Draft Environmental Impact Report

Trails at Lyons Canyon Project State Clearinghouse No. 2022060346

DECEMBER 2024

Prepared for:

LOS ANGELES COUNTY DEPARTMENT OF REGIONAL PLANNING

LA COUNTY PLANNING

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ACC	Advanced Clean Cars
ACT	Advanced Clean Trucks
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
AF	acre-feet
AFY	acre-feet per year
AHMP	All Hazards Mitigation Plan
amsl	above mean sea level
APN	Assessor's Parcel Number
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARA	Agricultural Resource Area
AVAQMD	Antelope Valley Air Quality Management District
BAT	Best Available Technologies
BLM	Bureau of Land Management
BMP	best management practice
BP	before present
Btu	British thermal unit
BUG	backlight, up light, and glare
BVWSD	Buena Vista Water Storage District
CAAQS	California Ambient Air Quality Standards
CAFE	corporate average fuel economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Office of Emergency Services
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalGEM	California Geologic Energy Management Division
CALGreen	California Green Building Standards
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCAP	Community Climate Action Plan
CCD	Census County Division
CCR	California Code of Regulations

Acronym/Abbreviation	Definition
CDFW	California Department of Fish and Wildlife
CDP	Census Designated Place
CEC	California Energy Commission
CEOC	County Emergency Operations Center
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFP	California Fully Protected
CFR	Code of Federal Regulations
CGS	California Geologic Survey
CH_4	methane
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
City	City of Santa Clarita
CIWMB	California Integrated Waste Management Board
CLOMR	Conditional Letter of Map Revision
CLWA	Castaic Lake Water Agency
CMP	Conservation Management Plan
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNG	compressed natural gas
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COA	condition of approval
County	County of Los Angeles
CPP	Clean Power Plan
CPT	Cone Penetrometer Test
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CSO	Construction Safety Orders
CUP	Conditional Use Permit
CUPA	certified unified program agency
CWA	Clean Water Act
CWC	California Water Code
dB	decibel
dBA	A-weighted decibel
DBH	diameter at breast height
DCD	Density-Controlled Development

Acronym/Abbreviation	Definition
DDT	dichlorodiphenyltrichloroethane
DDW	California Division of Drinking Water
DOC	California Department of Conservation
DOGGR	Division of Oil, Gas, and Geothermal Resources
DOL	U.S. Department of Labor
DPM	Diesel Particulate Matter
DPR	Department of Parks and Recreation
DRP	Department of Regional Planning
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EDR	Environmental Database Resources
EIA	U.S. Energy Information Administration
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
EMFAC	EMission FACtor
EO	Executive Order
EOC	Emergency Operations Center
EPA	U.S. Environmental Protection Agency
EPS	emissions performance standard
ESA	Environmental Science Associates
ESCP	erosion and sediment control plan
EV	electric vehicle
EWMP	Enhanced Watershed Management Program
FBFM	Flood Boundary and Floodway Map
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FESA	federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone
FICON	Federal Interagency Committee on Noise
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FMP	fuel modification plan
FMZ	fuel modification zone
FPP	fire protection plan
FR	Federal Register
FRAP	Fire and Resources Assessment Program
FTA	Federal Transit Administration
GHG	greenhouse gas
GHMPS	Gas Hazard Mitigation Policy and Standards
GMED	Geotechnical Materials Engineering Division
GOV	California Government Code
GPA	General Plan Amendment
gpm	gallons per minute

Acronym/Abbreviation	Definition
GSP	groundwater sustainability plan
GVWR	gross vehicle weight rating
GWMP	groundwater management plan
GWP	global warming potential
HAP	hazardous air pollutant
HCD	California Department of Housing and Community Development
HCP	habitat conservation plan
HFC	hydrofluorocarbons
HHMD	Health Hazardous Materials Division
HIA	health impact assessment
HMA	Hillside Management Area
HMBP	Hazardous Materials Business Plan
HMCIP	California Hazardous Material Incident Contingency Plan
HMMP	Habitat Mitigation and Monitoring Plan
HOA	Homeowners' Association
HRA	health risk assessment
HVAC	heating, ventilation, and air conditioning
HWCA	Hazardous Waste Control Act
Hz	hertz
I	Interstate
IPCC	Intergovernmental Panel on Climate Change
ips	inches per second
IQ	intelligence quotient
IRIS	Integrated Risk Information System
IRWMP	Integrated Regional Water Management Plan
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
IWMP	Idle Well Management Plan
kBTU	thousand British Thermal Units
kW	kilowatt
kWh	kilowatt-hours
LACBC	Los Angeles County Building Code
LACC	Los Angeles County Code
LACDPR	Los Angeles County Department of Parks and Recreation
LACDRP	Los Angeles County Department of Regional Planning
LACFCD	Los Angeles County Flood Control District
LACL	Los Angeles County Library
LACOE	Los Angeles County Office of Education
LACoFD	Los Angeles County Fire Department
LACSD	Los Angeles County Sanitation Districts
LACSMD	Los Angeles County Sewer Maintenance District
LACWWD	Los Angeles County Waterworks District

Acronym/Abbreviation	Definition
LARWQCB	Los Angeles Regional Water Quality Control Board
LASD	Los Angeles County Sheriff's Department
LCFS	Low Carbon Fuel Standard
L_{dn}	day–night average noise level
LED	light emitting diode
L_{eq}	equivalent noise level over a given period
LEV	Low-Emission Vehicle
LID	low-impact development
L_{max}	maximum sound level
L_{min}	minimum sound level
LOMR	Letter of Map Revision
LOS	level of service
LRA	Local Responsibility Area
LRTP	Long Range Transportation Plan
LST	localized significance threshold
MATES	Multiple Air Toxics Exposure Study
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant level
MDV	medium-duty vehicles
MH	motorhomes
MHDT	medium-heavy duty truck
MM	Mitigation Measure
MMcf	million cubic feet
MMT	million metric ton
MND	Mitigated Negative Declaration
mPa	micro-Pascal
MPO	metropolitan planning organization
MRCA	Mountains Recreation and Conservation Authority
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
msl	mean sea level
MWELO	Model Water Efficient Landscape Ordinance
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	natural community conservation plan
NEA	Northwest Economic Associates
NF3	nitrogen trifluoride
NFHL	National Flood Hazard Layer
NFIP	National Flood Insurance Program
NHAPS	National Human Activity Pattern Survey
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide

Acronym/Abbreviation	Definition
NOI	Notice of Intent
NOP	Notice of Preparation
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWD	Newhall Water Division
OA	operational area
OAEOC	Operational Area Emergency Operation Center
OAERP	Operational Area Emergency Response Plan
OBUS	other buses
OEHHA	Office of Environmental Health Hazard Assessment
OEM	Office of Emergency Management
OHP	Office of Historic Preservation
OHWM	ordinary-high water mark
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
OVOV	One Valley, One Vision
PA	Planning Area
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
PeMS	Performance Measurement System
PFAS	per- and polyfluoroalkyl substances
PFC	perfluorocarbon
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PGA	peak ground acceleration
PM_{10}	coarse particulate matter
PNA	Parks Needs Assessment
PPV	peak particle velocity
PRC	California Public Resources Code
PRD	permit registration document
Project	Trails at Lyons Canyon Project
psi	pounds per square inch
PV	photovoltaic
RCB	reinforced concrete box
RCNM	Roadway Construction Noise Model
RCRA	Resources Conservation and Recovery Act
REC	recognized environmental condition
REL	reference exposure level
RFS	Renewable Fuel Standard
RHNA	Regional Housing Needs Allocation
RPD	Residential Planned Development
RPS	California Renewables Portfolio Standard

Acronym/Abbreviation	Definition
RRBWSD	Rosedale-Rio Bravo Water Storage District
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SBUS	school bus
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCOPE	Santa Clarita Organization for Planning the Environment
SCRAM	Support Center for Regulatory Atmospheric Modeling
SCS	Sustainable Communities Strategy
SCV	Santa Clarita Valley
SCV Water	Santa Clarita Valley Water Agency
SCVGSA	Santa Clarita Valley Groundwater Sustainability Agency
SCVJSS	Santa Clarita Valley Joint Sewerage System
SCVSD	Santa Clarita Valley Sanitation District
SCWD	Santa Clarita Water Division
SEA	Significant Ecological Area
SEATAC	Significant Ecological Area Technical Advisory Committee
SEDS	State Energy Data System
SEMS	Standardized Emergency Management System
SF_6	sulfur hexafluoride
SFM	Sustainable Forest Management
SGMA	Sustainable Groundwater Management Act
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLCP	Short-Lived Climate Pollutants
SLF	Sacred Lands File
SLIC	Spills, Leaks, Investigation and Cleanup
SMA	Special Management Area
SMARA	Surface Mining and Reclamation Act
SMMC	Santa Monica Mountains Conservancy
SMP	Soil Management Plan
SNMP	Salt and Nutrient Management Plan
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
SOP	standard operating procedure
SO_x	sulfur oxides
SP	service population
SPL	Sound Pressure Level

Acronym/Abbreviation	Definition
SR	State Route
SRA	source-receptor area
SRA	State Responsibility Area
SRI	solar reflectance index
SSC	Species of Special Concern
SUSMP	Standard Urban Stormwater Mitigation Plan
SVP	Society of Vertebrate Paleontology
SWP	State Water Project
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TAZ	traffic analysis zone
TCE	trichloroethylene
TCR	Tribal Cultural Resource
TDM	Transportation Demand Management
TIA	Transportation Impact Analysis
TOG	total organic gas
TTM	Tentative Tract Map
UNFCCC	United Nations Framework Convention on Climate Change
U-Pass	LA Metro Universal College Student Transit Pass
USACE	U.S. Army Corps of Engineers
USCR	Upper Santa Clara River
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
VCP	vitrified clay pipe
VdB	vibration decibel
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compound
VTTM	Vesting Tentative Tract Map
VWD	Valencia Water Division
WEAP	Workers Environmental Awareness Program
WEP	Wildfire Evacuation Plan
WQO	water quality objective
WRP	water reclamation plant
WSA	Water Supply Assessment
WSCP	Water Shortage Contingency Plan
WUI	wildland–urban interface

Acronym/Abbreviation	Definition
YSMN	Yuhaaviatam of San Manuel Nation
ZEV	zero-emission vehicle

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Executive Summary

The purpose of the Executive Summary for this Draft Environmental Impact Report (EIR) is to provide a brief summary of the proposed Trails at Lyons Canyon Project (Project), its environmental consequences, mitigation measures, and alternatives to the Project. Per the requirements of Section 15123 of the State of California Environmental Quality Act (CEQA) Guidelines, a summary shall identify:

1. Each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect (see Section ES.4 and ES.6);
2. Areas of controversy known to the Lead Agency including issues raised by agencies and the public (see Section ES.5); and
3. Issues to be resolved including the choice among alternatives and whether or how to mitigate significant effects (see Section ES.6)

ES.1 Introduction

This Draft EIR has been prepared by the County of Los Angeles (County) to evaluate potential environmental effects that would result from implementation of the Project. This Draft EIR has been prepared in conformance with the CEQA statutes (California Public Resources Code Section 2100 et seq., as amended) and its implementing guidelines (California Code of Regulations [CCR] Title 14, Section 15000 et seq.). The Project constitutes a "project" as defined in the CEQA Guidelines Section 15378. Pursuant to Section 15367 of the State CEQA Guidelines, the County is the lead agency for the Project.

The Project site includes five parcels that total 233.49 gross acres located in the unincorporated County community of Santa Clarita. The Project site consists of vacant, undeveloped land. The Project involves the development of 510 dwelling units, a recreational center, improved open space, and preservation of open space. The Project would also include off-site improvements including circulation and utility improvements.

CEQA requires the preparation of an EIR for any project that a lead agency determines may have a significant impact on the environment. CEQA also establishes mechanisms whereby the public and decision makers can be informed about the nature of the project being proposed and the extent and types of impacts that the project and its alternatives would have on the environment if they were to be implemented.

The basic purposes of CEQA are as follows (14 CCR 15002):

1. Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities;
2. Identify the ways that impacts to the environment can be avoided or significantly reduced;
3. Prevent significant, avoidable impacts to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

In compliance with CEQA, this Draft EIR has been prepared to analyze the potential environmental impacts that may result from implementation of the Project. This Draft EIR identifies feasible mitigation measures and alternatives that would minimize or eliminate the potential significant impacts associated with the Project. This Draft EIR evaluates potential environmental impacts associated with implementation of the Project and provides information regarding short-term, long-term, direct, indirect, and cumulative environmental effects of the Project. The Draft EIR must allow the County, responsible agencies, and other interested parties, to evaluate the environmental impacts and consequences of Project implementation, thereby enabling them to make informed decisions regarding the requested entitlements. The following is a summary of discretionary actions the County will consider:

- Certification of the EIR (RPPL2021003071),
- Vesting Tentative Tract Map (VTTM) No. 83301 (RPPL2021003061) to subdivide the Project site into 37 lots,
- Conditional Use Permits (CUPs) (RPPL2021003113) for the following:
  - Development in a Hillside Management Area;
  - Density-Controlled Development;
  - Development in the County-designated Santa Susana Mountains/Simi Hills Significant Ecological Area (SEA);
  - Grading In Excess of 100,000 cubic yards within an A-2 Zone;
  - Development of Townhomes within A-2 Zones;
- Oak Tree Permit (RPPL2021003070)
- Administrative Housing Permit for 47-unit very-low-income senior citizen housing units (with 1 manager's unit, for a total of 48 units within one building) and accompanying 9% density bonus (with incentives/waivers)

The following is a list of other responsible agencies and their discretionary authority over the Project:

- United States Army Corps of Engineers
  - Section 404 permit for impacts to Waters of the United States;
- California Department of Fish and Wildlife
  - Section 1602 Streambed Alteration Agreement for impacts to the existing wetland riparian habitats; and
- Los Angeles Regional Water Quality Control Board
  - Section 401 Certification for impacts to surface water quality.

ES.2 EIR Document Organization

This Draft EIR is organized into seven chapters, including the Executive Summary. A list of the Draft EIR chapters and a brief description of their contents is provided below to assist the reader in locating information.

Executive Summary - This chapter provides a summary of the Project description, alternatives to the Project, environmental impacts, mitigation measures, and determinations of significance.

Chapter 1: Introduction - This chapter briefly discusses the purpose of the Draft EIR and provides a summary of the relevant CEQA Guidelines that govern the preparation of this EIR. This chapter summarizes the scoping period and the comments received by the County on the Notice of Preparation (NOP) during the scoping process.

Chapter 2: Environmental Setting – In accordance with Section 15125 of the State CEQA Guidelines, this chapter includes a description of the physical environmental conditions of the Project site and vicinity, which constitute the baseline physical conditions. This chapter provides an overview of the regulatory setting and a discussion of related projects considered in the cumulative impact analysis.

Chapter 3: Project Description - In accordance with Section 15124 of the State CEQA Guidelines, this chapter outlines the County's underlying purpose and objectives for the Project, includes a summary of the components of the Project, and includes a listing of the discretionary actions that must be considered by the County and other responsible agencies.

Chapter 4: Introduction to Environmental Analysis - This chapter contains 20 sections including the following:

Section 4.1	Aesthetics	Section 4.11	Land Use and Planning
Section 4.2	Agriculture and Forestry	Section 4.12	Mineral Resources
Section 4.3	Air Quality	Section 4.13	Noise
Section 4.4	Biological Resources	Section 4.14	Population and Housing
Section 4.5	Cultural Resources	Section 4.15	Public Services
Section 4.6	Energy	Section 4.16	Recreation
Section 4.7	Geology and Soils	Section 4.14	Transportation
Section 4.8	Greenhouse Gas Emissions	Section 4.18	Tribal Cultural Resources
Section 4.9	Hazards and Hazardous Materials	Section 4.19	Utilities and Service Systems
Section 4.10	Hydrology and Water Quality	Section 4.20	Wildfire

For each environmental issue area, the analysis and discussion are organized into nine subsections as described below:

- **Existing Conditions** – This subsection describes the physical environmental conditions in the vicinity of the Project at the time of publication of the NOP. The environmental setting establishes the baseline conditions by which the County will determine whether specific Project-related impacts are significant.
- **Regulatory Requirements** - This subsection describes the laws, regulations, ordinances, plans, and policies applicable to the environmental issue area and the Project.
- **Thresholds of Significance** – This subsection identifies a set of thresholds by which the level of impact is determined.
- **Methodology** – This subsection describes the approach and methodology used in the subsequent impact analysis.
- **Impact Analysis** – This subsection provides a detailed analysis regarding the environmental effects of the Project, and whether the impacts of the Project would meet or exceed the thresholds of significance.
- **Cumulative Impact Analysis** – Provides an evaluation of the potential cumulative impacts of the Project in combination with identified cumulative projects.
- **Mitigation Measures** – This subsection identifies potentially feasible mitigation measures that would avoid or substantially reduce significant adverse Project impacts.

- **Level of Significance After Mitigation –** This subsection discusses whether Project-related impacts would be reduced to below a level of significance with implementation of the mitigation measures identified in the Draft EIR. If applicable, this subsection also identifies any residual significant and unavoidable adverse impacts of the Project that would result even with implementation of any feasible mitigation measures.
- **References -** In addition to the seven subsections listed above, full citations for all documents referred to in each environmental issue area discussion are included at the end of each section or chapter.

Chapter 5: Other CEQA Considerations – Provides a discussion of potential environmental impacts as a result of the Project, including those that can be reduced to a less-than-significant level and those significant environmental effects that cannot be avoided if the Project is implemented. These include impacts that can be mitigated but cannot be reduced to a less than significant level.

Chapter 6: Alternatives - Discusses alternatives to the Project, including a "No Project Alternative". This chapter describes the rationale for selecting the range of alternatives discussed in the Draft EIR and identifies the alternatives considered by the County that were rejected from further discussion as infeasible during the scoping process. Lastly, Chapter 6 includes a discussion of the environmental impacts of the alternatives that were carried forward for analysis and identifies the environmentally superior alternative.

Chapter 7: List of Preparers – This chapter lists the persons who directly contributed to preparation of the Draft EIR.

Appendices include various technical studies prepared for the Project, as listed in the Table of Contents.

ES.3 Project Description

ES.3.1 Project Overview

The Project site, which totals 233.49 gross (227.34 net) acres, is located in the unincorporated County, in the northern foothills of the Santa Susana Mountains, at the westerly perimeter of the Santa Clarita Valley. It is located south of Sagecrest Circle, west of The Old Road, and north of Calgrove Boulevard and Ed Davis Park in Towsley Canyon. The Project site consists of five Assessor's Parcel Numbers (APNs) 2826-041-039, 2826-023-014, 2826-022-026, 2826-022-027 and 2826-022-035. Development would be clustered within the northeasterly portion of the Project site.

The Project includes the creation of 37 lots for the development of 510 dwelling units with a mix of two- and three-story attached and detached for-sale condominium units, and a four-story affordable senior rental apartment building. The dwelling units will range in height from 26 to 38 feet high for the condominiums and 45 feet high for the senior living rental apartment building. The Project includes the development of 291 buildings and the following features and amenities: two 57- to 64-foot-wide onsite public streets, 26- to 36-foot-wide private driveways and fire lanes providing access to all units, five-foot-wide pedestrian walkways throughout the development, several debris basins, a water tank, a 4,540 square-foot recreational center, and an outdoor swimming pool. The Project meets required parking standards including a two-car garage for each proposed condominium dwelling unit and surface parking for the senior apartment dwelling units, and additional uncovered and guest parking spaces throughout the development. The Project includes the required bicycle parking with approximately 159 bicycle parking spaces (30 short-term and 129 long-term spaces). The Project also includes concrete block walls and privacy fencing from 3.5 to six feet high, and several retaining walls from three to 17.5 feet high. Several on-site access and utility easements are proposed.

The Project would include both improved and natural and preserved open space (approximately 75% of the Project site). The improved open space includes several open space areas, including a dog park and parklets throughout the development area. The private driveway and fire lane surrounding the entirety of the residential development will serve as a multi-purpose trail. This multi-purpose trail system would connect to trails in the southern portion of the Project site. After implementation of the Project, all on-site trails would be open to the public.

The Project includes approximately 150 acres of unimpacted natural open space on-site. A majority (over 144 acres and 62% on the Project site) of the on-site natural open space would be preserved and maintained in perpetuity through a conservation easement. The Project would plant 856 ornamental trees and would be required to plant 772 native/mitigation replacement trees within the conservation and landscaped areas.

Off-site Project components include sidewalk improvements, a retaining wall adjacent to The Old Road directly east of the Project site, improvements to The Old Road fronting the Project site, and fuel modification (brush thinning). The Project would include several off-site utility infrastructure component improvements, including utility water lines, upgrades to two existing pump stations, upsizing of existing sewer pipelines, and the construction of three manholes within The Old Road. Additionally, the Project also includes the vacation of excess right-of-way in the Old Road and acquisition of an adjacent County-owned parcel (APN: 2826-022-901).

The Project requires approximately 1,500,000 cubic yards of cut and 1,300,000 cubic yards of fill for a total of 2,800,000 cubic yards of grading with 1,345,000 cubic yards of over excavation. There is expected to be 15% shrinkage on the over excavation for a total of 200,000 cubic yards. The total earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site adjacent parcel adjacent to The Old Road that includes manufactured slopes. The grading would be balanced onsite, and as such, no import or export of soils is proposed.

ES.3.2 Project Objectives

CEQA Guidelines Section 15124 requires an EIR to include a statement of objectives sought by the Project. The objectives assist the County in developing a reasonable range of alternatives to be evaluated in the EIR. The Project objectives also aid decision makers in preparing Findings of Fact and a Statement of Overriding Considerations, if necessary. The statement of objectives also is to include the underlying purpose of a project and may discuss a project's benefits. The Project's specific objectives are as follows:

1. Provide a diverse mix of housing units in various typologies that would assist the County in obtaining its regional housing needs allocation (RHNA) goals, including very low-income housing and moderate/middle-income households.
2. Provide housing opportunities consistent with the County General Plan 2035 and the Santa Clarita Valley Area Plan, One Valley One Vision, a component of the General Plan and applicable to the unincorporated portions of the Santa Clarita Valley.
3. Provide a mix of housing types proximate to convenient freeway access and existing roadway infrastructure.
4. Provide substantial homeownership opportunities for middle-income families in an area proximate to existing residential uses and infrastructure.
5. Provide a mix of housing types within a clustered development to limit the amount of the site subject to disturbance, limit the amount of urban wildland interface areas, preserve significant ridgelines, preserve biological resources, and provide a substantial amount of natural open space within the Project site.

6. Provide a comprehensive trail network, including publicly accessible trailhead, that provides connections for the public to access existing open space areas and established trails.

ES.4 Environmental Impacts and Mitigation Measures

Table ES-1, Environmental Impacts and Mitigation Measures, provides a summary of the Project and cumulative impact analyses related to the Project. As detailed in Table ES-1, the following topics require mitigation measures: Aesthetics, Agriculture and Forest, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Land Use and Planning, Noise, Public Services, Transportation, Tribal Cultural Resources, and Wildfire. The Transportation section includes a significant and unavoidable impact. All other topics would have no impacts or less than significant impacts without mitigation. Table ES-1 identifies the significant environmental impacts resulting from the Project pursuant to State CEQA Guidelines Section 15123(b)(1). For more detailed discussion, please see Chapter 4, Environmental Impact Analysis, of this Draft EIR. Table ES-1 lists the applicable mitigation measures related to potentially significant impacts, as well as the level of significance after mitigation, if applicable.

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.1. Aesthetics			
4.1a. Would the project have a substantial adverse effect on a scenic vista?	Potentially Significant Impact	**MM-4.1-1**: *Visual Shielding Plan.* Prior to the issuance of a grading permit, the Applicant/Developer shall prepare a Visual Shielding Plan (Plan) to improve the overall aesthetic quality of construction areas. Plan requirements shall include the following: 1. Designated Staging Areas: The Plan shall require the establishment of one or more designated staging area(s) intended for the storage of construction equipment and vehicles, stockpiles, waste bins, and other construction-related materials during Project construction. The designated staging area(s) shall be located within the grading area on the northern portion of the Project site, strategically placed away from publicly-maintained trails and open-space areas to the south. Upon completion of construction activities for the day, all equipment shall be consolidated in the designated staging area(s) and any equipment or machinery not in use for a period of three of more months shall be removed from the Project site. 2. Visual Shielding: To address potential aesthetic impacts from construction equipment and activities, the Plan shall require establishment of visual shielding in the form of temporary, opaque fencing and/or cloth screening along the Project-site boundary fronting The Old Road as well as in the vicinity of the Taylor Trailhead and where the western leg of the Taylor Trail intersects with the Project site. Temporary, opaque fencing and/or cloth screening shall also be installed around the designated construction staging areas(s). The color palette of temporary fencing and/or cloth screening shall be restricted to neutral earth tones (e.g., shades of brown, green, gray, or beige). 3. Project Site Cleanliness/Management: All construction-related equipment and materials on the Project site shall be maintained in a clean and organized manner. 4. **Monitoring:** Monthly inspections shall be conducted to assess the effectiveness of the Plan. Any failed or poorly-performing visual shielding	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		(e.g., damaged fencing and/or cloth screening) shall be replaced or repaired as soon as possible. The Plan shall be reviewed and approved by the County to ensure compliance with this mitigation measure. Visual shielding and establishment of designated staging areas shall commence prior to grading or soil disturbance activities and shall be maintained throughout the construction period and until the site is permanently stabilized and/or developed. **MM-4.3-1:** *Construction Methods* (See Section 4.3, Air Quality).	
4.1b. Would the project be visible from or obstruct views from a regional riding, hiking, or multi-use trail?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.1c. Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.1d. Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings because of height, bulk, pattern, scale, character, or other features and/or conflict with applicable zoning and other regulations governing scenic quality? (Public views are those that are experienced from publicly accessible vantage point)	Potentially Significant Impact	**MM-4.1-1:** *Visual Shielding Plan.* **MM-4.4-16:** *SEA Protected Trees Replacement/Compensation.* (See Section 4.4, Biological Resources)	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.1e. Would the project create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Cumulative: Would the project have a cumulative effect related to aesthetic?	Potentially Significant Impact	**MM-4.1-1:** *Visual Shielding Plan.* **MM-4.17-2:** *Transportation Demand Management (TDM) Program*. (See Section 4.17, Transportation)	Less Than Significant with Mitigation
4.2. Agriculture and Forestry			
4.2a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact	No mitigation measures are required.	No Impact
4.2b. Would the project conflict with existing zoning for agricultural use, with a designated Agricultural Resource Area, or with a Williamson Act contract?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.2c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland	No Impact	No mitigation measures are required.	No Impact

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
(as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?			
4.2d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?	Potentially Significant Impact	**MM-4.4-16:** *SEA Protected Trees Replacement/Compensation*. (See Section 4.4, Biological Resources)	Less Than Significant with Mitigation
4.2e. 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?	Potentially Significant Impact	**MM 4.4-1:** *On-Site Habitat Preservation.* (See Section 4.4, Biological Resources) **MM-4.4-16**: *SEA Protected Trees Replacement/Compensation*. (See Section 4.4, Biological Resources)	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect on agriculture and forestry resources?	Less Than Significant Impact	**MM-4.4-2**: *Habitat Mitigation and Monitoring Plan.* (See Section 4.4, Biological Resources) **MM-4.4-16**: *SEA Protected Trees Replacement/Compensation*. (See Section 4.4, Biological Resources)	Less Than Significant Impact
4.3. Air Quality			
4.3a. Would the project conflict with or obstruct implementation of applicable air quality plans of either the South Coast AQMD (SCAQMD) or the Antelope Valley AQMD (AVAQMD)?	Potentially Significant Impact	**MM-4.3-1:** *Construction Equipment.* Heavy-duty diesel-powered construction equipment greater than 50 horsepower shall be equipped with California Air Resources Board (CARB)-certified Tier 4 Final or better diesel engines. The County shall verify and approve all pieces within the construction fleet that would not meet Tier 4 Final standards. Equipment engines must be maintained in good condition and in proper tune as per manufacturer's specifications. During construction activities, the contractor shall, at a minimum, electrify or use alternative fuels (non-diesel) for the operation of all equipment less than	Less than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		50 horsepower (welders). In addition, electricity use during the construction activities shall come from the existing electric grid instead of a diesel generator. If a generator is necessary for the completion of construction activities, a non-diesel generator shall be used.	
4.3b. 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?	Potentially Significant Impact	**MM-4.3-1:** *Construction Equipment.* **MM-4.8-1**: *Construction Emission Reductions*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-2:** *Electrify Buildings.* (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-3:** *Energy Conservation*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-5:** *Encourage Electric Vehicles.* (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-8:** *Landscape Maintenance Equipment Emission Reduction*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.17-2:** *Transportation Demand Management (TDM) Program*. (See Section 4.17, Transportation)	Less than Significant with Mitigation
4.3c. Would the project expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant Impact	**MM-4.3-1:** *Construction Equipment.*	Less than Significant with Mitigation
4.3d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Cumulative: Would the project have a cumulative effect related to air quality?	Potentially Significant Impact	**MM-4.3-1:** *Construction Equipment.*	Less than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

<table>
<tr><th>Environmental Topic and Threshold</th><th>Level of Significance Prior to Mitigation</th><th>Mitigation Measure(s)</th><th>Level of Significance After Mitigation</th></tr>
<tr><td colspan="4">4.4. Biological Resources</td></tr>
<tr><td>4.4a. 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 (CDFW) or U.S. Fish and Wildlife Service (USFWS)?</td><td>Potentially Significant Impact</td><td>MM-4.4-1: On-Site Habitat Preservation. Prior to final map recordation, the on-site conservation easement area shall be designated on the final map. Additionally, a letter of intent shall be obtained from the Conservation Easement holder. Prior to the issuance of a grading permit, the Applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code Section 815.1, that permanently preserves 144.43 acres of open space within the Project boundaries for long-term conservation and management as a natural conservation area (“Conservation Area”). The following table documents the vegetation communities that would be preserved. The Conservation Area provides sufficient preservation for Project-related impacts to vegetation communities within Resource Categories 4 and 5 of the Significant Ecological Area Ordinance Implementation Guide.
<table>
<tr><th>Alliance</th><th>Unimpacted Acres (Open Space)</th><th>Preserved via Conservation Easement</th></tr>
<tr><td colspan="3">SEA Resource Category 1</td></tr>
<tr><td>Baccharis salicifolia Shrubland</td><td>0.52</td><td>0.52</td></tr>
<tr><td>Salix gooddingii–Salix laevigata Forest and Woodland</td><td>0</td><td>0.0</td></tr>
<tr><td>Sub-Total</td><td>0.52</td><td>0.52</td></tr>
<tr><td colspan="3">SEA Resource Category 3</td></tr>
<tr><td>Ericameria palmeri Provisional Shrubland</td><td>0</td><td>0</td></tr>
<tr><td>Eriodictyon crassifolium Provisional Shrubland</td><td>0.41</td><td>0.41</td></tr>
<tr><td>Juglans californica Forest and Woodland</td><td>0.09</td><td>0.09</td></tr>
</table>
</td><td>Less than Significant with Mitigation</td></tr>
</table>

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)			Level of Significance After Mitigation
		Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0	0	
		Quercus agrifolia Forest and Woodland	10.64	10.28	
		Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.01	0.01	
		Sub-Total	*11.15*	*10.79*	
		SEA Resource Category 4			
		Adenostoma fasciculatum Shrubland	69.77	64.68	
		Adenostoma fasciculatum Shrubland–Disturbed	9.73	9.73	
		Artemisia californica–Salvia leucophylla Shrubland	28.01	28.01	
		Artemisia californica–Salvia leucophylla Shrubland–Disturbed	10.66	10.66	
		Avena spp.–*Bromus* spp. Herbaceous Semi-natural	2.62	2.62	
		Distichlis spicata Herbaceous	0.07	0.07	
		Eriogonum davidsonii/Croton setiger Grassland	0	0	
		Eriogonum fasciculatum Shrubland	0	0	
		Sub-Total	*120.87*	*115.77*	
		SEA Resource Category 5			
		Brassica nigra–Centaurea melitensis Herbaceous Semi-natural Stands	16.47	16.24[a]	

Non-SEA Resource Category		
Developed[1]	1.31	1.11
Total Acres	**150.31**	**144.43**

Notes: SEA = Significant Ecological Area.
[a] 16.24 acres of this community are proposed to be restored per MM-4.4-2.
[1] Existing trails.

Conservation Management Plan. As part of recording the conservation easement, a Conservation Management Plan (CMP) applicable to the On-Site Conservation Area shall be prepared and submitted to the County of Los Angeles for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The CMP shall set forth the following requirements that shall be implemented by the entity that holds the conservation easement and/or manages and stewards the Conservation Area: (1) there shall be no grading or other construction activities within the On-Site Conservation Area, except for the proposed habitat enhancement/restoration, construction and maintenance of signage, and trail maintenance; (2) off-trail activities (e.g., hiking, biking, horseback riding) shall be prohibited; (3) signage shall be installed at the trailheads and at any access points to the On-Site Conservation Area, which shall include information on the organization that holds the conservation easement, brief descriptions of the restoration activities, protection of biological resources, and restrictions to human activities; (4) signage shall be placed in visible locations that prohibits smoking and that requires that humans and domesticated pets remain within the limits of designated hiking trails, all domesticated pets be on leashes, and owners clean up after domesticated pets; (5) no fencing or other barriers to wildlife movement shall be installed; (6) dog waste bag dispensers and wildlife-proof receptacles for trash shall be provided at appropriate locations on the trail; (7) gasoline-powered maintenance equipment shall be prohibited; (8) commercial honeybee operations shall not be allowed to use the On-Site Conservation Area for storing their apiaries; (9) rodenticides shall be prohibited; (10) herbicides and pesticides shall be discouraged, and only those typically used for invasive plant management in California wildlands shall be allowed, per the California Invasive Plant Council and Pesticide Research Institute's 2015 Best Management Practices (BMPs) for Wildland Stewardship: Protecting Wildlife When Using Herbicides for Invasive Plant Management; (11) arborists

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		certified by the International Society of Arboriculture (ISA) shall conduct surveys every five years that shall include an assessment of potential infestations of invasive shothole borer beetle and other pathogens or invasive insects that can threaten native habitat; (12) at least one annual walk-through survey shall be conducted by a biologist to qualitatively monitor the general condition of on-site habitats and to check for any new introduction or expansion of invasive plant species; (13) collect and remove trash, repair vandalized signs, and rectify trespass impacts; and (14) provide annual reporting that document the conditions of the Conservation Area. Approved work shall be outlined in the CMP and in the conservation easement, including monitoring and maintenance efforts or for other activities associated with preserve management, and prohibited activities shall be delineated. The conservation easement holder shall be an entity that has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The California Department of Fish and Wildlife per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968(b). Funding for implementation of the tasks in the CMP shall be provided by a traditional endowment, establishing a community facilities district or landscape management district, or through contractual obligation with the Homeowners' Association (HOA) or other equivalent mechanism(s). **MM-4.4-2**: *Habitat Mitigation and Monitoring Plan.* After implementation of MM-4.4-9, if the Los Angeles County Department of Regional Planning (Planning) determines that sufficient habitat is not preserved off site, per MM-4.4-9, then on-site establishment and restoration shall be conducted in the On-Site Conservation Area (MM-4.4-1). Prior to the issuance of a grading permit, a qualified biologist shall be retained to prepare a Habitat Mitigation and Monitoring Plan (HMMP) detailing the specific approach for each type of habitat restoration and establishment area, special-status species transplant location, and Significant Ecological Area protected tree transplant/planting	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		and outlining detailed performance standards and monitoring requirements for each, following the monitoring and reporting methods and performance standards listed below. Planning approval of the HMMP shall be required prior to the onset of Project-related ground-disturbing activities. When specified for each habitat type below, the acreages allotted for on-site establishment apply to a total of 16.24 acres of *Brassica nigra–Centaurea melitensis* herbaceous semi-natural stands. ▪ On-site establishment of 0.84-acre of *Eriodictyon crassifolium* provisional shrubland alliance ▪ On-site restoration/establishment of 0.07-acre of *Rhus trilobata–Crataegus rivularis–Forestiera pubescens* shrubland alliance ▪ On-site establishment of 15.20 acres *Quercus agrifolia* forest and woodland alliance Habitat Restoration/Enhancement Implementation The following best management practices shall be implemented during the implementation of the habitat restoration/enhancement activities. Schedule**:** Establishment of restoration/revegetation sites shall be conducted during the appropriate time of year (between October 15 and January 30), with planting and/or seeding occurring immediately after the restoration sites are prepared. Stressors: Any stressors causing habitat degradation should be addressed prior to starting restoration. This includes the removal of invasive plants and trash. Removal of invasive species shall include the following: ▪ Removal of non-native species in patches of native habitat shall be conducted in such a way as to minimize impacts to the existing native vegetation. ▪ Any proposals for use of herbicide treatments should be accompanied by a plan that demonstrates the following:	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		- That other methods of invasive species control have been tested and that a single application of herbicide has been determined to be the best solution - That there is a post application plan for revegetation and/or mulching; - That the treatment is a one-time application. ▪ Pre-emergent herbicide shall not be used. <u>Plant Material.</u> The following shall be implemented: ▪ Details regarding the planned source of their plant material shall be provided. ▪ All stock from nurseries shall be derived from plants originally collected within cismontane County. ▪ Plant material used for habitat restoration purposes shall consist of native species that are local to the immediate area of the mitigation site. ▪ All plant material proposed for use in a habitat restoration program shall be inspected by a County-approved Restoration Biologist to ensure that all container plants are in good health and do not contain pests or pathogens that may be harmful to existing native plants or wildlife species. ▪ Container plants and other landscaping materials (including organic mulches) should be inspected by the County Planning-approved Restoration Biologist to ensure they do not contain Argentine ant (*Linepithema humile*). ▪ Native seed mixes shall be inspected by the County-approved Restoration Biologist prior to their application to ensure that they contain the proper species and that seed packages are in good condition and do not contain any pests or pathogens. ▪ Diseased or infested plant, seed, or landscape materials should be removed from the site and transported to an appropriate off-site green waste facility. ▪ One application of mulch shall be done, except for areas that shall provide nesting opportunities for native bees.	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		Maintenance Plan/Guidelines. A Maintenance Plan shall be included that outlines the following: (1) weed control, including cleaning of equipment to prevent further spread or introduction of new weeds; (2) herbivory control; (3) trash removal; (4) irrigation system maintenance; (5) maintenance training; and (6) replacement planting. Signage and Fencing. Signage specifications shall be developed to indicate the site is a restoration/preserve area and to either indicate that trespassing is not allowed or to instruct visitors to stay on trails. Specifications on fencing to protect biological resources and restrict human access shall be provided. Monitoring Methods Proposed plantings, enhancement/restoration, and receptor sites shall be monitored for 10 years following the completion of seeding or planting. The monitoring program shall consist of the observation and evidence of vegetative growth and the observation of emergent and flowering special-status plant species where required, along with seed production for flowering plants, photo-documentation, and measurements of annual rainfall. A County Planning-approved Restoration Biologist, restoration specialists, biologists, or horticulturists with appropriate credentials and experience in native habitat restoration shall perform monitoring. Continuity within the personnel and methodology of monitoring shall be maintained insofar as possible to ensure comparable assessments. The Biologist shall conduct monitoring surveys quarterly during the non-growing season for each enhanced or restored habitat type or particular plant species where required. During the growing period, or as soon as vegetative growth is observed, the enhancement/restoration and receptor sites shall be monitored on a every other week basis through seed production for 10 years to document the growth of the enhanced or restored habitat type or replacement population. Qualitative surveys, consisting of a general site walkover and habitat characterization, shall be completed during each monitoring visit. General	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		observations, such as growth, flowering, and seed production, as well as pest problems, weed establishment, mortality, and site security, shall be noted in each site walkover. The Project Biologist shall also note observations on native plant recruitment for the purpose of later discussion in the annual reports. Records shall be kept of mortality and other problems, such as insect damage, weed infestation, and soil loss. Surveying Flowering and Seed Production. In the case of replacement populations for specific species, flowering individuals observed within receptor sites shall be counted. As noted above, quantitative surveys may require multiple visits per month as the blooming period may be staggered along several months (i.e., vegetative growth or non-blooming individuals may not be detected until that individual has bloomed). Peak blooming periods may fluctuate year to year due to seasonal conditions; therefore, multiple visits shall aid in a more accurate count of flowering individuals. Each flowering individual in the restoration plots shall be tallied and recorded on data sheets. The total yearly population shall be calculated each year for the annual monitoring results. Photo-Documentation. Permanent stations for photo-documentation shall be established prior to or during the first annual monitoring event. Photos shall be taken each monitoring period from the same vantage point and in the same direction each year and shall reflect material discussed in the annual monitoring report. Monitoring Schedule. During the growing period, or as soon as vegetative growth is observed, each enhancement/restoration and receptor site shall be monitored monthly through seed production for 10 years. Annual Monitoring Reports. At the end of each monitoring period, an annual report shall be prepared for submittal to County Planning. The report shall summarize the information collected during the qualitative and quantitative monitoring. Each report shall document the monitoring methods and description of the enhancement/restoration and receptor sites and provide copies of field data, photo-documentation, monitoring results, an analysis of	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		success, and recommendations for the project and/or remedial measures if necessary. Since seeding of particular species may not occur when planned, monitoring shall be tied to the actual implementation date (e.g., the first annual report shall be delivered on January 1st of the year following the first growing season after enhancement/restoration and/or seeding). These reports shall describe the success of the relocation and shall discuss the efficacy of the various methods employed to propagate this species. These reports shall also include the following: ▪ A list of names, titles, and companies of all persons who prepared the content of the annual report and participated in monitoring activities for that year ▪ A vicinity map indicating location of the mitigation site ▪ A mitigation site plan, identifying plot locations, photo station locations, etc. as appropriate ▪ Copies of all monitoring photographs ▪ An analysis of all qualitative and quantitative monitoring data <u>Performance Standards</u> The performance standards set forth below are to be achieved for the mitigation and monitoring program to be considered successful. Because of the variability of growing conditions and the number of flowering individuals from year-to-year, the performance standards shall be considered to have been achieved if during any of 3 years of the 10-year monitoring period, the target acreage or population number is achieved. Thus, the annual standards provide a guide showing that the program is on a positive trajectory.	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		▪ The growing conditions and number of flowering individuals in any given year can vary substantially, based on environmental conditions, such that it is necessary to observe translocated populations over a period of years to accurately determine survival. To this end, this plan includes a 10-year monitoring term to track flowering individuals, which provides the best and easiest indicators to track that the translocation is succeeding. ▪ Various threats to plants must be minimized to ensure survival and ultimate flowering of seeded individuals leading to future germination/successful reproduction. ▪ Habitat characteristics including non-native grasses and herbaceous weeds are important and require monitoring to determine that specific enhancement/restoration areas and translocation/receptor sites are exhibiting a positive trajectory. Should the performance standards be achieved early in the program, monitoring shall continue for the full 10 years to ensure that there is no degradation of the habitat values during the 10-year period. <u>Performance Standards for 10-Year Monitoring Period</u> ▪ Flowering of the total number of flowering plants originating from seed shall equal or exceed the number of container individuals counted during the 2-year monitoring period (at least 3 years of the 10-year monitoring period). ▪ Emergence of leaves for of a minimum of 80% of the translocated bulbs ▪ Flowering of a minimum of 60% of the translocated bulbs ▪ Survival of 80% of established individuals ▪ Habitat subject to translocation must exhibit same or less cover by non-native grasses and forbs than during the initial planting (30%). <u>Adaptive Management</u> The HMMP shall include adaptive management strategies in the event the mitigation and monitoring program fails to achieve the performance standards discussed above during the 10-year monitoring period; the Project	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		Applicant shall implement the following remedial measures to attempt to achieve the performance standards: ▪ If the enhancement/restoration areas or receptor sites are observed to be failing significantly to achieve the performance standard during the 10-year monitoring period, the Biological Monitor shall identify an alternate site(s) in the Conservation Area in which to broadcast seed from a contingency seed supply held at a seed facility (and maintained for at least 10 years). Should the performance standards be achieved, contingency seed would be broadcast in the enhancement/restoration areas or receptor sites. ▪ If receptor sites appear on track to meet the performance standards, any remaining plant material may be planted after 5 years at the receptor sites (if space allows) or additional acceptable receptor sites shall be identified. This would allow for 5 years of monitoring of the container stock. ▪ Seeds and/or bulbs shall continue to be harvested from plants maintained in the nursery and installed in the receptor sites on an as-needed basis to ensure translocation/receptor sites are progressing toward final performance. ▪ The alternate site shall be prepared as outlined for the initial site and modifications incorporated as determined by the Project Biologist in coordination with County Planning. Once an approach has been determined in coordination with the County, the seed would be broadcast at the contingency seed and seeded at the alternate site, and a 10-year program, that includes monitoring and maintenance, would be initiated as set forth above. **MM-4.4-3:** *Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation*. The required Conservation Management Plan (CMP) approved by the County of Los Angeles (County) shall include a Special-Status Plant Mitigation and Monitoring Plan (SSPMMP) that shall provide guidance and methods to preserve the special-status plants known to occur within the Conservation Area (slender mariposa lily [*Calochortus clavatus* var. *clavatus*],	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		Plummer's mariposa lily [*Calochortus plummerae*], Peirson's morning glory [*Calystegia peirsonii*], and scarlet Keckiella [*Keckiella ternata*]), along with a program of special-status plants seed collection and dispersal within the Conservation Area. The SSPMMP shall also include methods and approach to translocating mariposa lily individuals proposed for impact into the Conservation Area. The SSPMMP shall be developed and implemented with a program that does not conflict with other conservation easement resource management objectives. The SSPMMP shall provide details on site preparation measures, as well as specific methods for the pre-construction collection of seeds from all four species and the harvest of mariposa lily bulbs from impacted populations. The SSPMMP shall also provide detailed methods for the dispersal of that seed and the translocation of the harvested bulbs into the conservation easement areas within locations with appropriate soils and growing conditions for each species, as determined by a qualified biologist in coordination with the County and California Department of Fish and Wildlife. Finally, the SSPMMP shall provide a schedule and action plan for the maintenance and monitoring programs, including success criteria, and remedial contingency measures to be implemented if efforts are not successful. Pre-construction surveys shall be conducted in the Project footprint to map slender mariposa lily, Plummer's mariposa lily, Peirson's morning glory, and scarlet keckiella individual locations with a high-accuracy GPS unit and a permanent marker established in the field to locate the individual mariposa lilies for bulb collection. Seeds shall be collected from each species at the appropriate time of year. Mariposa lily bulbs shall remain in the ground until Project development. Prior to Project development, the bulbs shall be translocated within appropriate habitat in the Conservation Area. <u>Performance Standard.</u> Monitoring shall take place annually for 5 years from the time of establishment of the mariposa lily bulbs. The following success criteria is the minimum required by the end of the 5-year monitoring period:	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		▪ 25 slender mariposa lily ▪ 44 scarlet keckiella ▪ 600 Peirson's morning glory ▪ 128 Plummer's mariposa lily If it appears that the population of these special-status plant species (slender mariposa lily, scarlet keckiella, Peirson's morning glory, and Plummer's mariposa lily) or the vegetation community composition and status are on the decline or have been degraded, remedial activities shall be implemented according to the CMP and the SSPMMP, and monitoring shall continue until the success criteria are met. These activities may include weed control, additional seeding, native plant establishment, or other activities where appropriate. Annual monitoring reports shall be submitted by August 31 of each year and shall include an evaluation of current monitoring data in relation to previous population observations (during previous monitoring years) and native enhancement efforts for slender mariposa lily, scarlet keckiella, club-haired mariposa lily, Peirson's morning glory, and Plummer's mariposa lily. These reports shall also include any recommendations for remedial management measures and shall discuss other issues that need to be addressed, such as trespassing or vandalism. **MM-4.4-4**: *Biological Monitoring*. Prior to the issuance of a grading permit, the Applicant shall submit the qualifications of potential Biological Monitor(s) to the County of Los Angeles (County) Department of Regional Planning (Planning) for review and approval. The Applicant shall then fund the County Planning-approved Biological Monitor(s) during Project construction to monitor construction activities and to ensure compliance with all mitigation measures. The Biological Monitor shall be present on site during all vegetation removal and each day prior to the commencement of grading activities. The Biological Monitor shall be responsible for conducting a pre-construction clearance survey, and any wildlife (common or special-status) shall be relocated to the Conservation Area. Pre-construction clearance	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		surveys shall be conducted prior to construction of each new phase of the development. The Biological Monitor shall ensure that wildlife do not become entrapped in excavation or trenching areas. Safeguards shall be implemented during daytime periods of non-activity and overnight, such as a placing a platform over trenches, flush with the ground surface; installing escape ramps in trenches; or installing exclusionary fencing. Should relocation of any trapped wildlife be required, construction shall be halted until the Biological Monitor arrives on site and clears the work area (in compliance with all applicable permits and authorizations). Burrowing owl has the potential to occur as a transient during dispersal and migration. Focused pre-construction surveys for burrowing owl shall be conducted weekly by the Biological Monitor beginning 30 days prior to the commencement of vegetation removal, with the last/fourth survey being conducted three days prior to the commencement of vegetation removal. If burrowing owl are located during any focused pre-construction surveys, or during the monitoring of construction activities, a 500-foot no-work buffer shall be established around the location of the burrow(s), and County Planning and California Department of Fish and Wildlife (CDFW) shall be notified. CDFW shall be consulted regarding the potential need for an Incidental Take Permit per California Fish and Game Code 2081. The no-work buffer shall remain in place until the until the Project Applicant obtains confirmation from CDFW that it can be removed. The results of the surveys and any associated monitoring shall be documented in a Burrowing Owl Survey/Monitoring Report that shall be submitted to County Planning. The Biological Monitor shall also monitor any colonial roosts located within 500 feet from the Project limits to determine if Project activities are having a detrimental effect on the roost. If bats are exhibiting distress due to noise generated by Project activities, the Biological Monitor shall work with the construction contractor on ways to reduce activities in the proximity of the roost (e.g., limiting the number of tractors in the area). The results of the protective actions will be documented in the daily monitoring report.	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		The Biological Monitor shall regularly inspect the Project site as needed after the completion of all grading activities. Monthly spot-check monitoring is anticipated to be required throughout the construction of the Project for those areas that are graded but not yet developed/landscaped. During monthly visits, the biological monitor shall do the following: (1) address the potential establishment of invasive species and require weed abatement (if necessary) in accordance with MM-4.4-6, Invasive Species Prevention; (2) address the potential establishment of native vegetation/habitat to reduce the potential for impacts between phases of construction; (3) identify deficiencies, if applicable, with any erosion control measures that have the potential to negatively impact biological resources. Daily monitoring reports shall be prepared by the Biological Monitor that at a minimum document the results of any surveys conducted, wildlife relocations, construction activities performed, compliance issues observed, and corrective actions taken. The monitoring reports shall include photos. The monitoring reports shall be made available to County Planning and the California Department of Fish and Wildlife at their request. **MM-4.4-5:** *Demarcation of Disturbance Limits*. Prior to commencement of earthwork for each phase of Project construction, the construction limits shall be clearly demarcated (e.g., installation of flagging or temporary high visibility construction fence), as recommended by the Biological Monitor approved by the County of Los Angeles. All construction activities, including equipment staging and maintenance, shall be conducted within the marked disturbance limits to prevent inadvertent disturbance to sensitive vegetation communities outside the limits of work. The flagging shall be maintained throughout construction. **MM-4.4-6**: *Invasive Species Prevention*. The Project shall not include invasive plant species listed on Appendix C of the SEA Ordinance Implementation Guide and in the California Invasive Plant Council inventory in Project landscaping palettes. Project landscape palettes shall be reviewed and approved by the County of Los Angeles (County) to ensure that invasive plant	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		species are excluded. In addition, to prevent the spread of invasive plant species during construction and until the establishment of common landscaped areas associated with the Project, the following measures shall be implemented: ▪ A Workers Environmental Awareness Training (WEAT) program shall be prepared that shall include invasive species prevention measures implemented by the Project. The WEAT shall include descriptions of the common invasive plants known in the region. The WEAT shall also include descriptions of sensitive resources known to occur on the Project site and the procedures to follow should a sensitive resource be encountered. ▪ All mobile vehicles and construction equipment shall be washed prior to entering the Project site in an upland location where any seed material from invasive species shall be contained and not carried onto the Project site. Logs of the washing shall be submitted monthly to the County Department of Regional Planning. ▪ Following the completion of grading activities, for those areas of the Project site that are graded but not yet developed/landscaped, the County-approved Biological Monitor shall conduct monthly spot checks to prevent the introduction or establishment of invasive plant species onto the graded areas (see MM-4.4-4, Biological Monitoring). If invasive species are identified, the Biological Monitor shall remove the plants with hand tools or weeding equipment to prevent propagation. ▪ All vegetative material removed from the Project footprint shall be transported in a covered vehicle and shall be disposed of at a certified disposal site. **MM-4.4-7:** *Landscaping Plan*. Prior to the issuance of the first grading permit, the Applicant shall prepare a Landscaping Plan for the areas maintained by the Homeowners' Association (HOA) and submit the Landscaping Plan to the County of Los Angeles for review and approval. The Landscaping Plan for the HOA-maintained areas shall include, but not be limited to, the following requirements:	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		▪ The plant species list shall include scientific names, common names, plant container sizes, and quantities. ▪ Invasive plant species (designated by California Invasive Plant Council) shall not be included in the Landscaping Plan as they could establish off site and have negative impacts to the adjacent habitats. ▪ Non-native milkweeds shall not be included in the landscaping plan as they could establish off site and have negative impacts to the adjacent habitats. ▪ The plant layout shall indicate the location of the plant species. ▪ Planting notes shall include irrigation and plant installation requirements such as mulch requirements. ▪ Ornamental varietals and selections of native species shall be avoided if they have the potential to hybridize with local native populations. ▪ Where native species are required, the species shall be indigenous native species of the region (locally indigenous native species). **MM-4.4-8:** *Crotch's Bumble Bee Habitat Preservation and Minimization Measures.* <u>Incidental Take Permit</u> The Applicant shall consult with the California Department of Fish and Wildlife on obtaining an Incidental Take Permit (ITP), per California Fish and Game Code 2081, for the take of Crotch's bumble bee. Mitigation for direct impacts to Crotch's bumble bee will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished through the preservation of on-site suitable habitat (MM-4.4-1) and off-site suitable habitat (MM-4.4-9). The Applicant shall be obligated to implement all minimization and avoidance measures conditions that are included in the ITP. <u>Pre-Construction Survey</u>	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		A pre-construction survey for Crotch's bumble bee (*Bombus crotchii*) shall be conducted within the construction footprint prior to the start of ground-disturbing construction activities occurring during the Crotch's bumble bee nesting period (February 1 through October 31). The survey shall ensure that no nests for Crotch's bumble bee are located within the construction area. The pre-construction survey shall include a habitat assessment and focused surveys, both of which shall be based on recommendations described in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction. The habitat assessment shall, at a minimum, include historical and current species occurrences; document potential habitat on site including foraging, nesting, and/or overwintering resources; and identify which plant species are present. For the purposes of this mitigation measure, nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and human-made structures that may support bumble bee colonies, such as rock walls, rubble, and furniture. The habitat assessment shall be repeated prior to February 1 in each year that ground-disturbing activities will occur to determine if nesting resources are present within the impact area. If nesting resources are present in the impact area, focused surveys shall be conducted. The focused survey shall be performed by a biologist with expertise in surveying for bumble bees and include at least three survey passes that are not on sequential days or in the same week, preferably spaced 2 to 4 weeks apart. The timing of these surveys shall coincide with the colony active period (April 1 through August 31 for Crotch's bumble bee). Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling), and surveyors shall wait at least 1 hour following rain. Optimal surveys are conducted when there are sunny to partly sunny skies and ambient temperatures are greater than 60° Fahrenheit. Surveys may be conducted	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		earlier than April 1 if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 mph). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the nest resources for up to 5 minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after 5 minutes of observation. If a bumble bee worker is detected, then a representative shall be identified to species. Biologists should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point that would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes). Identification shall include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in the U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographic documentation if able. The bee shall be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee identifying characteristics cannot be adequately captured in the container due to movement, the container shall be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee species, they become active shortly after removal from the cold environment, so photography must be performed quickly.	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		If Crotch's bumble bee nests are not detected, no further mitigation would be required. The mere presence of foraging Crotch's bumble bees would not require implementation of additional minimization measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources shall be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources. A written survey report shall be submitted to the County of Los Angeles (County) and CDFW within 30 days of the pre-construction survey. The report shall include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report shall include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers and detailed habitat assessment. If Crotch's bumble bee nests are observed, the survey report shall also include recommendations for avoidance, and the location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report. If the above measures are followed, it is assumed that the project shall not need to obtain authorization from CDFW through the California Endangered Species Act Incidental Take Permit process. If the nest resources cannot be avoided, as outlined in this measure, the project applicant shall consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		offset impacts to Crotch's bumble bee may supersede measures provided in this California Environmental Quality Act document and shall be incorporated into the Habitat Mitigation and Monitoring Plan. **MM-4.4-9:** *Off-Site Habitat Preservation.* Prior to final map recordation, the Applicant shall obtain a letter of intent from the future Conservation Easement holder. Prior to issuance of a grading permit, the Applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code Section 815.1, that permanently preserves off-site habitat for long-term conservation and management ("off-site conservation area"). As part of recording the conservation easement for any off-site parcel(s), a Conservation Management Plan (CMP) applicable to the off-site conservation area shall be prepared and submitted to the Los Angeles County (County) Department of Regional Planning (Planning) for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The conservation easement holder shall be an entity that has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The California Department of Fish and Wildlife (CDFW) per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968(b). One or more of the following options shall be used to provide adequate preservation for Project-related impacts to vegetation communities and wildlife habitat within the Significant Ecological Area (SEA) Ordinance Implementation Guide Resource Categories 1 and 3. The proposed off-site conservation area lands must support resources similar to those disturbed by the Project (i.e., sensitive vegetation communities, special-status plant and wildlife habitats, jurisdictional waters, and protected trees) and be connected with other natural open space areas. To determine that these conditions are present, the Applicant shall fund a biological resources assessment by a County Planning-approved Biologist for any parcel proposed for preservation,	

Table ES-1. Environmental Impacts and Mitigation Measures

<table>
<tr><th>Environmental Topic and Threshold</th><th>Level of Significance Prior to Mitigation</th><th>Mitigation Measure(s)</th><th>Level of Significance After Mitigation</th></tr>
<tr><td></td><td></td><td>and the results of the assessment shall be submitted to County Planning for their approval to be used as mitigation.

<u>In-Kind and Off-Site in the Santa Susana Mountains and Simi Hills Significant Ecological Area</u>
For parcels within the SEA that support in-kind vegetation communities as those found in the Project site, the preservation ratios for each of the SEA Resource Categories listed would be in accordance with the SEA Ordinance Implementation Guide. The following table indicates the minimum preserved acres required for off-site preservation of in-kind vegetation communities (communities classified as the same as those being impacted by the Project) within the SEA.

In-Kind Vegetation Communities Preserved Off-Site in the Santa Susana Mountains and Simi Hills Significant Ecological Area
<table><tr><th>Alliance</th><th>Required In-Kind Preserved Acres</th></tr><tr><td colspan="2">SEA Resource Category 1 (Mitigated at 5:1)</td></tr><tr><td>Baccharis salicifolia Shrubland</td><td>11.65</td></tr><tr><td>Salix gooddingii–Salix laevigata Forest and Woodland</td><td>6.22</td></tr><tr><td>Sub-Total</td><td>17.87</td></tr><tr><td colspan="2">SEA Resource Category 3 (Mitigated at 3:1)</td></tr><tr><td>Ericameria palmeri Provisional Shrubland</td><td>2.00</td></tr><tr><td>Eriodictyon crassifolium Provisional Shrubland</td><td>0.84[a]</td></tr><tr><td>Nassella (Stipa) spp.–Melica spp. Herbaceous</td><td>0.20</td></tr><tr><td>Quercus agrifolia Forest and Woodland</td><td>30.50[b]</td></tr></table></td><td></td></tr>
</table>

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)		Level of Significance After Mitigation
		Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.07[a]	
		Sub-Total	*33.61*	
		Total	**51.48**	

Notes: SEA = Significant Ecological Area.

[a] None would be needed if MM-4.4-2, Habitat Mitigation and Monitoring Plan, is implemented.

[b] 15.30 acres shall be needed if MM-4.4-2 is implemented.

Out-of-Kind and Within the Santa Susana Mountains and Simi Hills Significant Ecological Area

Preservation of out-of-kind vegetation communities (communities classified as being different than those being impacted by the Project) that are in the same group (defined by combinations of relatively narrow sets of diagnostic plant species (including dominant and co-dominant species, broadly similar composition, and diagnostic growth forms that reflect biogeographic differences in mesoclimate, geology, substrates, hydrology, and disturbance regimes as defined by the Federal Geographic Data Committee in the 2006 Draft National Vegetation Classification Standard) as the impacted vegetation communities (as defined by the National Vegetation Classification Standards) can be satisfied with the acquisition of parcels within the Santa Susana Mountains and Simi Hills SEA. For preserved lands within the same Resource Category, a multiplier of 1.5 shall be applied to increase lands for preservation, as shown in the following table. For preserved lands within a higher sensitivity Resource Category, a multiplier of 1.25 shall be applied, as shown in the following table. Lower sensitivity Resource Categories may not satisfy mitigation requirements for higher sensitivity Resource Categories. For the two Resource Category 1 communities, preservation shall be a riparian-associated vegetation community.

Out-of-Kind Vegetation Communities Preserved Within the Santa Susana Mountains and Simi Hills Significant Ecological Area

Alliance	Out-of-Kind-Same Resource Category Preserved Acres	Out-of-Kind-Higher Resource Category Preserved Acres
SEA Resource Category 1 (Mitigated at 5:1)	**1.5 Multiplier**	**1.25 Multiplier**
Baccharis salicifolia Shrubland	17.47	NA
Salix gooddingii–Salix laevigata Forest and Woodland	9.33	NA
Subtotal	*26.81*	*NA*
SEA Resource Category 3 (Mitigated at 3:1)	**1.5 Multiplier**	**1.25 Multiplier**
Ericameria palmeri Provisional Shrubland	3.00	2.50
Eriodictyon crassifolium Provisional Shrubland	1.26[a]	1.05[a]

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)			Level of Significance After Mitigation
		Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0.31	0.25	
		Quercus agrifolia Forest and Woodland	45.75[b]	38.13[c]	
		Rhus trilobata–*Crataegus rivularis*–*Forestiera pubescens* Shrubland	0.10[a]	0.08[a]	
		Subtotal	*50.42*	*42.01*	
		Total	*77.23*	*42.01*	

Notes: NA = Not Applicable (due to there being no higher Resource Category)

[a] None would be needed if MM-4.4-2, Habitat Mitigation and Monitoring Plan, is implemented.

[b] 22.95 acres will need to be preserved if MM-4.4-2 is implemented.

[c] 19.13 acres will need to be preserved if MM-4.4-2 is implemented.

Vegetation Communities Preserved Within the Santa Clara River Significant Ecological Area

Off-site preservation within portions of the Santa Clara River SEA that are contiguous with the Santa Susana Mountains and Simi Hills SEA shall be considered if the area supports the same resource values as the Project site and is connected with other natural open space. Preservation of vegetation communities shall be acquired within the adjacent Santa Clara River SEA at a multiplier of 2 for in-kind preservation, multiplier of 2.5 for out-of-kind preservation but within the same Resource Category, and a multiplier of 2.25

Table ES-1. Environmental Impacts and Mitigation Measures

<table>
<tr><th>Environmental Topic and Threshold</th><th>Level of Significance Prior to Mitigation</th><th>Mitigation Measure(s)</th><th>Level of Significance After Mitigation</th></tr>
<tr><td></td><td></td><td>for out-of-kind preservation but a higher level Resource Category, as shown in the following table. For the two Resource Category 1 communities, preservation shall be a riparian-associated vegetation community.

Vegetation Communities Preserved Within the Santa Clara River Significant Ecological Area
<table><tr><th>Alliance</th><th>In-Kind Preserved Acres</th><th>Out-of-Kind-Same Resource Category Preserved Acres</th><th>Out-of-Kind-Higher Resource Category Preserved Acres</th></tr><tr><td>SEA Resource Category 1 (Mitigated at 5:1)</td><td>2 Multiplier</td><td>2.5 Multiplier</td><td>2.25 Multiplier</td></tr><tr><td>Baccharis salicifolia Shrubland</td><td>23.30</td><td>29.12</td><td>NA</td></tr><tr><td>Salix gooddingii–Salix laevigata Forest and Woodland</td><td>12.45</td><td>15.56</td><td>NA</td></tr><tr><td>Sub-Total</td><td>35.74</td><td>44.68</td><td>NA</td></tr><tr><td>SEA Resource Category 3 (Mitigated at 3:1)</td><td>2 Multiplier</td><td>2.5 Multiplier</td><td>2.25 Multiplier</td></tr><tr><td>Ericameria palmeri Provisional Shrubland</td><td>4.00</td><td>5.00</td><td>4.50</td></tr><tr><td>Eriodictyon crassifolium Provisional Shrubland</td><td>1.67[a]</td><td>2.09[a]</td><td>1.88[a]</td></tr></table></td><td></td></tr>
</table>

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)				Level of Significance After Mitigation
		Nassella (Stipa) spp.–*Melica* spp. *Herbaceous*	*0.41*	*0.51*	*0.46*	
		Quercus agrifolia Forest and Woodland	*61.00*[b]	*76.25*[c]	*68.63*[d]	
		*Rhus trilobata–Crataegus rivularis–*Forestiera *pubescens* Shrubland	*0.13*[a]	*0.17*[a]	*0.15*[a]	
		Sub-Total	*67.21*	*84.02*	*75.62*	
		Total	***102.95***	***128.70***	***75.62***	
		Notes: NA = Not Applicable (due to there being no higher Resource Category 1 None would be needed to be preserved off-site if MM-4.4-2 is implemented. 2 29.16 acres would be needed if MM-4.4-2 is implemented. 3 36.45 acres would be needed to be preserved if MM-4.4-2 is implemented. 4 32.81 acres would be needed to be preserved if MM-4.4-2 is implemented. <u>Preservation of Assessor's Parcel Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067</u> The six parcels are located within the Santa Susana Mountains/Simi Hills SEA, approximately 1 mile south-southwest of the Project site. Nine vegetation communities were mapped in the six parcels, as listed in the table below. Two SEA Resource Category 3 communities, *Pseudotsuga macrocarpa–Quercus agrifolia* association (bigcone Douglas fir–coast live oak forest) and *Quercus agrifolia* association (coast live oak woodland and forest) occur, primarily on north-facing slopes and canyon bottoms. The seven SEA Resource Category 4 communities are shrub-dominated and consist of chaparral and coastal scrub species.				

Assessor's Parcels Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

Vegetation Community	Acres
SEA Resource Category 1	
Quercus agrifolia Association Southern Coast Live Oak Riparian Forest (Water Resources)	27.47
SEA Resource Category 3	
Pseudotsuga macrocarpa–Quercus agrifolia Association	4.02
Quercus agrifolia Association	50.89
Subtotal	54.91
SEA Resource Category 4	
Adenostoma fasciculatum–Salvia leucophylla Association	11.35
Adenostoma fasciculatum–Salvia mellifera Mixed Shrub Association	1.16
Adenostoma fasciculatum Association	77.08
Artemisia californica–Eriogonum fasciculatum Association	2.08
Ceanothus crassifolius–Adenostoma fasciculatum–Rhus ovata Association	249.26
Ceanothus crassifolius–Adenostoma fasciculatum Association	14.37
Malacothamnus fasciculatus–Salvia leucophylla Association	2.54
Malosma laurina–Eriogonum fasciculatum Association	12.93
Wild oats and annual brome grasslands Semi-natural Alliance	12.24

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation

Subtotal	383.01
SEA Resource Category	
Urban/Developed	*1.31*
Total	**466.70**

Note: SEA = Significant Ecological Area.

The drainages in the six parcels are part of the Wiley Canyon and Towsley Canyon watersheds that contribute to the South Fork of the Santa Clara River. The desktop analysis resulted in 13.30 acres of potential streams in the six parcels. The method for determining potential adjacent riparian oak forest resulted in 27.47 acres of SEA Category 1 Water Resources. The remaining 54.91 acres of *Pseudotsuga macrocarpa–Quercus agrifolia* association and *Quercus agrifolia* association would be considered upland and SEA Resource Category 3.

As shown in the following table, the off-site conservation area provides sufficient acreage to fully offset impacts to SEA Resource Category 4 vegetation communities (for SEA Resource Category 4, preservation can be out-of-kind if the resource is of the same category.) and to partially offset impacts to SEA Resource Category 3 (for this discussion, the creation of vegetation communities within the *Brassica nigra–Centaurea melitensis* herbaceous semi-natural stands is not included; however, if oak trees are planted as replacement for SEA protected trees, then an argument shall be made that planted oaks also constitute the creation of oak woodland). The 27.47 acres of SEA Category 1 Water Resources and the 54.91 acres of SEA Resource Category 3 provides the necessary acres of preservation for these two categories. The parcels provide an additional 26.72 acres of SEA Resource Category 3 vegetation communities and 503.17 acres of SEA Resource Category 4 vegetation communities.

[**Note**: *Due to the size of the table and for formatting purposes, this table is not included within this Executive Summary. Please review Section 4.4.7,*

Table ES-1. Environmental Impacts and Mitigation Measures

<table>
<tr><th>Environmental Topic and Threshold</th><th>Level of Significance Prior to Mitigation</th><th>Mitigation Measure(s)</th><th>Level of Significance After Mitigation</th></tr>
<tr><td></td><td></td><td>
Mitigation Measures, of Section 4.4, Biological Resources, of this Draft EIR for the table detailing impacts to SEA Resource Category Communities and Proposed Preservation for the Project Using APNs 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067.]

<u>Mitigation Bank Credits</u>
Off-site purchase of mitigation credit from a County Planning-approved mitigation bank shall be completed prior to the issuance of grading permits. The mitigation bank would have to be located within the Santa Susana Mountains and Simi Hills SEA or be contiguous with the SEA. The credits purchased must meet the acres calculated by using a multiplier of 3 applied to the preservation ratios stated in the SEA Ordinance Implementation Guide for SEA Resource Categories 1 and 3, as shown in the following table.

Mitigation Credits Required to be Purchased from a County-Approved Mitigation Bank
<table>
<tr><th>SEA Resource Category</th><th>Mitigations Credits Required</th></tr>
<tr><td>1</td><td>53.61[a]</td></tr>
<tr><td>3</td><td>100.83[b,c]</td></tr>
</table>
Notes: County = County of Los Angeles; SEA = Significant Ecological Area.
[a] Riparian scrub.
[b] 91.50 woodland, 8.72 shrubland, and 0.61 grassland
[c] 45.90 woodland, 6.01 shrubland, and 0.61 grassland (totaling 52.52) would be needed if MM-4.4-2 is implemented.

Mitigation lands shall consist of similar or higher quality habitat than found on the Project site. Should credits not be available, then compensation may be in the form a County-approved turnkey project with a mitigation bank and/or other County Planning-approved option. Selected mitigation banks shall be accredited through CDFW and/or the County to have established conservation easements that shall ensure the preservation of the resources in perpetuity.
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Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-4.4-10*: Special-Status Wildlife Relocation Plan.* Prior to commencement of any earthmoving activities or the pre-construction staging of equipment on the Project site, the Project Applicant shall contract with a biologist approved by the County of Los Angeles (County) to develop a Pre-construction Wildlife Survey and Relocation Plan for terrestrial reptiles, including the California newt (*Taricha torosa*), two-striped gartersnake (*Thamnophis hammondii*), Southern California legless lizard (*Anniella stebbinsi*), and coastal whiptail (*Aspidoscelis tigris stejnegeri*). The Pre-construction Wildlife Survey and Relocation Plan shall be submitted to the County for review prior to any ground-disturbing activities within potentially occupied habitat. The plan shall include at a minimum, the following: ▪ Protocols for pre-construction surveys to flush out and/or move identified special-status wildlife within the Study Area, as feasible - Relocation to the Conservation Area shall be the primary location, unless otherwise approved by the County ▪ The timing, frequency, and locations where surveys should be conducted - Surveys shall be conducted 24 hours prior to construction activities and repeated the morning of the proposed activity - Surveys shall be conducted in all areas anticipated to be subject to vegetation clearing ▪ The habitat and conditions in the proposed relocation site(s) ▪ The methods that would be used for trapping and relocating identified species - All equipment used in the effort shall be cleaned and decontaminated to minimize the spread of herpetofaunal pathogens (per the 2020 article by Julian et al. in the Herpetological Review, Minimizing the Spread of Herpetofaunal Pathogens in Aquatic Habitats by Decontaminating Construction Equipment)	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		- Any wildlife handling and relocation methodology from the Streambed Alteration Agreement issued by the California Department of Fish and Wildlife (CDFW) shall be incorporated in the Pre-construction Survey and Relocation Plan ▪ Protocols for documentation/recordation of the species and number of animals relocated - Relocations shall be logged and made available to the County, if requested ▪ Protocols for notifying CDFW if identified species cannot be relocated - Attempts at relocation shall be logged, and notification shall occur within 24 hours ▪ The timing and frequency of reports documenting the results of the surveys **MM-4.4-11**: *Nesting Bird Avoidance*. Project construction shall be conducted in compliance with the conditions set forth in the Migratory Bird Treaty Act and California Fish and Game Code with methods approved by the California Department of Fish and Wildlife to protect active bird/raptor nests. Vegetation removal shall occur during the non-breeding season for nesting birds (generally late September to early March) and nesting raptors (generally early July to late January) to avoid impacts to nesting birds and raptors. For the remaining Project activities initiated during the breeding season for nesting birds (March 1–September 30) and nesting raptors (February 1–June 30), a pre-construction survey shall be conducted by the Biological Monitor (MM-4.4-4) for nesting birds and/or raptors within 3 days prior to any work within 300 feet for suitable nesting habitat for non-raptors and within 500 feet for suitable nesting habitat for raptors). If the Biological Monitoring does not find any active nests or immediately adjacent to the impact areas, the Project activity shall be allowed to proceed. If the Biological Monitor finds an active nest adjacent to the construction area and determines that the nest may be indirectly impacted or breeding activities substantially disrupted, the Biological Monitor shall delineate an	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activity. Any nest found during survey efforts shall be mapped on the construction plans, which will be included in the report(s) documenting the survey(s) that will be submitted to the County within three days of the completion of the survey. The active nest shall be protected until nesting activity has ended. To protect any nest site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by the Biological Monitor: (1) work limits shall be established within a buffer around any occupied nest (the buffer shall be 100–300 feet for nesting non-raptors and 300–500 feet for nesting raptors), unless otherwise determined by the Biological Monitor and (2) access and surveying shall be restricted within the buffer of any occupied nest, unless otherwise determined by the Biological Monitor. Encroachment into the buffer area around a known nest shall only be allowed if the Biological Monitor determines that the proposed activity would not disturb the nest occupants. Construction can proceed when the Biological Monitor has determined that fledglings have left the nest, or the nest has failed. **MM-4.4-12**: *Lighting Plan*. Prior to issuance of the building permit, the Applicant shall prepare lighting plans for submission and approval by the Los Angeles County (County) Department of Regional Planning (Planning) that identify the type, layout, and luminaire wattage of all exterior fixtures to be employed in association with the Project. The plan shall demonstrate compliance with Chapter 22.80 (Rural Outdoor Lighting District) of the County Code. The lighting plan shall at a minimum address and conform to the Rural Outdoor Lighting District as well as the following requirements, and Planning must approve all aspects of the final submitted lighting plans. ▪ Wherever feasible and compatible with requirements for nighttime safety and security, outdoor lighting shall be not be operated adjacent to native habitats.	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		▪ Outdoor lighting shall be fully shielded so that bulbs and lenses are not visible and shall cause no light trespass into native habitats or skyward. No lighting shall be directed toward native habitats. ▪ Light fixtures shall be mounted as low as possible to minimize light trespass. ▪ The lowest amount of light shall be employed that is needed for the task. The lighting shall only illuminate the area needed and shall be no brighter than necessary. This includes lighting for stage events. ▪ Motion sensors or automatic controls shall be employed to ensure that lights are not left on longer than necessary. ▪ Only warm light sources shall be used for outdoor lighting. The amount of blue light emitted shall be minimized, as blue light has been shown to harm human health and endanger wildlife. Warm (or subdued) light sources recommended for use outdoors include low-pressure sodium, high-pressure sodium, and low-color-temperature LEDs. Wherever feasible, lighting color temperature shall not exceed 2,200 kelvins. ▪ The following types of lighting are prohibited and shall not be used: drop-down lenses, mercury vapor lights, ultraviolet lights, searchlights, laser lights, or other outdoor lighting that flashes, blinks, alternates, or moves. ▪ Project structures shall utilize non-reflective materials to avoid glare intruding into native habitats. ▪ Landscape screens shall be employed where feasible to reduce glare from vehicle headlights into native habitats. **MM-4.4-13**: *Homeowners' Association Covenants, Conditions, and Restrictions*. The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions (CC&Rs), which are reviewed and approved prior to final map recordation, then recorded immediately after the final map records, shall include the following requirements to reduce potential human impacts on adjacent habitats and wildlife species:	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		▪ Invasive plant species (designated by the California Invasive Plant Council) shall be prohibited on all residential lots, as they could establish off site and have negative impacts to the adjacent habitats. ▪ All trash/garbage waste and recycling receptacles shall have locking devices that discourage wildlife foraging in common areas/parks and shall encourage the use of such locking devices on residential receptacles, as feasible. ▪ Intentional feeding of wildlife, including mule deer, is prohibited. ▪ The use of rodenticides is prohibited. ▪ Speed limits of 15 mph shall be posted, and the CCRs shall require residents to comply with the posted speed limits. ▪ Smoking shall be prohibited in open space areas. ▪ The HOA shall not use balloons for any community events, and the use of balloons by individual homeowners shall be discouraged. ▪ Homeowner reprisals against native wildlife species (i.e., killing or harming native wildlife species in any way) if homeowner pets are killed or harmed by wildlife shall be prohibited. ▪ Public information signage shall be installed at the trailhead and in the recreation facility, and printed information shall be provided to the HOA in order to (1) educate and inform the public about wildlife, especially mountain lions present in the area; (2) advise on proper avoidance measures to reduce human-wildlife conflicts; (3) advise on proper use of open space trails in a manner respectful to wildlife (e.g., dogs on leash, proper waste disposal); and (4) provide local contact information to report injured or dead wildlife. Signage should be written in the language(s) understandable to all those likely to recreate and use the trails. Signage should not be made of materials harmful to wildlife.	
4.4b. Would the project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-	Potentially Significant Impact	**MM-4.4-1**: *On-Site Habitat Preservation*. **MM-4.4-2**: *Habitat Mitigation and Monitoring Plan*. **MM-4.4-4**: *Biological Monitoring*.	Less than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?		**MM-4.4-5**: *Demarcation of Disturbance Limits*. **MM-4.4-6**: *Invasive Species Prevention*. **MM-4.4-7**: *Landscaping Plan*. **MM-4.4-8:** *Crotch's Bumble Bee Habitat Preservation and Minimization Measures.* **MM-4.4-9:** *Off-Site Habitat Preservation*. **MM-4.4-12:** *Lighting Plan*. MM-4.4-13. Homeowners' Association Covenants, Conditions, and Restrictions	
4.4c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially Significant Impact	**MM-4.4-1**: *On-Site Habitat Preservation*. **MM-4.4-3:** *Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation* **MM-4.4-4**: *Biological Monitoring*. **MM-4.4-5**: *Demarcation of Disturbance Limits*. **MM-4.4-6**: *Invasive Species Prevention*. **MM-4.4-7**: *Landscaping Plan*. **MM-4.4-9:** *Off-Site Habitat Preservation*. **MM-4.4-14:** *Jurisdictional Waters Compensation*. Mitigation for up to 4.94 acres of direct impacts to jurisdictional waters shall be implemented through on-site enhancement of remaining jurisdictional waters (per MM-4.4-3) and/or off-site acquisition, such as mitigation bank credits and/or turnkey projects with mitigation banks (as approved by the County of Los Angeles) following the issuance of permits from the U.S. Army Corps of Engineers, Los Angeles Regional Water Quality Control Board, and California Department of Fish and Wildlife, and prior to the issuance of the grading permit.	Less than Significant with Mitigation
4.4d. Would the project interfere substantially with the movement of any native resident or	Potentially Significant Impact	**MM-4.4-1**: *On-Site Habitat Preservation*. **MM-4.4-4**: *Biological Monitoring*.	Less than Significant

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		**MM-4.4-12**: *Lighting Plan*. **MM-4.4-15:** *Roosting Bat Survey.* If Project construction initiates between June 1 and August 30, a Los Angeles County Department of Regional Planning (LACDRP)-approved Biological Monitor shall conduct a pre-construction roosting bat survey within one week prior to the start of construction-related activities for the Project. The biologist shall inspect cliff features that could have crevices used for roosting by a colony of canyon bat (Parastrellus hesperus) within 500 feet of proposed construction activities and then conduct a roost emergence survey at dusk for any potential roosting features found. Results of the surveys shall be documented in a report and submitted to LACDRP. As stated in MM-4.4-4, the Biological Monitor shall monitor any colonial roosts located within 500 feet from the Project limits.	with Mitigation
4.4e. Would the project convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or other unique native woodlands (juniper, Joshua, southern California black walnut, etc.).	Potentially Significant Impact	**MM-4.4-1**: *On-Site Habitat Preservation*. **MM-4.4-2**: *Habitat Mitigation and Monitoring Plan*. **MM-4.4-4**: *Biological Monitoring*. **MM-4.4-5**: *Demarcation of Disturbance Limits*. **MM-4.4-6**: *Invasive Species Prevention*. **MM-4.4-7**: *Landscaping Plan*. **MM-4.4-9:** *Off-Site Habitat Preservation*. **MM-4.4-16:** *SEA Protected Trees Replacement / Compensation*.	Less than Significant with Mitigation
4.4f. Would the project conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (County Code, Title 12, Ch. 12.36), the County Oak Tree Ordinance (County Code, Title 22, Ch. 22.174), the Significant Ecological Areas	Potentially Significant Impact	**MM-4.4-1**: *On-Site Habitat Preservation*. **MM-4.4-2**: *Habitat Mitigation and Monitoring Plan*. **MM-4.4-4**: *Biological Monitoring*. **MM-4.4-5**: *Demarcation of Disturbance Limits*. **MM-4.4-6**: *Invasive Species Prevention*. **MM-4.4-7**: *Landscaping Plan*.	Less than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
(SEAs) (County Code, Title 22, Ch. 102), Specific Plans (County Code, Title 22, Ch. 22.46), Community Standards Districts (County Code, Title 22, Ch. 22.300 et seq.), and/or Coastal Resource Areas (County General Plan, Figure 9.3)?		**MM-4.4-8**: *Crotch's Bumble Bee Habitat Preservation and Minimization Measures*. **MM-4.4-9:** *Off-Site Habitat Preservation*. **MM-4.4-10**: *Special-Status Wildlife Relocation Plan*. **MM-4.4-12**: *Lighting Plan*. **MM-4.4-13:** *Homeowners' Association Covenants, Conditions, and Restrictions*. **MM-4.4-16:** *SEA Protected Trees Replacement / Compensation*. The required Conservation Management Plan (CMP) approved by the County of Los Angeles (County) shall include a Protected Tree Replacement Plan that shall dictate the establishment of replacement trees in the Conservation Area at the numbers specified in the following table. At a minimum, the removal of any SEA Protected Tree shall result in a minimum of two replacement plantings with 10:1 for Heritage Trees. Replacement trees shall be seedlings of the same species being removed and shall be planted within an area where suitable growing conditions are present and where the trees shall be able to remain in perpetuity, which may include the On-Site Conservation Area. Undersized, naturally sprouted trees of the same species growing on site may be protected or transplanted as replacement trees. The replacement trees shall be nurtured and maintained in a condition of good health and shall be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. The following table details the quantity of each species required for planting. **Summary of Individual Species Replacement Quantities**	

Scientific Name	Common Name	Total Impacted	Replacement Ratio	Total Replacement Required
Heteromeles arbutifolia	toyon	0	2:1	0
Juglans californica	Southern California black walnut	3	2:1	6
Populus fremontii	Fremont cottonwood	15	2:1	30
Quercus agrifolia	coast live oak	191	2:1	382
Quercus agrifolia (Heritage Tree)	coast live oak (Heritage Tree)	15	10:1	150
Quercus berberidifolia	scrub oak	1	2:1	2
Quercus lobata	valley oak	10	2:1	20
Quercus lobata (Heritage Tree)	valley oak (Heritage Tree)	2	10:1	20
Salix laevigata	red willow	24	2:1	48
Salix lasiolepis	arroyo willow	7	2:1	14
Sambucus nigra ssp. *caerulea*	blue elderberry	50	2:1	100
	Total	**318**	**N/A**	**772**

It should be noted that mitigation can include the protection of undersized, naturally sprouted trees of the same species growing on site. In addition, per

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		the County Code, the County may require additional mitigation and monitoring requirements following review of the Significant Ecological Area Conditional Use Permits. At a minimum, the County requires that the replacement trees need to be nurtured and maintained in a healthy condition and be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. The Project Applicant must pay into the County Protected Tree Fund should there not be enough locations within the Conservation Area (on-site or off-site) or Project landscaped areas for replacement trees. As a last resort, the Protected Tree Fund payments shall be used by the County in accordance with County Code Section 22.102.070(F)(5).	
4.4g. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved state, regional, or local habitat conservation plan?	No Impact	No mitigation measures are required.	No Impact
Cumulative: Would the project have a cumulative effect on biological resources?	Potentially Significant Impact	**MM-4.4-1**: *On-Site Habitat Preservation*. **MM-4.4-2**: *Habitat Mitigation and Monitoring Plan*. **MM-4.4-3**: *Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation*. **MM-4.4-4**: *Biological Monitoring*. **MM-4.4-5**: *Demarcation of Disturbance Limits*. **MM-4.4-6**: *Invasive Species Prevention*. **MM-4.4-7**: *Landscaping Plan*.	Less than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-4.4-8: *Crotch's Bumble Bee Habitat Preservation and Minimization Measures*. **MM-4.4-9:** *Off-Site Habitat Preservation*. **MM-4.4-10**: *Special-Status Wildlife Relocation Plan*. **MM-4.4-11**: *Nesting Bird Avoidance*. **MM-4.4-12**: *Lighting Plan*. **MM-4.4-13:** *Homeowners' Association Covenants, Conditions, and Restrictions*. **MM-4.4-14**: *Jurisdictional Waters Compensation*. **MM 4.4-15:** *Roosting Bat Survey* **MM-4.4-16**: *SEA Protected Trees Replacement / Compensation.*	
4.5. Cultural Resources			
4.5a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	Potentially Significant Impact	**MM-4.5-1:** *Archaeological Monitoring.* Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Archaeologist, meeting the Secretary of the Interior's Standards, and with experience in California prehistoric and historic resources (experience within Los Angeles County preferred). The Principal Investigator/Archaeologist shall do the following: (1) compose a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan); (2) manage archaeological monitoring; and (3) address any inadvertent discoveries identified during Project implementation. These actions are described further below. (1) *Cultural Resource Monitoring and Inadvertent Discovery Plan*. The Principal Investigator/Archaeologist shall compose the Plan to outline cultural monitoring protocols and a program of treatment and mitigation in the case of an inadvertent discovery of cultural resources during ground-disturbing activities. The Plan would be informed by the data and findings provided in the cultural report prepared for the Project (Appendix D), final	Less than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		grading and site plans in order to provide guidance for the proper identification, evaluation, treatment, and protection of any cultural resources or human remains in accordance with California Environmental Quality Act (CEQA), as well as the depths at which cultural monitoring is required, throughout the duration of the Project. Existence and importance of adherence to this Plan shall be stated on all Project site plans intended for use by those conducting the ground disturbing activities. (2) *Archaeological Monitoring*. The Principal Investigator/Archaeologist shall manage archaeological monitoring activities conducted by technicians knowledgeable in archaeological resources during initial ground disturbances within native soils. Initial ground disturbance is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to cultural monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by Project-related construction. The retained Principal Investigator/Archaeologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitors shall be responsible for maintaining daily monitoring logs. The requirement for archaeological monitoring shall be noted on all construction plans to ensure implementation. Upon completion of all ground disturbing activities and prior to release of the grading bond, an archaeological monitoring report shall be prepared within 60 days following completion of ground disturbance and submitted to the County of Los Angeles for review. This report shall document compliance with approved cultural mitigation, all monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the County and the South Central Coastal Information Center (SCCIC). **MM-4.5-2:** *Workers Environmental Awareness Program (WEAP) Training.* Prior to the commencement of ground-disturbing activities for all phases of Project implementation, the Project Applicant shall retain a Principal	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		Investigator/Archaeologist, as detailed in MM-4.5-1, above. The Principal Investigator/Archaeologist shall prepare a WEAP. The WEAP shall be submitted to the County of Los Angeles for review and approval. All construction personnel and monitors shall be presented the WEAP training prior to the start of ground-disturbing activities. This training shall inform all personnel working on the Project site about the archaeological sensitivity of the area. The purpose of the WEAP training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the Project and explain the importance of and legal basis for the protection of significant archaeological resources. The WEAP shall define "tribal cultural resources" and include appropriate management requirements relating to inadvertent discovery of a potential tribal cultural resource. Each worker should also be instructed on the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the Principal Investigator/Archaeologist, and, if appropriate, Tribal representative as determined by the Principal Investigator/Archaeologist. Necessity of training attendance shall be stated on all Project site plans intended for use by those conducting the ground-disturbing activities.	
4.5b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Potentially Significant Impact	**MM-4.5-1:** *Archaeological Monitoring.* **MM-4.5-2:** *Workers Environmental Awareness Program (WEAP) Training.*	Less Than Significant with Mitigation
4.5c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	Potentially Significant Impact	**MM-4.5-1:** *Archaeological Monitoring.* **MM-4.5-2:** *Workers Environmental Awareness Program (WEAP) Training.*	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect on cultural resources?	Potentially Significant Impact	**MM-4.5-1:** *Archaeological Monitoring.* **MM-4.5-2:** *Workers Environmental Awareness Program (WEAP) Training.*	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.6. Energy			
4.6a. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.6b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Cumulative: Would the project have a cumulative effect on energy resources?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.7. Geology and Soils			
4.7a. Would the project 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 active fault trace? Refer to Division of Mines and Geology Special Publication 42?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
ii. Strong seismic ground shaking?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
iii. Seismic related ground failure including liquefaction and lateral spreading?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
iv. Landslides?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.7b. Would the project result in substantial soil erosion or the loss of topsoil?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.7c. 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?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.7d. Would the project 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	No mitigation measures are required.	Less Than Significant Impact
4.7e. Would the project have soils incapable of adequately supporting the use of onsite wastewater treatment systems	No Impact	No mitigation measures are required.	No Impact

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
where sewers are not available for the disposal of wastewater?			
4.7f. Would the project conflict with the Hillside Management Area Ordinance (County Code, Title 22, Ch. 22.104)?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.7g. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially Significant Impact	**MM-4.7-1.** *Paleontological Monitoring*. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Qualified Paleontologist that meets the standards of the Society for Vertebrate Paleontology (2010). The Principal Investigator/Qualified Paleontologist shall do the following: (1) compose a Paleontological Resource Monitoring and Inadvertent Discovery Plan (Plan); (2) manage paleontological monitoring; and (3) address any inadvertent discoveries identified during Project implementation. These actions are described further below. (1) *Paleontological Resource Monitoring and Inadvertent Discovery Plan*. The Principal Investigator/Qualified Paleontologist would compose the Plan to outline paleontological monitoring protocols and a program of treatment and mitigation in the case of an inadvertent discovery of paleontological resources during ground-disturbing activities. The Plan would be informed by the data and findings provided in the paleontological report prepared for the Project (Confidential Paleontological Resources Assessment Report, prepared by Environmental Science Associates, dated November 2021, as included as Appendix E-2 of this Draft Environmental Impact Report), final grading and site plans in order to provide guidance for the proper identification, evaluation, treatment, and protection of any paleontological resources in accordance with California Environmental Quality Act (CEQA) throughout the duration of the Project. Existence and importance of adherence to this Plan shall be stated on all Project site plans intended for use by those conducting the ground disturbing activities. (2) *Paleontological Monitoring*. The Principal Investigator/ Qualified Paleontologist shall manage paleontological monitoring activities	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		conducted by technicians knowledgeable in paleontological resources during initial ground disturbances within native soils. Initial ground disturbance is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to paleontological monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by Project-related construction. The retained Principal Investigator/ Qualified Paleontologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter paleontological resources. The paleontological monitors shall be responsible for maintaining daily monitoring logs. The requirement for paleontological monitoring shall be noted on all construction plans to ensure implementation. Upon completion of all ground disturbing activities, a paleontological monitoring report shall be prepared within 60 days following completion of ground disturbance and submitted to the County of Los Angeles for review. This report shall document compliance with approved paleontological mitigation, all monitoring efforts, and include an appendix with daily monitoring logs. **MM-4.7-2.** *Workers Environmental Awareness Program (WEAP) Training.* Prior to the commencement of ground-disturbing activities for all phases of Project implementation, the Project Applicant shall retain a Principal Investigator/Qualified Paleontologist. The Principal Investigator/Qualified Paleontologist shall prepare a WEAP. The WEAP shall be submitted to the County of Los Angeles for review and approval. All construction personnel and monitors shall be presented the WEAP training prior to the start of ground-disturbing activities. This training shall inform all personnel working on the Project site about the paleontological sensitivity of the area. The purpose of the WEAP training is to provide specific details on the kinds of paleontological materials that may be identified during construction of the Project and explain the importance of and legal basis for the protection of significant paleontological resources. Each worker should also be instructed on the	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		proper procedures to follow in the event that paleontological resources are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the Principal Investigator/Qualified Paleontologist, if appropriate. Necessity of training attendance shall be stated on all Project site plans intended for use by those conducting the ground-disturbing activities.	
Cumulative: Would the project have a cumulative effect related to geology and soils?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.8. Greenhouse Gas Emissions			
4.8a. Would the project generate greenhouse gas emissions (GHGs), either directly or indirectly, that may have a significant impact on the environment?	Potentially Significant Impact	**MM-4.8-1.** *Construction Emission Reductions*. Prior to the issuance of grading permits, the Project Applicant or its designee shall implement the following strategies during construction activities and provide evidence to the County that the Construction Contractor's contract specifications include the following strategies: a) Use electric or hybrid powered equipment for generators and other small pieces of equipment (e.g., forklifts and saws), as commercially available. b) Use cleaner-fuel equipment such as replacing diesel fuel with compressed natural gas (CNG) or renewable diesel, as commercially available. c) Reduce idling time of heavy-duty trucks either by shutting them off when not in use or reducing the time of idling to no more than 3 minutes (5-minute limit is required by the state airborne toxics control measure 13 CCR § 2485). Commercially available equipment is herein defined as equipment sourced within 50 vehicle miles of the Project site and within 10 percent of the cost of the diesel-fueled-equivalent equipment. The Project Applicant must contact at least 3 contractors or vendors within Los Angeles County and submit to the County justification if the specified equipment is not commercially available.	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		Compliance with this measure shall be documented and made available to the County upon request. **MM-4.8-2.** *Electrify Buildings.* All the Project's buildings shall be powered fully by electricity, with no natural gas infrastructure or appliances, including no fireplaces. Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the building design plans include no natural gas infrastructure. **MM-4.8-3.** *Energy Conservation*. Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the residential and recreational building design plans include the following energy conservation measures: a) Install Energy Star-rated heating, cooling, lighting, and appliances. b) Install a 7-kilowatt (kW) solar photovoltaic electric generating system at the recreation center. c) Outdoor lighting shall be light emitting diodes (LED) or other high-efficiency lightbulbs. d) Install Cool Pavement. Prior to the issuance of building permits, the Project applicant or its designee shall submit building plans illustrating installation of cool pavements in place of dark pavements. Outdoor pavements, such as walkways and patios, shall use paving materials with three-year SRI of 0.28 or initial SRI of 0.33. e) Provide information on energy efficiency, energy efficient lighting and lighting control systems, energy management, and existing energy incentive programs to future residents of the Project. **MM-4.8-4.** *Utilize 100% Zero-Carbon Electricity.* The Project shall require, through the Covenants, Conditions and Restrictions (CC&Rs), enforced by the homeowners' association, the use of 100% zero-carbon electricity procured through Southern California Edison (SCE) (SCE Green Rate) or other electricity provider for residences and the recreational center. This requirement shall be	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		enforced until which time the electricity provided is 100% carbon-free for all accounts by default. **MM-4.8-5.** *Encourage Electric Vehicles.* Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the single-family residential building design plans incorporate the following: a) The installation of a dedicated 208/240 branch circuit will be included in every single-family garage unit, and no-less-than 92 of the market-rate units will have one Level 2 (fast charger with 40-amp circuit) electric vehicle (EV) charging station in the garage. **MM-4.8-6**. *Water Use Efficiency and Water Conservation*. Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the residential and recreational building design plans include the following water use efficiency and conservation measures, including: a) High-efficiency appliances/fixtures to reduce water use, and/or include water-efficient landscape design b) Low-flow or high-efficiency water fixtures c) Water-efficient landscapes with lower water demands than required by the California Department of Water Resources (DWR) 2015 Model Water Efficient Landscape Ordinance (MWELO) d) Planting of native and drought-tolerant plant species only e) Provide educational materials to future tenants and building occupants about water saving behaviors and water-conserving landscaping. **MM-4.8-7.** *Solid Waste Reduction.* Prior to the issuance of building permits for the Project, the Project Applicant shall provide building plans that include the following solid waste reduction measure: a) Provide storage areas for recyclables and organic waste in new construction, and food waste storage, if a pick-up service is available.	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-4.8-8. *Landscape Maintenance Equipment Emission Reductions*. The Project Applicant shall implement the following landscape maintenance equipment reduction measures: a) *Outdoor Electrical Outlets*. Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the design plans include electrical outlets on the exterior of the structure to facilitate use of electrical lawn and garden equipment. b) *Encourage Utilization of Existing Yard Equipment Exchange and Rebate Programs*. The Project's future homeowners' association shall educate future residents about the South Coast Air Quality Management District (SCAQMD) Electric Lawn Mower Rebate Program and the Commercial Electric Lawn and Garden Equipment Exchange Program. When conventional gasoline-powered yard equipment (e.g., lawn mowers, leaf blowers and vacuums, shredders, trimmers, and chain saw) are exchanged for electric and rechargeable battery-powered yard equipment, direct GHG emissions from fossil-fuel combustion are displaced by indirect GHG emissions associated with the generation of electricity used to power the equipment. **MM-4.17-2**: *Transportation Demand Management (TDM) Program*. (See Section 4.17, Transportation)	
4.8b. Would the project conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Potentially Significant Impact	**MM-4.8-1:** *Construction Emissions Reductions*. **MM-4.8-2**: *Electrify Buildings.* **MM-4.8-3**: *Energy Conservation.* **MM-4.8-4**: *Utilize 100% Zero-Carbon Electricity.* **MM-4.8-5**: *Encourage Electric Vehicles.* **MM-4.8-6**: *Water Use Efficiency and Water Conservation.* **MM4.8-7**: *Solid Waste Reduction.* **MM-4.8-8**: *Landscape Maintenance Equipment Emission Reduction.*	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-4.17-2: *Transportation Demand Management (TDM) Program*. (See Section 4.17, Transportation)	
Cumulative: Would the project have a cumulative effect related to greenhouse gas emissions?	Potentially Significant Impact	**MM-4.8-1:** *Construction Emissions Reductions*. **MM-4.8-2:** *Electrify Buildings*. **MM-4.8-3:** *Energy Conservation*. **MM-4.8-4:** *Utilize 100% Zero-Carbon Electricity*. **MM-4.8-5:** *Encourage Electric Vehicles*. **MM-4.8-6:** *Water Use Efficiency and Water Conservation*. **MM4.8-7:** *Solid Waste Reduction*. **MM-4.8-8:** *Landscape Maintenance Equipment Emission Reduction*. **MM-4.17-2**: *Transportation Demand Management (TDM) Program*. (See Section 4.17, Transportation)	Less Than Significant Impact
4.9. Hazards and Hazardous Materials			
4.9a. Would the project create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.9b. 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 or waste into the environment?	Potentially Significant Impact	**MM-4.9-1**: *Soils Management Plan (SMP)*. Prior to issuance of a grading permit, the Applicant shall retain a Qualified Environmental Specialist to prepare a Soil Management Plan (SMP) for submittal to the Los Angeles County Fire Department Hazardous Materials Division for approval. The SMP shall provide the protocols for all earthwork activities and the potential to encounter previously unidentified hazardous materials or wastes on the Project site as well as within off-site disturbance areas. Potential conditions and/or hazards that may be encountered during construction activities	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		include but may not limited to buried septic systems, buried debris (e.g., building debris with lead-based paint chips or asbestos), areas of soil staining, or other suspect conditions that can be identified visually and/or from odors within the Project's proposed disturbance area. If suspect materials or conditions are encountered, then the following actions are required and specific protocols, consistent with applicable Health and Safety Code and Health Hazardous Materials Division of the Los Angeles County Fire Department (LACoFD) requirements, shall be included in the SMP: (1) earthwork activities in that area shall cease until sampling and characterization is completed by the Qualified Environmental Specialist; (2) depending on sampling/analysis results, the appropriate oversight agency shall be notified (e.g. Regional Water Quality Control Board, Department of Toxic Substances Control (DTSC), or the local Certified Unified Program Agency (LACoFD); (3) documentation shall be prepared that itemizes required sampling, results, and actions in conformance with regulatory standards to be taken; (4) protocols for resuming earthwork activities following approval from the oversight agency and remediation of contamination, if any, as deemed necessary by the Qualified Environmental Specialist and oversight agency; (5) National Institute for Occupational Safety and Health (NIOSH)-approved half-face respirators equipped with minimum N-95 protection factor shall be available upon request for use during worker collocation with surface disturbance activities; and (6) hand washing facilities and areas for changing of clothing shall be provided during worker collocation with surface disturbance activities. The SMP shall outline requirements for construction activities that occur within 30 feet of the edge of Interstate 5 (I-5) to address potential aerially deposited lead (ADL) from historic vehicle emissions that included leaded fuels. The SMP shall set forth protocols for soil sampling beneath the pavement of The Old Road within 30-feet of I-5 to determine ADL concentrations and require that if soils are affected by ADL, they shall be managed consistent with all applicable DTSC standards and requirements.	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		The SMP shall outline requirements for ground-disturbing activities as part of the Project as it relates to the potential of releasing spores of Coccidioidomycosis (also known as Valley Fever) into the air. In addition to providing N-95 respiratory masks upon request for construction personnel during any ground-disturbance activities, the SMP shall require the provision of educational material to construction personnel. This educational material shall include information on how to minimize exposure to and recognize symptoms of Valley Fever and ways report symptoms of Valley Fever; proper cleaning procedures to minimize accidental exposure; and demonstrations on how to use personal protective equipment, such respiratory protection, skin, and eye protection. The SMP shall require that any heavy equipment with factory enclosed cabs be provided with high-efficiency particulate absorbing filter (HEPA)-rated air filtration and positive pressure air. The General Contractor utilizing applicable heavy equipment shall provide proof of worker training on proper use of applicable heavy equipment cabs. Communication methods, such as two-way radios, shall be available for use in enclosed cabs.	
4.9c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of sensitive land uses?	Potentially Significant Impact	**MM-4.9-1**: *Soils Management Plan (SMP)*.	Less Than Significant with Mitigation
4.9d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Potentially Significant Impact	**MM-4.9-2.** *Well Assessment*. Prior to issuance of a grading permit, the Applicant shall retain a California registered design professional, such as a licensed civil engineer and/or licensed petroleum engineer to evaluate the exact location, condition, and abandonment status of the well on the Project site. A summary report detailing the findings of the well conditions and abandonment status shall be submitted to the Los Angeles Department of Public Works (Public Works) Building Official and California Geologic Energy Management (CalGEM) for review and approval prior to issuance of a grading	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		permit. Pursuant to Section 110.4 of the Los Angeles County Building Code (LACBC), building permits shall not be issued for new buildings or enclosed structures, additions, or conversions of any building or structure to habitable or occupiable space on, adjacent to, or within 300 feet (91.44 meters) of the existing plugged well without documentation, stamped and signed by the licensed engineer, of proper abandonment of the existing well consistent with CalGEM guidelines and approval by the Public Works Building Official. A CalGEM monitor shall be present on site during all abandonment activities of the on-site oil well. Any further additional abandonment or removal of the plugged well as required by CalGEM shall be completed and approved by CalGEM prior to issuance of a grading permit. **MM-4.9-3**: *Methane Gas Survey and Remediation*. Prior to issuance of a grading permit, the Applicant shall conduct methane gas testing for the presence of methane gas emissions within 300 feet of the plugged well, in accordance with CalGEM and Los Angeles County Department of Public Works (Public Works) methane gas assessment guidelines. The Project applicant shall retain a Qualified Geotechnical Specialist to perform the methane gas soil survey and provide a summary report of the findings with recommendations for remedial work, if necessary. The summary report shall be submitted to the Public Works Building Official for review and approval prior to issuance of a grading permit. In the event that the soil gas investigation indicates methane levels that exceed 5,000 parts per million by volume, the Project Applicant shall include installation of a gas protection system for residences within 300 feet of the plugged oil well. The gas protection system shall be developed in compliance with the Public Works Methane Hazard Mitigation Policy and become part of the project design plans. The Applicant shall submit documentation to Public Works that ensures compliance with the proper abandonment standards and necessary approvals from CalGEM regarding the appropriate well abandonment. It shall ensure that this has been completed prior to commencement of construction of the Project and that all remedial and grading activity recommendations have been implemented to the satisfaction	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		of CalGEM and the Public Works Building Official prior to commencement of construction grading.	
4.9e. 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?	No Impact	No mitigation measures are required.	No Impact
4.9f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Potentially Significant Impact	**MM-4.17-1**: *Construction Traffic Management Plan*. (See Section 4.17, Transportation) **MM-4.20-1**. *Wildfire Education Program*. (See Section 4.20, Wildfire)	Less Than Significant with Mitigation
4.9g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires because the project is located:			
i. within a high fire hazard area with inadequate access?	Potentially Significant Impact	**MM-4.17-1**: *Construction Traffic Management Plan*. (See Section 4.17, Transportation) **MM-4.20-1**. *Wildfire Education Program*. (See Section 4.20, Wildfire) **MM-4.20-4**: *Construction Fire Prevention Plan*. (See Section 4.20, Wildfire) **MM-4.20-5**: *Construction-Related Fire Prevention Measures*. (See Section 4.20 below for more details)	Less Than Significant with Mitigation
ii. within an area with inadequate water and pressure to meet fire flow standards?	Potentially Significant Impact	**MM-4.20-4**: *Construction Fire Prevention Plan*. (See Section 4.20, Wildfire) **MM-4.20-5**: *Construction-Related Fire Prevention Measures*. (See Section 4.20, Wildfire)	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
iii. within proximity to land uses that have the potential for dangerous fire hazard?	Potentially Significant Impact	**MM-4.20-4**: *Construction Fire Prevention Plan*. (See Section 4.20, Wildfire) **MM-4.20-5**: *Construction-Related Fire Prevention Measures*. (See Section 4.20, Wildfire)	Less Than Significant with Mitigation
4.9h. Does the proposed use constitute a potentially dangerous fire hazard?	Potentially Significant Impact	**MM-4.20-1.** *Wildfire Education Program*. (See Section 4.20, Wildfire) **MM-4-20-2.** *Alternative Materials and Methods.* (See Section 4.20, Wildfire) **MM-4.20-3.** *Annual Fuel Modification Zone Inspection*. (See Section 4.20, Wildfire) **MM-4.20-4.** *Construction Fire Prevention Plan*. (See Section 4.20, Wildfire) **MM-4.20-5**. *Construction-Related Fire Prevention Measures.* (See Section 4.20, Wildfire)	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect related to hazards and hazardous materials?	Potentially Significant Impact	**MM-4.9-1:** *Soils Management Plan (SMP)*. **MM-4.9-2:** *Well Assessment*. **MM-4.9-3:** *Methane Gas Survey and Remediation.* **MM-4.17-1:** *Construction Traffic Management Plan*. (See Section 4.17, Transportation) **MM-4.20-1.** *Wildfire Education Program*. (See Section 4.20, Wildfire) **MM-4-20-2.** *Alternative Materials and Methods.* (See Section 4.20, Wildfire) **MM-4.20-3.** *Annual Fuel Modification Zone Inspection*. (See Section 4.20, Wildfire) **MM-4.20-4.** *Construction Fire Prevention Plan*. (See Section 4.20, Wildfire)	Less Than Significant with Mitigation
4.10. Hydrology and Water Quality			
4.10a. Would the project violate any water quality standards or waste discharge requirements or	Potentially Significant Impact	**MM-4.4-14**: *Jurisdictional Waters Compensation* (See Section 4.4, Biological Resources)	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
otherwise substantially degrade surface or groundwater quality?			
4.10b. 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?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.10c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of a Federal 100-year flood hazard area or County Capital Flood floodplain; the alteration of the course of a stream or river; or through the addition of impervious surfaces, in a manner which would:	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
i. Result in substantial erosion or siltation on or off site?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
iii. Create or contribute runoff water which would exceed the capacity of existing or	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			
iv. Impede or redirect flood flows which would expose existing housing or other insurable structures in a Federal 100-year flood hazard area or County Capital Flood floodplain to a significant risk of loss or damage involving flooding?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.10d. Would the project otherwise place structures in Federal 100-year flood hazard or County Capital Flood floodplain areas which would require additional flood proofing and flood insurance requirements?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.10e. Would the project conflict with the Los Angeles County Low Impact Development Ordinance (County Code, Title 12, Ch. 12.84)?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.10f. Would the project use onsite wastewater treatment systems in areas with known geological limitations (e.g. high groundwater) or in close proximity to surface water (including, but	No Impact	No mitigation measures are required.	No Impact

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
not limited to, streams, lakes, and drainage course)?			
4.10g. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.10h. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Cumulative: Would the project have a cumulative effect related to hydrology or water quality?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.11. Land Use and Planning			
4.11a. Would the project physically divide an established community?	Less than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.11b. Would the project cause a significant environmental impact due to a conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Potentially Significant Impact	**MM-4.3-1:** *Construction Equipment.* (See Section 4.3, Air Quality) **MM-4.4-1:** *On-Site Habitat Preservation*. (See Section 4.4, Biological Resources) **MM-4.4-2:** *Habitat Mitigation and Monitoring Plan*. (See Section 4.4, Biological Resources) **MM-4.4-3:** *Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation*. (See Section 4.4, Biological Resources) **MM-4.4-4:** *Biological Monitoring*. (See Section 4.4, Biological Resources) **MM-4.4-5:** *Demarcation of Disturbance Limits*. (See Section 4.4, Biological Resources)	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-4.4-6: *Invasive Species Prevention*. (See Section 4.4, Biological Resources) **MM-4.4-7:** *Landscaping Plan*. (See Section 4.4, Biological Resources) **MM-4.4-8:** *Crotch's Bumble Bee Habitat Preservation and Minimization Measures*. (See Section 4.4, Biological Resources) **MM-4.4-9:** *Off-Site Habitat Preservation*. (See Section 4.4, Biological Resources) **MM-4.4-10:** *Special-Status Wildlife Relocation Plan*. (See Section 4.4, Biological Resources) **MM-4.4-11:** *Nesting Bird Avoidance.* (See Section 4.4, Biological Resources) **MM-4.4-12:** *Lighting Plan*. (See Section 4.4, Biological Resources) **MM-4.4-13:** *Homeowners' Association Covenants, Conditions, and Restrictions*. (See Section 4.4, Biological Resources) **MM-4.4-14:** *Jurisdictional Waters Compensation*. (See Section 4.4, Biological Resources) **MM-4.4-16:** *SEA Protected Trees Replacement/Compensation.* (See Section 4.4, Biological Resources) **MM-4.5-1:** *Archaeological Monitoring.* (See Section 4.5, Cultural Resources) **MM-4.5-2:** *Workers Environmental Awareness Program (WEAP) Training.* (See Section 4.5, Cultural Resources) **MM-4.7-1:** *Workers Environmental Awareness Program (WEAP) Training.* (See Section 4.7, Geology and Soils) **MM-4.7-2:** *Paleontological Monitoring.* (See Section 4.7, Geology and Soils) **MM-4.8-1:** *Construction Emission Reductions*. (See Section 4.8, Greenhouse Gas Emissions)	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-4.8-2: *Electrify Buildings*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-3:** *Energy Conservation*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-4:** *Utilize 100% Zero-Carbon Electricity*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-5:** *Encourage Electric Vehicles*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-6:** *Water Use Efficiency and Water Conservation*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-7:** *Solid Waste Reduction*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-8:** *Landscape Maintenance Equipment Emission Reduction*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.13-1:** *Simultaneous Equipment Operation Limit for Portion of Lot 22.* (See Section 4.13, Noise) **MM-4.13-2:** *Staging Areas & Stationary Equipment*. (See Section 4.13, Noise) **MM-4.13-3:** *Stationary Equipment Construction Noise Barrier*. (See Section 4.13, Noise) **MM-4.13-4:** *Temporary Noise Barrier for On-Site Phases*. (See Section 4.13, Noise) **MM-4.17-1:** *Construction Traffic Management Plan*. (See Section 4.17, Transportation) **MM-4.17-2:** *Traffic Demand Management (TDM) Plan.* (See Section 4.17, Transportation) **MM-4.20-1:** *Wildfire Education Program.* (See Section 4.20, Wildfire)	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-4.20-2: *Alternative Materials and Methods.* (See Section 4.20, Wildfire) **MM-4.20-3.** *Annual Fuel Modification Zone Inspection.* (See Section 4.20, Wildfire) **MM-4.20-4.** *Construction Fire Prevention Plan.* (See Section 4.20, Wildfire) **MM-4.20-5**: *Construction-Related Fire Prevention Measures.* (See Section 4.20, Wildfire)	
4.11c. Would the project conflict with the goals and policies of the General Plan related to Hillside Management Areas or Significant Ecological Areas?	Potentially Significant Impact	**MM-4.4-1:** *On-Site Habitat Preservation*. (See Section 4.4, Biological Resources) **MM-4.4-2:** *Habitat Mitigation and Monitoring Plan*. (See Section 4.4, Biological Resources) **MM-4.4-3:** *Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation*. (See Section 4.4, Biological Resources) **MM-4.4-4:** *Biological Monitoring.* (See Section 4.4, Biological Resources) **MM-4.4-5:** *Demarcation of Disturbance Limits* (See Section 4.4, Biological Resources) **MM-4.4-6:** *Invasive Species Prevention* (See Section 4.4, Biological Resources) **MM-4.4-7:** *Landscaping Plan* (See Section 4.4, Biological Resources) **MM-4.4-8:** *Crotch's Bumble Bee Habitat Preservation and Minimization Measures* (See Section 4.4, Biological Resources) **MM-4.4-9:** *Off-Site Habitat Preservation*. (See Section 4.4, Biological Resources) **MM-4.4-10:** *Special-Status Wildlife Relocation Plan*. (See Section 4.4, Biological Resources) **MM-4.4-11:** *Nesting Bird Avoidance* (See Section 4.4, Biological Resources)	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-4.4-12: *Lighting Plan* (See Section 4.4, Biological Resources) **MM-4.4-13:** *Homeowners' Association Covenants, Conditions, and Restrictions* (See Section 4.4, Biological Resources) **MM-4.4-14:** *Jurisdictional Waters Compensation*. (See Section 4.4, Biological Resources) **MM-4.4-16:** *SEA Protected Trees Replacement / Compensation* (See Section 4.4, Biological Resources)	
Cumulative: Would the project have a cumulative effect related to land use and planning?	Potentially Significant Impact	**MM-4.3-1:** *Construction Equipment.* (See Section 4.3, Air Quality) **MM-4.4-1:** *On-Site Habitat Preservation*. (See Section 4.4, Biological Resources) **MM-4.4-2:** *Habitat Mitigation and Monitoring Plan*. (See Section 4.4, Biological Resources) **MM-4.4-3:** *Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation*. (See Section 4.4, Biological Resources) **MM-4.4-4:** *Biological Monitoring*. (See Section 4.4, Biological Resources) **MM-4.4-5:** *Demarcation of Disturbance Limits*. (See Section 4.4, Biological Resources) **MM-4.4-6:** *Invasive Species Prevention*. (See Section 4.4, Biological Resources) **MM-4.4-7:** *Landscaping Plan*. (See Section 4.4, Biological Resources) **MM-4.4-8:** *Crotch's Bumble Bee Pre-construction Surveys*. (See Section 4.4, Biological Resources) **MM-4.4-9:** *Off-Site Habitat Preservation*. (See Section 4.4, Biological Resources)	Less Than Significant Impact

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-4.4-10: *Special-Status Wildlife Relocation Plan*. (See Section 4.4, Biological Resources) **MM-4.4-11:** *Nesting Bird Avoidance.* (See Section 4.4, Biological Resources) **MM-4.4-12:** *Lighting Plan*. (See Section 4.4, Biological Resources) **MM-4.4-13:** *Homeowners' Association Covenants, Conditions, and Restrictions*. (See Section 4.4, Biological Resources) **MM-4.4-14:** *Jurisdictional Waters Compensation*. (See Section 4.4, Biological Resources) **MM-4.4-16:** *SEA Protected Trees Replacement/Compensation.* (See Section 4.4, Biological Resources) **MM-4.5-1:** *Archaeological Monitoring.* (See Section 4.5, Cultural Resources) **MM-4.5-2:** *Workers Environmental Awareness Program (WEAP) Training.* (See Section 4.5, Cultural Resources) **MM-4.7-1:** *Workers Environmental Awareness Program (WEAP) Training.* (See Section 4.7, Geology and Soils) **MM-4.7-2:** *Paleontological Monitoring.* (See Section 4.7, Geology and Soils) **MM-4.8-1:** *Construction Emission Reductions*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-2:** *Electrify Buildings*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-3:** *Energy Conservation*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-4:** *Utilize 100% Zero-Carbon Electricity*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-5:** *Encourage Electric Vehicles*. (See Section 4.8, Greenhouse Gas Emissions)	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-4.8-6: *Water Use Efficiency and Water Conservation*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-7:** *Solid Waste Reduction*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.8-8:** *Landscape Maintenance Equipment Emission Reduction*. (See Section 4.8, Greenhouse Gas Emissions) **MM-4.13-1:** *Simultaneous Equipment Operation Limit for Portion of Lot 22.* (See Section 4.13, Noise) **MM-4.13-2:** *Staging Areas & Stationary Equipment*. (See Section 4.13, Noise) **MM-4.13-3:** *Stationary Equipment Construction Noise Barrier*. (See Section 4.13, Noise) **MM-4.13-4:** *Temporary Noise Barrier for On-Site Phases*. (See Section 4.13, Noise) **MM-4.17-1:** *Construction Traffic Management Plan*. (See Section 4.17, Transportation) **MM-4.17-2:** *Traffic Demand Management (TDM) Plan.* (See Section 4.17, Transportation) **MM-4.20-1:** *Wildfire Education Program.* (See Section 4.20, Wildfire) **MM-4.20-2:** *Alternative Materials and Methods.* (See Section 4.20, Wildfire) **MM-4.20-3.** *Annual Fuel Modification Zone Inspection.* (See Section 4.20, Wildfire) **MM-4.20-4.** *Construction Fire Prevention Plan.* (See Section 4.20, Wildfire) **MM-4.20-5**: *Construction-Related Fire Prevention Measures.* (See Section 4.20, Wildfire)	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.12. Mineral Resources			
4.12a. 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?	No Impact	No mitigation measures are required.	No Impact
4.12b. 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?	No Impact	No mitigation measures are required.	No Impact
Cumulative: Would the project have a cumulative effect on mineral resources?	No Impact	No mitigation measures are required.	No Impact
4.13. Noise			
4.13a. 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 County General Plan or noise ordinance (County Code, Title 12, Chapter 12.08), or applicable standards of other agencies?	Potentially Significant Impact	**MM-4.13-1:** *Simultaneous Equipment Operation Limit for Portion of Lot 22.* Within the area of Lot 22 designated on Figure 4.13-3, Area of Lot 22 In Which Construction Noise Mitigation is Required of the Draft Environmental Impact Report (EIR), the total quantity of mobile construction equipment allowed to operate simultaneously shall not exceed one. **MM-4.13-2:** *Staging Areas & Stationary Equipment*. Prior to issuance of grading permits, the County/Project applicant shall incorporate the following measures as a note on the grading plan cover sheet to ensure that the greatest distance between noise sources and sensitive receptors during construction activities have been achieved. ▪ Neither stationary construction equipment (i.e., generator, air compressor, cement mixer) nor construction staging areas shall be located within Lot 22.	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		▪ Construction equipment, fixed or mobile, shall be equipped with properly operating and maintained noise mufflers consistent with manufacturers' standards. ▪ Construction staging areas shall be located away from off-site sensitive uses during Project construction. ▪ The Project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the Project site, whenever feasible. **MM-4.13-3:** *Stationary Equipment Construction Noise Barrier*. Stationary construction equipment located within 600 feet of the northern Project site property boundary in Lots 2, 3, 8, 9, 10, and 11 and within The Old Road Improvements construction zone shall each be enclosed within a sound barrier of 10-foot minimum height. **MM-4.13-4:** *Temporary Noise Barrier for On-Site Phases.* For mobile equipment (as defined by the Section 12.08.440 of the Los Angeles County Code) construction activities within a Project Lot that is adjacent to an occupied, on-site residence, a temporary noise barrier shall be erected and maintained along the boundary between the Project Lot under construction and the Project Lot with occupied residence(s). The noise barrier for mobile construction equipment operation shall either: (1) extend along the entire common boundary between the construction zone and adjacent occupied Project Lot; or (2) extend from either end of the construction zone a length that is twice the separation distance between the construction zone and closest residence. For stationary construction equipment (as defined by the Section 12.08.440 of the Los Angeles County Code), temporary sound barriers surrounding three sides of the equipment (with the remaining open side facing the opposite direction from the adjacent occupied residences) shall be erected and maintained. The temporary sound barriers shall remain in place throughout the duration of the applicable construction activity. To determine the appropriate height and length of the temporary noise barrier, prior to construction activities for	

Table ES-1. Environmental Impacts and Mitigation Measures

<table>
<tr><th>Environmental Topic and Threshold</th><th>Level of Significance Prior to Mitigation</th><th>Mitigation Measure(s)</th><th>Level of Significance After Mitigation</th></tr>
<tr><td></td><td></td><td>each phase of development, the construction contractor shall determine the nearest occupied residence to the phased construction activity and abide by the below requirements:
<table>
<tr><th>Distance from Construction to On-site, Occupied Residence</th><th>Type of Equipment</th><th>Noise Barrier Height</th><th>Location for Barrier</th></tr>
<tr><td>50 to 99 feet</td><td>Mobile</td><td>14 feet</td><td>Along boundary between construction zone and adjacent Lot.</td></tr>
<tr><td>50 to 99 feet</td><td>Stationary</td><td>11 feet</td><td>Within 5 feet of stationary equipment, 3 sides</td></tr>
<tr><td>100 to 250 feet</td><td>Mobile</td><td>12 feet</td><td>Along boundary between construction zone and adjacent Lot.</td></tr>
<tr><td>100 to 300 feet</td><td>Stationary</td><td>11 feet</td><td>Within 5 feet of stationary equipment, 3 sides</td></tr>
<tr><td>Beyond 250 feet</td><td>Mobile</td><td>None</td><td>None</td></tr>
<tr><td>Beyond 300 feet</td><td>Stationary</td><td>None</td><td>None</td></tr>
</table></td><td></td></tr>
<tr><td>4.13b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?</td><td>Less Than Significant Impact</td><td>No mitigation measures are required.</td><td>Less Than Significant Impact</td></tr>
<tr><td>4.13c. 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</td><td>No Impact</td><td>No mitigation measures are required.</td><td>No Impact</td></tr>
</table>

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
use airport, would the project expose people residing or working in the project area to excessive noise levels?			
Cumulative: Would the project have a cumulative effect related to noise?	Potentially Significant Impact	**MM-4.13-1**: *Simultaneous Equipment Operation Limit for Portion of Lot 22* **MM-4.13-2:** *Staging Areas & Stationary Equipment* **MM-4.13-3:** *Stationary Equipment Construction Noise Barrier* **MM-4.13-4:** *Temporary Noise Barrier for On-Site Phases*	Less Than Significant Impact with Mitigation
4.14. Population and Housing			
4.14a. 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)?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.14b. Would the project displace substantial numbers of existing people or housing, especially affordable housing, necessitating the construction of replacement housing elsewhere?	No Impact	No mitigation measures are required.	Less Than Significant Impact
Cumulative: Would the project have a cumulative effect related to population and housing?	No Impact	No mitigation measures are required.	Less Than Significant Impact

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.15. Public Services			
4.15a. Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:			
i) Fire protection?	Potentially Significant Impact	**MM-4.17-1:** *Construction Traffic Management Plan*. (See Section 4.17, Transportation) **MM-4.20-1.** *Wildfire Education Program*. (See Section 4.20, Wildfire) **MM-4.20-2:** *Alternative Materials and Methods.* (See Section 4.20, Wildfire) **MM-4.20-3:** *Annual Fuel Modification Zone Inspection*. (See Section 4.20, Wildfire) **MM-4.20-4:** *Construction Fire Prevention Plan*. (See Section 4.20, Wildfire) **MM-4.20-5**: *Construction-Related Fire Prevention Measures.* (See Section 4.20, Wildfire)	Less Than Significant with Mitigation
ii) Sherriff protection?	Potentially Significant Impact	**MM-4.1-1.** *Visual Shielding Plan* (See Section 4.1, Aesthetics) **MM-4.17-1**: *Construction Traffic Management Plan*. (See Section 4.17, Transportation)	Less Than Significant with Mitigation
iii)Schools?	Potentially Significant Impact	**MM-4.17-1**: *Construction Traffic Management Plan*. (See Section 4.17, Transportation)	Less Than Significant with Mitigation
iv)Parks?	Potentially Significant Impact	**MM-4.17-1**: *Construction Traffic Management Plan*. (See Section 4.17, Transportation)	Less Than Significant with Mitigation
v) Libraries?	Less than Significant Impact	No mitigation measures are required.	Less Than Significant Impact

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
vi) Other public facilities?	Potentially Significant Impact	**MM-4.17-1**: *Construction Traffic Management Plan*. (See Section 4.17, Transportation)	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect on public services?	Potentially Significant Impact	**MM-4.17-1**: *Construction Traffic Management Plan*. (See Section 4.17, Transportation)	Less Than Significant with Mitigation
4.16. Recreation			
4.16a. 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?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.16b. Does the project include neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities which might have an adverse physical effect on the environment?	Less than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.16c. Would the project interfere with regional trail connectivity?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Cumulative: Would the project have a cumulative effect on recreational facilities?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.17. Transportation			
4.17a. Would the project conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Potentially Significant Impact	**MM-4.17-1:** *Construction Traffic Management Plan.* Prior to construction of the Project, the Applicant shall prepare a detailed Construction Traffic Management Plan, that shall be prepared in accordance with the County's Requirements For Temporary Traffic Controls For Lane Closures, Street Closures And Detours and supplemental to Part 6 of the Greenbook Standard Specifications for Public Works Construction, subject to County review and approval. The Plan shall include, but not be limited to, the following: ▪ Maintain existing access for land uses in proximity of the Project site throughout construction, unless otherwise approved by the County. ▪ Schedule deliveries and pick-ups of construction materials to non-peak travel periods, to the maximum extent feasible. ▪ Coordinate deliveries and pick-ups to reduce the potential of trucks waiting to load or unload for protracted periods of time. ▪ Minimize obstruction of through traffic lanes on The Old Road and ensure adequate evacuation capabilities of the Project site and nearby developed areas that may require use of The Old Road during evacuations. Use flag persons as needed to ensure safe traffic operations along The Old Road. ▪ If any lane closure is necessary, include detailed safety precautions for pedestrians and bicyclists to allow for safe passage such as alternate routing, protection barriers, and appropriate signage. ▪ Construction equipment traffic from the contractors shall be controlled by flagman. ▪ Identify designated transport routes for heavy trucks (in addition to haul trucks) to be used throughout Project construction. ▪ Schedule vehicle movements to ensure that there are no vehicles waiting off-site and impeding public traffic flow on the surrounding streets. ▪ Install temporary construction signs to warn vehicular traffic of reduced speed limits in construction zone.	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		▪ Establish requirements for loading/unloading and storage of materials on the Project site, where length of time traffic travel lanes could be encumbered and/or sidewalk closings or pedestrian diversions would be implemented, to ensure the safety of the pedestrians. ▪ Coordinate with adjacent property owners and emergency service providers to ensure adequate access to the Project site and surrounding uses. ▪ Limit potential roadway lane closure(s) to off-peak travel periods. ▪ Identify a contact person in the Construction Traffic Management Plan that would be available to oversee implementation of the Plan and address any community concerns. **MM-4.17-2.** *Transportation Demand Management (TDM) Program.* Prior to issuance of final map recordation, the Project Applicant shall prepare a TDM Program aimed at discouraging single-occupancy vehicle trips and encouraging alternative modes of transportation, such as carpooling, taking transit, walking, and biking for residents. The TDM Program shall be subject to review and approval by the Los Angeles County Department of Regional Planning and Los Angeles County Public Works. The exact measures to be implemented shall be determined when the TDM Program is prepared, prior to issuance of a final map recordation for the Project. The following TDM measures are based on measures by the California Air Pollution Control Officers Association (CAPCOA) publication, *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (2021). The TDM Program must include, but would not be limited to, the following: a. Locating the Project near a Bike Lane; Improving Bike Boulevard; Expand Bikeway Network: The Project shall include a Class III bicycle route on the proposed “A” Street, “B” Street, and the gated private access road on-site, which would connect to Los Angeles County’s future Class II bicycle lane along the Project frontage on The Old Road.	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		b. E-Bikeshare System: The Project shall include an E-bike loaner program (separate from the publicly accessible options in the City of Santa Clarita) to provide residents with short-term access for trips. This program shall be active for five years following an initial deposit by the Project Applicant. c. Provide Community-Based Traveling Planning: The Project shall provide households with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles, thereby reducing household vehicle miles traveled (VMT). The Project shall create a ridesharing program for school children. Most school districts provide bussing services to public schools only. School Pool helps match parents to transport students to private schools or to schools where students cannot walk or bike and do not meet the requirements for bussing. d. Carpool/Vanpool Incentives: The Project shall include monetary assistance with fares or gas costs for carpool/vanpool users. This incentive shall be active for three years following an initial deposit by the Project Applicant. e. Implement Subsidized or Discounted Transit Program: The Project shall provide subsidized/discounted daily or monthly public transit passes. This incentive shall be active for three years following an initial deposit by the Project Applicant.	
4.17b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Potentially Significant Impact	**MM-4.17-2**: *Transportation Demand Management (TDM) Plan*.	**Significant and Unavoidable**
4.17c. Would the project substantially increase hazards due to a road design feature (e.g., sharp curves) or incompatible uses (e.g., farm equipment)?	Potentially Significant Impact	**MM-4.17-1**: *Construction Traffic Management Plan*.	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.17d. Would the project result in inadequate emergency access?	Potentially Significant Impact	**MM-4.17-1**: *Construction Traffic Management Plan.* **MM-4.20-1**. *Wildfire Education Program*. (See Section 4.20, Wildfire)	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect related to transportation?	Potentially Significant Impact	**MM-4.17-1**: *Construction Traffic Management Plan.* **MM-4.17-2**: *Transportation Demand Management (TDM) Program*.	Less Than Significant with Mitigation
4.18. Tribal Cultural Resources			
4.18a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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:			
i. 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 § 5020.1(k)?	Potentially Significant Impact	**MM-4.18-1**: *Retention of Native American Monitoring*. Prior to the commencement of any ground disturbance activities, the applicant/owner/developer shall retain a Native American monitor/entity procured by the Fernandeño Tataviam Band of Mission Indians. The applicant/owner/developer shall make arrangements with the retained Native American monitor/entity to enter into a Native American Monitoring Agreement with the intent of securing a total of one Native American monitor to be present during initial ground disturbance (including testing, clearing, grubbing, and grading operations) occurring from one foot above native soils and up to five feet below the surface of native soil. Initial ground disturbance is defined as initial construction-related earthmoving of sediments from their place of deposition. This definition excludes movement of sediments after they have been initially disturbed or displaced by current Project-related construction. More than one monitor may be required if multiple areas within the Project site are simultaneously exposed to initial ground disturbance causing monitoring to be hindered by the distance (more than 100 feet apart) of the simultaneous activities. **MM-4.18-2**: *Workers Environmental Awareness Program***.** The retained Native American monitor/entity procured by the Fernandeño Tataviam Band of	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		Mission Indians (as detailed in MM-4.18-1, above) shall be notified by the applicant/owner/developer of the time and location of the Worker Environmental Awareness Program (WEAP) training no later than 72 hours prior to its scheduled occurrence. The applicant/owner/developer shall provide the retained Native American monitor/entity the access and opportunity to participate in the WEAP training. For further details and requirements pertaining to the WEAP training, please see MM-4.5-2. MM-4.18-3: *Inadvertent Discovery Clause*. In the event that potential prehistoric or historic-era Native American/Tribal resources (sites, features, or artifacts) are exposed during construction activities for the Project, all construction work occurring within 60 feet of the find shall immediately stop and the retained Native American monitor/entity procured by the Fernandeño Tataviam Band of Mission Indians (as detailed in MM-4.18-1, above) must be notified promptly. The find shall be assessed by the retained Principal Investigator/Archaeologist (as detailed in MM-4.5-1) in consultation with the retained Native American monitor/entity. Consultation shall assess and document potential finds in real time to determine whether or not additional study is warranted. In the event that human remains and associated funerary objects are inadvertently encountered during construction activities, the remains and funerary objects shall be treated in accordance with state and local regulations that provide requirements with regard to the accidental discovery of human remains, including California Health and Safety Code Section 7050.5, California Public Resources Code Section 5097.98, and CEQA Guidelines Section 15064.5(e). In accordance with these regulations, if human remains are found, the County Coroner must be immediately notified of the discovery. Additionally, the retained Native American monitor/entity must be notified of the discovery immediately. No further excavation or disturbance of the Project site or any nearby (no less than 100 feet) area reasonably suspected to overlie adjacent remains can occur until the County Coroner has determined, within 2 working days of notification of the discovery, if the remains are potentially human in origin. If the County Coroner	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		determines that the remains are, or are believed to be, Native American, he or she is required to notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant must then complete their inspection within 48 hours of being granted access to the site. The most likely descendant would then determine, in consultation with the property owner, the disposition and treatment of the human remains.	
ii. 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?	Potentially Significant Impact	**MM-4.18-1**: *Retention of Native American Monitoring*. **MM-4.18-2**: *Workers Environmental Awareness Program*. **MM-4.18-3**: *Inadvertent Discovery Clause*.	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect on tribal cultural resources?	Potentially Significant Impact	**MM-4.18-1**: *Retention of Native American Monitoring.* **MM-4.18-2**: *Workers Environmental Awareness Program.* **MM-4.18-3**: *Inadvertent Discovery Clause.*	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.19. Utilities and Service Systems			
4.19a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.19b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.19c. 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?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.19d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
impair the attainment of solid waste reduction goals?			
4.19e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Cumulative: Would the project have a cumulative effect on utilities and service systems?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
4.20. Wildfire			
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones:			
4.20a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?	Potentially Significant Impact	**MM-4.17-1:** *Construction Traffic Management Plan*. (See Section 4.17, Transportation) **MM-4.20-1**: *Wildfire Education Program*. The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions for the Project shall require that the HOA prepare an educational program with wildfire-related information to be provided to all residents and occupants, including the Wildfire Evacuation Plan (WEP) and the Fire Protection Plan (FPP) requirements. The Covenants, Conditions, and Restrictions will be submitted to the County of Los Angeles (County) prior to issuance of certificate of occupancy. The educational program shall be prepared in easy-to-understand, graphically based materials and shall be annually reviewed and updated, as appropriate, in order to maintain high wildfire awareness. Program features shall include, but may not be limited to, the following: 1. Biannual email and mailers: Residents and occupants shall be provided with biannual emails and mailers in April and in August that include information such as reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires. Links to	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		various resources on where to get trusted information, such as the Los Angeles County Fire Department (LACoFD), 211 Los Angeles County, and Ready Los Angeles County, shall be provided and updated annually, as necessary. Additionally, at least once a year, information on the following shall be provided in the email and mailer: (1) how to notify the County Office of Emergency Management (OEM) and Health and Human Services of special needs and/or required accommodations (Accessible Alert LA County, CERT programs, or other), for transportation or other special services; and (2) how to prepare for evacuation of pets and how to register for assistance with pet evacuations. 2. Website: A dedicated community website shall be developed and maintained with more detailed information and resources about wildfire awareness, prevention, and evacuation. The website shall serve as a centralized resource for the fire and evacuation education program and include information from the FPP and WEP. In addition to general emergency preparedness education, the website shall include information that is included in emails, mailers, and workshops/webinars. The website shall have up-to-date fire watch and red flag warning alerts, as well as information on restrictions during fire weather conditions. Residents shall also be able to use the website to sign up for an annual residential defensible space inspection from the HOA fire safety committee. 3. New resident packet: All residents and new residents in the future shall be presented with a wildfire awareness and safety package upon purchase or rental of a residence. Within the package will be a USB drive with the WEP, FPP (which includes information on the regional fire hazard, how to build a go-bag, and tools to prepare a household evacuation plan), and a list of agencies and resources for receiving trusted information. 4. Emergency alert campaign: Residents shall be encouraged to sign up for Alert LA County. Alert LA County is the mass notification system for emergency alerts, weather alerts, health notifications, building alerts, and	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		other updates from County, state, and federal agencies. Reminders shall be sent out in the biannual mailers and emails, on the community website, in the workshops, and in the new resident package. 5. Trail signage: Signs shall be placed at the new trailhead to provide all users with information about how to safely use the trail and shall include restrictions on smoking and firearm usage. Signs shall be evaluated annually to ensure proper maintenance. 6. HOA fire safety committee: The HOA shall establish a fire safety committee responsible for overseeing the maintenance of community-wide fire protection features. Residents will be able to report fire hazards or hazardous fuel conditions to the HOA committee for remediation. The committee shall be responsible for the coordination of the third party fuel modification zone (FMZ) inspections and the volunteer residential defensible space inspections. The committee shall also be responsible for the creation and distribution of the educational program for the Project. The committee shall serve as a communication link between LACoFD and the community.	
4.20b. 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?	Potentially Significant Impact	**MM-4.20-1:** *Wildfire Education Program.* **MM-4.20-2**: *Alternative Materials and Methods*. Prior to the execution of any contract with a construction contractor, the Project Applicant/Developer shall ensure that the following requirements shall be placed on the construction contractor's contract specification: All residential structures shall be built using ignition-resistant materials pursuant to the most recent Los Angeles County (County) Fire and Building Codes (Chapter 7A, focusing on structure ignition resistance from flame impingement and flying embers in areas designated as high fire hazard areas). The following are additional ignition-resistant construction requirements, beyond existing code requirements: 1. The 16 residences included in the southeastern portion of the Project site (within Lot 5 of the Tentative Tract Map) adjacent to the off-site open space area shall include the following features for additional fire	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		prevention, protection, and suppression (Figure 4.20-2, Fuel Modification Zones, of the Draft EIR): i. Windows on structures facing the open space areas shall include dual panes, with both panes tempered. ii. Exterior walls and doors shall be constructed to a standard of minimum 1-hour fire rated with one layer of 5/8-inch type X gypsum sheathing applied behind the exterior covering or cladding on the exterior side of the framing, from the foundation to the roof, for all exterior walls of each building. iii. Exterior vents shall be ember-resistant (recommend BrandGuard, O'Hagin, or similar vents approved by LACoFD). iv. A solid 6-foot-tall wall shall be constructed of concrete masonry units between on-site structures and off-site open space. Proof of compliance shall be provided to the County prior to issuance of a certificate of occupancy for homes that require these additional fire prevention, protection, and suppression features. **MM-4.20-3**: *Annual Fuel Modification Zone Inspection*. The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions shall require annual fuel modification inspections to be conducted to confirm and document compliance with fuel modification maintenance requirements, as defined in the Los Angeles County Fire Department (LACoFD) approved fuel modification plan. The HOA shall obtain a fuel modification zone (FMZ) inspection and report in May/June of each year to document and certify that vegetation management activities throughout the Project site have been performed. If the FMZ areas are not compliant, the HOA shall have a specified period to correct any noted issues, and re-inspection shall be required to achieve the annual certification of compliance. Documentation of compliance shall be retained by the HOA and provided to LACoFD upon request. **MM-4.20-4**. *Construction Fire Prevention Plan*. Prior to the commencement of construction activities, the Project Applicant/Developer shall prepare a construction fire protection plan (FPP) that requires the training of	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		construction personnel and provides details related to fire-suppression procedures and equipment to be used on-site during construction. The construction FPP shall be consistent with the requirements in California Building Code Chapter 33 and California Fire Code Chapter 33, shall be subject to review and approval of the Los Angeles County Fire Department (LACoFD), and shall include the following: ▪ Protocols for conducting mandatory Project-specific environmental awareness training for all on-site construction workers, including the requirement to conduct the training prior to any grubbing or ground disturbance, and requirements for ongoing training to occur prior to commencement of each phase of construction ▪ Requirements to conduct and document construction worker trainings, which shall include protocols for minimizing potential ignition activities, vegetation clearing, parking requirements/restrictions, equipment/vehicle idling restrictions, smoking restrictions, initial attack firefighting, proper use of gas-powered equipment and storage of flammable fuels, use of spark arrestors, fire reporting, and hot work restrictions ▪ LACoFD-approved construction work restrictions during red flag warnings and high to extreme fire danger days ▪ Specifications for access to adequate water supplies and/or water trucks to service construction activities ▪ Documentation of emergency contact information and protocols for on-site emergency response communication to on-site workers, coordination with local fire agencies, and reporting/documentation procedures for actions taken ▪ Designation of an on-site fire awareness coordinator with itemized description of their role and responsibility for ensuring compliance with the construction FPP, including demonstration of compliance with applicable plans and policies established by state and local agencies and documentation of completion of required construction worker trainings	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-4.20-5. *Construction-Related Fire Prevention Measures.* Prior to the execution of any contract with a construction contractor and issuance of grading permits, the Project Applicant/Developer shall ensure that the following requirements shall be placed on the construction contractor's contract specification: ▪ All required fuel modification for each phase of construction activity shall be implemented prior to commencement of that phase and prior to combustible building materials being delivered to the site. ▪ Prior to bringing lumber onto the Project site, improvements within the active development area shall be in place, including utilities, operable fire hydrants, an approved, temporary roadway surface, and fuel modification zones (FMZs) established pursuant to the construction fire protection plan (FPP) and Los Angeles County Fire Department (LACoFD) requirements. ▪ All temporary construction power lines shall only be allowed in areas that have been cleared of combustible vegetation. ▪ All-new permanent power lines shall be installed underground for fire safety purposes.	
4.20c. 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?	Potentially Significant Impact	**MM-4.20-3**. *Annual Fuel Modification Zone Inspection.* **MM-4.20-4**. *Construction Fire Prevention Plan*. **MM-4.20-5:** *Construction-Related Fire Prevention Measures.*	Less Than Significant with Mitigation
4.20d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or	Potentially Significant Impact	**MM-4.20-1:** *Wildfire Education Program.* **MM-4.20-2:** *Alternative Materials and Methods*. **MM-4.20-3**. *Annual Fuel Modification Zone Inspection*.	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
landslides, as a result of runoff, post-fire slope instability, or drainage changes?			
4.20e. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Potentially Significant Impact	**MM-4.20-1:** *Wildfire Education Program.* **MM-4.20-2:** *Alternative Materials and Methods*. **MM-4.20-3:** *Annual Fuel Modification Zone Inspection*. **MM-4.20-4:** *Construction Fire Prevention Plan*. **MM-4.20-5:** *Construction-Related Fire Prevention Measures.*	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect related to wildfire?	Potentially Significant Impact	**MM-4.17-1:** *Construction Traffic Management Plan*. (See Section 4.17, Transportation) **MM-4.20-1:** *Wildfire Education Program.* **MM-4.20-2:** *Alternative Materials and Methods*. **MM-4.20-3.** *Annual Fuel Modification Zone Inspection*. **MM-4.20-4.** *Construction Fire Prevention Plan*. **MM-4.20-5:** *Construction-Related Fire Prevention Measures.*	Less Than Significant with Mitigation

ES.5 Areas of Known Controversy/Issues to be Resolved

The County has complied with the CEQA Guidelines by providing opportunities for early participation in the environmental review process. Specifically, in accordance with Section 15082(a) of the CEQA Guidelines, the County circulated a NOP for a 30-day public review period. The NOP was sent to the State Clearinghouse, the Los Angeles County Clerk, public agencies, special districts, responsible and trustee agencies, and other interested parties for a public review period that began on June 16, 2022 and ended on July 15, 2022 (CEQA Public Review and Scoping Period). The purpose of the NOP is to formally convey that the County, as the lead agency, solicited input regarding the scope and proposed content of the Draft EIR. The NOP included an invitation to agencies and the public to review and comment on the NOP. A copy of the NOP is included in Appendix A-1 and the comment letters received in response to the NOP are included in Appendix A-2 of this Draft EIR.

The primary areas of controversy identified by the public and agencies included the following potential issues (the Draft EIR section that addresses the issue raised is provided in parentheses):

- Potential for impacts to the Significant Ecological Area (Section 4.1, Aesthetics; Section 4.4, Biological Resources; and Section 4.11, Land Use and Planning)
- Potential for air quality and/or pollution impacts (Section 4.3, Air Quality)
- Potential for impacts on wildlife, oak trees, and open space (Section 4.2, Agriculture-Forest; Section 4.4, Biological Resources; Section 4.11, Land Use and Planning)
- Potential for impacts on cultural resources (Section 4.5, Cultural Resources)
- Potential for impacts on carbon sequestration (Section 4.8, Greenhouse Gases)
- Potential for impacts associated with hazards and hazardous materials (Section 4.9, Hazards and Hazardous Materials)
- Potential for impacts associated with water supply (Section 4.19, Utilities and Service Systems)
- Potential for increased local noise levels (Section 4.13, Noise)
- Potential for impacts on level of police, fire, school, and recreation services (Section 4.15, Public Services, Section 4.16, Recreation)
- Potential for increased traffic levels (Section 4.17, Transportation)
- Potential for impacts on tribal cultural resources (Section 4.18, Tribal Cultural Resources)
- Potential for impacts associated with the Project's location in a Very High Fire Hazard Severity Zone (Section 4.9, Hazards and Hazardous Materials; Section 4.20, Wildfire)

ES.6 Summary of Project Alternatives

CEQA requires that Environmental Impact Reports (EIRs) "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives" (14 CCR 15126.6[a]). The CEQA Guidelines direct that the selection of alternatives be governed by "a rule of reason" (14 CCR 15126.6[a] and [f]).

As presented in this Draft EIR and summarized above in Table ES-1, the Project would result in one significant and unavoidable impact after implementation of all mitigation measures. The Project would result in one significant and

unavoidable Project-level impact, regarding inconsistency with CEQA Guidelines section 15064.3(b) resulting in a significant impact under baseline conditions for vehicle miles traveled (VMT), as detailed under Threshold 4.17b of Section 4.17, Transportation, of this Draft EIR.

This Draft EIR includes the analysis of three alternatives to the Project:

- Alternative A – No Project/No Build Alternative
- Alternative B – Mixed Use Project Alternative
- Alternative C – Reduced Footprint Alternative

Pursuant to Section 15126.6(d) of the CEQA Guidelines, each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less than, similar to, or greater than the corresponding impacts of the Project. Each alternative is also evaluated to determine whether the Project objectives would be substantially attained.

ES.6.1 Alternative A - No Project/No Build Alternative

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate the specific alternative of "No Project" along with its impacts. As stated in this section of the CEQA Guidelines, the purpose of describing and analyzing a No Project Alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving a proposed project. Section 15126.6(e)(3)(b) further states that "in certain instances, the No Project Alternative means 'No Build' wherein the existing environmental setting is maintained." Accordingly, Alternative A assumes the proposed Project would not proceed, no new permanent development or land uses would be introduced within the Project site, and the existing environment would be maintained. The existing uses would continue to operate as they do currently. The Project site is currently undeveloped hillsides with no habitable structures or paved roads on-site. Miscellaneous structures on the Project site include fencing, a metal frame bridge, a billboard, an abandoned water tank, water wells, metal drainage pipe, irrigation lines, non-dedicated trails, electrical distribution lines, dirt roads, and an abandoned and plugged oil well. The miscellaneous structures would remain, and no on-site landscaping improvements or pedestrian connections would occur. Additionally, all on-site trees would be preserved under this alternative.

ES.6.2 Alternative B – Mixed Use Alternative

Alternative B would include 361 multi-family dwelling units, 49,000 square feet of retail uses, a recreational center, on-site trails, and the same overall development footprint and natural open space as assumed for the Project. As such, Alternative B development would be situated in the northeastern portion of the Project site, consistent with the Project. The homeowners' association (HOA)-maintained open space would increase under Alternative B with increased acreage of pocket parks throughout the development footprint. Overall, the development footprint would be approximately 81 acres, and total natural open space would be approximately 153 acres. The 361 dwelling units would include 234 multi-family (apartment) rental units, and 37 very-low-income senior rental apartments. The 49,000 square feet of retail uses would be situated on land currently zoned "C-3-DP" (Unlimited Commercial – Development Program) and consist of uses such as a shopping center, restaurants, and other related services, and would include associated surface parking. It is assumed that the on-site retail uses would result in internal trip-capture benefits for future residents at the Project site under Alternative B.

Project infrastructure would include internal roadways, trails and a new trailhead, a new water tank, and seven LACFCD lots with debris and desilting basins, consistent with the Project. Comparable off-site improvements to the Project would also be necessary for Alternative B. These would include development of an eight-foot-wide sidewalk along The Old Road fronting the Project site to provide pedestrian access into the site and widening The Old Road along the Project site frontage to include a total of 80-foot right of way, including sidewalk, curb, and gutter. Between the proposed sidewalk and the portion of the Project site's eastern boundary (adjacent to The Old Road), the Project proposes a retaining wall of a maximum of four feet in height above grade. In addition to improvements to The Old Road, Alternative B would include off-site utility infrastructure components, including utility water line, booster station, and water tank infrastructure improvements, consistent with the Project.

Alternative B would not require a Zone Change to implement, as the existing zone designation of C-3-DP would accommodate retails uses associated with the 49,000 square feet of retail uses. All other discretionary actions of the Project would be required for Alternative B.

ES.6.3 Alternative C – Reduced Footprint Alternative

Alternative C would include 510 multi-family dwelling units in mid-rise apartment complexes and a recreational center. This alternative would include substantial avoidance of riparian habitat and non-riparian streams, and partial avoidance of other biological resources. This alternative satisfies requests by commenters on the Notice of Preparation and from Significant Ecological Areas Technical Advisory Committee for a reduced-footprint alternative. Grading would not be balanced on-site and would require export of soils off-site. All development would be concentrated within the northeastern corner of the Project site, on approximately 30.5 acres. This represents a 64% reduction in the development footprint when compared to the Project. Therefore, the remaining approximately 205 acres would be included as natural open space within the southwestern portion of the site. Due to site constraints to accommodate the reduced alternative footprint, no publicly-accessible trailhead would be included within Alternative C. The approximately 205 acres of natural open space included on-site would not be open to the public for trail usage, and access to the natural open space would be prohibited with signage. The 510 dwelling units would include 459 multi-family (apartment) rental units, and 51 very-low-income rental apartments. The dwelling units would be 4 stories and 56 feet tall. As all 510 units would be rental units, there would be no HOA management of the residential units and on-site uses; all units would be managed through an apartment leasing office.

Project infrastructure would include internal roadways, a new water tank, and LACFCD lots with debris and desilting basins, consistent with the Project. The same off-site improvements as the Project would also be necessary for Alternative C. These would include development of an 8-foot-wide sidewalk along The Old Road fronting the Project site to provide pedestrian access into the site and widening The Old Road along the Project site frontage to include a total of 80-foot right of way, including sidewalk, curb, and gutter. Between the proposed sidewalk and the portion of the Project site's eastern boundary (adjacent to The Old Road), the Project proposes a retaining wall of a maximum of 4 feet in height. In addition to improvements to The Old Road, Alternative C would include off-site fuel modification and off-site utility infrastructure components, including utility water line, and booster station, consistent with the Project.

Alternative C would require a Zone Change of approximately 3 acres of C-3-DP to A-2-1 to accommodate the multi-family residential uses and a Plan Amendment to H18 (allow 9 to 18 units/acre).

1 Introduction

The purpose of this Chapter is to introduce the proposed Trails at Lyons Canyon Project (Project), the applicable environmental review procedures, and the organization of the Draft Environmental Impact Report (Draft EIR).

1.1 CEQA Overview and Purpose of an EIR

This Draft EIR has been prepared by the Los Angeles County Department of Regional Planning to evaluate potential environmental effects that would result from implementation of the Project. This Draft EIR has been prepared in conformance with the California Environmental Quality Act of 1970 (California Public Resources Code Section [PRC] 21000 et seq., as amended [CEQA]) and its implementing guidelines (California Code of Regulations [CCR] Title 14, Section 15000 et seq. [State CEQA Guidelines]). The Project constitutes a "project" as defined in the State CEQA Guidelines Section 15378. Pursuant to Section 15367 of the State CEQA Guidelines, the County of Los Angeles is the lead agency for the Project.

The Project site, which totals 233.49 gross acres, is in the unincorporated Los Angeles County, in the northern foothills of the Santa Susana Mountains at the westerly perimeter of the Santa Clarita Valley. The Project site consists of the following five assessor parcel numbers (APNs): 2826-041-039, 2826-023-014, 2826-022-026, 2826-022-027, and 2826-022-035. The Project site is currently undeveloped with no habitable structures or paved roads on-site. The topography of the site is varied and is characterized by hillside and valley terrain with moderate to steep slopes.

The Project includes the creation of 37 lots for the development of 510 dwelling units with a mix of two- and three-story attached and detached for-sale condominium dwelling units, and a four-story affordable senior housing rental apartment building within 41.47 gross acres; 1.13 gross acres for a recreational center; 10.73 gross acres of debris basin lots); 21.78 gross acres of HOA-maintained open space; 152.84 gross acres of natural and improved (landscaped) open space; 1.43 gross acres of water tank and frontage; and 4.10 gross acres for "A" Street and "B" Street, which would be the public roadways. Off-site Project components include sidewalk improvements, a retaining wall adjacent to The Old Road, directly east of the Project site, improvements to The Old Road fronting the Project site, fuel modification (brush thinning). Additionally, the Project would include several off-site utility infrastructure component improvements, including a utility water line, upgrades to two existing pump stations, upsizing of existing sewer pipelines, and the construction of three manholes within The Old Road.

CEQA requires the preparation of an EIR for any project that a lead agency determines may have a significant impact on the environment. According to Public Resources Code Section 21002.1(a):

> The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided.

CEQA also establishes mechanisms whereby the public and decision makers can be informed about the nature of the project being proposed and the extent and types of impacts that the project and its alternatives would have on the environment, if they were to be implemented.

The basic purposes of CEQA are as follows (State CEQA Guidelines, §15002):

1. Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities;
2. Identify the ways that impacts to the environment can be avoided or significantly reduced;
3. Prevent significant, avoidable impacts to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

This Draft EIR was prepared in accordance with Section 15151 of the State CEQA Guidelines, which defines the standards for EIR adequacy as follows:

> An EIR 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 the 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 the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

A detailed description of the Project is provided in Chapter 3, Project Description, of this Draft EIR, which includes a list of the discretionary actions that must be considered by the County and other responsible agencies. This Draft EIR is intended to serve as a Project EIR under CEQA. Section 15161 of the State CEQA Guidelines states that states a Project EIR should focus primarily on changes in the environment that would result from development of a project. A Project EIR must examine all phases of a project, including planning, construction and operation. This Project EIR is intended to provide the environmental information necessary for the County to make a final decision on the requested discretionary actions to be considered as part of the Project. This Draft EIR is also intended to support discretionary review and decisions by other agencies.

1.2 Organization of this EIR

This Draft EIR is organized into the following chapters: Executive Summary, Introduction, Environmental Setting, Project Description, Environmental Impact Analysis (to include technical sections that address Impacts and Mitigation Measures), Other CEQA Considerations, Alternatives, and Preparers. A list of the Draft EIR chapters and a brief description of their contents is provided below to assist the reader in locating information.

Chapter ES, Executive Summary: This chapter provides a summary of the Project description, Alternatives to the Project, environmental impacts, mitigation measures, and determinations of significance.

Chapter 1, Introduction: This chapter briefly discusses the purpose of the Draft EIR and provides a summary of the relevant CEQA Guidelines that govern the preparation of this EIR. This chapter summarizes the scoping period and the comments received by the County on the Notice of Preparation (NOP) during the scoping process.

Chapter 2, Environmental Setting: In accordance with Section 15125 of the State CEQA Guidelines, this chapter includes a description of the physical environmental conditions of the Project site and vicinity, which constitute the baseline physical conditions. This chapter provides an overview of the regulatory setting and a discussion of related projects considered in the cumulative impact analysis.

Chapter 3, Project Description: In accordance with Section 15124 of the State CEQA Guidelines, this chapter outlines the County's underlying purpose and objectives for the Project, includes a summary of the components of the Project, and includes a listing of the discretionary actions that must be considered by the County and other responsible agencies.

Chapter 4, Environmental Impact Analysis: This chapter contains 20 sections in alphabetical order from Aesthetics to Wildfire, and each section includes the following: existing conditions of the Project site and vicinity, identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures (if any), level of significance after mitigation, and references. Specifically, Chapter 4 includes the following sections:

- Section 4.1, Aesthetics
- Section 4.2, Agriculture and Forest
- Section 4.3, Air Quality
- Section 4.4, Biological Resources
- Section 4.5, Cultural Resources
- Section 4.6, Energy
- Section 4.7, Geology and Soils
- Section 4.8, Greenhouse Gas Emissions
- Section 4.9, Hazards and Hazardous Materials
- Section 4.10, Hydrology and Water Quality
- Section 4.11, Land Use and Planning
- Section 4.12, Mineral Resources
- Section 4.13, Noise
- Section 4.14, Population and Housing
- Section 4.15, Public Services
- Section 4.16, Recreation
- Section 4.17, Transportation
- Section 4.18, Tribal Cultural Resources
- Section 4.19, Utilities and Service Systems
- Section 4.20, Wildfire

Chapter 5, Other CEQA Considerations: This chapter contains a summary discussion of any significant unavoidable impacts, significant and irreversible environmental effects, potential growth-inducing impacts, potential secondary effects of mitigation, and effects found not to be significant that would be caused by the Project.

Chapter 6, Alternatives: Pursuant to Section 15126.6 of the State CEQA Guidelines, this chapter includes an analysis of a reasonable range of feasible alternatives to the Project. Alternatives are analyzed that would feasibly attain most of the basic objectives of the Project, but would avoid or reduce any of the significant effects of the Project. The comparative merits of each alternative are evaluated when compared to the Project, and an environmentally superior alternative is identified in compliance with Section 15126.6(e)(2).

Chapter 7, List of Preparers: This chapter lists the persons who directly contributed to preparation of the Draft EIR.

1.3 Public Review Process

Section 15051 of the State CEQA Guidelines identifies the lead agency as the public entity with the greatest responsibility for carrying out or approving a project as a whole.

The County, as the lead agency, has determined that an EIR is required for the Project and has authorized the preparation of this Draft EIR. The County will review and consider this EIR before making its decision to approve, conditionally approve, or deny the Project.

Although this Draft EIR was prepared with consultant support, the analysis and findings in this document have been independently reviewed by the County and reflect the County's conclusions, as required by Section 15084 of the State CEQA Guidelines.

1.3.1 Notice of Preparation

The County has complied with the State CEQA Guidelines by providing opportunities for early responsible and trustee agency participation in the environmental review process, as well as opportunity for early public consultation with bordering municipalities and interested organizations and individuals. Specifically, in accordance with Section 15082(a) of the State CEQA Guidelines, the County circulated a Notice of Preparation (NOP) for a 30-day public review. The NOP was sent to the State Clearinghouse, public agencies, special districts, responsible and trustee agencies, and other interested parties for a public review period that began on June 16, 2022 and ended on July 15, 2022 (CEQA Public Review and Scoping Period). The purpose of the NOP is to formally convey that the County, as the lead agency, solicited input regarding the scope and proposed content of the Draft EIR.

The NOP included a description of the Project; identification of potential environmental effects associated with Project approval and implementation; and an invitation to agencies and the public to review and comment on the NOP, which is provided in Appendix A-1 of this Draft EIR. Comments on the NOP were received from six state agencies, eight local agencies, four organizations, and two individuals, which are provided in Appendix A-2. The NOP comment letters, which contain environmental concerns, are listed in Table 1-1, along with a summary of the environmental issues raised and the Draft EIR technical section(s) where the environmental topics are addressed.

Table 1-1. Notice of Preparation and Comment Letters Summary

Sender of Comments	Date Received	General Summary of Comments	Addressed in Section(s)
State Agency			
Native American Heritage Commission (NAHC)	June 16, 2022	NAHC provides recommendations for cultural assessment by contacting the appropriate regional California Historical Research Information System Center; contacting NAHC for Sacred Lands File search and Native American Tribal Consultation List; and consulting legal counsel about compliance with Assembly Bill 52, Senate Bill 18, and other applicable laws.	Section 4.18, Tribal Cultural Resources
California Department of	July 1, 2022	Caltrans District 7 expresses concern regarding the Project's contribution to urban sprawl and the extension into the Wildland Urban Interface (WUI) as well as increases to wildfire risks. The comment	Section 4.17, Transportation

Table 1-1. Notice of Preparation and Comment Letters Summary

Sender of Comments	Date Received	General Summary of Comments	Addressed in Section(s)
Transportation (Caltrans) District 7		also expresses concerns about the Project's auto-oriented development and impacts related to vehicle miles traveled (VMT). Caltrans recommends mixed land use types in the Project's zoning area, a reduction in the amount of parking, implementation of Transportation Demand Management (TDM) strategies, and an improvement in the connections to existing active transportation and transit infrastructure. Caltrans notes requirements of projects to have an Encroachment Permit when using State right-of-way and encourages construction vehicles to use facilities during off-peak commute periods.	
California Department of Fish and Wildlife (CDFW) South Coast Region	July 12, 2022	CDFW cited existing law in the comment letter establishing its role as a trustee agency for fish and wildlife resources and as a responsible agency under CEQA. The comment summarizes the Project description and location. CDFW provides specific comments, which recommend an analysis of impacts to mountain lions; cumulative impacts (with Canyon View Estates project specifically); open space acreage; development in Very High Fire Severity Zones; streams and associated natural communities; the Coastal California Gnatcatchers; Crotch's bumble bee; nesting birds; rare insects; bats; rare plants; sensitive natural communities; and the Santa Susana Mountains/Simi Hills Significant Ecological Area (SEA). The comment also provides general comments and recommendations for disclosure, analysis, mitigation measures, to provide a Biological Baseline Assessment, assessing direct and indirect impacts, alternatives, data, compensatory mitigation, long-term management of mitigation lands, wildlife-friendly fencing, use of native plants, translocation/salvaging on-site plants/animals, and wetland resources.	Section 4.4, Biological Resources; Section 4.20, Wildfire
State Water Resources Control Board, Division of Drinking Water (SWRCB)	July 15, 2022	SWRCB cites Section 64556, Title 22 of the California Code of Regulations stating that an application for an amended water supply permit shall be submitted to the state. Furthermore, the commenter states that the layouts of the new water pipelines must comply with the Water Main Separation requirements of Chapter 16, California Waterworks Standards of Title 22, California Code of Regulations.	Section 4.10, Hydrology and Water Quality, Section 4.19, Utilities and Service Systems
Yuhaaviatam of San Manuel Nation (YSMN)	July 20, 2022 *(NOTE: Comment*	YSMN states the Project is outside of Serrano ancestral territory and, as such, YSMN will not be further participating in the CEQA process.	N/A

Table 1-1. Notice of Preparation and Comment Letters Summary

Sender of Comments	Date Received	General Summary of Comments	Addressed in Section(s)
	received outside of NOP Public Review Period: June 16, 2022, through July 15, 2022)		
California Department of Conservation, Geologic Energy Management Division (CalGEM)	July 27, 2022 *(NOTE: Comment received outside of NOP Public Review Period: June 16, 2022, through July 15, 2022)*	CalGEM states that operators must obtain CalGEM approval and permits to perform any well work. The comment notes that there is one known plugged and abandoned oil well within the Lyon Canyons Oil Field and there is the possibility that others could be present. CalGEM requests to be notified in case other oil wells are found during development. The comment also states that local permitting agencies, property owners, and/or developers should be aware of the significant and potentially dangerous issues associated with development near oil, gas, and geothermal wells. Additionally, CalGEM advises against building over or impeding access to oil, gas, or geothermal wells. The commenter also recommends that information regarding identified wells be communicated to the appropriate County department and that soils containing hydrocarbons be disposed of in accordance with appropriate laws.	Section 4.7, Geology and Soils; Section 4.9, Hazards and Hazardous Materials
Regional/Local Agency			
Southern California Association of Governments (SCAG)	July 7, 2022	SCAG provided organization background information as well as demographic and growth forecasts. The comment recommends the Final Program Environmental Impact Report for Connect SoCal be reviewed for guidance for mitigation measures.	Section 4.11, Land Use and Planning; Section 4.17, Transportation
Los Angeles County Sheriff's Department (LASD)	July 12, 2022	LASD states the Project may affect level of service provided by the department due to a proposed increase in housing. LASD recommends that the Draft EIR identify the anticipated population growth as a result of the Project. The comment suggests incorporation of the principles of the Crime Prevention through Environmental Design guidance as well the establishment of a Construction Traffic Management Plan.	Section 4.15, Public Services
Department of Public Health (Public Health)	July 12, 2022	Public Health states that it does not foresee any significant impacts from the Project. The comment points out that the applicant shall abide by the Noise Control Ordinance for the County of Los Angeles.	Section 4.13, Noise

Table 1-1. Notice of Preparation and Comment Letters Summary

Sender of Comments	Date Received	General Summary of Comments	Addressed in Section(s)
Los Angeles County Library (LACL)	July 13, 2022	LACL states that the public library that will service the Project, Stevenson Ranch Library, does not currently meet minimum collection item requirements based on population of its service area. The comment states that the Project will have "a significant impact on library services since it will create a demand for additional materials and public access computers and will affect the library's capacity to serve the residents of the area". However, the commenter provides the cost estimate for the one-time Library Facilities Mitigation Fee to minimize the impact of residential projects on library services,	Section 4.15, Public Services
Los Angeles County Department of Parks and Recreation (DPR)	July 14, 2022	DPR requests changes to the NOP to include information regarding Los Angeles County multi-use trails. The requested changes relate to DPR's request for 20-foot-wide multi-use trail easements to be dedicated to the County for existing regional trails within the Project site.	Chapter 3.0, Project Description; Section 4.15, Public Services, Section 4.16, Recreation
Los Angeles County Fire Department (LACoFD)	July 15, 2022	LACoFD recommends discussion of erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones, archeological and cultural resources, and the County Oak Tree Ordinance. The commenter also states that the Project must comply with all County Code and ordinance requirements.	Section 4.4, Biological Resources; Section 4.5, Cultural Resources; Section 4.9 Hazards and Hazardous Materials; Section 4.20, Wildfire
Los Angeles County Department of Public Works (Public Works)	July 19, 2022 *(NOTE: Comment received outside of NOP Public Review Period: June 16, 2022, through July 15, 2022)*	Public Works recommends that if the Project contains or lies within 300 feet of active, abandoned, or idle oil or gas wells, this be addressed and mitigated. Additionally, the commenter states that if operation involves the construction, installation, modification, or removal of any storage tanks, industrial waste treatment or disposal facilities, and/or storm water treatment facilities, the County's Environmental Programs Division must be contacted for required approvals and operating permits.	Section 4.9, Hazards and Hazardous Materials
City of Los Angeles—LA Sanitation and Environment, Wastewater Engineering Services Division	July 25, 2022 *(NOTE: Comment received outside of NOP Public Review*	The commenter states that based on the Project's location, the sewer infrastructure does not fall within the jurisdiction of the City of Los Angeles, and therefore they do not have details to offer in the analysis.	Section 4.19, Utilities and Service Systems

Table 1-1. Notice of Preparation and Comment Letters Summary

Sender of Comments	Date Received	General Summary of Comments	Addressed in Section(s)
	Period: June 16, 2022, through July 15, 2022)		
Organizations			
Endangered Habitats League	July 1, 2022	The commenter expresses concerns over the Project's impacts to biological resources, fire hazards, greenhouse gas (GHG) emissions, VMT, affordable housing, and the application of the SEA ordinance and the updated Housing, Safety, and Land Use Elements.	Section 4.4, Biological Resources; Section 4.8, Greenhouse Gas Emissions; Section 4.11, Land Use and Planning; Section 4.17, Transportation
Sierra Club, Santa Clarita Valley Group	July 15, 2022	The commenter identifies the following issues to be further evaluated in the Draft EIR: aesthetics, air quality, biological resources, paleontological resources, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire.	Section 4.1, Aesthetics; Section 4.3, Air Quality; Section 4.4, Biological Resources; Section 4.5, Cultural Resources; Section 4.7, Geology and Soils; Section 4.8, Greenhouse Gas Emissions; Section 4.9, Hazards and Hazardous Materials; Section 4.10, Hydrology and Water Quality; Section 4.11, Land Use and Planning; Section 4.15, Public Services; Section 4.17, Transportation; Section 4.18, Tribal and Cultural Resources; Section 4.19, Utilities and Service Systems; Section 4.20, Wildfire; Chapter

Table 1-1. Notice of Preparation and Comment Letters Summary

Sender of Comments	Date Received	General Summary of Comments	Addressed in Section(s)
			5, Other CEQA Considerations
Sierra Club Wildland Urban Wildfire Committee	July 16, 2022 *(NOTE: Comment received outside of NOP Public Review Period: June 16, 2022, through July 15, 2022)*	The commenter requests that the NOP be re-noticed and re-circulated as it failed to disclose the removal of a number of SEA-protected trees. The commenter also requests that the EIR analyze impacts related to oak trees, SEA, carbon sequestration, General Plan consistency, and wildfire concerns due to the Project's location within a Very High Fire Hazard Severity Zone.	Section 4.4, Biological Resources; Section 4.20, Wildfire
Santa Monica Mountains Conservancy	July 20, 2022 *(NOTE: Comment received outside of NOP Public Review Period: June 16, 2022, through July 15, 2022)*	The commenter expresses concern due to oak tree removal on aesthetics, biological resources, geological, and hydrological impacts due to grading and the potential to affect Lyons Creek. The commenter requests that the Draft EIR include an analysis of Project alternatives that do not require grading or substantive streambed alteration and offers suggestions for mitigation measures. The commenter also states that the NOP is deficient for not discussing the loss of SEA protected trees and oak trees. The commenter recommends that mitigation measures include a minimum 2:1 mitigation ratio for impacts to all Sensitive Natural Communities with mid to high level rankings.	Section 4.1, Aesthetics; Section 4.4, Biological Resources; Section 4.7, Geology and Soils; Section 4.10 Hydrology and Water Quality
Individuals			
Christle Gonzalez	June 30, 2022	The commenter requested another scoping meeting because the commenter had trouble attending the Zoom Scoping Meeting. This commenter expresses concerns regarding potential impacts to wildlife.	Section 4.4, Biological Resources
Christle Gonzalez	July 14, 2022	This commenter raises concerns regarding impacts to wildlife, agriculture, increased traffic congestion and noise levels, overcrowding of the school system, and wildfires.	Section 4.2, Agriculture and Forestry Resources; Section 4.4, Biological Resources; Section 4.13, Noise; Section 4.15, Public Services; Section 4.17, Transportation; Section 4.20, Wildfire

Table 1-1. Notice of Preparation and Comment Letters Summary

Sender of Comments	Date Received	General Summary of Comments	Addressed in Section(s)
George Magaña	July 14, 2022	This commenter raises concerns for potential impacts on wildlife, GHG emissions, and air and water pollutants during construction.	Section 4.3, Air Quality; Section 4.4, Biological Resources; Section 4.8, Greenhouse Gases; and Section 4.10, Hydrology and Water Quality

Source: Appendix A-2.

1.3.2 Scoping Meeting

Pursuant to Public Resources Code Section 21083.9 and Section 15082(c) of the State CEQA Guidelines, the lead agency is required to conduct at least one scoping meeting for all projects of Statewide, regional, or area-wide significance as outlined in Section 15206 of the State CEQA Guidelines. The Project is a project of Statewide, regional, and area-wide significance because it is a proposed residential development of more than 500 dwelling units (Section 15206, (b)(2)(A)). The scoping meeting is for jurisdictional agencies and interested persons or groups to provide comments regarding, but not limited to, the range of actions, alternatives, mitigation measures, and environmental effects to be analyzed. Rather than conducting an in-person meeting, the Governor's Executive Order N-25-20 allows local governments to hold meetings via teleconferencing and to make public meetings accessible telephonically or otherwise electronically while still meeting the State's transparency requirements. Therefore, the Project's scoping meeting was held online, through a webinar-type format. The County hosted one scoping meeting that was held virtually on June 29, 2022, at 6:00 PM that was made available through the County's website at: https://planning.lacounty.gov/ceqa/notices, and a specific link to the scoping meeting was available on the NOP. A video recording of the Scoping Meeting is available through the County's website at: https://case.planning.lacounty.gov/case/view/2021-001195 (County of Los Angeles 2022).

At the conclusion of the presentation, attendees of the scoping meeting were able to provide comments and pose questions about the Project to the County during the questions and answers portion of the meeting. The County received seven comments/questions with environmental concerns during the scoping meeting, which are provided in Table 1-2, Scoping Meeting Comments Summary, below.

Table 1-2. Scoping Meeting Comments Summary

Sender of Comments	General Summary of Comments	Addressed in Section(s)
Lynne Plambeck of Santa Clarita Organization for Planning the Environment (SCOPE)	The commenter believes the NOP is insufficient due to not including there could be impacts to trees and oak woodland. The commenter requests that the Draft EIR consider the potential impacts of tree loss, climate change, carbon sequestration, compliance with General Plan goals and policies and Santa Clarita Valley Area Plan (OVOV), wildfire, transportation, mountain lions and connection to wildlife	Section 4.4, Biological Resources; Section 4.8, Greenhouse Gases; Section 4.10, Hydrology and Water Quality

Table 1-2. Scoping Meeting Comments Summary

Sender of Comments	General Summary of Comments	Addressed in Section(s)
	corridors, and the fire safety plan. The commenter expresses concern over the Water Supply Assessment prepared for the Project and water implications due to perfluorooctanesulfonic acid (PFOS) pollution in wells and requests the Draft EIR address polluted wells.	
Marlee Bossert	The commenter wants to ensure the public will have access to open space, and that trail connectivity is addressed. The commenter also wants traffic concerns to be addressed and requests that oak trees are planted on the Project site. The commenter expresses support for the placement of the proposed residential uses adjacent to existing roadway infrastructure.	Section 4.4, Biological Resources; Section 4.16, Recreation; Section 4.17, Transportation
Dave Bossert	The commenter expresses support for the project. The commenter requests that the open space remain as contiguous as possible and that oak trees be planted on the Project site to replace those removed. Additionally, the commenter requests that the public have access to the open space and that a fire buffer be created to protect from wildfire.	Section 4.4, Biological Resources; Section 4.11, Land Use and Planning; Section 4.20, Wildfire
Diiehma Thompson	The commenter requests the open space remains contiguous and offers access to the public.	Section 4.4, Biological Resources; Section 4.11, Land Use and Planning
Susan Stone	The commenter requests that the EIR address wildfire and states that the Project conflicts with the County's Climate Action Plan. The commenter also raises concerns over high mortgage insurance due to wildfire risk and requests that construction of the fire station is assured before the Project begins.	Section 4.15, Public Services; Section 4.20, Wildfire
Emily Swift	The commenter opposes removal of on-site trees due to their carbon sequestration capabilities. The commenter also raises concerns over the lack of available water and requests that open spaces be preserved.	Section 4.4, Biological Resources; Section 4.8, Greenhouse Gases; Section 4.10, Hydrology and Water Quality
Barbara Myler	The commenter requests an analysis of traffic impacts.	Section 4.17, Transportation

Source: County of Los Angeles 2022.

1.3.3 Public Review of the Draft EIR

Upon completion, the Draft EIR was distributed to responsible and trustee agencies, other affected agencies, bordering municipalities, interested parties/organizations, and all individuals who requested a copy of the Draft EIR in writing in accordance with CEQA. A notice announcing the availability (Notice of Availability [NOA]) of the Draft EIR was published in *The Signal* newspaper. The 60-day public review period of the Draft EIR begins on Tuesday, December 10, 2024 and ends on Friday, February 7, 2025. Comments on the Draft EIR from public agencies

(including responsible and trustee agencies), bordering municipalities, interested parties/organizations, and the general public are accepted during the 60-day public review period.

Written comments need to be received by or postmarked to the County on or before Friday, February 7, 2025. Written comments can be provided via email to EAguirre@planning.lacounty.gov, or by mail to:

Erica G. Aguirre, AICP
Principal Planner, Subdivisions
County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, California 90012

A digital copy of the Draft EIR is available at the following location during normal business hours:

Stevenson Ranch Library
25950 The Old Road
Stevenson Ranch, California 91381

A hardcopy of the Draft EIR is available by appointment during normal business hours at the following location:

Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, California 90012

The Draft EIR can also be viewed and downloaded at the County's website at: https://bit.ly/3xYekD8

1.4 Mitigation Monitoring Procedures

State CEQA Guidelines Section 15097 requires that the mitigation measures and revisions to the Project identified in the EIR are implemented. Therefore, CEQA requires that the lead agency adopt a program for monitoring or reporting on the required revisions and the measures it has imposed to mitigate or avoid significant environmental effects. The Mitigation Monitoring and Reporting Program for the Project will be completed as part of the Final EIR, prior to consideration of the Project by the County of Los Angeles Regional Planning Commission.

1.5 References

County of Los Angeles. 2022. "The Trails at Lyons Canyon EIR Scoping Meeting" [YouTube video]. Virtual Scoping Meeting Recording. Project No. 2021-001195/Tentative Tract Map No. 83301/TR83301/RPPL 2021003061; June 29, 2022. https://case.planning.lacounty.gov/case/view/2021-001195.

2 Environmental Setting

2.1 Introduction

Chapter 2 of this Draft Environmental Impact Report (EIR) describes the environmental setting of the proposed Trails at Lyons Canyon Project (Project) and provides an overview of the environmental setting and planning context. As stated in California Environmental Quality Act (CEQA) Guidelines Section 15125(a):

> An EIR must include a description of the physical environmental conditions in the vicinity of the project. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to provide an understanding of the significant effects of the proposed project and its alternatives. The purpose of this requirement is to give the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts.

CEQA requires that the lead agency describe the physical environmental conditions as they exist at the time the Notice of Preparation (NOP) is published, which was made available for public review for 30 days as required pursuant to Section 15082 of the CEQA Guidelines, from June 16, 2022, to July 15, 2022. Conditions at this time may be affected by the COVID-19 pandemic and potential societal and regulatory changes and restrictions put in place in response to the pandemic (California, Executive Department State of California [Gavin Newsom]). As stated in CEQA Guidelines Section 15125(a)(1):

> Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence. In addition, a lead agency may also use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record.

Therefore, if the environmental baseline conditions set forth in this Draft EIR are different from the conditions at the time of the issuance of the NOP, then the applicable EIR Section includes a discussion of the conditions used in the impact analysis.

2.2 Project Site

2.2.1 Project Location

Figure 2-1, Regional Location and Vicinity Map, provides the Project site boundaries in the context of the surrounding community and jurisdictions. The Project site, which totals approximately 233.49 acres, is in unincorporated Los Angeles County (County), in the northern foothills of the Santa Susana Mountains at the westerly perimeter of the Santa Clarita Valley. The Project site consists of five Assessor's Parcel Numbers (APNs) 2826-041-039, 2826-023-014, 2826-022-026, 2826-022-027, and 2826-022-035.

Regional access to the Project site is provided by the northbound/southbound Interstate (I) 5 Freeway to the east, with freeway access ramps via Lyons Avenue or Calgrove Boulevard, each located approximately 1.0 mile from the Project site. Direct access to the Project site is currently provided by The Old Road on the east. Regarding pedestrian access to the Project site, sidewalks are not currently present on The Old Road fronting the Project site. There is a sidewalk present on the west side of The Old Road north of Sagecrest Circle, and the sidewalk continues north toward Pico Canyon Road. While there are marked crosswalks at The Old Road and Pico Canyon Road, there are no marked crosswalks at The Old Road and Calgrove Boulevard.

2.2.2 Surrounding Land Uses

Figure 2-2, Surrounding and Nearby Land Uses, provides an overview of nearby land uses. The Project site is located within the unincorporated County, but is adjacent to City of Santa Clarita boundaries, with residential, limited commercial, and open space land uses surrounding the Project site. The Project site is south of Sagecrest Circle, adjacent to The Old Road on its eastern side, and north of Calgrove Boulevard near Ed Davis Park in Towsley Canyon. The Project site is bordered by open space on its western and southern boundaries, and is surrounded by a variety of land uses, as follows:

- **Land Uses to the North:** The Project site is bounded by residential uses on Sagecrest Circle in the Stevenson Ranch, which is a master-planned community in the unincorporated County located north of the Project site on the west side of I-5. Current County land uses immediately north of the Project site and east of I-5 include General Plan designations of Residential 2 (H2), Conservation (OS-C), and Major Commercial (CM) with respective zoning of Residential Planned Development (RPD), Open Space (O-S), and C-3. City of Santa Clarita land use and zoning designations to the north and east of I-5 include Urban Residential 2 (UR2) and Public Institutional (PI).[1]
- **Land Uses to the East:** The City of Santa Clarita is located east of the Project site, across I-5 freeway. The Project site is bounded by The Old Road and I-5 on its northeastern boundary, with residential and commercial uses located on the eastern side of I-5, within the City of Santa Clarita. Southeast of the Project site's boundary is the City of Santa Clarita's Taylor Trail Wilderness and Open Space and Rivendale Park and Open Space. Current County land uses immediately east of the Project site and east of I-5 include General Plan designations of Rural Land 5 (RL5) and H2, with respective zoning of A-2-1 (with a small area of C-3) and A-2-2. The City of Santa Clarita's land use and zoning designation to the east of I-5 is Mixed Use Neighborhood (MXN).
- **Land Uses to the South:** South of the Project site is open space land within the unincorporated County land and a small recreational trailhead area within the City of Santa Clarita's boundaries. The Mountains Recreation and Conservation Authority (MRCA) Santa Clarita Woodlands Park, including Ed Davis Park in Towsley Canyon, is located southwest of the Project site. Southeast of the Project site's boundary is the City of Santa Clarita's Taylor Trail Wilderness and Open Space and Rivendale Park and Open Space. Current land use south of the Project site includes lands with the County General Plan designated Parks and Recreations (OS-PR) and a County zoning designation of O-S. The Rivendale Park and Open Space Area, as well as the Ed Davis Park at Towsley Canyon, have a City of Santa Clarita land use and zoning designation of Open Space (OS).
- **Land Uses to the West:** West of the Project site is vacant land within the Santa Susana Mountains and lands owned by the United States Department of the Interior Bureau of Land Management (BLM), the Santa Monica Mountains Conservancy (SMMC), the MRCA, and private landowners. Current County land use

[1] The City uses the same titles for land use and zoning designations within these areas.

immediately the west of the Project site includes General Plan designations of Rural Land 2 (RL2), Rural Land 20 (RL20), and OS-C, and zoning of A2-2 and O-S.

2.2.3 On-Site Conditions

The Project site is currently undeveloped hillsides with no habitable structures or paved roads on-site. The topography of the Project site is characterized by hillside and valley terrain with moderate to steep variations with a significant ridgeline designated in the southern portion of the Project site. Elevations in the Project site range from approximately 1,654 feet above mean sea level (msl) at the southwest corner to approximately 1,300 feet above msl at the northeast corner. Lyons Canyon is located in the central portion of the Project site. Lyons Ranch is an unpaved dirt and gravel pathway that traverses through the Project site from the northeastern end, traveling south and eventually west, and continuing off-site. Lyons Ranch is currently used as an emergency access road and non-dedicated trail. Non-dedicated and informal hiking trails are located throughout the Project site's hillsides, generally meandering between Lyons Ranch and Towsley Canyon Road, located off-site and south of the Project site. A part of Taylor Trail transects the southeastern portion of the Project site. On-site, non-dedicated trails are depicted on Figure 3-5, Conceptual Trail Map, of Chapter 3, Project Description.

Photographs were taken to depict existing views of the Project site from public vantage points along the northeastern border of the Project site. The locations of the specific views are mapped on Figure 2-3, Key View Map of Existing Site Photographs. The views themselves are depicted in Figure 2-4, Existing Site Photographs. The views illustrated in Figure 2-4 are described below.

- **Photo 1.** The vantage point of Photo 1 is located on the northeastern corner of the Project site adjacent to an offsite stand of trees to the north and provides a westerly view towards the Project site. The existing conditions shown in Photo 1 include foreground views of a field covered in ruderal, grassy vegetation, midground views of chaparral-covered hillsides with stands of trees, and background views of prominent ridgelines to the southwest. Hillside landscaping and fencing associated with neighboring residential development can be seen to the northwest. A wooden utility pole with transmission lines running towards The Old Road is also present.
- **Photo 2.** The vantage point of Photo 2 is located just off site at the intersection of Lyons Ranch (an unpaved dirt and gravel pathway currently used as an emergency access road and non-dedicated trail) and The Old Road and provides a westerly view towards the Project site. The existing conditions shown in Photo 2 include foreground views of chain-link fencing and disturbed, gravel terrain, midground views of a hillside with stands of trees to the south and a ruderal, grassy field to the north, and background views of chaparral covered hillsides with scattered trees. Prominent off-site ridgelines are also present in the background further west.
- **Photo 3.** The vantage point of Photo 3 is located along The Old Road approximately 420 feet north of the off-site Taylor Trailhead and provides a westerly view towards the Project site. The existing conditions shown in Photo 3 include gently sloped canyon terrain covered in wildland vegetation, including grassland, chaparral, and stands of trees. Several errant fence posts and a chain-link gate leading towards a non-dedicated trail are also present in the foreground.
- **Photo 4.** The vantage point of Photo 4 is located in the off-site parking lot of the Taylor Trailhead (within Rivendale Ranch Open Space) west of The Old Road and provides a northwesterly view towards the Project site. Existing conditions in Photo 4 include foreground views of ruderal vegetation adjacent to the parking lot and midground views of tree stands and chaparral on a south-facing hillslope. The landscape includes portions of barbed wire fencing along the Project-site boundary in the midground, as well as on-site chain-

link fencing, a piece of off-road equipment, and a blue storage container to the east of the hillslope. Off-site residential development, transmission lines, and prominent ridgelines are visible further to the northeast.

Miscellaneous structures on the Project site include fencing, a metal frame bridge, a billboard, an abandoned water tank, metal drainage pipe, irrigation lines, trails, electrical distribution lines, dirt roads, and an abandoned and plugged oil well. The plugged oil well (Ayers 1 – API 03706017), which did not produce oil, is located within the center of the Project site and was identified in 1961 (Stantec 2023). The location of this abandoned and plugged oil well is identified on Figure 2-5, Special Management Areas. Special Management Areas (SMAs) are defined by the County as areas that require additional development regulations due to the presence of natural resources, scenic resources, or identified hazards (County of Los Angeles 2015). As shown on Figure 2-5, the Project site is located within the following SMAs: a Hillside Management Area (HMA), a Significant Ecological Area (SEA), and Very High Fire Hazard Severity Zone (VHFHSZ).

- HMAs are defined by the County as mountainous or foothill terrain with a natural slope of 25 percent or greater, and the portions of the Project site that meet this definition are within an HMA (County of Los Angeles 2015). The Hillside Management Areas Ordinance in Title 22 of the County's Zoning Code and Hillside Design Guidelines of the General Plan regulate development within HMAs to protect the public from natural hazards associated with steep hillsides and to minimize the effects of development on scenic resources (County of Los Angeles 2015).
- The entirety of the Project site is located within the Santa Susana Mountains/Simi Hills SEA. According to Chapter 22.102, Significant Ecological Areas, of the County's Zoning Code, the SEA is established to protect resources from incompatible development that could result in potential environmental degradation (County of Los Angeles 2020).
- The entirety of the Project site is located within a VHFHSZ that falls within the State Responsibility Area (SRA) (CAL FIRE 2007). The Project site is within Fire Zone 4.

Further, as identified on Figure 2-5, the Project site includes a designated significant ridgeline located in the southern portion of the Project site. When ridgelines are mapped as "significant ridgelines" by the County, the stricter regulations applicable to those ridgelines apply as described in Appendix I, Hillside Design Guidelines, to the County Code. The proposed Project would avoid any impacts to the mapped significant ridgeline.

2.3 General Plan and Zoning

2.3.1 Land Use Designation

The General Plan land use designation of Residential 2 (H2) encompasses the entire Project site and is included in the Santa Clarita Valley Area Plan, also known as "One Valley One Vision" (OVOV), as shown on Figure 2-6, Existing Land Use Designation. The land use designations of OVOV define the Residential 2 (H2) land use category as "urban residential," allowing a permitted residential density of up to two dwelling units per acre. According to the OVOV plan, the Residential 2 (H2) designation provides for residential neighborhoods at densities that require urban services, providing a transition between higher density, urban development and rural communities throughout the planning area. Within Residential 2 (H2), density-controlled development (clustering) is encouraged on lands with significant environmental and or topographical features or resources, in order to preserve open space for protection of these natural features or resources (County of Los Angeles 2012).

2.3.2 Zoning Designations

As depicted on Figure 2-7, Existing Zoning Designations, the Project site has the following zoning designations: Heavy Agricultural (A-2-2 and A-2-1) and Unlimited Commercial-Development Program (General Commercial [C-3] and C-3-DP). The Project site is not included in a community standards district. Details of the zoning designations are provided below.

The Heavy Agricultural designations of A-2-2 and A-2-1 allow for uses such as single-family residences, crops, animal hospitals, dairies, dog kennels, and oil wells. According to the Title 22, Planning and Zoning, of the County of Los Angeles County Code, and more specifically, Chapter 22.16, Agricultural, Open Space, Resort and Recreation, and Watershed Zones, the Heavy Agricultural (A-2) zone is established to permit a comprehensive range of agricultural uses in areas particularly suited for agricultural activities. Permitted uses are intended to encourage agricultural activities and other such uses required for the inhabitants of the community. The A-2 zone may provide the land necessary to permit low-density single-family residential development, outdoor recreational uses, and public and institutional facilities.

As stated above, portions of the Project site are zoned General Commercial (C-3) and General Commercial-Development Program (C-3-DP). According to Chapter 22.20, Commercial Zones, of the County's Zoning Code, the commercial zones provide for the orderly, well-planned, and balanced growth of commercial districts; support commercial activity to meet the needs of the community; strengthen the County's tax base; and provide appropriate transitions between commercial and residential uses to promote commercial opportunities and preserve residential quality of life. According to Chapter 22.52, Development Program Zone, of the County's Zoning Code, the Development Program Zone, a "-DP" zone may be combined with any zone. The "-DP" zone addition is established to provide a zone in which development occurring after a property has been rezoned will conform to plans and exhibits submitted by an applicant in instances where such plans and exhibits constitute a critical factor in the decision to rezone. Adherence to such developmental plans is assured by the requirement of submission and approval of a Conditional Use Permit (CUP) incorporating a development program by an applicant, providing necessary safeguards to ensure completion as specified. Permitted uses within the C-3 and C-3-DP zoning designations include Neighborhood Commercial (C-2) uses and secondhand stores.

2.4 Regional Conditions

The Project site is located in the eastern Ventura Basin within the Transverse Ranges (i.e., an east-west trending series of steep mountain ranges and valleys) along the northerly flank of the Santa Susana Mountains. The east-west structure of the Transverse Ranges is in contrast to the normal northwest trend of much of the rest of coastal California. The Ventura Basin consists of a narrow, elongate and east-west trending sedimentary trough extending from the Santa Barbara Channel on the west to the San Gabriel fault on the east. The flanks of the Ventura Basin are broken by a series of large reverse/thrust faults including the Santa Susana and Oak Ridge faults on the southern flank, and the Red Mountain and San Cayetano faults on the northern flank. The San Gabriel Fault, the dominant geologic feature in the Santa Clarita Valley, forms the eastern Ventura Basin boundary, and separates the Ventura Basin from the structurally similar Soledad Basin (Appendix E-1). No active or potentially active faults are known to exist within the Project site or surrounding area, and the nearest Alquist Priolo Earthquake Fault Zone is located approximately 1.5 miles northwest of the site and was established for surface features identified following the 1994 Northridge earthquake (Appendix E-1). For more information on geologic conditions relevant to the Project, please see Section 4.7, Geology and Soils of this Draft EIR.

The Project site occurs entirely within the Santa Susana Mountains and Simi Hills SEA. Although the Project site is located at the interface of undeveloped lands and existing development, it represents the northeastern extent of a County designated wildlife corridor that provides for wildlife movement from lands associated with the Santa Susana Mountains and Simi Hills SEA to undeveloped lands associated with the San Gabriel Mountains further east, with a substantial east-west movement route located in Towsley Canyon located south of the Project site (Appendix C). The shrubland, grassland, and woodland habitats within the Project site that provide live-in, nesting/breeding, and foraging habitat for several common species, and potentially for special-status plant and wildlife species, are contiguous with large tracts of similar habitat communities that are located on adjacent lands that are both privately held undeveloped land, as well as designated open space associated with Santa Clarita Woodlands Park, Rivendale Ranch Open Space, and Pico Canyon Park (Appendix C). With the exception of developed areas located to the immediate north and east of the Project site, adjacent undeveloped lands contain contiguous stands vegetation including chamise chaparral, California sagebrush – purple sage scrub, mulefat thickets, upland mustards or star-thistle fields, and thick-leaf yerba santa scrub, and coast live oak woodland (Appendix C). No existing or known planned Habitat Conservation Plans are located within the Project vicinity (Appendix C). No proposed or designated critical habitat is present within the Project site, and the nearest finalized critical habitat is for the coastal California gnatcatcher located approximately 0.53-mile to the southeast of the site on the east side of I-5 (Appendix C). For more information on biological conditions relevant to the Project, please see Section 4.4, Biological Resources, of this Draft EIR.

The Project site is located in the Santa Clara Watershed, regulated by the Los Angeles Regional Water Quality Control Board-Los Angeles Region, and specifically, within the Upper Santa Clara River (USCR) East Subbasin hydraulic area (RWQCB 2012). The Santa Clara River Valley East Subbasin is bordered on the north by the Piru Mountains, on the west by impervious rocks of the Modelo and Saugus Formations and a constriction in the alluvium, on the south by the Santa Susana Mountains, and on the south and east by the San Gabriel Mountains. Surface water is drained by the Santa Clara River, Bouquet Creek, and Castaic Creek (Appendix F). Lyons Canyon, located in the central portion of the Project site, drains eastward into the South Fork of the Santa Clara River, which leads to the Santa Clara River approximately 3.75 miles northeast of the Project site. For more information on geologic conditions relevant to the proposed Project, please see Section 4.10, Hydrology and Water Quality, of this Draft EIR.

2.5 Public Services and Utilities

2.5.1 Public Transit and Bicycle Routes

There are four local and four express Santa Clarita Transit routes near the Project area, as detailed below (Appendix J).

- Santa Clarita Transit Route 4. Route 4 provides local service between Bouquet Junction and the Newhall Metrolink Station. It runs along Pico Canyon Road north of the Project site near the study area. Route 4 has average headways of one hour during the weekday AM and PM peak period. The Newhall Metrolink Station is approximately 3 miles from the Project site.
- Santa Clarita Transit Route 5. Route 5 provides local service between Stevenson Ranch and Forest Park. It runs along Pico Canyon Road and The Old Road north of the Project site. Route 5 has average headways of one hour during the weekday AM and PM peak period.

- Santa Clarita Transit Route 6. Route 6 provides local service between Stevenson Ranch and Shadow Pines. It runs along Pico Canyon Road and The Old Road north of the project site in the study area. Route 6 has average headways of one hour during the weekday AM and PM peak period.
- Santa Clarita Transit Route 14. Route 14 provides local service between Plum Canyon and the Newhall Metrolink Station. It runs along Pico Canyon Road north of the Project site. Route 14 has average headways of one hour during the weekday AM and PM peak period. The Newhall Metrolink Station is approximately 3 miles from the Project site.
- Santa Clarita Transit Route 757. Route 757 provides express service between the McBean Regional Transit Center and the Metro North Hollywood Station. It runs along I-5 Freeway. Route 757 has average headways of one hour during the weekday AM peak period and 30 minutes during the PM peak period.
- Santa Clarita Transit Route 791. Route 791 provides express service between Santa Clarita and Canoga Park. It runs along I-5 Freeway in the study area. Route 791 has headways of 30 minutes to one hour during the weekday AM and PM peak periods.
- Santa Clarita Transit Route 792. Route 792 provides express service between the City of Santa Clarita and the City of Century City. It runs along I-5 Freeway. Route 792 has headways of 30 minutes to one hour during the weekday AM and PM peak periods.
- Santa Clarita Transit Route 794. Route 794 provides express service between the Santa Clarita and the Burbank Metrolink Station/Union Station. It runs along I-5 Freeway in the study area. Route 794 has one bus that runs during the AM peak period average headways of one hour during the weekday AM peak period and has an approximately one-hour headway during the PM peak period.

Existing bicycle facilities surrounding the Project site include a Class II bike lane on The Old Road, north of Sagecrest Circle. A Class II bike lane is defined as a portion of the road that is designated by pavement striping for exclusive bicycle use. The County's 2012 Bicycle Master Plan and the City of Santa Clarita's 2020 Non-Motorized Transportation Plan indicate that there is a planned Class II bike lane that would connect to the existing Class II bike lane on The Old Road, which would connect to a planned Class II bike lane on Calgrove Boulevard, east of The Old Road and the Project site. Additionally, a Class II bike lane is planned along Pico Canyon Road, west of The Old Road (Appendix J).

2.5.2 Public Services

The Los Angeles County Fire Department (LACoFD) provides 24-hour, all-risk emergency services to unincorporated areas of the County as well as to 59 incorporated cities within the County that have contracted with LACoFD. LACoFD Fire Station 124, located at 25870 Hemingway Avenue, in the community of Stevenson Ranch, is the primary fire protection service provider to the Project site. Fire Station 124 is located approximately 2.6 miles northwest of the Project site.

The Los Angeles County Sheriff's Department (LASD) provides general-service law enforcement to unincorporated areas of the County as well as cities within the County that have contracted with the agency. The Project site is located within the Santa Clarita Valley Sheriff Station's service area. The Santa Clarita Valley Sheriff Station is located at 26201 Golden Valley Road in Santa Clarita, approximately 4 miles east of the Project site (LASD 2022).

The Project site is located within the service area of the Newhall School District for elementary schools and the William S. Hart High School District for middle and high schools.

The Los Angeles County Library (LACL) provides library services to the County. The nearest LACL to the Project site is the Stevenson Ranch Library, located at 25950 The Old Road, in the community of Stevenson Ranch. The Stevenson Ranch Library is approximately 1.7 miles north of the Project site.

The Project's public service providers and the potential for the Project to generate environmental impacts associated with these public services, is discussed in Section 4.15, Public Services, of this Draft EIR.

2.5.3 Utilities

Water

The Project site is located within the service area of the Valencia Water Division of the Santa Clarita Valley Water Agency.

Wastewater

For wastewater, the Project site is located within the service boundaries of the Los Angeles County Sanitation Districts (LACSD), and specifically, the Santa Clarita Valley Sanitation District (SCVSD). Wastewater generated within the Santa Clarita Valley is treated by the SCVSD, which includes two existing water reclamation plants (WRPs), which are operated by the LACSD (LACSD 2021). These include the Saugus WRP and the Valencia WRP, which are interconnected, forming the Santa Clarita Valley Joint Sewerage System (SCVJSS). There are no sewer systems at the Project site. The existing off-site downstream sewer system consists of approximately 11,500 linear feet of gravity sewer pipe, ranging from 8- to 18-inches in diameter, before connecting to the 24-inch SCVSD Trunk Sewer.

Electrical

The Project site is within the service area of Southern California Edison (SCE) for electrical services. The Project site currently contains underground and overhead electrical distribution lines.

Natural Gas

The Project site is within the service area of Southern California Gas Company (SoCalGas). According to SoCalGas, there are existing facilities within the Project area (SoCalGas 2021).

Cable and Telecommunication

The Project site is within the service areas of AT&T and Charter for cable and telecommunication services.

Solid Waste

The Project site is within the service areas of the Sunshine Canyon Landfill and Chiquita Canyon Landfill. Three private solid waste haulers are permitted to collect residential, commercial, and industrial waste in the County.

2.6 Cumulative Projects

The CEQA Guidelines Section 15130 requires that a project's cumulative impacts be discussed when the incremental effects of the project are cumulatively considerable. According to CEQA Guidelines Section

15065(a)(3), the term cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." Specifically, CEQA Guidelines Section 15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." When addressing cumulative impacts, CEQA Guidelines Section 15130(b) notes that the elements necessary to provide an adequate discussion of significant cumulative impacts encompass either:

A. 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, or
B. 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. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

The cumulative impact analyses under each environmental issue in Chapter 4, Environmental Impact Analysis, of this Draft EIR uses one of the methods listed above, as applicable, as detailed further below and in Table 2-1, Method of Evaluation for Cumulative Impacts.

Section 15130(b)(3) of the State CEQA Guidelines states that "lead agencies shall define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used." There are environmental issues whose relevant geographic scope for purposes of cumulative impact analysis will differ depending on topic-specific factors, which may be defined by local, regional, or state agency jurisdiction or by other environmental factors. One example is the geographic scope of cumulative air quality impacts, defined by the South Coast Air Quality Management District (SCAQMD) to encompass the South Coast Air Basin. The basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. Therefore, in the case of cumulative air quality impacts, an analysis based on projections of the SCAQMD's Air Quality Management Plan is suitable for analysis of cumulative impacts, whereas other environmental topics would consider a different geographic scope of area affected. The geographic scope of cumulative impacts for each environmental topic is described in the cumulative impact analyses of Sections 4.1 through 4.20 of this Draft EIR and summarized in Table 2-1, Geographic Area for Cumulative Impacts, below.

The analyses in Sections 4.1 through 4.20 of this Draft EIR address whether, after adoption of Project-specific mitigation, the residual impacts of the proposed Project would (1) contribute considerably to an existing/anticipated (without the Project) cumulatively significant effect or (2) cause a new cumulatively significant impact. The Draft EIR examines "reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project" (14 CCR 15130[a][3] and 15130[b][5]).

Table 2-1, Geographic Area for Cumulative Impacts, describes the geographic scope of cumulative impact analysis for each environmental resource category.

Table 2-1. Geographic Area for Cumulative Impacts

Environmental Resource		Applicable Geographic Area
Aesthetics		Local and Immediate Vicinity
Agriculture and Forestry Resources		Regional and Local
Air Quality	Air Quality Plans	South Coast Air Basin
	Toxic Air Contaminants; Sensitive Receptors; Odors	Immediate Vicinity
	Construction/Operational Sources	South Coast Air Basin
Biological Resources		Regional and Local
Cultural Resources		Regional and Local
Energy		State and Regional
Geology and Soils		Regional and Local
Greenhouse Gas Emissions		Global
Hazards and Hazardous Materials		Local and Immediate Vicinity
Hydrology and Water Quality		Sub-Watershed, Groundwater Basin, and Immediate Vicinity
Land Use and Planning		Regional, Local, and Immediate Vicinity
Mineral Resources		State, Regional, and Local
Noise	On-Site Construction Noise, Off-site Vehicle/Truck Noise, Groundborne Vibration, and Airport Noise	Immediate Vicinity
Population and Housing		Regional and Local
Public Services		Local
Recreation		Regional and Local
Transportation		Regional, Local, and Immediate Vicinity
Tribal Cultural Resources		Regional and Local
Utilities and Service Systems		Regional, and Local
Wildfire		Immediate Vicinity

The cumulative projects are listed in Table 2-2, List of Cumulative Projects. Figure 2-8, Cumulative Project Location Map, provides the locations of the list of cumulative projects considered in this Draft EIR ("Cumulative Projects"), which includes 50 Cumulative Projects in unincorporated Los Angeles County (Cumulative Projects LA1 through LA14) and in the City of Santa Clarita (Cumulative Projects SC1 through SC26) (County of Los Angeles 2024, City of Santa Clarita 2024). This list also includes the Cumulative Projects within the Draft Transportation Impact Analysis prepared for the Lyons Canyon Residential Project, prepared by Fehr and Peers in consultation with the County and City of Santa Clarita, which are included as Cumulative Projects LA1, LA2, and SC1 (Appendix J).

The Cumulative Projects include projects within proximity to the Project site, within the Santa Clarita Valley that would require discretionary actions, such as subdivisions or conditional use permits, and would result in construction or operational impacts on the environment. The Cumulative Projects within the County include those within the Stevenson Ranch, Newhall Ranch, and Val Verde communities of the Santa Clarita Valley. The Cumulative Projects within the City of Santa Clarita include those within the following boundaries: I-5 to the west, (i.e., the City's western boundary), Newhall Ranch Road to the north, Golden Valley Road/SR 14 to the east, and the City's boundary to the south (i.e., north of I-5).

The Cumulative Projects within Table 2-2, List of Cumulative Projects, include the known projects that were determined to be applicable in accordance with coordination with the City and County, and as available at the time of the preparation of this Draft EIR. The Cumulative Projects include those that are: 1) completed but not fully occupied; 2) currently under construction; 3) proposed with applications on file at the County or City; or 4) reasonably foreseeable. These projects in the list include a variety of land uses, including residential, commercial, industrial, medical, educational, open space, public facilities, and other uses. Table 2-2 provides a summary of proposes development for the Cumulative Projects LA1 through LA14, and SC1 through SC26.

Table 2-2. List of Cumulative Projects

Location ID	Cumulative Project Name and Location	Land Use/Project Type	Size	Unit	Status
Unincorporated Los Angeles County					
LA1	**Canyon View Estates** Pico Canyon Road and Stevenson Ranch Parkway	Residential Open Space Public Facility	37 79 7	DU Acres Lot	Approved (Not Constructed)
LA2	**Tentative Tract Map 74979** South of Sagecrest Circle near Coriander Court	Residential Open Space	7 1	DU Lot	Under Review (Inactive)
LA3	**Aidlin Hills** Pico Canyon	Residential Open Space Pump Station Public facility	102 8 1 10	DU Lot station Lot	Approved (Under Construction)
LA4	**Legacy Village (of Newhall Ranch)** West of Valencia Boulevard	Residential Commercial Fire Station Open Space Park/recreation	3,799 839 1 309 32.8	DU/ Beds KSF station Lots acres	Under Review
LA5	**Entrada South (of Newhall Ranch)** Magic Mountain Parkway and Valencia	Residential Commercial Elementary school Fire Station Open Space Park/recreation	1,574 730 1 1 153.5 8.5	DU KSF school station acres Acres	Under Review
LA6	**Valencia Commerce Center (VCC)** Commerce Center Drive and north of SR 126	Industrial Commercial Public Facility Open Space	72 50 7 60	Lots Lots Lots Lots	Under Review (On Hold)
LA7	**Mission Village (of Newhall Ranch)**	Residential Commercial	4,412 1.6	DU MSF	Approved (Under Construction)

Table 2-2. List of Cumulative Projects

Location ID	Cumulative Project Name and Location	Land Use/Project Type	Size	Unit	Status
	South of Santa Clara River and SR 126	Open Space	146	Lots	
		Library	1	library	
		School	1	school	
		Fire Station	1	station	
LA8	**Landmark Village (of Newhall Ranch)** North of Santa Clara River and west of Interstate 5	Residential	1,444	DU	Approved (Not Constructed)
		Commercial	1.033	MSF	
		Open Space	31.3	acres	
		Recreation/Parks	16.8	acres	
		School	1	school	
		Fire Station	1	station	
LA9	**Sterling Ranch Estates** Coolidge Avenue and Del Valle Road	Residential	222	DU	Approved (Not Constructed)
		Commercial	21.00	KSF	
		Parks	2	Lot	
		Public Facility	7	Lot	
		Pump Station	1	station	
		Open Space	26.1	acres	
LA10	**Williams Ranch** Hasley Canyon and Castaic Community	Residential	497	DU	Approved (Under Construction)
		Parks	12	Lot	
		Public Facility	10	Lot	
		Booster Station	1	Lot	
LA11	**Tentative Tract Map 62000** East end of Cromwell Avenue and Val Verde	Residential	19	DU	Under Review (Inactive)
		Open Space	1	Lot	
LA12	**Tentative Tract Map 60665** South of Hasley Canyon and west of Del Valle Road	Residential	90	DU	Under Review
		Open Space	5	Lot	
LA13	**Conditional Use Permit for Clock Tower** 23857 Old Road, Newhall, California 91321	Wireless Telecommunication Facility	1	tower	Under Review
LA14	**Homestead South (Tentative Tract Map 84508)** South of SR-126, Long Canyon Road (future	Residential	3,617	DU	Under Review
		Commercial	66.4	KSF	
		Elementary School	9.4	acres	
		Junior High School,	19.3	acres	

Table 2-2. List of Cumulative Projects

Location ID	Cumulative Project Name and Location	Land Use/Project Type	Size	Unit	Status
	street) Magic Mountain Parkway (future extension)	High School	54.6	acres	
		Parks	12.1	acres	
		Private Recreation	11.0	acres	
		Open Space	993.6	acres	
City of Santa Clarita					
SC1	**Wiley Canyon Project** Wiley Canyon Road, between Calgrove Boulevard and Wabuska Street	Senior Living Commercial Residential	217 8.91 379	beds KSF DU	Under Review
SC2	**8th Street Subdivision*** Near 8th Street and Parkview Drive	—	—	—	—
SC3	**Center at Needham Ranch Business Park*** Sierra Highway, South of Newhall Drive	Commercial Open Space	4 —	MSF —	—
SC4	**Lexen Hotel*** Newhall Avenue and Railroad Avenue	Hotel	—	—	—
SC5	**Newhall Crossings*** Main Street and 9th Street	Residential Commercial	—	—	—
SC6	**Master's University Master Plan** Placerita Canyon Road	University Residential Open Space	240 42 20	KSF units Acres	Entitled
SC7	**Laemmle Theaters*** 22500 Lyons Avenue	—	—	—	—
SC8	**Placerita Meadows** 23290 Valencia Boulevard	Residential	310	units	Application Pending
SC9	**Santa Clarita Commerce Center** North of Oak Ridge Drive	Industrial	430	KSF	Approved
SC10	**Bridge to Home** Drayton Street/ Springbrook Avenue	Residential Shelter	8 18.68	units KSF	Application Pending
SC11	**Henry Mayo Newhall Hospital*** 23845 McBean Parkway	Hospital	—	—	—

Table 2-2. List of Cumulative Projects

Location ID	Cumulative Project Name and Location	Land Use/Project Type	Size	Unit	Status
SC12	**Henry Mayo Newhall Hospital Update** 23845 McBean Parkway	Hospital	400	KSF	Under Construction
SC13	**Patios Connection*** Valencia Boulevard and Citrus Drive	—	—	—	—
SC14	**Gate-King Industrial Park Project** Newhall Avenue and Pine Street	Industrial/ Commercial Open Space	4.45 14	MSF Lots	Approved
SC15	**Oliver Hotel (Element by Westin)*** McBean Parkway and Valencia Boulevard	—	—	—	Entitled
SC16	**Valencia Town Center (VTC) Square** 23920 Valencia Boulevard, Suite 302	Commercial	331.9	KSF	Constructed
SC17	**Town Center Specific Plan**[a] Between Magic Mountain Parkway to the north, Valencia Boulevard to the to the south and east, and by McBean Parkway to the west	Retail Office Theater Restaurant Hotel/Convention Center	94.6 530.6 182.7 80.2 317.2	KSF KSF KSF KSF KSF	Application Pending
SC18	**River Village (Area D)** Newhall Ranch Road/East Bouquet Canyon	Residential	184	Units	Constructed
SC19	**Homewood Suites/Hampton Inn** Newhall Ranch Road/East of Interstate 5	Hotel	185	Rooms	Constructed
SC20	**Holiday Inn Express/Residences Inn/Springhill Suites** Wayne Mills Place and Tourney Road	Hotel	290	Rooms	Constructed
SC21	**Shadowbox Studios (formerly Blackhall Studios)** Railroad Avenue and 13th Street	Commercial/Office	1	MSF	Approved

Table 2-2. List of Cumulative Projects

Location ID	Cumulative Project Name and Location	Land Use/Project Type	Size	Unit	Status
SC22	**University of California at Los Angeles Film Archives Expansion** 24700 McBean Parkway	Office	250	KSF	Under Construction
SC23	**Dockweiler 21** Sierra Highway/Dockweiler Drive	Residential	93	Units	Constructed
SC24	**Eternal Valley Memorial Park Expansion** 26313 Golden Valley Road	Institutional	13	Acres	Approved
SC25	**Central Park Buildout Project** 27150 Bouquet Canyon	Recreational	4	fields	Constructed
SC26	**Neighborhood Self Storage** 26676 Valley Center Drive	Commercial	156	KSF	Constructed

Source: County of Los Angeles 2024; City of Santa Clarita 2024; Fehr and Peers 2023 (Appendix J).
Note: DU: dwelling unit; KSF: thousand square feet; MSF: million square feet; – information unavailable
[a] This assumes buildout of the "Full Buildout" scenario of the Specific Plan.
* Information for this project was unavailable during preparation of the Draft EIR.

2.7 References

CAL FIRE. (California Department of Forestry and Fire Protection). 2023. *State Responsibility Area Fire Hazard Severity Zones*. September 29, 2023. Accessed March 11, 2024. https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map-2022/fire-hazard-severity-zones-maps-2022-files/fhsz_county_sra_e_2022_losangeles_3.pdf?rev=8144d96923e7499ebe5a027ba48912cf&hash=DFEF25E33A0773FB1B8A25F3C2D65A59.

City of Santa Clarita. 2024. Major Development Projects in the City. Accessed March 11, 2024. https://santaclarita.gov/wp-content/uploads/sites/42/migration/Development%20Projects%20Map%202021.pdf.

County of Los Angeles. 2012. *Santa Clarita Valley Area Plan – One Valley One Vision*. Accessed March 11, 2024. https://planning.lacounty.gov/wp-content/uploads/2022/10/Santa-Clarita-Valley-Area-Plan.pdf.

County of Los Angeles. 2015. *Los Angeles County General Plan 2035*. Adopted October 6, 2015. Updated July 14, 2022. Accessed March 11, 2024. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

County of Los Angeles. 2020. *SEA Ordinance Implementation Guide*. Effective January 16, 2020. Updated June 30, 2020. Accessed May 9, 2022. https://planning.lacounty.gov/site/sea/wp-content/uploads/2020/07/SEA-IG-6-30-20.pdf.

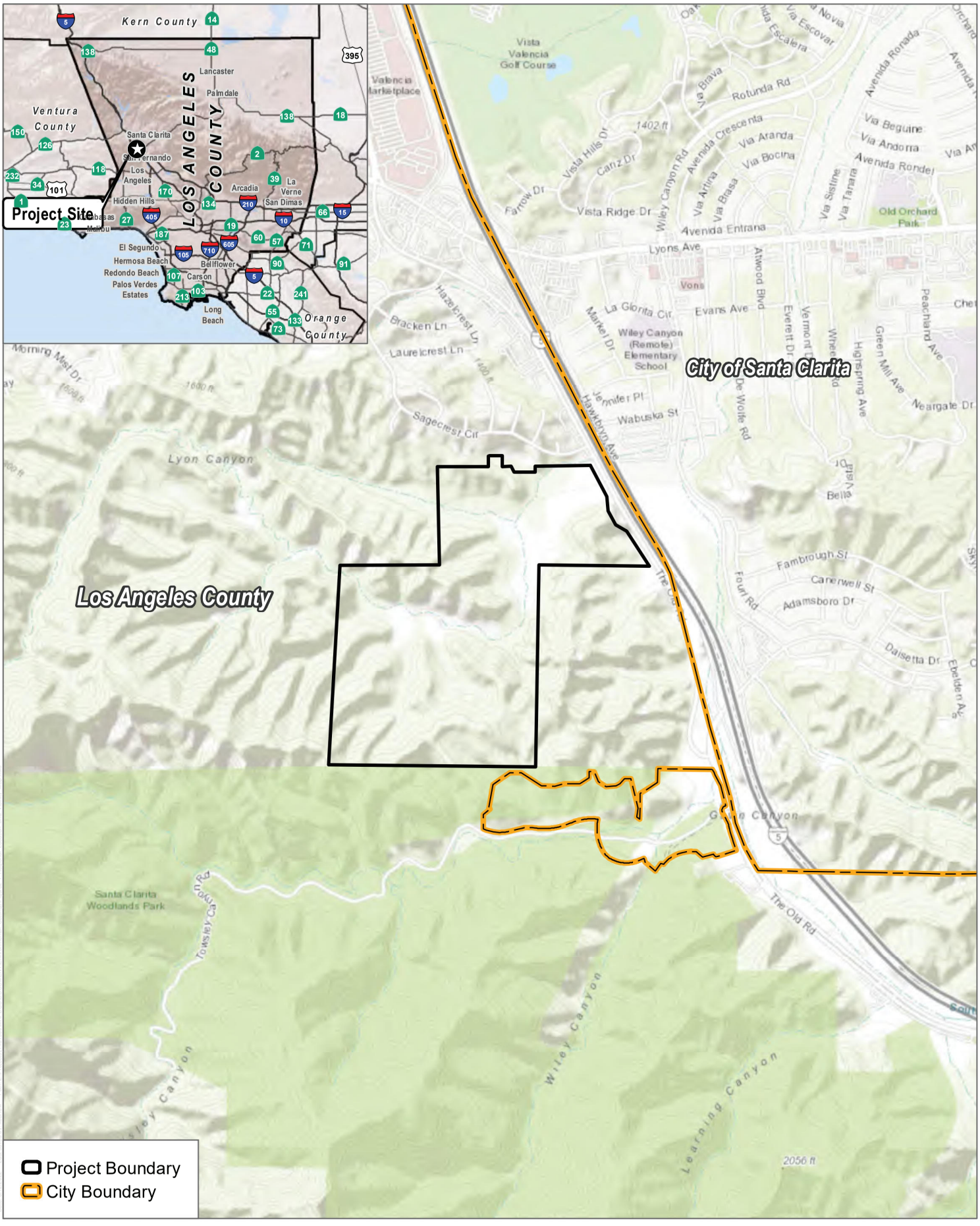
County of Los Angeles. 2024. "Subdivisions in Newhall Zoned District." Excel Report from E. Aguirre (County of Los Angeles) to D. Sarraf (Dudek). February 15, 2024.

LACSD (Los Angeles County Sanitation Districts). 2021. "Will Serve Letter for Vesting Tentative Tract Map No. 83301, Trails at Lyons Canyon." May 3, 2021.

LASD (Los Angeles County Sheriff's Department). 2022. "Santa Clarita Valley Sheriff's Station." Accessed May 10, 2022. https://lasd.org/santa-clarita-valley/.

Public Works (Los Angeles County Public Works). 2020. *Los Angeles County Public Works Transportation Impact Analysis Guidelines*. July 23, 2020. Accessed May 10, 2022. https://dpw.lacounty.gov/traffic/docs/Transportation-Impact-Analysis-Guidelines-July-2020-v1.1.pdf.

RWQCB (Regional Water Quality Control Board). 2012. "Figure 1, EWMP Boundaries." Accessed May 10, 2022. https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/santa_clara/upper/doc/ewmp_map.pdf.



SOURCE: ESRI World Topographic Map

DUDEK

0 800 1,600 Feet

FIGURE 2-1

Regional Location and Vicinity Map

Trails at Lyons Canyon Project

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SOURCE: Bing Maps 2023, Open Street Map 2019

DUDEK

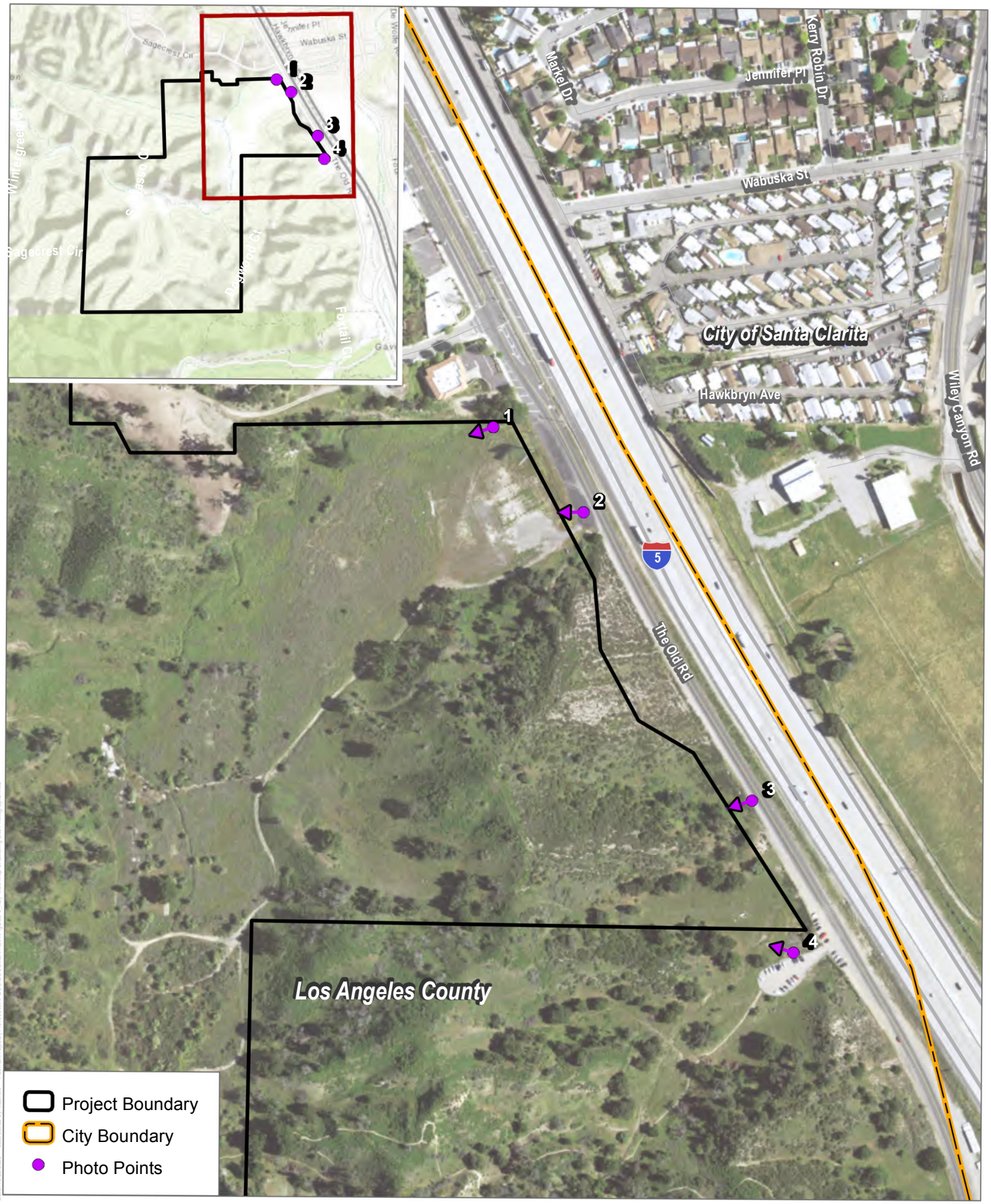
0 625 1,250 Feet

FIGURE 2-2

Surrounding and Nearby Land Uses

Trails at Lyons Canyon Project

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SOURCE: NAIP 2020, Open Streets Map 2019

DUDEK

0 150 300 Feet

FIGURE 2-3

Key View Map of Existing Site Photographs

Trails at Lyons Canyon Project

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Photo 1



Photo 2



Photo 3



Photo 4

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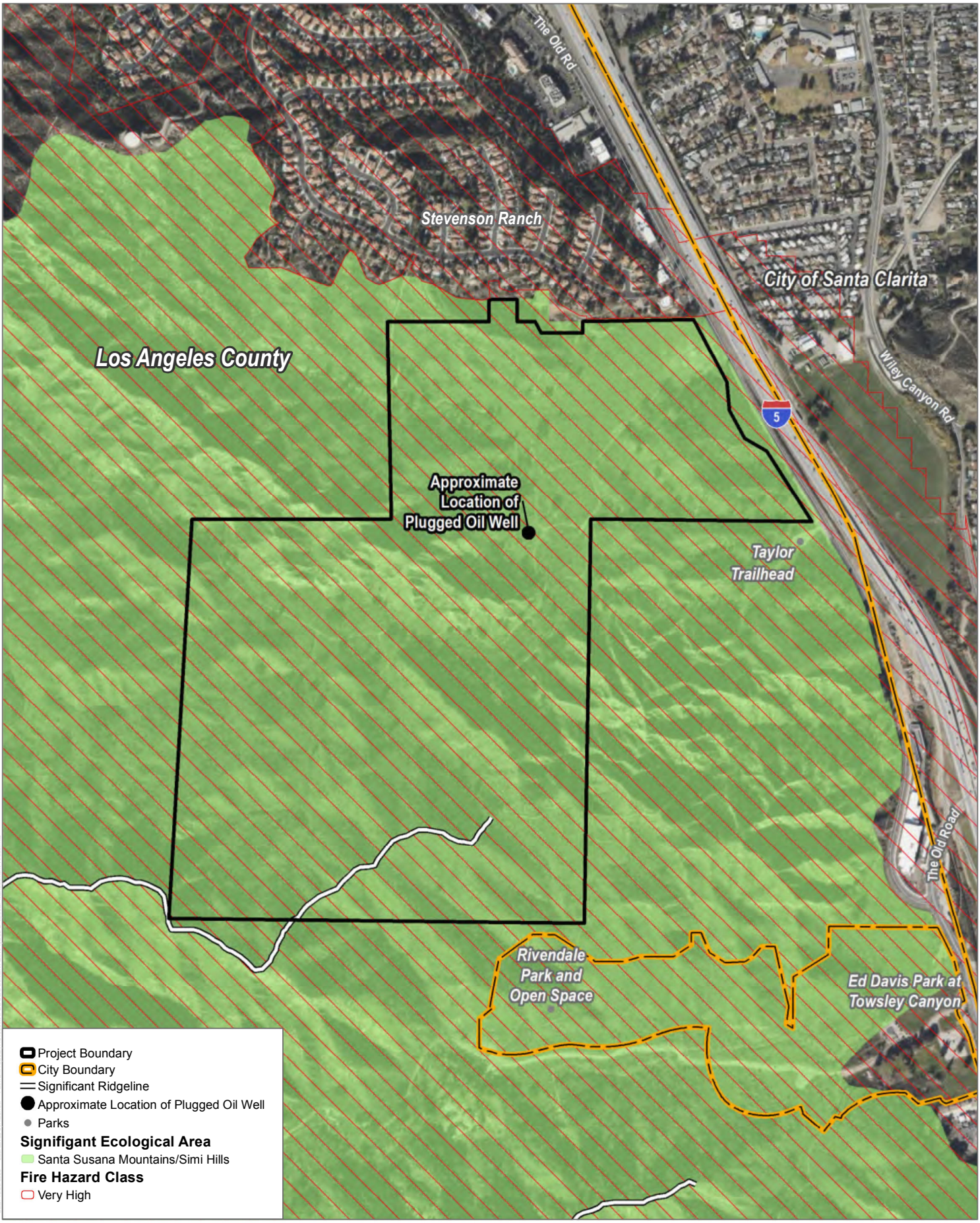
DUDEK

FIGURE 2-4

Existing Site Photographs

Trails at Lyons Canyon Project

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SOURCE: Bing Maps 2021, Open Street Map 2019

DUDEK

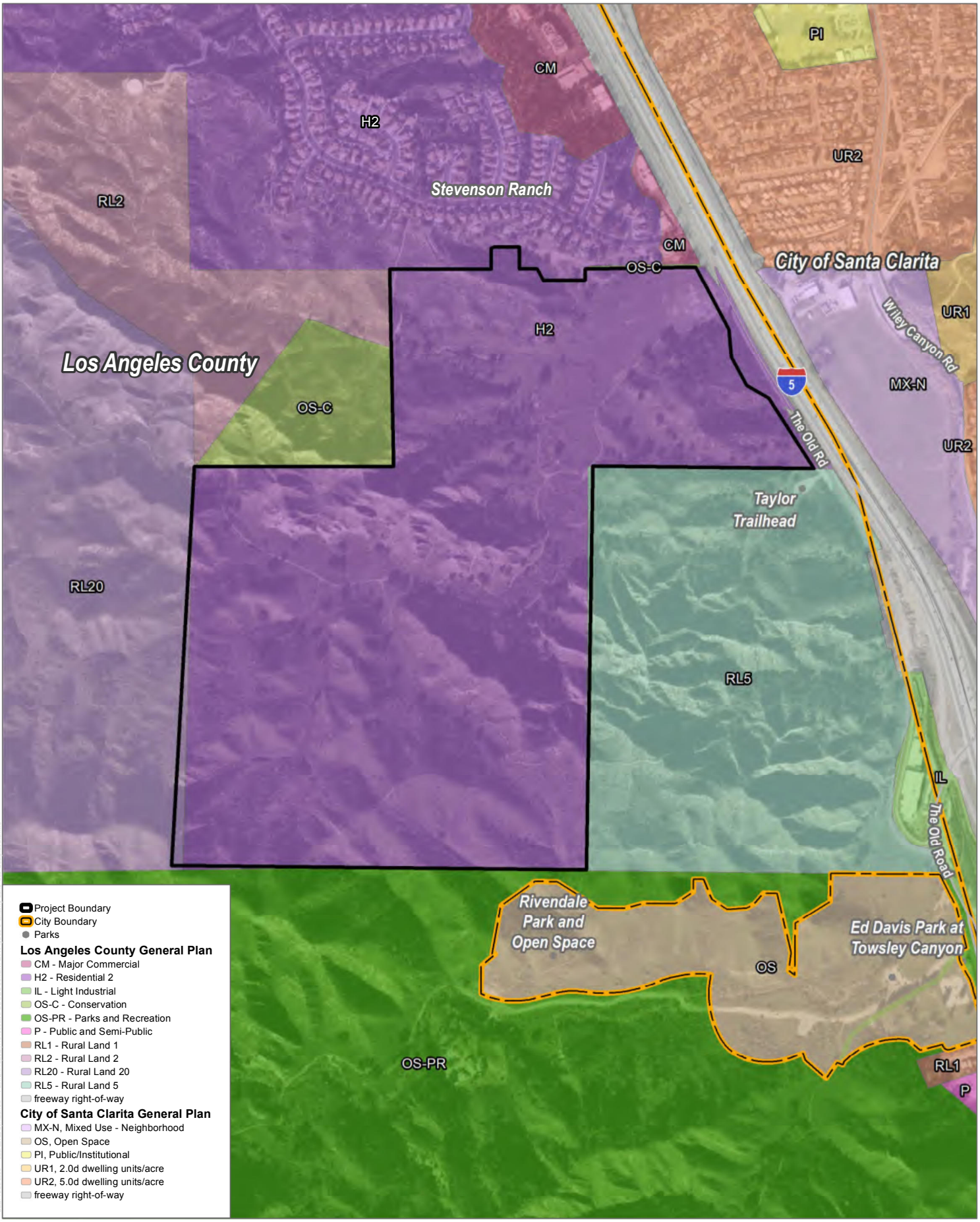
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FIGURE 2-5

Special Management Areas

Trails at Lyons Canyon Project

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SOURCE: Bing Maps 2021, Open Street Map 2019

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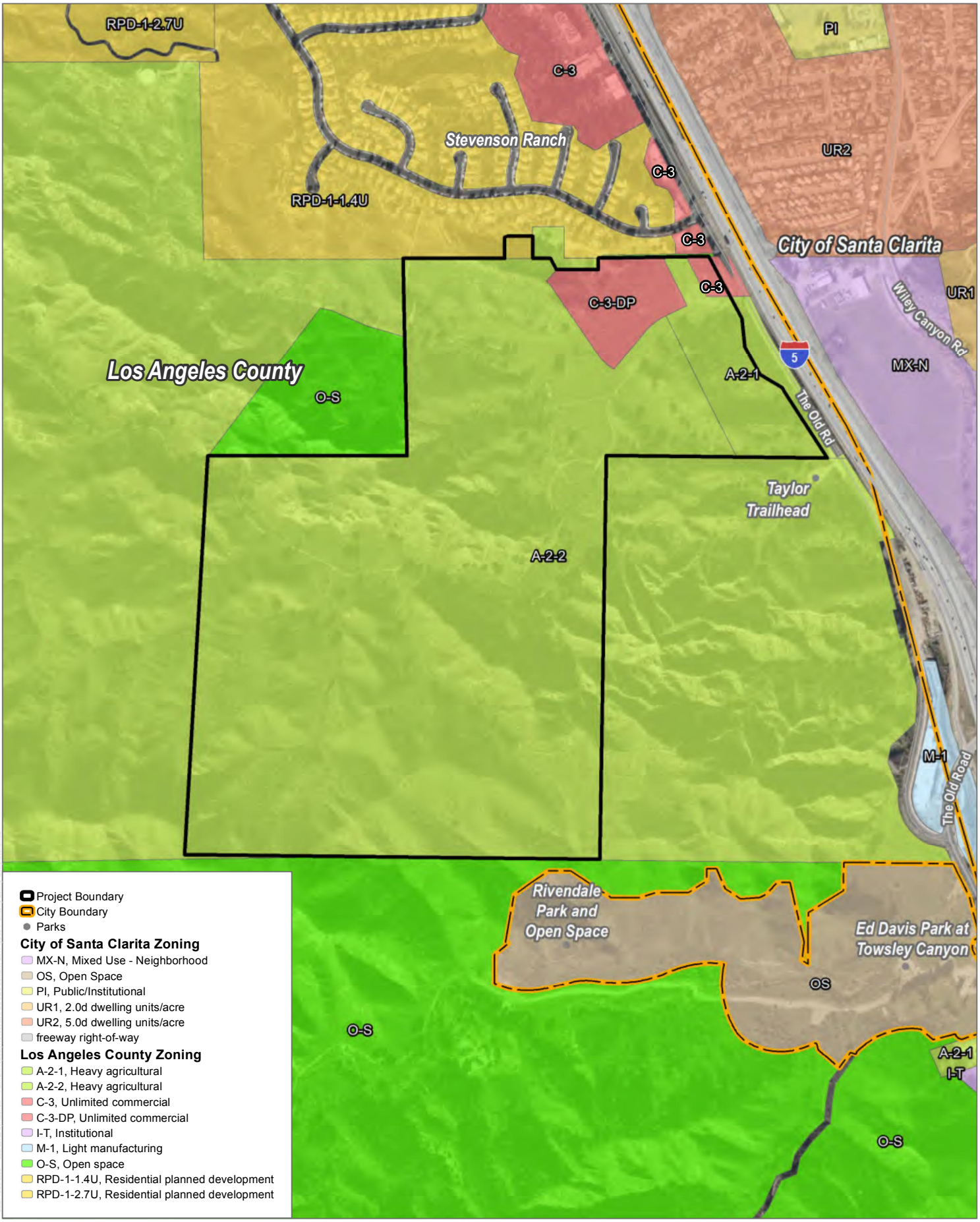
0 420 840 Feet

FIGURE 2-6

Existing Land Use Designations

Trails at Lyons Canyon Project

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SOURCE: Bing Maps 2021, Open Street Map 2019

DUDEK

0 420 840 Feet

FIGURE 2-7

Existing Zoning Designations

Trails at Lyons Canyon Project

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Project Site

City Limits

Cumulative Projects

Los Angeles County (Unincorporated)

City of Santa Clarita

ID	Los Angeles County (Unincorporated) Projects
LA1	Canyon View Estates
LA2	Tentative Tract Map 74797
LA3	Aidlin Hills
LA4	Legacy Village
LA5	Entrada South
LA6	Valencia Commerce Center (VCC)
LA7	Mission Village
LA8	Landmark Village
LA9	Sterling Ranch Estates
LA10	Williams Ranch
LA11	Tentative Tract Map 62000
LA12	Tentative Tract Map 60665
LA13	Conditional Use Permit for Clock Tower
LA14	Homestead South

ID	City of Santa Clarita Projects
SC1	Wiley Canyon Project
SC2	8th Street Subdivision
SC3	Center at Needham Ranch Business Park
SC4	Lexen Hotel
SC5	Newhall Crossings
SC6	Master's University Master Plan
SC7	Laemmle Theatres
SC8	Placerita Meadows
SC9	Santa Clarita Commerce Center
SC10	Bridge to Home
SC11	Henry Mayo Newhall Hospital
SC12	Henry Mayo Newhall Hospital Project Update
SC13	Patios Connection
SC14	Gate-King Industrial Park Project
SC15	Oliver Hotel (Element by Westin)
SC16	Valencia Town Center (VTC) Square
SC17	Town Center Specific Plan
SC18	River Village (Area D)
SC19	Homewood Suites/Hampton Inn
SC20	Holiday Inn Express/Residences Inn/Springhill Suites
SC21	Shadowbox Studios (formerly Blackhall Studios)
SC22	University of California at Los Angeles Film Archives Expansion
SC23	Dockweiler 21
SC24	Eternal Valley Memorial Park Expansion
SC25	Central Park Buildout Project
SC26	Neighborhood Self Storage

Date: 6/26/2024 - Last saved by: tlerry - Path: Z:\Projects\143190\MAPDOC\DOCUMENT\EIRFigure2-8 Cumulative Project List 20240626.mxd

SOURCE: BASEMAP-ESRI MAPPING SERVICE 2023

DUDEK

0 2,400 4,800 Feet

FIGURE 2-8

Cumulative Projects

Trails at Lyons Canyon Project

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3 Project Description

Chapter 3 of this Draft Environmental Impact Report (EIR) provides a description of the proposed Trails at Lyons Canyon Project (Project). The purpose of this chapter is to describe the Project in a manner that will be meaningful for review by the public, reviewing agencies, and decision-makers in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Sections 21000 et seq., and the State CEQA Guidelines (14 CCR 15000 et seq.). Per the requirements of Section 15124 of the State CEQA Guidelines, a complete project description must contain the following information:

A. the precise location and boundaries of the proposed Project, shown on a detailed map, along with a regional map of the project's location (see Section 3.1 and Chapter 2, Section 2.2, Project Location);
B. a statement of the objectives sought by the proposed Project, which should include the underlying purpose of the project (see Section 3.4);
C. a general description of the Project's technical, economic, and environmental characteristics, considering the principal engineering documentation and supporting public service facilities (see Section 3.2); and
D. a statement briefly describing the intended uses of the EIR, including a list of the agencies that are expected to use the EIR in their decision making, a list of permits or other approvals required to implement the project, and a list of related environmental review and consultation requirements imposed by federal, state, or local laws, regulations, or policies (see Sections 3.5 and 3.6).

In accordance with Section 15124, the description of a project "should not supply extensive detail beyond that needed for evaluation and review of environmental impacts." This chapter of the Draft EIR includes the required information, as listed above.

As stated in Section 15126.2 of the State CEQA Guidelines, an EIR must identify and focus on the significant effects of a project on the environment. In assessing the impacts of a proposed project, the lead agency "should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published." The approval and implementation of the Project would result in physical changes to the environment, which are analyzed in this Draft EIR.

3.1 Project Summary

The Project site, which totals 233.49 gross (227.34 net[1]) acres, is located in unincorporated Los Angeles County (County), in the northern foothills of the Santa Susana Mountains at the westerly perimeter of the Santa Clarita Valley. The Project site consists of five Assessor's Parcel Numbers (APNs) 2826-041-039, 2826-023-014, 2826-022-026, 2826-022-027, and 2826-022-035.

Figure 2-1, Regional Location and Vicinity Map, included in Chapter 2, Environmental Setting, of this Draft EIR, provides the Project boundaries in the context of the surrounding community and jurisdictions. Stevenson Ranch,

[1] The net acreage is the gross acreage minus existing utilities easements and the acreage of the proposed internal private driveways in Lots 1 through 11.

a master-planned community in the unincorporated County, is located north of the Project site, and the City of Santa Clarita is located just east of the Project site. The Santa Susana Mountains are located west of the site, with Ventura County located farther west of the Santa Susana Mountains. South of the Project site is unincorporated County land and City of Santa Clarita land (specifically, Rivendale Park and Open Space). Locally, the Project site is south of Sagecrest Circle, adjacent to The Old Road on its eastern side, and north of Calgrove Boulevard near Ed Davis Park in Towsley Canyon. The Project site is bordered by open space on its western, southern, and southeastern boundaries. Regional access to the Project site is provided by the northbound/southbound Interstate-5 (I-5) Freeway to the east, with freeway access ramps via Lyons Avenue or Calgrove Boulevard, each located one mile from the Project site. Direct access to the Project site is currently provided by The Old Road on the east.

Figure 3-1, Conceptual Site Plan, identifies the Project proposed development overlaid on an aerial photograph. Based on lot acreages, the Project includes the development of 510 dwelling units with a mix of attached and detached dwelling units, and affordable senior housing apartments within 41.47 acres; 1.13 acres for a recreational center; 10.73 acres of debris basin lots maintained by the Los Angeles County Flood Control District (LACFCD); 21.72 acres of HOA-maintained open space; 152.84 acres of natural and improved open space, including landscaped areas and parklets; 1.43 acres of water tank and frontage; and 4.10 acres for Street A and Street B, which would be the public roadways.

Table 3-1, Lot Summary for Vesting Tentative Tract No. 83301, shows the number of proposed lots and associated numbering, the gross and net acreage for each lot, the proposed use for each lot, and the dwelling unit per acre for the residential lots.

Table 3-1. Lot Summary for Vesting Tentative Tract No. 83301

Lot No.	Proposed Use/Product Type	Gross Area (Acres)	Net Area (Acres)	Dwelling Units (DU)	Density (DU/Acre)
2	3-Story Attached Dwelling Units	4.64	3.88	87	18.8
3	3-Story Attached Dwelling Units	1.84	1.38	20	10.9
4	3-Story Detached Dwelling Units	7.79	6.66	105	13.5
5	2 to 3-Story Detached Dwelling Units	8.50	7.47	70	8.2
6	2 to 3-Story Detached Dwelling Units	9.07	7.96	78	8.6
7	2 to 3-Story Attached Dwelling Units	6.95	5.73	90	12.9
8	2 to 3-Story Attached Dwelling Units	0.78	0.70	6	7.7
9	2 to 3-Story Attached Dwelling Units	0.65	0.57	6	9.2
10	Affordable Senior Apartments[1]	0.74	0.70	48	64.0
11	Affordable Senior Apartments	0.51	0.30	0	N/A
	Subtotal	*41.47*	*35.35*	*510*	*2.18*
14	Debris Basin	3.97	3.97	0	
15	Debris Basin	3.76	3.76	0	
19	Debris Basin	1.62	1.62	0	
33	Debris Basin	0.19	0.19	0	
34	Debris Basin	0.54	0.54	0	
35	Debris Basin	0.30	0.30	0	
36	Debris Basin	0.35	0.35	0	
	Subtotal	*10.73*	*10.73*	*0*	*N/A*

Table 3-1. Lot Summary for Vesting Tentative Tract No. 83301

Lot No.	Proposed Use/Product Type	Gross Area (Acres)	Net Area (Acres)	Dwelling Units (DU)	Density (DU/Acre)
16	HOA Open Space	0.86	0.86	0	
17	HOA Open Space	1.20	1.20	0	
18	HOA Open Space	0.78	0.78	0	
20	HOA Open Space	5.96	5.96	0	
21	HOA Open Space	5.16	5.16	0	
22	HOA Open Space	3.41	3.41	0	
23	HOA Open Space	1.32	1.32	0	
30	HOA Open Space	2.01	2.01	0	
31	HOA Open Space	0.32	0.32	0	
32	HOA Open Space	0.20	0.20	0	
37	HOA Open Space	0.50	0.50	0	
	Subtotal	*21.72*	*21.72*	*0*	*N/A*
1	Landscape/Open Space	0.06	0.04	0	
24	Natural Open Space	4.67	4.67	0	
25	Natural Open Space	75.95	75.95	0	
26	Natural Open Space	62.94	62.94	0	
27	Natural Open Space	9.28	9.28	0	
	Subtotal	*152.90*	*152.88*	*0*	*N/A*
12	Recreation Center	0.40	0.40	0	
13	Recreation Center	0.73	0.73	0	
	Subtotal	*1.13*	*1.13*	*0*	*N/A*
28	Water PRV	0.75	0.75	0	
29	Water Tank	0.68	0.68	0	
	Subtotal	*1.43*	*1.43*	*0*	*N/A*
Streets	A and B Street (Public)	4.10	4.10	0	
	Total	**233.49**	**227.34**	**510**	

Note: Numbers may not sum due to rounding.

[1] One of the 48 units would be a manager's unit (47 very-low-income senior housing units and 1 manager's unit for a total of 48 units)

As shown in Table 3-1 above, the Project includes 152.84 acres within Lot 24 through 27, which are designated as, "Natural Open Space", which generally includes land that would be maintained in perpetuity as natural undeveloped and preserved open space, but also includes small areas that would be vegetated but might have manufactured slopes, debris basins, and/or vegetation that would be subject to fuel modification (i.e. vegetation clearing or thinning).

To determine the amount of land that would be preserved in a natural state in perpetuity for the purposes of biological resources, the Project anticipates that all land areas excluded from the Project's impact areas would be preserved. The area of land within the Project's grading limits, as well as a surrounding construction buffer area, is characterized as the Project's "development footprint" and includes 72.55 acres. Other areas of impact for the purposes of biological resources include 6.73 acres of on-site fuel modification and 3.90 acres of on-site drainage inundation areas for the debris basins (debris extents) that could be subject to occasional maintenance. In

summary, the total on-site Project impact area, including the Project development footprint, fuel modification zones, and debris extents, would be 83.17 acres.

The Project would result in 150.31 acres of unimpacted natural open space. The Project, as required by Section 22.102.090 (Significant Ecological Area Development Standards) of the County Code, proposes to dedicate approximately 144.43 acres of the total 150.31 acres (approximately 62% of the Project site) as natural open space; this area is defined as the "Conservation Area" or "on-site Conservation Area" as detailed further in Section 4.4, Biological Resources. The Conservation Area would be preserved and maintained in perpetuity through a conservation easement as implemented through mitigation measure (MM)-4.4-1. In totality, the on-site Project impact area (83.17 acres) and natural open space (150.31 acres) total 233.49 gross acres of the Project site.

The Project would require approximately 1,500,000 cubic yards of cut and 1,300,000 cubic yards of fill for a total of 2,800,000 cubic yards of grading with 1,345,000 cubic yards of over excavation. There is expected to be 15% shrinkage on the over excavation for a total of 200,000 cubic yards. The total earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site parcel adjacent to The Old Road that would be constructed with manufactured slopes. The grading would balance onsite, and as such, no import or export of soils would be required for the Project.

Off-site improvements of the Project include development of an eight-foot-wide sidewalk along The Old Road fronting the Project site to provide pedestrian access into the site, and the widening of The Old Road along the Project site frontage to include a total of 80-foot right of way, including sidewalk, curb, and gutter. Between the proposed sidewalk (adjacent to The Old Road) and the portion of the Project site's eastern boundary, the Project proposes to construct a manufactured slope and a retaining wall of a maximum of four feet in height. These off-site improvements along The Old Road would occur on 2.49 acres, and acquisition of property rights to this off-site area would occur as a condition of approval prior to final map recordation. In addition to improvements to The Old Road, the Project includes off-site utility infrastructure improvements, as discussed in Section 3.2.8 below.

3.2 Project Characteristics

The Project includes the development of residential units, a recreation center, flood control facilities, open space, internal roadways, and a water tank. Further details of the Project's characteristics are provided below.

3.2.1 Land Use Entitlements

The Los Angeles County 2035 General Plan (General Plan) land use designation for the Project site is Residential 2 (H2), which would allow for development of the Project as currently proposed. The Project site is included in the Santa Clarita Valley Area Plan, also known as "One Valley One Vision" (OVOV), as shown on Figure 2-6, Existing Land Use Designation, of Chapter 2, Environmental Setting. The land use designations of OVOV define the Residential 2 (H2) land use category as "urban residential", allowing a permitted residential density of up to two dwelling units per net acre. According to the OVOV plan, the Residential 2 (H2) designation provides for residential neighborhoods at densities that require urban services, providing a transition between higher density, urban development and rural communities throughout the planning area. Within land designated Residential 2 (H2), density-controlled development (clustering) is encouraged on lands with significant environmental and or topographical features or resources, in order to preserve open space for protection of these natural features or resources (County of Los Angeles 2012). No General Plan Amendment is required. The discretionary actions required for the Project are summarized below.

Vesting Tentative Tract Map (VTTM) No. 83301

Vesting Tentative Tract Map (VTTM) No. 83301 is proposed to subdivide the 233.49-acre Project site into 37 legal lots and two public streets, as shown on Figure 3-2, Vesting Tentative Tract Map No. 83301. Title 21, Subdivisions, of the Los Angeles County Code (County Code), sets forth the general provisions and requirements for compliance with the Subdivision Map Act. As set forth in Chapter 21.38, Vesting Tentative Map of the County Code, when a subdivider files a vesting tentative map for a subdivision whose proposed development is inconsistent with the Zoning Ordinance, the County may deny or may approve it conditioned on the subdivider obtaining the necessary change in the Zoning Ordinance in order to eliminate the inconsistency. The Project would include detached single-family condominiums within the A-2-1, A-2-2, C-3, and C-3-DP zones, as well, which are allowed in the zone as part of the subdivision.

Oak Tree Permit

The Project would require an Oak Tree Permit in accordance with Chapter 22.174, Oak Tree Permits of the County Code. As stated in Chapter 22.174, the Oak Tree Permit is established: (a) to recognize oak trees as significant historical, aesthetic, and ecological resources, and as one of the most picturesque trees in Los Angeles County, lending beauty and charm to the natural and manmade landscape, enhancing the value of property, and the character of the communities in which they exist; and (b) to create favorable conditions for the preservation and propagation of this unique, threatened plant heritage, particularly those trees which may be classified as heritage oak trees, for the benefit of current and future residents of the County.

The Project site is located within the Santa Susana Mountains and Simi Hills Significant Ecological Area (SEA) and includes biological resources, including trees, that are protected under the SEA Development Standards. As described further in Section 3.2.5 below, 334 SEA-Protected Trees would be impacted by the Project, including 232 protected oak trees (i.e., coast live oak, scrub oak, and valley oak). As such, an Oak Tree Permit is required. The Oak Tree Permit also includes replacement trees other SEA-Protected trees, in line with SEA replacement requirement.

Conditional Use Permit

The Project would require approval of a Conditional Use Permit (CUP), which includes the components discussed below.

Development in a Hillside Management Area

The Project site is within a Hillside Management Area (HMA),[2] due to the presence of mountainous or foothill terrain with a natural slope of 25% or greater at the Project site. According to Chapter 22.104 (Hillside Management Areas), of Title 22, the County's Zoning Code (Zoning Code), the HMA is established to ensure that development preserves and enhances the physical integrity and scenic value of HMAs, to provide open space, and to be compatible with and enhance community character. Therefore, a CUP is required for the Project for development within the HMA.

[2] Special Management Areas (SMAs) are defined by the County as areas that require additional development regulations due to the presence of natural resources, scenic resources, or identified hazards (County of Los Angeles 2015). The Project site is located within the following SMAs: a Hillside Management Area (HMA), Significant Ecological Area (SEA), and Very High Fire Hazard Severity Zone (VHFHSZ).

Development in a Significant Ecological Area

According to Chapter 22.102, Significant Ecological Areas (SEA), of the Zoning Code, the SEA is established to protect resources from incompatible development that could result in potential environmental degradation. The Project site is entirely contained within the Santa Susana Mountains/Simi Hills SEA. A discretionary SEA CUP is required for development that cannot demonstrate compliance with Section 22.102.070 (Protected Tree Permit), or Sections 22.102.090 (SEA Development Standards) and 22.102.100 (Natural Open Space Preservation). Prior to a public hearing, a SEA CUP application must undergo review by the SEA Technical Advisory Committee (SEATAC), consistent with Section 22.102.150 of the County Code.

Density-Controlled Development

The Project's proposed development of the site (i.e., residential dwelling units) is designed in a configuration defined by the County as "density-controlled development" (Section 22.140.170 [Density-Controlled Developments], of the Zoning Code), which is applicable to the A-2 zones of the Project site. Density-controlled development is defined as "a concentration of dwelling units within one or more portions of a lot, resulting in the remainder of the lot being free of buildings or structures, as opposed to development spread throughout the entire lot" (Section 22.14.010, Definitions, of the Zoning Code). As such, even though the Project site is 233.49 gross acres, development of the Project's dwelling units would be concentrated within 41.47 gross acres. In total, the area of land within the Project's grading limits, as well as a surrounding construction buffer area, includes 72.55 gross acres that are in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space.

Grading In Excess of 100,000 Cubic Yards

According to Table 22.16.030-C in the County Code, the Project is subject to a CUP due to grading that requires more than 100,000 cubic yards of earthwork within an agricultural land use.

Development of Townhouses within A-2 zones

As stated in Section 22.16.030 (Land Use Regulations for Zones A-1, A-2, O-S, R-R, and W of the Zoning Code), a CUP is required for development of townhouses within the A-2 zone.

Administrative Housing Permit

As stated in Chapter 22.166, Housing Permits of the County Code, a housing permit is required by the County to facilitate the increased production of affordable housing and senior citizen housing. This applies to the Project, which would provide affordable senior citizen housing, and therefore the Project may be eligible to receive various benefits, including but not limited to: density bonuses, incentives, waivers or reductions of development standards, and permit streamlining pursuant to the State Density Bonus Law, as set forth in Section 65915 of the California Government Code, as amended, or any other State laws or local ordinances or policies that aim to increase the production of affordable housing, including transitional and supportive housing, and senior citizen housing.

In accordance with State Density Bonus Law, the Project Applicant is requesting the following incentives:

- Request to allow surface parking for very-low-income senior housing to be located within an A-2-1 zone
- Request to allow the applicability of Density-Controlled Development (DCD) in the C-3-DP-zoned portion of the Project site

Additionally, the Project Applicant is requesting the following waivers:

- Maximum Height as provided by County Code Section 22.16.050(B)
  - The Project requests to exceed maximum height of 35 feet in the underlying A-2 zone and seeks a maximum height of 38 feet above grade within the A-2 zone.
- Building Separation as provided by County Code 22.110.050(A)(1)
  - The Project requests to allow 9 feet of building separation instead of 10 feet of building separation.
- Maximum retaining wall height per County Code 22.110.070(B)(4)
  - The Project requests a maximum retaining wall height of 17.5 feet.
- Multi-family housing in DCD development per County Code 22.140.170(C)(3)
  - The Project proposes senior affordable housing in the C-3-DP-zoned portion of the Project site.
- Natural Open Space Preservation of 65% of Project site per County Code 22.102.100(A)(2)(a)
  - The Project proposes the permanent preservation of approximately 65% of the Project site as natural open space.
- Retaining Walls Topped with Walls or Fences per LACC 22.110.070(B)(4)(b)
  - The Project includes retaining walls that are topped by non-view-obscuring fences in both cut and fill conditions. These fences would exist in required yards in some circumstances and would not exceed six feet in total height.

3.2.2 Residential Development

The Project would construct 510 dwelling units with a mix of attached and detached dwelling units and affordable senior housing on ten lots within 41.47 acres. The residential component of the Project would be clustered in the northeastern portion of the Project site, within Lots 2 through 11. Dwelling units would vary in design, and whether the units are attached or detached, as discussed further in Section 4.1, Aesthetics, of Chapter 4, Environmental Impact Analysis, of this Draft EIR.

Table 3-2, Proposed Residential Dwelling Units, provides a summary of the proposed residential uses and Figure 3-1, Conceptual Site Plan, provides an illustration of the residential lots.

Table 3-2. Proposed Residential Dwelling Units

Lot No.	No. of Dwelling Units	Attached/ Detached Dwelling Units	No. of Stories	Building Height (Maximum feet)	No. of Buildings	Gross Lot Acreage	Dwelling units/ acre	Zoning
2	87	Attached	3	38	14	4.64	18.8	C-3-DP
3	20	Attached	3	38	5	1.84	10.9	A-2-2
4	105	Detached	3	35	105	7.79	13.5	A-2-2
5	70	Detached	2-3	26-35	70	8.50	8.2	A-2-2
6	78	Detached	2-3	28-35	78	9.07	8.6	A-2-2
7	90	Attached	2-3	29-35	15	6.95	12.9	A-2-1
8	6	Attached	2-3	29-35	1	0.78	7.7	C-3
9	6	Attached	2-3	29-35	1	0.65	9.2	A-2-1

Table 3-2. Proposed Residential Dwelling Units

Lot No.	No. of Dwelling Units	Attached/ Detached Dwelling Units	No. of Stories	Building Height (Maximum feet)	No. of Buildings	Gross Lot Acreage	Dwelling units/ acre	Zoning
10/11	48	Attached	4	45	1	1.25	38.1	C-3-DP
Total	**510**	**N/A**	**N/A**	**N/A**	**290**	**41.47**	**N/A**	**N/A**

Notes: N/A: Not Applicable.

Residential Lots

Lot 2

Lot 2 would include 87 three-story attached dwelling units within 14 buildings, on a 4.64-acre lot, for a density of 18.8 dwelling units per acre. The existing zoning for Lot 2 is C-3-DP. The buildings would be up to 38 feet high and the dwelling units would be attached in configurations of six to seven dwelling units. Public vehicular access to Lot 2 would be from proposed "A" Street to the south and internal driveways.

Lot 3

Lot 3 would include 20 three-story attached dwelling units within five buildings, on a 1.84-acre lot, for a density of 10.9 dwelling units per acre. Lot 3 would be adjacent to Lot 2 and would represent the same housing types as Lot 2. The existing zoning at Lot 3 is A-2-2. The buildings would be up to 38 feet in height and the dwelling units would be attached in configurations of six to seven dwelling units. Public vehicular access to Lot 3 would be from proposed "A" Street to the south and internal driveways. Lot 3 would have one removable bollard for emergency vehicle access, located within an internal roadway toward the north portion of the lot.

Lot 4

Lot 4 would include 105 three-story detached dwelling units across 7.79 acres. The existing zoning at Lot 2 is A-2-2, and the density for Lot 4 would be 13.5 dwelling units per acre. The dwelling units would be up to 35 feet in height. Lot 4 would have one removable bollard within an internal driveway for emergency vehicle access, located within the northwestern portion of the lot. Public vehicular access to Lot 4 would be from proposed "A" Street to the east.

Lot 5

Lot 5 would include 70 detached dwelling units over 8.50 gross acres, for a density of 8.2 dwelling units per acre. The existing zoning designation for Lot 5 is A-2-2. The dwelling units would be up to 26 feet in height for two-story dwelling units or 35 feet for three-story dwelling units. Public vehicular access to Lot 5 would be from proposed "A" Street from the east.

Lot 6

Lot 6 would include 78 detached dwelling units over 9.07gross acres, with a density of 8.6 dwelling units per acre. The existing zoning designation for Lot 6 is A-2-2. The dwelling units would be up to 28 feet in height for two-story dwelling units or 35 feet for three-story dwelling units. The dwelling units in Lot 6 are clustered in groups of four to six around an internal driveway with a terminus. Public vehicular access to Lots 6 and 7 would be from proposed

"A" Street from the west and from "B" Street to the south. The proposed Recreational Center (described further, below) is adjacent to Lot 6, to the north.

Lot 7

Lot 7 would include 90 two-story attached dwelling units within 15 buildings over 6.95 gross acres, with a density of 12.9 dwelling units per acre. The existing zoning designation for Lot 7 is A-2-1. The buildings in Lot 7 would be situated with one side of each building facing an internal driveway terminus which would provide garage access to the dwelling units. The dwelling units would be up to 29 feet in height for two-story dwelling units or 35 feet for three-story dwelling units. Public vehicular access to Lot 7 would be from proposed "A" Street from the north and proposed "B" Street from the south.

Lot 8

Lot 8 would include six two-story attached dwelling units within one building over 0.78 gross acres, with a density of 7.7 dwelling units per acre. The existing zoning designation for Lot 8 is C-3. The dwelling units would be up to 29 feet in height for two-story dwelling units or 35 feet for three-story dwelling units. Public vehicular access to Lot 8 would be from proposed "A" Street to the south, where it would share an internal driveway with Lot 9.

Lot 9

Lot 9 would include six two-story attached dwelling units within one building over 0.65 gross acres, with a density of 9.2 dwelling units per acre. The existing zoning designation for Lot 9 is A-2-1. The dwelling units would be up to 29 feet in height for two-story dwelling units or 35 feet for three-story dwelling units. Public vehicular access to Lot 9 would be from proposed "A" Street to the south, where it would share an internal driveway with Lot 8.

Lots 10 and 11

Lot 10 would include 47 dwelling units for affordable senior dwelling units (very-low-income) for active adults, age-restricted to persons 55 and over, and one dwelling unit for a manager's unit, for a total of 48 dwelling units within one building. Lot 10 and 11 are 1.25 acres in total with a density of 64 dwelling units per acre. Lot 11 would include parking and driveways for Lot 10. The existing zoning designation for Lot 10 is C-3-DP, and the zoning for Lot 11 is A-2-1. The building would be four stories and up to 45 feet in height. The building would include leasing offices, a lobby, amenity rooms, and a clubroom. Public vehicular access to Lot 10 and 11 would be from proposed "A" Street to the south.

Affordable Housing - Inclusionary Housing and Density Bonus Program

The Project proposes the construction of 510 total residential dwelling units, including 24 affordable for-sale condominium dwelling units (averaging 135% Area Median Income [AMI]). Additionally, an approximately 10% set aside of 47 affordable senior rental units apartments in one multifamily building will be provided for very-low-income seniors (50% AMI) and one rental unit at market rate for an on-site manager. The Project includes affordable housing in compliance with the County's Inclusionary Housing ordinance (IHO) (Title 22 – Planning and Zoning, Division 6 – Development Standards, Chapter 22.121 – Inclusionary Housing, of the Zoning Code), which requires a minimum five percent affordable housing set aside. The IHO ensures the inclusion of affordable housing units in housing developments that meet certain criteria and encourages mixed-income communities. The Project

would provide 24 for-sale condominium dwelling units to be deed-restricted for moderate- or middle-income households in compliance with the County's IHO requirements.

Additionally, in accordance with both State law and the County's Zoning Code, the Project includes additional affordable housing for very-low-income seniors. Senate Bill (SB) 1818, which amended the State Density Bonus Law (Government Code 65915) to offer incentives for the development of affordable housing for low-income, moderate-income, and senior citizen households. Title 22 – Planning and Zoning, Division 6 – Development Standards, Chapter 22.120 – Density Bonus, of the Zoning Code codifies the requirements of Government Code Sections 65915 through 65918. In exchange for providing 10 percent of the Project's dwelling units as deed-restricted units affordable rental apartments to very-low-income senior citizens, the Project is entitled to a density bonus of 32.5% above the maximum allowable base residential density (Gov. Code §65915[f][2]), as well as two incentives and unlimited waivers. As such, the Project Applicant proposes to utilize the Density Bonus program under State and County Code to increase the allowable dwelling unit count from the baseline allowed to 510 dwelling units.

In total, the Project would provide a total of 71 affordable dwelling units (24 for sale condominiums and 47 rental apartment units), representing approximately 15% of the Project's base number of dwelling units, and this would be processed as part of the Administrative Housing Permit, described above under Section 3.2.1, Land Use Entitlements.

3.2.3 Open Space and Recreational Facilities

Natural Open Space

The proposed Project would designate Lot 24 (northwesternmost corner of the Project site), Lots 25 and 26 (southern portion of the Project site), and Lot 27 (western portion of the Project site) as Natural Open Space lots. In addition to preserved, undisturbed natural open space, Lots 24 through 27 include the following: on-site trails, fuel modification zones, and flood control features. These lots mostly border existing natural open space outside of the Project site's western and southern boundaries and would preserve significant ridgelines, conserve habitat areas, and provide a buffer and transition to the proposed developed uses at the Project site. The Project would result in 150.31 acres of unimpacted natural open space on-site. As detailed in Section 4.4, Biological Resources, the Project would preserve 144.43 acres of the 150.31 acres of undisturbed natural open space on-site within a conservation easement (as implemented through MM-4.4-1, On-Site Habitat Preservation). Additionally, as implemented through MM-4.4-9, the Project would provide 466.70 acres of off-site conservation area in the Santa Susana Mountains/Simi Hills Significant Ecological Area.

Improved Open Space

The Project would improve 21.72 acres of open space land on Lots 16 through 18, 20 through 23, 30 through 32, and 37 at the Project site. The improved open space land would consist primarily of manufactured slopes adjacent to residential planning area building pads. As stated above, this improved open space would mostly be located between preserved natural open space at the Project site and future proposed dwelling units and associated infrastructure. Landscaping within the improved open space portion of the site is described in Section 3.2.5, Landscaping and Protected Trees, below.

In addition to open space lots, as described above, the Project site would include 2.59 acres of active and passive open space within Lots 1 through 7, and 10 through 13. The locations of the active and passive open spaces are

depicted on Figure 3-3, Active and Passive Open Space Plan. Active open space areas would contain a dog park, open space within the recreational lot, and open space within Lots 2 and 3, and would total 0.85 acre. On-site passive open space areas would contain amenities such as landscaping (parklets) and shade trees, picnic tables, activity space, and/or naturalized walking paths, and would total 1.74 acres. Overall, including HOA open space lots (described above) and active and passive open space areas, the total improved open space at the Project site would be 24.31 acres.

An HOA would be established for maintenance of improved open space, slopes, all common landscaped areas and the active and passive areas, as described above.

Recreational Facilities

Recreation Center

The Project would provide a 1.13-acre recreation center in the central portion of the Project site, at Lots 12 and 13. The recreation center would include one building of 4,540 square feet, which may include the following: a club room, fitness center, restrooms, conference room, study room, kitchen space, and entertainment/sitting areas. The recreation center would also include an outdoor swimming pool and spa. Lot 13 would include surface parking for the recreation center. The site plan of the recreational lot is depicted on Figure 3-4, Conceptual Recreational Building Plan. The recreational center would be connected via sidewalks to the proposed on-site multi-use trail system that would lead to on-site nature trails and to the County's regional trail system, as discussed below.

Passive and Active Open Space

In addition to dedicated natural and improved open space lots and the recreation center at the Project site, most of the residential lots would contain passive or active open space, which are described and included within the "improved open space" header, above.

Trails

As shown on Figure 3-2, the Project would construct a private-gated access road that would be constructed along the outer northern and western edge of the development area to provide for emergency and maintenance vehicular access. This paved access road would also be available for pedestrian/hiking/biking use. The access road would serve as a multi-use trail system, would be 28-feet wide, and would have a reciprocal access easement to provide access to all residential lots, open spaces, and County-maintained facilities. A new publicly-accessible trailhead would be constructed near the gated connection of the access road to The Old Road at the northeastern corner of the Project site. Trailhead signage would be posted at this access point at The Old Road, as implemented through MM-4.20-1, of Section 4.20, Wildfire, of this Draft EIR.

As depicted on Figure 3-5, Conceptual Trail Map, these on-site trails would connect to adjacent public open spaces outside of the Project's boundaries, including the City of Santa Clarita's Rivendale Park and Open Space in Towsley Canyon (City of Santa Clarita 2016). Additionally, a portion of the proposed private access road would replace the existing undesignated Lyons Ranch Road (an existing fire access road) and would terminate before reaching the boundaries of the Project site. Several existing non-dedicated trails are located within the southern portion of the site (within the designated natural open space portion of the Project site), as shown on Figure 3-5, and would remain with implementation of the Project. With implementation of the Project, an existing non-dedicated trail would be dedicated the County, as shown in green/purple striping on Figure 3-5. Existing non-dedicated trails on the southern

portion of the site would also remain with implementation of the Project and would eventually connect to the off-site portions of Rivendale Park and Open Space and Ed David Park at Towsley Canyon.

3.2.4 Circulation Plan

On-Site Vehicular Circulation

Direct access to the Project site is currently provided by The Old Road, bordering the easternmost boundary of the Project site. Improvements to The Old Road that would be completed as a part of the Project are discussed in Section 3.2.8, Off-Site Improvements. Within the Project site, local public access to the Project site would be provided by two primary access points from The Old Road: "A" Street and "B" Street, which would both be public roads of 57- to 64-feet wide, including sidewalks. Both streets would provide two full access unsignalized driveways from The Old Road into and out of the Project site. Figure 3-6, Circulation Plan, depicts the proposed vehicular and non-vehicular circulation at the Project site.

"A" Street would meet The Old Road toward the northeastern boundary of the Project site and would provide central access to the proposed uses onsite. "B" Street would meet The Old Road toward the southeastern portion of the site and provide western public access into the site. The Project design would provide an internal roadway network providing access to all residential lots from "A" and "B" Streets. The internal private drives within residential lots would be 26 feet wide.

The 28-foot-wide gated private access road would be provided along the northern and western Project development boundaries and would be located between residential lots and debris basin/open space lots on the site plan, as shown on Figure 3-2. The private access road would be gated at its connection to The Old Road at the northeastern-most portion of the Project site and would be available for pedestrian, hiking, and bicycling access, as described above, but would not be generally available for vehicular access by future residents. The private access road would be used as a fire road, for emergency or maintenance vehicular access. From the northeastern-most point of connection with The Old Road, the private access road would provide access to the western portion of the site, before turning south, and bordering dwelling units east of the private access road. Toward the southernmost end of the dwelling unit footprints (adjacent to Lot 5), the private access road would split into two roads—one road turning west and one road turning east. For the western split of the private access road, a proposed twenty-foot-wide multi-use trail (for hiking, mountain biking, and equestrian use), would connect to the existing variable width trail alignments. With implementation of the Project, the eastern portion of the private access road would connect to an existing on-site, non-dedicated trail, which would connect to an off-site hiking trail (Taylor Trail) and the Taylor Trail Wilderness and Open Space area, through a proposed easement for a twenty-foot-wide multi-use trail (for hiking, mountain biking, and equestrian use).

From the private access road, access would be provided along Lot 15 (a debris basin), terminating before reaching the edge of the Project's western boundary. Additionally, there is an egress-ingress access easement to an off-site future project site, Tentative Tract Map (TTM) 74979, located in the northwestern portion of the Project site, on Lot 24. TTM 74979 is defined as Cumulative Project LA2, as detailed in Chapter 2, Environmental Setting, of this EIR. This accessway is not proposed to be developed as a part of this Project.

Emergency Access

Within Lots 3 through 5, there would be emergency access points within internal driveways that would connect to the proposed private access road, which would meet The Old Road at the northeastern-most boundary of the Project

site. The Project would provide emergency vehicle access via proposed "A" and "B" Streets, which would connect to private driveways within the residential lots. Lots 2 through 13 would contain 20-foot-wide fire lanes within private driveways and would have emergency bollards throughout. Specifically, Lots 3, 4, and 5 would contain a 26-foot-wide access gate to provide emergency and maintenance access from internal roadways. These emergency access points would connect to the proposed private access road traversing the site. Lots 10 and 11, which would accommodate the senior housing apartments, would have a 28-foot-wide lane.

Non-Vehicular Circulation

The Project would support pedestrian infrastructure in the form of sidewalks and trails at the Project site. Generally, sidewalks would be provided on one or both sides of "A" and "B" Streets, and within internal driveways of the residential lots, sidewalks would be available along most internal roadways. Internal driveways in the residential lots, adjacent to private garages, would not have adjacent sidewalks, but sidewalks would be provided leading to front doors of all ground-floor dwelling units. This is a code requirement for condominium developments and apartment projects pursuant to County Code Section 21.24.380. Additionally, as discussed below in Section 3.2.8, Off-Site Improvements, the Project would construct sidewalks along The Old Road fronting the Project site. As discussed above, the proposed private access road would mostly be for pedestrian use (in addition to occasional maintenance/emergency vehicle use).

3.2.5 On-Site Landscaping and Protected Trees

Landscaping

The Project landscaping would use native, drought-tolerant, and climatically appropriate species. A fuel modification plan for the Project development footprint would be required to be designed in compliance with the Los Angeles County Fire Department (LACoFD) Fuel Modification Guidelines and best practices, as discussed in Section 3.2.6, Fire Protection Features, below.

The overall planting palette, composed of shade and accent trees, screening shrubs and hedges, groundcovers, vines, and lawn, has been designed to reflect a distinctive sense of place for the Project. The plantings would provide seasonal interest and shade in the warmest times of the year and would be composed of safe, non-invasive, non-thorny, and non-toxic flowers, leaves, seeds, and sap. The overall planting palette would be primarily low maintenance and low water use, and plantings would be grouped and organized according to consistent seasonal maintenance practices, water use, and solar exposure. The use of native plants is recommended; however, the palette could also reflect the planting and geographic diversity of Southern California and use species that are climatically appropriate. Approximately one-quarter of the Project site would be planted with restored native habitat planting, including indigenous oak trees.

With implementation of the Project, a total of 856 ornamental trees and 772 native/mitigation trees would be planted, as described further in Section 4.4, Biological Resources, of Chapter 4, Environmental Impact Analysis. Figure 3-7, Landscape Plan, depicts the existing and proposed vegetation on the northern portion of the Project site, proximate to proposed dwelling units.

Adjacent to the southern side of "B" Street, the Project would include features to create a more naturalized transition between the development on the Project site and the off-site Rivendale Park and Open Space to the south. "B" Street would be lined on both the north and the south side of the street with a mix of small and medium street trees spaced 25-feet on center. In addition to the trees, the south side of the "B" Street right-of-way would

include either a retaining wall or a 6-foot-tall treated chain-link fencing and associated screening shrubs (e.g. laurel sumac, sweet bay, Indian laurel, coffeeberry) to further buffer the Project site from the off-site open space areas. The shrub screening in the "B" Street right-of-way would be followed by varying distances of slope plantings, native habitat plantings, and bioretention rim planting that would continue to the southern edge of the Project site. The intent of these structural and vegetative features is to add a physical barrier that would discourage terrestrial wildlife movement into the developed portion of the Project site and to create a visibility barrier between the properties, while also providing additional screening for Project-related street and vehicle lighting and vehicle noise.

On-site Trees

The Project would also be required to comply with standard tree planting requirements pursuant to Title 21 of the County Code, Section 21.32.195, requiring that one tree be planted for 25 linear feet of street frontage. Based on the total proposed street frontage of 7,555 linear feet, this requires planting of 303 trees along the front yard areas of all the proposed residential lots, based on the Project's total street frontage. The Project would be conditioned to meet this requirement.

Protected Trees

The Project site is located within a portion of the Santa Susana Mountains and Simi Hills SEA, as designated by Los Angeles County Department of Regional Planning (LACDRP). Chapter 3 (SEA Protected Trees) of the Los Angeles County SEA Ordinance Implementation Guide describes tree protection regulations based on species and size of trees. Any SEA Protected Tree with a diameter at breast height (DBH) of 36 inches or more for a single trunk or with two trunks that measure a total of 54 inches or more in diameter, is considered a Heritage Tree.

There are 849 trees on the Project site, of which 664 are SEA-Protected Trees. Of the 664 SEA-Protected Trees, which include southern California black walnut, Fremont cottonwood, coast live oak, scrub oak, valley oak, red willow, arroyo willow, and blue elderberry, a total of 51 are classified as Heritage Trees, including 46 coast live oaks and 5 valley oaks. A total of 334 of the SEA-Protected Trees would be impacted by the Project. The 334 SEA-Protected Tree impacts would be comprised of 265 removals, 16 encroachments (trees that would not be removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds would be anticipated), and 53 SEA-Protected Trees that would be located within a debris basin.[3] Of the 334 SEA-Protected Trees impacted by the Project, 232 oak trees (coast live oak, scrub oak, and valley oak) would be impacted.

All SEA-Protected Trees proposed for removal would be replaced, resulting in 772 replacement trees within the natural open space and in strategic locations with development area, in accordance with the Los Angeles County SEA Ordinance as detailed in the Section 4.4, Biological Resources. The Project would transplant oak trees upon evaluation and recommendation by a qualified arborist for those trees with a greater potential for survival. Outside the development footprint, it is required that heritage oak trees be preserved within the Project site. Refer to Section 4.4, Biological Resources of this Draft EIR for more information about protected trees.

3.2.6 Fuel Modification

The Project site is located within Fire Zone 4, which is within a Very High Fire Hazard Severity Zone (VHFHSZ) that falls within the State Responsibility Area (SRA) (CAL FIRE 2023). Thus, a fuel modification plan for the Project

[3] It should be noted that the 53 SEA-Protected Trees that would be located within a debris basin would not be removed but are considered as removals for mitigation purposes. This is because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding.

footprint would be designed in compliance with the LACoFD's Fuel Modification Guidelines and best practices. The fuel modification plan would categorize the Project site into fuel modification zones for planting, which would include the Ember Resistant Zone, Zone A, Setback Zone; Zone B, Irrigated Zone; Zone C, Native Brush Thinning Zone; and a fire access road zone. The Ember Resistant Zone extends 5 feet from any combustible structure and prohibits combustible material in that distance. Zone A extends 20 feet beyond the edge of any combustible structure, accessory structure, appendage, or projection and would primarily consist of green lawns, ground cover, and adequately spaced shrubs. Plants within Zone A would be highly fire-resistant. Zone B, Irrigated Zone, would extend from the outermost edge of Zone A to 100 feet from proposed structures. Landscaping within Zone B would consist of primarily green lawns, ground cover, shrubs, and trees. Zone C, Native Brush Thinning Zone, would extend from the outermost edge of Zone B, up to 200 feet from structures or the Project site boundary. Plants in Zone C would likely consist of existing native vegetation and adequately spaced ornamental shrubs and trees. Existing native vegetation would be modified by thinning and removing portions of the vegetation if the species constitute a fire risk.

In order to maintain adequate fuel modification zones for Project-related development that would be close to the Project site boundary, the Project would require off-site brush thinning at the northern boundary of the property near Sagecrest Circle. Off-site brush thinning would also be required within property owned by the City of Santa Clarita within the Rivendale Park and Open Space property at the southeastern boundary of the Project site. For more information related to fuel modification, please refer to Section 4.20, Wildfire of this Draft EIR.

A conceptual fuel modification plan must be reviewed and approved by the Los Angeles County Fuel Modification Division of the LACoFD prior to approval of VTTM No. 83301. Final fuel modification plans will require approval from the Los Angeles County Fuel Modification Division prior to the issuance of building permits. Upon occupancy and as regulated by the Forestry Department of the LACoFD, random, annual inspections for compliance with brush thinning and fuel modification regulations per the Fire Code of the County's Municipal Code would occur.

The Project would incorporate infrastructure to ensure fire safety, including a new water tank to assure a reliable fire flow water pressure for the new residential structures (discussed below), fire hydrants, and an emergency access road. The development of the proposed dwelling units and buildings on-site would be required to comply with Chapter 7 of the California Fire Code (CFC), which requires the use of ignition resistant building materials, smoke barriers, sprinkler systems, fire protection systems, and door and window designs to avoid ember intrusion.

3.2.7 Utilities and Infrastructure

Flood Control Facilities

The Project would construct seven primary flood control facilities, including two debris basins and five desilting basins. Lot 14 (Basin A) would contain a 3.97-acre debris basin, Lot 15 (Basin B) would contain a 3.76-acre debris basin. Lot 19 and Lots 33 through 36 would contain desilting basins, for a total of 3.0 acres, resulting in a total of 10.73 acres for debris basins. These facilities would be designed to intercept debris and stormwater runoff from the developed portion of the Project site for the purposes of flood control and would be conveyed to the LACFCD for ongoing maintenance. The Project would also contain detention basins, which would also retain water during storm events and would be maintained by the HOA.

Due to the cut/fill grading transitions and proximity to the major slopes across Project site, the Geotechnical Report (see Section 4.7, Geology and Soils) recommended that infiltration of stormwater is infeasible at the site; therefore, biofiltration would be developed for water quality treatment across the Project site. Biofiltration units and modular

wetlands would be developed to treat stormwater flows from the developed pads. The treated flow would then be discharged to storm drain pipes and conveyed offsite. Additional information is provided in Section 4.10, Hydrology and Water Quality.

Utilities

Water

The Project site is located within the service area of the Valencia Water Division of the Santa Clarita Valley Water Agency. All waterlines would be located within the proposed roadways of the Project site and within The Old Road.

A new water tank would be installed at the Project site to assure a reliable fire flow water pressure for the Project uses onsite. The water tank would be on 0.68 acre on Lot 29 with an access road (Lot 20) leading to the water tank, as shown on Figure 3-2. The estimated storage capacity of the water tank would be up to 2 million gallons of water. A 400-square-foot chemical feed building would be adjacent to the water tank, and would provide water treatment for the water in the proposed water tank. Access to the water tank and chemical feed building for use and maintenance would be available from the private access road transecting the site, and more specifically, near the junction where this private access road splits and turns southwesterly. The water tank and chemical feed building would be surrounded by natural and HOA-managed open space at the Project site.

Wastewater

For wastewater services, the Project site is located within the service boundaries of the Los Angeles County Sanitation District (LACSD), and specifically, the Santa Clarita Valley Sanitation District (SCVSD). The nearest existing sewer line is located approximately 400 feet north of the Project site and is a County 8-inch to 18-inch vitrified clay pipe (VCP) sewer. This VCP sewer ultimately flows to the LACSD's Valencia Trunk Sewer, a 24-inch diameter trunk sewer with the capacity of 5.4 million gallons per day (mgpd). Sewer flow from the Project would proceed through a 10-inch pipe, owned by the County, from the Project site to facilities owned by the City of Santa Clarita, before discharging to the existing 24-inch SCVSD Trunk Sewer line. All sewer lines would be located under roadways at the Project site and under The Old Road to connect to the SCVSD Trunk Sewer line.

The Project would generate a total sewer flow rate of 0.525 cubic feet per second (cfs). All on-site public sewer facilities would be owned, operated, and maintained by the Los Angeles County Sewer Maintenance District (LACSMD) (Dexter Wilson Engineering 2022). Refer to Section 4.19, Utilities and Service Systems of this Draft EIR for more information about wastewater infrastructure.

Storm Drains

As described above, Lot 14 would contain a 3.97-acre debris basin, Lot 15 would contain a 3.76-acre debris basin, and Lot 19 would contain a 1.62-acre desilting basin, which would be designed to intercept debris and stormwater runoff from the developed portion of the Project site. The Project would also contain detention basins which would also retain water during storm events. Biofiltration would be developed for water quality treatment across the Project site. Biofiltration units and modular wetlands would be developed to treat stormwater flows from the developed pads. The treated flow would then be discharged to storm drain pipes and conveyed offsite. Stormwater would flow to the existing outfall in the existing reinforced concrete box culvert at the northeast corner of the Project site adjacent to The Old Road (see Figure 4.10-7, Proposed Drainage and Water Quality Infrastructure, of Section

4.10, Hydrology and Water Quality). All storm drain lines would be located under proposed roadways or graded portions of the Project site.

Electrical

The Project site is within the service area of Southern California Edison (SCE). Extensions of existing electrical infrastructure into the Project site will be obtained from power lines within The Old Road right of way. All electrical lines would be undergrounded at the Project site with implementation of the Project.

Natural Gas

The Project site is within the service area of Southern California Gas Company (SoCalGas). However, MM-4.8-2, Electrify Buildings, in Section 4.8, Greenhouse Gas Emissions requires that buildings at the Project site be powered fully by electricity, and there would be no natural gas infrastructure or appliances at the Project site. As such, through implementation of MM-4.8-2, no extensions of existing natural gas infrastructure into the Project site would occur.

Cable and Telecommunication

The Project site is within the service area of AT&T for telephone services, and Charter for cable television. Extensions of existing cable infrastructure into the Project site will be obtained from existing infrastructure within The Old Road right of way.

Solid Waste

The Project site is within the service areas of the Sunshine Canyon Landfill and Chiquita Canyon Landfill. Three private solid waste haulers are permitted to collect residential, commercial, and industrial waste in the County. These haulers operate in franchise systems and would be responsible for refuse collection for the Project.

3.2.8 Off-Site Improvements

The Project includes 6.17 acres of off-site improvement areas, including areas required for the Project's development footprint, brush thinning zones, and debris extents. These are detailed further below.

APN 2826-022-901 at The Old Road

As shown on Figure 3-2, the Project boundary is both adjacent to and offset from The Old Road by varying distances. Lots 7, 16, and 17 are generally setback from The Old Road. Property included within APN 2826-022-901 would contribute to the development of Lots 7 and 8, thereby allowing the Project to develop the required manufactured slopes, retaining wall, stormwater infrastructure (V-ditches along slopes), roadway ingress/egress and curb/gutter, and roadway ingress/egress for the gated private access road. These off-site improvements along The Old Road would occur on 2.49 acres, and acquisition of property rights to this off-site area would occur as a condition of approval prior to final map recordation.

The Old Road

The Old Road would be improved as required by the conditions of approval imposed by Los Angeles County Public Works. The existing portion of The Old Road adjacent to the Project's northeastern boundary within APN 2826-022-

901 is approximately 21 feet wide, with a curb and gutter on the east side of the road and an asphalt edge on the western side of the road. Off-site improvements of the Project would include widening The Old Road by 47 feet (including 45 feet of asphalt and 2 feet of concrete curb and gutter) within APN 2826-022-901 to create a total 68-foot-wide curb to curb road within an 80-foot right of way. A new 8-foot-wide concrete sidewalk would be installed along the western frontage of the Project site and an approximately 4-foot-tall retaining wall would be constructed adjacent to the sidewalk. The Project would require off-site easements for improvements along the Old Road.

Water Infrastructure

In coordination with the Santa Clarita Valley Water Agency, the Project will require various off-site water infrastructure improvements to service the Project site. Required improvements include the following:

- New Zone Valve between Newhall and Valencia in The Old Road
- 2,950 feet of 18-inch water main in The Old Road
- 4,000 feet of 12-inch water main in The Old Road
- Pump Station 4 Upgrades (within footprint of Pump Station 4):
  - 1,975 gallons per minute (gpm) firm capacity (820 gpm increase)
  - Upsize/replace 50 feet of on-site 6-inch pump station pipelines to 8-inch
  - Upsize/replace 190 feet of on-site 8-inch pump station pipelines to 10-inch
- Pump Station 5 Upgrades:
  - 1,225 gpm firm capacity (366 gpm increase) (Appendix L-1).

At Pump Station 4, the Project would include a connection to Peachland Avenue from Pump Station 4. This would include an approximately 40-foot-long pipeline connection from the point of connection to the pump station. Through implementation of the Project, a water line would run directly from Pump Station 4 into the existing water main within Peachland Avenue. This would require trenching within Peachland Avenue.

These improvements would be completed by the Applicant, and are identified on Figure 4.19-2, Off-Site Water Infrastructure, in Section 4.19, Utilities and Service Systems, of this Draft EIR.

Sewer Infrastructure

The existing downstream sewer system consists of approximately 11,500 linear feet of gravity sewer pipe ranging in size from 8 inches to 18 inches before connecting to the 24-inch SCVSD Trunk Sewer. The Project would upsize an 8-inch pipeline to 10-inches and construct three manholes within The Old Road, near the northeastern boundary of the Project site. It is anticipated that the Project would generate a total flow rate of 0.525 cubic feet per second entering existing 8-inch sewer lines from one of the proposed manholes. The sewage would flow through 10 to 18-inch lines before terminating at the existing 24-inch SCVSD Trunk Sewer (diversion structure) (Dexter Wilson Engineering 2022).

Fuel Modification

As detailed in Section 4.20, Wildfire, of this Draft EIR, Project development would require the fuel modification on-site. Additionally, due to the requirements of fuel modification zone distances for the proposed development, the Project would require off-site fuel modification (brush thinning) across 3.17 acres. The extent of off-site brush

thinning requirements is depicted on Figure 4.20-2, Fuel Modification Plan, in Section 4.20, Wildfire, of this Draft EIR.

Debris Basins

The Project would result in 0.51-acre of off-site debris extents. The drainage inundation areas for the debris basins do not involve earthwork or grading activities, but may be subject to occasional maintenance, if needed.

3.3 Project Construction

On-site construction activities would include removal of miscellaneous structures (i.e., fencing, a metal frame bridge, overhead electrical facilities, a billboard, metal drainage pipe, etc.), site preparation, grading, building construction, paving, and architectural coating. The sequence of construction for the residential lots would proceed as follows: Lots 7 through 9; Lot 6; Lot 5; Lot 4; Lots 2 and 3; and Lots 10 and 11, as detailed further under Section 4.3.4, Methodology, of Section 4.3, Air Quality, of this Draft EIR. Overall, on-site construction activity would be limited to the northern portion of the site, as shown on Figure 3-2. During grading activities, trenching for storm drain, sewer, water, and water quality facilities would commence. Paving-related activities would begin after trenching for utilities onsite. Towards the end of these activities, vertical construction of the residential lots would begin.

Temporary construction staging and construction worker parking associated with the Project would be accommodated on the Project site, limiting potential conflicts with traffic on local streets. During construction activities, security fencing would be placed at the Project site proximate to publicly-accessible areas near the Project site, such as along the Project's eastern boundary near The Old Road and at non-dedicated trail connections to the site. Construction activities would begin with removal of miscellaneous minor and non-habitable structures on-site, followed by site preparation and grubbing of vegetation, followed by cut/fill grading of the development areas.

Construction of the Project is anticipated to begin in the second quarter of 2025 and end in the fourth quarter of 2029, for a total duration of approximately 4 years and 6 months. It is anticipated that Project construction activities would take place within the allowable construction hours of the County (between 7:00 AM and 8:00 PM, Monday through Saturday), per Section 12.08.440 of the County Code. Construction and operations of the Project would overlap. For example, dwelling units in Lots 7, 8, and 9 (first residential lots to be constructed) would be operational during the construction of other phases. This Draft EIR assumes an overlap of construction and operational phases, which provides a conservative analysis of short-term air quality, greenhouse gas emissions, noise, and transportation impacts. Further information on construction phasing is detailed in Section 4.3, Air Quality, of this Draft EIR.

As detailed on Figure 3-2, the Project would require approximately 1,500,000 cubic yards of cut and 1,300,000 cubic yards of fill for a total of 2,800,000 cubic yards of grading with 1,345,000 cubic yards of over excavation. There is expected to be 15% shrinkage on the over excavation for a total of 200,000 cubic yards. The total earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site adjacent parcel adjacent to The Old Road that includes manufactured slopes. The grading would balance onsite, and as such, no import or export of soils would be required for the Project.

Off-site construction activities are anticipated to occur during the grading phase of the Project's on-site construction activities, in 2025. Construction activities at Pump Station 4 would last 15 working days and be completed prior to construction activities commencing at Pump Station 5. Pump Station 5 system upgrades would last 10 working days. Construction of an 18-inch off-site water line within The Old Road would follow completion of construction

activities at Pump Station 5. Installation of a 2,950-foot, 18-inch water pipeline in The Old Road would last a total of 60 working days, and installation of a 4,000-foot, 12-inch water pipeline would last a total of 80 working days. The installation of off-site water pipelines and sewer improvements would occur concurrently.

Off-site construction activities are dependent on a variety of factors. However, to calculate a worst-case scenario of construction activities, the analysis within this Draft EIR assumes concurrent off-site improvement construction activity during the grading phase of the Project.

3.4 Project Objectives

CEQA Guidelines Section 15124 requires an EIR to include a statement of objectives sought by the Project. The Project's specific objectives are as follows:

1. Provide a diverse mix of housing units in various typologies that would assist the County in obtaining its regional housing needs allocation (RHNA) goals, including very low-income housing and moderate/middle-income households.
2. Provide housing opportunities consistent with the Los Angeles County General Plan 2035 and the Santa Clarita Valley Area Plan, One Valley One Vision, a component of the General Plan and applicable to the unincorporated portions of the Santa Clarita Valley.
3. Provide a mix of housing types proximate to convenient freeway access and existing roadway infrastructure.
4. Provide substantial homeownership opportunities for middle-income families in an area proximate to existing residential uses and infrastructure.
5. Provide a mix of housing types within a clustered development to limit the amount of the site subject to disturbance, limit the amount of urban wildland interface areas, preserve significant ridgelines, preserve biological resources, and provide a substantial amount of natural open space within the Project site.
6. Provide a comprehensive trail network, including publicly accessible trailhead, that provides connections for the public to access existing open space areas and established trails.

3.5 Intended Uses of this EIR

In compliance with CEQA, this Draft EIR has been prepared to analyze the potential environmental impacts that may result from implementation of the Project. This Draft EIR also identifies feasible mitigation measures and/or alternatives that would minimize or eliminate the potential significant impacts associated with the Project. Lead agencies, such as the County, are charged with the duty to substantially lessen or avoid significant environmental effects where feasible (State CEQA Guidelines Sections 15002[a][3] and 15021[a][2]). Where a lead agency identifies unavoidable adverse environmental effects of a Project, State CEQA Guidelines Section 15093 authorizes the agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable adverse environmental effects when determining whether to approve a project. If the specific economic, legal, social, technological, or other benefits outweigh the unavoidable adverse environmental effects, these effects may be deemed acceptable by the agency as substantiated in a statement of overriding considerations.

This Draft EIR evaluates potential environmental impacts associated with implementation of the Project and provides information regarding short-term, long-term, direct, indirect, and cumulative environmental effects of the Project. The Draft EIR must allow the County, responsible agencies, and other interested parties, to evaluate the

environmental impacts of Project implementation and the environmental consequences of Project implementation, thereby enabling them to make informed decisions regarding the requested entitlements, as described below.

3.6 Project Approvals

3.6.1 Discretionary Actions

County of Los Angeles

The County of Los Angeles, as lead agency for the Project, has the responsibility for reviewing, processing, and approving the Project. If development is proposed that results in environmental impacts not assumed within this Draft EIR or covered under the impact analyses and mitigation measures set forth in this Draft EIR, or if substantial changes to the circumstances under which the Project is undertaken and/or new information of substantial importance becomes available after the certification of this Draft EIR, the County will evaluate the need for supplemental environmental documentation per Sections 15162 to 15164 of the State CEQA Guidelines.

The following is a summary of discretionary actions the County of Los Angeles will consider:

- Certification of Environmental Impact Report (RPPL2021003071)
- Vesting Tentative Tract Map (VTTM) 83301 to subdivide the Project site into 37 lots (RPPL2021003061)
- Conditional Use Permits (CUPs) (RPPL2021003113) for the following:
  - For development with an HMA;
  - For density-controlled development;
  - For development within the County's designated Santa Susana Mountains/Simi Hills SEA;
  - For grading exceeding 100,000 cubic yards in an A-2 zone;
  - For development of residential uses in the C-3 zone; and
  - For development of townhouses in an A-2 zone.
- Oak Tree Permit (RPPL2021003070)
- Administrative Housing Permit for the provision of 71 affordable dwelling units. This includes 24 for-sale inclusionary condominium units for moderate income levels, and 47 very low-income, rental senior citizen apartment units (with one manager's unit, for a total of 48 units within one building) and accompanying density bonus (with two incentives and unlimited waivers) to allow the provision of 510 units in all.

Responsible Agencies

A public agency, other than the lead agency, that has discretionary approval over a project is known as a "responsible agency," as defined by State CEQA Guidelines (14 CCR 15000 et seq.). The following is a summary of responsible agencies that have discretionary approval of the Project, with the discretionary actions that these agencies will consider:

United States Army Corps of Engineers

- Section 404 permit for impacts to Waters of the United States;

California Department of Fish and Wildlife

- Section 1602 Streambed Alteration Agreement for impacts to the existing wetland riparian habitats; and

Los Angeles Regional Water Quality Control Board

- Section 401 Certification for impacts to surface water quality.

3.6.2 Other Permits and Approvals

Other permits and approvals are required for Project implementation that are not subject to discretionary review, but nevertheless require actions by the applicant and/or the County to obtain the necessary approvals to implement the Project. Other permits and approvals required, and their respective agency administrators, are listed below:

California Geologic Energy Management

- Well Abandonment Permit

County of Los Angeles

- Fuel Modification Plan
- Grading/Building permits
- Well abandonment
- Vacation of excess right-of-way in The Old Road and acquisition of property rights for adjacent County-owned parcel (APN 2826-022-90) as condition of approval prior to final map recordation, to facilitate offsite improvements, including a manufactured slope and a retaining wall of a maximum of four feet in height, in the vicinity of The Old Road

City of Santa Clarita

- License agreement to allow Project's HOA to conduct brush thinning on City property
- Temporary construction easement for off-site utility infrastructure improvements

Santa Clarita Valley Water Agency

- Permits for construction of off-site infrastructure

State Water Resources Control Board

- Coverage under National Pollutant Discharge Elimination System Permit No. CAS000002, General Construction Activity Storm Water Permit and Stormwater Pollution Prevention Plan

  Domestic water supply permit amendment, pursuant to Section 64556, Title 22 of the CCR, for addition of a new distribution reservoir with a capacity of 100,000 gallons or more.

3.7 References

CAL FIRE (California Department of Forestry and Fire Protection). 2023. "FHSZ Viewer." Fire and Resource Assessment Program (FRAP). Accessed November 20, 2023. https://egis.fire.ca.gov/FHSZ/.

City of Santa Clarita. 2016. *City of Santa Clarita Master Plan of Trails*. Last updated November 2016. Accessed April 15, 2022. https://www.santa-clarita.com/home/showpublisheddocument/6973/636150743810600000.

County of Los Angeles. 2012. *Santa Clarita Valley Area Plan – One Valley One Vision*. Accessed March 11, 2024. https://planning.lacounty.gov/wp-content/uploads/2022/10/Santa-Clarita-Valley-Area-Plan.pdf.

County of Los Angeles. 2015. Los Angeles County General Plan 2035. Adopted October 6, 2015. Updated July 14, 2022. Accessed March 11, 2024. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

Dexter Wilson Engineering, Inc. 2022. *Sewer Area Study for the Trails at Lyons Canyon Project in the County of Los Angeles*. October 17, 2022. Provided as Appendix L-4.

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SOURCE: Land Chicago, 2023

NUWI LYONS CANYON, LLC

DUDEK

THE TRAILS AT LYON'S CANYON

UNINCORPORATED COUNTY OF LOS ANGELES, CALIFORNA

Conceptual Landscape Plan **FIGURE 3-1**

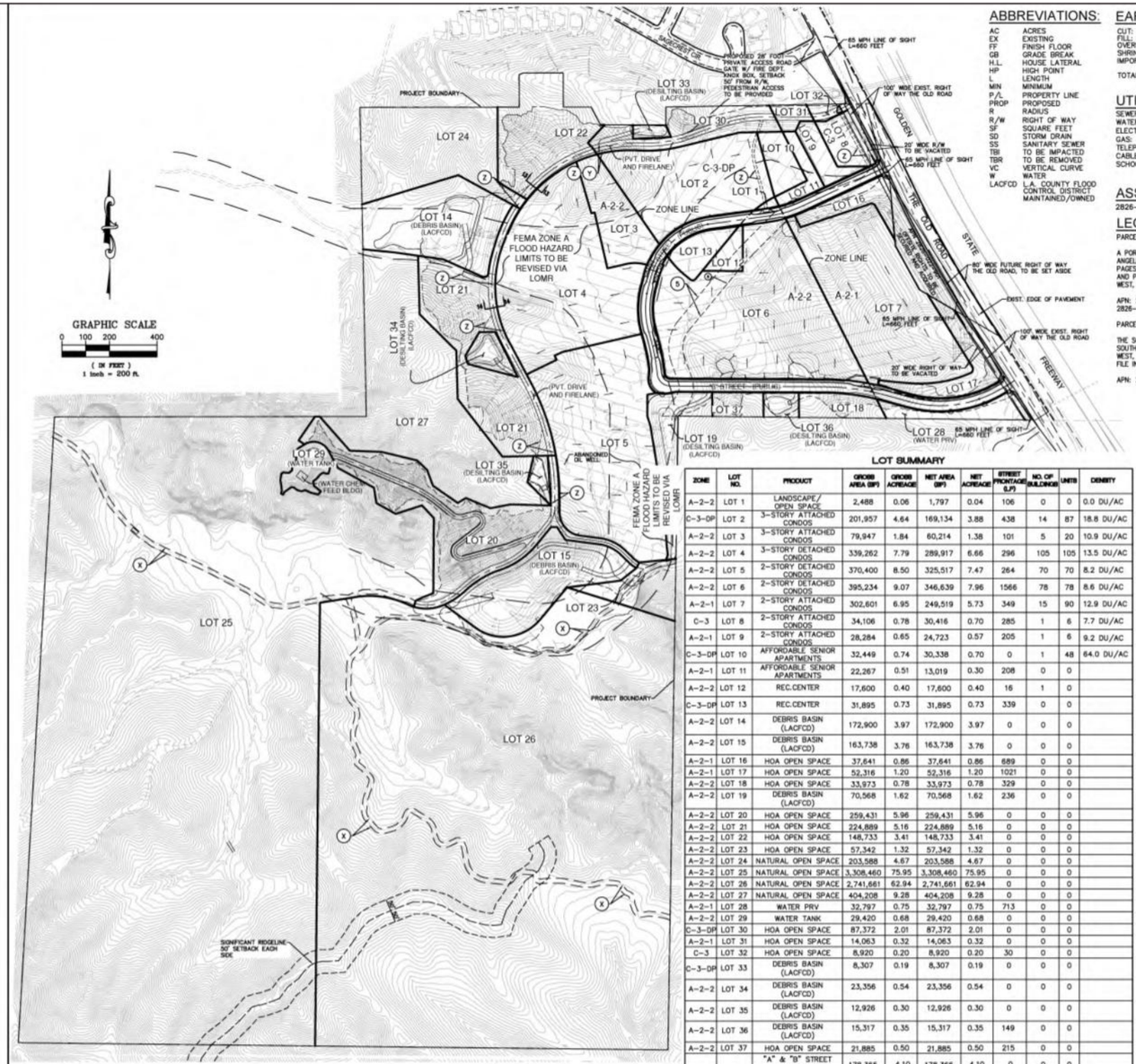
Conceptual Site Plan

0 50 100 200

SCALE: 1" = 100'

Trails at Lyons Canyon Project

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ABBREVIATIONS:

AC	ACRES
EX	EXISTING
FF	FINISH FLOOR
GB	GRADE BREAK
H.L.	HOUSE LATERAL
HP	HIGH POINT
L	LENGTH
MIN	MINIMUM
P/L	PROPERTY LINE
PROP	PROPOSED
R	RADIUS
R/W	RIGHT OF WAY
SF	SQUARE FEET
SD	STORM DRAIN
SS	SANITARY SEWER
TBI	TO BE IMPACTED
TBR	TO BE REMOVED
VC	VERTICAL CURVE
W	WATER
LACFCD	L.A. COUNTY FLOOD CONTROL DISTRICT MAINTAINED/OWNED

EARTHWORK SUMMARY:

CUT: 1,500,000 CY
FILL: 1,300,000 CY
OVEREXCAVATION 1,345,000 CY
SHRINKAGE ON OVEREX (15%)=200,000 CY
IMPORT/EXPORT: (1,500,000 CY – 1,300,000 – 200,000 CY) = 0 CY

TOTAL EARTHWORK (1,500,000 CY+1,345,000 CY) = 2,845,000 CY

UTILITY PROVIDERS

SEWER:	LOS ANGELES SANITATION DISTRICT
WATER:	SANTA CLARITA VALLEY WATER AGENCY
ELECTRICAL:	SOUTHERN CALIFORNIA EDISON COMPANY
GAS:	SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE:	AT&T
CABLE TV:	CHARTER
SCHOOLS:	NEWHALL SCHOOL DISTRICT & WILLIAM S. HART UNION HIGH SCHOOL DISTRICT

ASSESSOR'S PARCEL NUMBERS:

2826–022–026, –027, –035; 2826–023–014; 2826–041–039;

LEGAL DESCRIPTION

PARCEL 1:

A PORTION OF LOT 31, TRACT NO. 43793, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 1072, PAGES 1 THROUGH 7, INCLUSIVE, OF MAPS, AND PORTIONS OF LOT 7 AND PORTIONS OF SECTIONS 4 AND 9, TOWNSHIP 3 NORTH, RANGE 16 WEST, S.B.M., IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA.

APN: 2826–022–027 AND 2826–022–035 AND 2826–023–014 AND 2826–041–039

PARCEL 2:

THE SOUTHEAST ONE–FOURTH OF THE SOUTHEAST ONE–FOURTH OF THE SOUTHWEST ONE–FOURTH OF SECTION 4, TOWNSHIP 3 NORTH, RANGE 16 WEST, ACCORDING TO OFFICIAL PLAT OF THE SURVEY OF SAID LAND ON FILE IN THE BUREAU OF LAND MANAGEMENT.

APN: 2826–022–026

GENERAL NOTES

1. GROSS AREA: 233.49 ACRES NET AREA: 227.78 ACRES
2. EXISTING ZONING: A–2–1/A–2–2/C–3/C–3–DP
3. EXISTING SITE USE: VACANT
4. DEVELOPMENT TYPE: SINGLE AND MULTI–FAMILY RESIDENTIAL
5. TOTAL NUMBER OF RESIDENTIAL LOTS: 10
6. SMALLEST RESIDENTIAL LOT SIZE: 0.5 ACRES.
7. DEVELOPMENT IS LOCATED IN FIRE ZONE 4.
8. PRIVATE DRIVEWAY AND FIRE LANE GRADES: MIN. 0.5%, MAX. 12.5%
9. TOPOGRAPHY IS BASED ON CONTROLLED TOPO W/ CONTOUR INTERVALS 5 FEET.
10. THE OLD ROAD HAS A VARIABLE WIDTH RIGHT–OF–WAY OFFERED FOR DEDICATION.
11. ALL SLOPES OVER 5 FEET IN HEIGHT ARE TO BE LANDSCAPED AND IRRIGATED WITH THE COUNTY APPROVED PLANTS AND GROUND COVER.
12. EXISTING LOS ANGELES COUNTY GENERAL PLAN: H2/SEA
13. EXISTING LA COUNTY SANTA CLARITA VALLEY AREA WIDE LOCAL PLAN: H2
14. THERE ARE OAK TREES EXISTING WITHIN PROJECT BOUNDARY
15. BOUNDARY LINE DIMENSIONS ARE TAKEN FROM RECORD DATA, LOT AREAS SHOWN IN TABLE HEREON ARE GROSS ACREAGE.
16. TOP & TOE OF SLOPES ARE SUBJECT TO CHANGE IN FINAL ENGINEERING.
17. AN H.O.A. WILL BE ESTABLISHED FOR MAINTENANCE OF OPEN SPACE, SLOPES, AND ALL COMMON LANDSCAPE AREAS.
18. GRADE ELEVATIONS SHOWN ON THE VTM AND THE EXHIBIT MAP ARE APPROXIMATE. THE ELEVATIONS MAY CHANGE BY 10 FEET. ELEVATION CHANGES MAY BE GREATER THAN 10 FEET BUT ONLY IF DETERMINED BY DPW AND DRP THAT THE REVISIONS ARE CONSISTENT WITH THE INTENT OF THE SUBDIVISION MAP APPROVAL.
19. LOT LINES CAN BE ADJUSTED TO THE SATISFACTION OF DRP.
20. ALIGNMENT AND GEOMETRICS OF THE PRIVATE DRIVEWAYS AND TRAILS ARE APPROXIMATE. ADJUSTMENTS TO TRAILS CAN BE MADE WITH APPROVAL BY DRP AND THE PARKS AND RECREATION DEPARTMENT.
21. BUILDING FOOTPRINTS THAT ARE SHOWN ON THE EXHIBIT MAP ARE ONLY FOR ILLUSTRATIVE PURPOSES. ACTUAL BUILDING LOCATIONS AND FOOTPRINTS MAY VARY. APPROVAL IS REQUESTED DURING PLOT PLAN REVIEW PROVIDED THE PROPOSED BUILDINGS SATISFY ALL EXISTING CODES AND ORDINANCES. THIS MINOR CHANGE DOES NOT, HOWEVER, INCLUDE:
    A. A CHANGE IN PROPOSED LAND USE.
    B. A CHANGE OF MORE THAN 10 FEET IN BUILDING HEIGHT.
22. PERMISSION IS REQUESTED FOR UNIT PHASING. SEE UNIT PHASING EXHIBIT HEREON.
23. PERMISSION IS REQUESTED TO COMBINE LOTS.
24. PERMISSION IS REQUESTED TO RECORD ADDITIONAL OPEN SPACE LOTS.
25. PERMISSION IS REQUESTED TO RECORD ADDITIONAL UTILITY LOTS AND PROVIDE MAINTENANCE EASEMENTS TO THE SATISFACTION OF THE DPW AND DRP.
26. THE LOCATIONS OF APPURTENANT STRUCTURES (E.G., PASEOS, TRAILS, TRANSIT SHELTERS, WATER QUALITY DEVICES OR BASINS, ETC.) MAY BE RELOCATED TO THE SATISFACTION OF DPW AND DRP.
27. ALL PRIVATE DRIVEWAY AND FIRELANES WILL HAVE A RECIPROCAL ACCESS EASEMENTS TO PROVIDE ACCESS TO ALL RESIDENTIAL LOTS, AND OPEN SPACES.
28. PERMISSION IS REQUESTED TO MASS GRADE.
29. PERMISSION IS REQUESTED TO WAIVE STREET FRONTAGE REQUIREMENTS FOR LOT NOS. 10, 14, 15, 20–27, 29–31, AND 33–35.
30. PROPOSED PRIVATE DRIVEWAY GRADING IS APPROXIMATE ONLY AND SUBJECT TO ADJUSTMENTS PENDING DETERMINATION OF FINAL DEVELOPMENT LAYOUT AND PLANS.
31. LOCATION OF TRAILS TO BE FINALIZED PRIOR TO FINAL MAP APPROVAL.
32. ALL DIMENSIONS SHOWN ARE APPROXIMATE.
36. RELATED ENTITLEMENTS:
    –TENTATIVE MAP NO. 083301 (RPPL2021003081)
    –CONDITIONAL USE PERMIT NO. RPPL2021003113
    –OAK TREE PERMIT NO. RPPL2021003070
    –ADMINISTRATIVE HOUSING PERMIT NO. RPPL2021003105
    –ENVIRONMENTAL ASSESSMENT NO. RPPL2021003071
    –SEA CONDITIONAL USE PERMIT NO. RPPL2021003113
    –ZONING CONFORMANCE NO. RPPL2021003126
37. ALL SANITARY SEWER MAINLINES SHALL BE LOCATED WITHIN PUBLIC RIGHT OF WAY OR A MINIMUM 10' WIDE SANITARY SEWER EASEMENT WHEN LOCATED WITHIN PRIVATE DRIVE AND PROPERTIES. EACH RESIDENTIAL UNIT WILL BE SERVED BY A SEPARATE 4" SEWER LATERAL THAT IS CONNECTED TO THE SEWER MAIN WITHIN THE PRIVATE DRIVE AND FIRELANES.
38. THE DEVELOPER/ENGINEER ACKNOWLEDGE THAT THE SIZE OF THE WATER QUALITY AND/OR FLOOD CONTROL BASIN WILL BE REVIEWED AT THE IMPROVEMENT PLAN STAGE. SIGNIFICANT CHANGE OF THE SIZE OF THE BASIN FROM WHAT IS SHOWN ON THE TENTATIVE MAP MAY RESULT IN REVISING PLANNING DOCUMENTS BY THE DEPARTMENT OF REGIONAL PLANNING.
39. FEMA APPROVED CLOMER WILL BE REQUIRED BEFORE STORM DRAIN PLAN APPROVAL.
40. AS WATER DISTRIBUTION MAINLINES SHALL BE LOCATED WITHIN PUBLIC RIGHT OF WAY OR A MINIMUM 10' WIDE WATER EASEMENT WHEN LOCATED WITHIN PRIVATE DRIVE AND PROPERTIES.
41. EASEMENTS SHALL BE PROVIDED ON LOTS 14, 22, AND 24 FOR THE BENEFIT OF THE ADJACENT PROPERTY FOR SECONDARY ACCESS (INGRESS AND EGRESS) AND NECESSARY SLOPES. THE ENTITLEMENT, DESIGN AND CONSTRUCTION OF THE ACCESS ROAD SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY. EASEMENTS MAY BE EITHER BLANKET OR PRECISE IN NATURE.

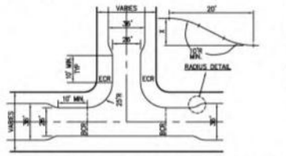


LEGEND:

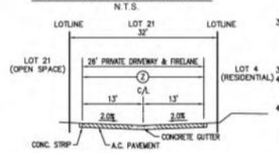
- BOUNDARY LINE
- EXISTING CONTOURS
- EXISTING SEWER
- EXISTING WATER
- DRAINAGE FLOW DIRECTION
- PROPOSED LOT LINES
- ZONE BOUNDARY LINE
- PROPOSED GRADING CONTOUR
- PROPOSED STREET GRADES
- PROPOSED RETAINING WALL
- PROPOSED MANUFACTURED SLOPE
- EXISTING EASEMENTS
- PROPOSED EASEMENTS
- LIMIT OF GRADING LINE
- PROPOSED STORM DRAIN
- PROPOSED SANITARY SEWER
- PROPOSED WATER
- LOT X — LOT NUMBER
- MWS — MODULAR WETLAND STORM WATER TREATMENT DEVICE
- PRIVATE DRIVEWAY AND FIRE LANE, RECIPROCAL ACCESS EASEMENT TO PROVIDE INTERNAL ACCESS/CIRCULATION TO ALL RESIDENTIAL LOTS, AND OPEN SPACES.

LOT SUMMARY

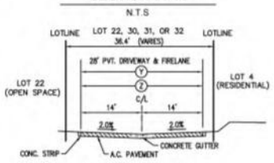
ZONE	LOT NO.	PRODUCT	GROSS AREA (SF)	GROSS ACREAGE	NET AREA (SF)	NET ACREAGE	STREET FRONTAGE (LF)	NO. OF BUILDINGS	UNITS	DENSITY
A–2–2	LOT 1	LANDSCAPE/ OPEN SPACE	2,488	0.06	1,797	0.04	106	0	0	0.0 DU/AC
C–3–DP	LOT 2	3–STORY ATTACHED CONDOS	201,957	4.64	169,134	3.88	438	14	87	18.8 DU/AC
A–2–2	LOT 3	3–STORY ATTACHED CONDOS	79,947	1.84	60,214	1.38	101	5	20	10.9 DU/AC
A–2–2	LOT 4	3–STORY DETACHED CONDOS	339,262	7.79	289,917	6.66	296	105	105	13.5 DU/AC
A–2–2	LOT 5	2–STORY DETACHED CONDOS	370,400	8.50	325,517	7.47	264	70	70	8.2 DU/AC
A–2–2	LOT 6	2–STORY DETACHED CONDOS	395,234	9.07	346,639	7.96	1566	78	78	8.6 DU/AC
A–2–1	LOT 7	2–STORY ATTACHED CONDOS	302,601	6.95	249,519	5.73	349	15	90	12.9 DU/AC
C–3	LOT 8	2–STORY ATTACHED CONDOS	34,106	0.78	30,416	0.70	285	1	6	7.7 DU/AC
A–2–1	LOT 9	2–STORY ATTACHED CONDOS	28,284	0.65	24,723	0.57	205	1	6	9.2 DU/AC
C–3–DP	LOT 10	AFFORDABLE SENIOR APARTMENTS	32,449	0.74	30,338	0.70	0	1	48	64.0 DU/AC
A–2–1	LOT 11	AFFORDABLE SENIOR APARTMENTS	22,267	0.51	13,019	0.30	208	0	0	
A–2–2	LOT 12	REC.CENTER	17,600	0.40	17,600	0.40	16	1	0	
C–3–DP	LOT 13	REC.CENTER	31,895	0.73	31,895	0.73	339	0	0	
A–2–2	LOT 14	DEBRIS BASIN (LACFCD)	172,900	3.97	172,900	3.97	0	0	0	
A–2–1	LOT 15	DEBRIS BASIN (LACFCD)	163,738	3.76	163,738	3.76	0	0	0	
A–2–1	LOT 16	HOA OPEN SPACE	37,641	0.86	37,641	0.86	689	0	0	
A–2–1	LOT 17	HOA OPEN SPACE	52,316	1.20	52,316	1.20	1021	0	0	
A–2–2	LOT 18	HOA OPEN SPACE	33,973	0.78	33,973	0.78	329	0	0	
A–2–2	LOT 19	DEBRIS BASIN (LACFCD)	70,568	1.62	70,568	1.62	236	0	0	
A–2–2	LOT 20	HOA OPEN SPACE	259,431	5.96	259,431	5.96	0	0	0	
A–2–2	LOT 21	HOA OPEN SPACE	224,889	5.16	224,889	5.16	0	0	0	
A–2–2	LOT 22	HOA OPEN SPACE	148,733	3.41	148,733	3.41	0	0	0	
A–2–2	LOT 23	HOA OPEN SPACE	57,342	1.32	57,342	1.32	0	0	0	
A–2–2	LOT 24	NATURAL OPEN SPACE	203,588	4.67	203,588	4.67	0	0	0	
A–2–2	LOT 25	NATURAL OPEN SPACE	3,308,460	75.95	3,308,460	75.95	0	0	0	
A–2–2	LOT 26	NATURAL OPEN SPACE	2,741,661	62.94	2,741,661	62.94	0	0	0	
A–2–2	LOT 27	NATURAL OPEN SPACE	404,208	9.28	404,208	9.28	0	0	0	
A–2–1	LOT 28	WATER PRV	32,797	0.75	32,797	0.75	713	0	0	
A–2–2	LOT 29	WATER TANK	29,420	0.68	29,420	0.68	0	0	0	
C–3–DP	LOT 30	HOA OPEN SPACE	87,372	2.01	87,372	2.01	0	0	0	
A–2–1	LOT 31	HOA OPEN SPACE	14,063	0.32	14,063	0.32	0	0	0	
C–3	LOT 32	HOA OPEN SPACE	8,920	0.20	8,920	0.20	30	0	0	
C–3–DP	LOT 33	DEBRIS BASIN (LACFCD)	8,307	0.19	8,307	0.19	0	0	0	
A–2–2	LOT 34	DEBRIS BASIN (LACFCD)	23,356	0.54	23,356	0.54	0	0	0	
A–2–2	LOT 35	DEBRIS BASIN (LACFCD)	12,926	0.30	12,926	0.30	0	0	0	
A–2–2	LOT 36	DEBRIS BASIN (LACFCD)	15,317	0.35	15,317	0.35	149	0	0	
A–2–2	LOT 37	HOA OPEN SPACE	21,885	0.50	21,885	0.50	215	0	0	
		"A" & "B" STREET (PUBLIC)	178,365	4.10	178,365	4.10	0	0	0	
TOTAL	37		10,170,666	233.49	9,902,904	227.34	7,555	291	510	2.18 DU/AC



TYPICAL PUBLIC STREET LOCAL INTERSECTION
3-WAY TRAFFIC CALMING DETAIL
N.T.S.



SECTION 14-14
N.T.S



SECTION 13-13
N.T.S

BENCHMARK

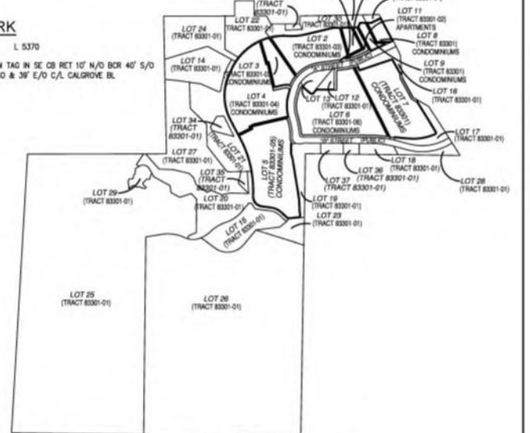
NEWHALL (2018) L 5370

DESCRIPTION: LACO BM TAG IN SE CB RET 10' N/O BCR 40' S/O C/L ONRAMP SFRWY SO & 36' E/O C/L CALGROVE BL

ELEVATION 1,339.015'

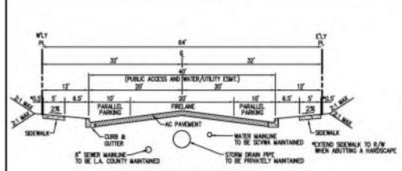
EASEMENTS BASED ON FIRST AMERICAN TITLE INSURANCE COMPANY PRELIMINARY TITLE REPORT, ORDER NO. NHSC-6837868(RA), DATED MAY 4, 2022

TITLE REPORT ITEM NO.	OWNER	PURPOSE	REFERENCE	FUTURE DISPOSITION	TENTATIVE MAP SHEET NO.
EXISTING EASEMENTS					
4	SO. CAL. EDISON	ELECTRICAL LINES & INCIDENTAL PURPOSES	JULY 25, 1945 BOOK 30616, PAGE 283	TO BE REALIGNED WITH FINAL SCE DESIGN	N/A CANNOT BE PLOTTED
5	AYERS EASEMENT	INGRESS/EGRESS	JULY 13, 1977 INSTR. NO. 77–74808 JULY 13, 1977 INSTR. NO. 77–75492 APRIL 4, 1978 INSTR. NO. 78–352178 FEBRUARY 27, 1979 INSTR. NO. 79–227247	TO BE REALIGNED WITH "A" STREET AND "B" STREET	1, 2
PROPOSED EASEMENTS					
X	TWENTY FOOT WIDE MULTI–USE(HIKING, MOUNTAIN BIKING, EQUESTRIAN) TRAIL EASEMENT TO BE DEDICATED TO THE COUNTY OF LOS ANGELES APPROPRIATELY ALONG THE EXISTING VARIABLE WIDTH TRAIL ALIGNMENTS		TO LA COUNTY PARKS AND REC. DEPARTMENT	1, 2, 5
Y	MINIMUM TWENTY EIGHT FOOT WIDE ACCESS EASEMENT FOR INGRESS AND EGRESS PURPOSES TO BE GRANTED TO ADJACENT PRIVATE PROPERTY OWNERS		PRIVATE ACCESS EASEMENT (TO BE MAINTAINED BY HOA)	1, 2, 4
Z	STORM DRAIN EASEMENT FOR ACCESS AND MAINTENANCE OF LOS ANGELES COUNTY OWNED BASIN, PIPS, AND STRUCTURES		TO LA COUNTY FLOOD CONTROL	1, 2, 4, 5
	PRIVATE DRIVEWAY AND FIRE LANE, RECIPROCAL ACCESS EASEMENT TO PROVIDE INTERNAL ACCESS/CIRCULATION TO ALL RESIDENTIAL LOTS, AND OPEN SPACES		TO LA COUNTY	4, 5
	TEN FOOT WIDE SANITARY SEWER EASEMENT, CENTERLINE BEING AT ALL SHOWN PROPOSED SEWER MAIN WHERE SEWER MAIN IS OUTSIDE OF PUBLIC RIGHT OF WAY		TO LA COUNTY PUBLIC WORKS		
	EASEMENTS ON LOTS 14, 22, AND 24 FOR THE BENEFIT OF THE ADJACENT PROPERTY FOR SECONDARY ACCESS (INGRESS AND EGRESS) AND NECESSARY SLOPES. THE ENTITLEMENT, DESIGN AND CONSTRUCTION OF THE ACCESS ROAD SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY. EASEMENTS MAY BE EITHER BLANKET OR PRECISE IN NATURE.		PRIVATE ACCESS EASEMENT (TO BE MAINTAINED BY HOA)		

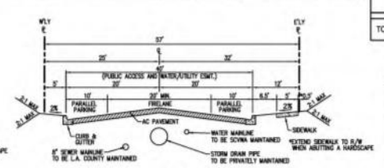


TRACT NO.	RES. UNITS		OPEN SPACE
TR 83301–01	–		177.14 Ac.
TR 83301–02	48	AFFORDABLE	–
TR 83301–03	107	CONDOMINIUMS	–
TR 83301–04	105	CONDOMINIUMS	–
TR 83301–05	70	CONDOMINIUMS	–
TR 83301–06	78	CONDOMINIUMS	–
TR 83301	102	CONDOMINIUMS	–
TOTAL	510	UNITS	177.14 Ac.

UNIT MAP PHASING EXHIBIT
N.T.S.



64' PUBLIC STREET
"A" STREET AND "B" STREET
N.T.S



57' PUBLIC STREET
"A" STREET AND "B" STREET
N.T.S



PUBLIC STREET - (R/W = 80')
THE OLD ROAD

SOURCE: United Civil INC., 2024

FIGURE 3-2

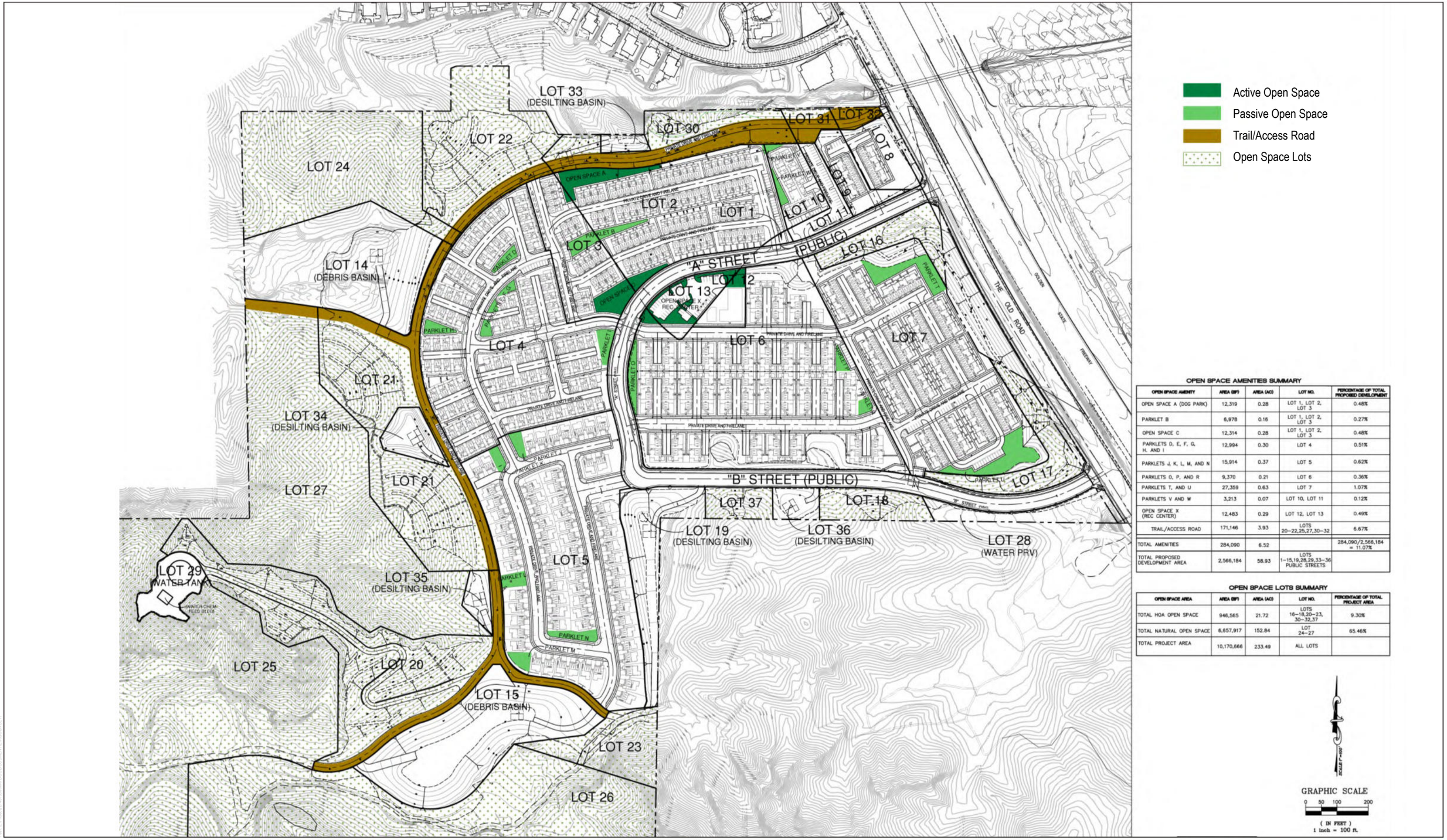
Vesting Tentative Tract Map No. 83301

Trails at Lyons Canyon Project

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OPEN SPACE AMENITIES SUMMARY

OPEN SPACE AMENITY	AREA (SF)	AREA (AC)	LOT NO.	PERCENTAGE OF TOTAL PROPOSED DEVELOPMENT
OPEN SPACE A (DOG PARK)	12,319	0.28	LOT 1, LOT 2, LOT 3	0.48%
PARKLET B	6,978	0.16	LOT 1, LOT 2, LOT 3	0.27%
OPEN SPACE C	12,314	0.28	LOT 1, LOT 2, LOT 3	0.48%
PARKLETS D, E, F, G, H, AND I	12,994	0.30	LOT 4	0.51%
PARKLETS J, K, L, M, AND N	15,914	0.37	LOT 5	0.62%
PARKLETS O, P, AND R	9,370	0.21	LOT 6	0.36%
PARKLETS T, AND U	27,359	0.63	LOT 7	1.07%
PARKLETS V AND W	3,213	0.07	LOT 10, LOT 11	0.12%
OPEN SPACE X (REC CENTER)	12,483	0.29	LOT 12, LOT 13	0.49%
TRAIL/ACCESS ROAD	171,146	3.93	LOTS 20–22,25,27,30–32	6.67%
TOTAL AMENITIES	284,090	6.52		284,090/2,566,184 = 11.07%
TOTAL PROPOSED DEVELOPMENT AREA	2,566,184	58.93	LOTS 1–15,19,28,29,33–36 PUBLIC STREETS	

OPEN SPACE LOTS SUMMARY

OPEN SPACE AREA	AREA (SF)	AREA (AC)	LOT NO.	PERCENTAGE OF TOTAL PROJECT AREA
TOTAL HOA OPEN SPACE	946,565	21.72	LOTS 16–18,20–23, 30–32,37	9.30%
TOTAL NATURAL OPEN SPACE	6,657,917	152.84	LOT 24–27	65.46%
TOTAL PROJECT AREA	10,170,666	233.49	ALL LOTS	

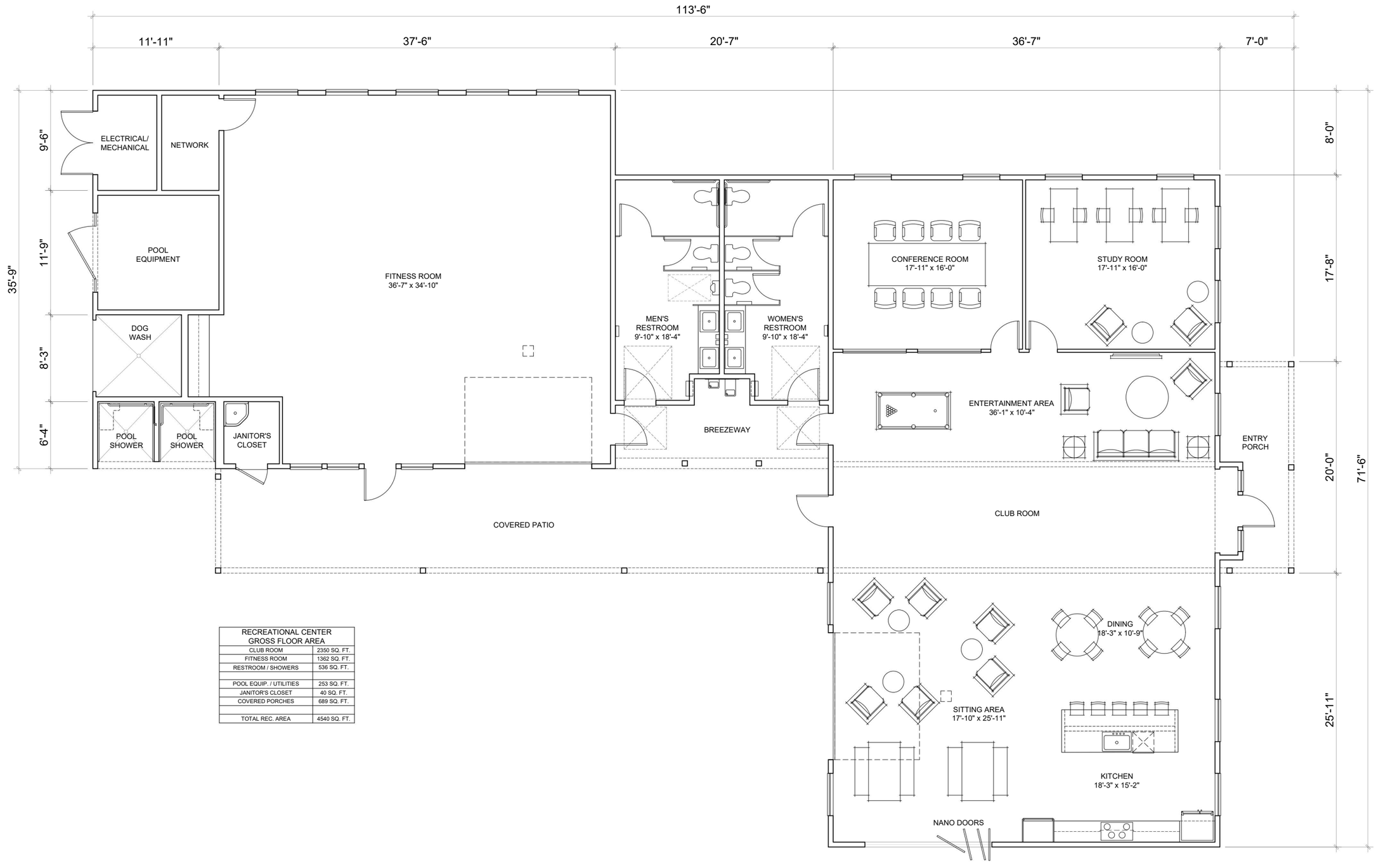
GRAPHIC SCALE
0 50 100 200
(IN FEET)
1 inch = 100 ft.

SOURCE: KTGY, 2024

FIGURE 3-3
Active and Passive Open Space Plan
Trails at Lyons Canyon Project

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RECREATIONAL CENTER GROSS FLOOR AREA	
CLUB ROOM	2350 SQ. FT.
FITNESS ROOM	1362 SQ. FT.
RESTROOM / SHOWERS	536 SQ. FT.
POOL EQUIP. / UTILITIES	253 SQ. FT.
JANITOR'S CLOSET	40 SQ. FT.
COVERED PORCHES	689 SQ. FT.
TOTAL REC. AREA	4540 SQ. FT.

SOURCE: KTGY, 2023

Architecture + Planning
17911 Von Karman Ave,
Suite 200
Irvine, CA 92614
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ktgy.com

DUDEK

NUWI - Lyons Canyon, LLC
2001 Wilshire Blvd, Suite 401
Santa Monica, CA 90403

The Trails at Lyons Canyon
Stevenson Ranch, CA #2020-0761

Parcel 1 APN: 2826-022-027, 2826-022-035, 2826-023-014, 2826-041-039
Parcel 2 APN: 2826-022-026

Plot Date: 09.05.2023
1st Submittal : 03.05.2021
2nd Submittal : 07.28.2021
3rd Submittal : 12.28.2021
4th Submittal : 05.04.2022
5th Submittal : 09.07.2022
6th Submittal : 02.15.2023

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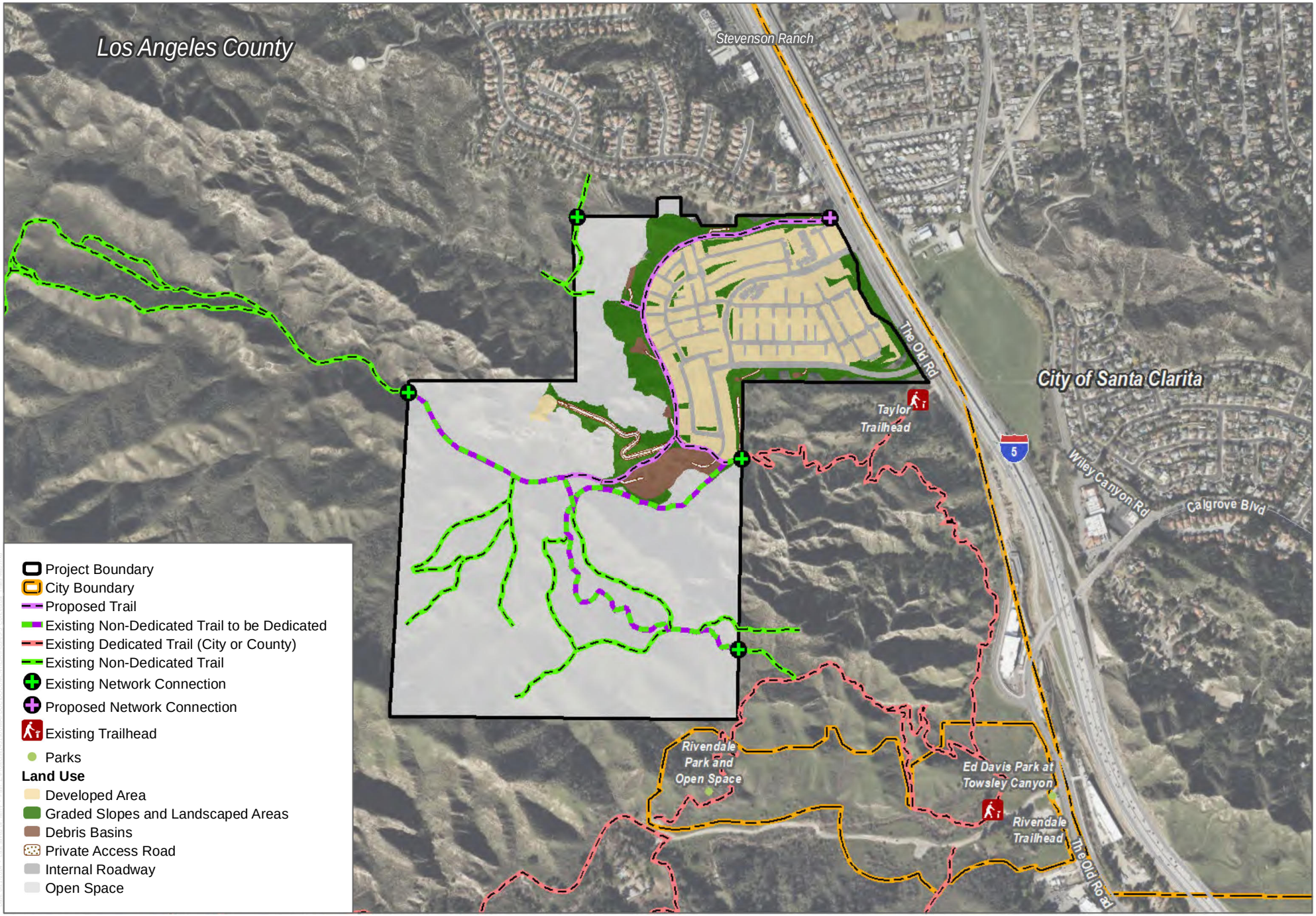
RECREATIONAL BUILDING
LOT 11: FLOOR PLAN

A8.20

FIGURE 3-4
Conceptual Recreational Building Plan
Trails at Lyons Canyon Project

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SOURCE: Bing Maps 2023, Open Street Map 2019

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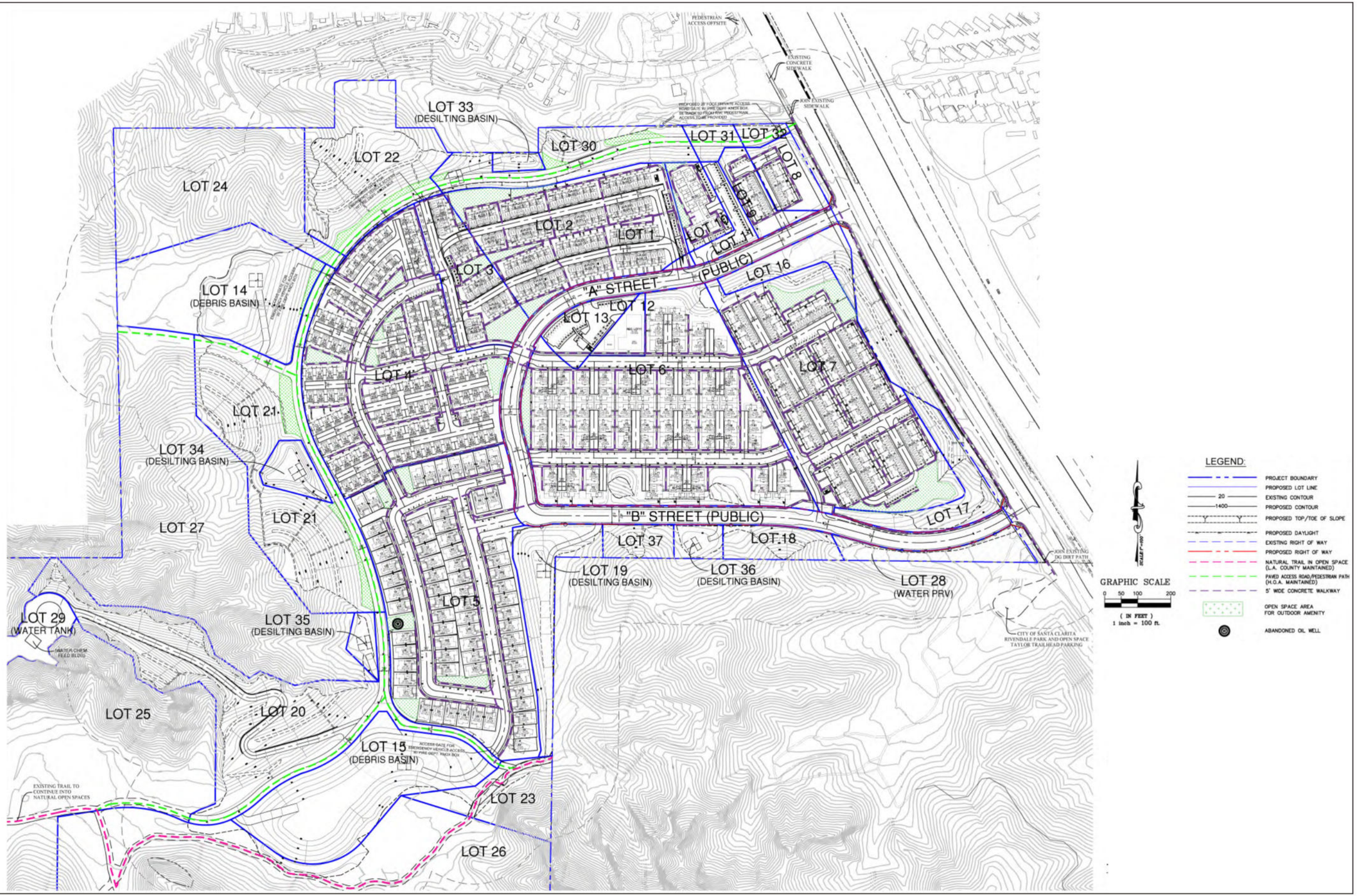
0 500 1,000 Feet

FIGURE 3-5

Conceptual Trails Map

Trails at Lyons Canyon Project

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SOURCE: United Civil INC., 2024

FIGURE 3-6

Circulation Plan

Trails at Lyons Canyon Project

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SOURCE: Supernatural, 2024

FIGURE 3-7

Landscape Plan

Trails at Lyons Canyon Project

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4.1 Aesthetics

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to aesthetics, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts, and references. Information contained in this section is based on publicly available data and reports from the County of Los Angeles, the City of Santa Clarita, the California Department of Transportation, and Google Earth, as well as Project site reconnaissance and conceptual site plans and the following:

Appendix C Biota Report—Trails at Lyons Canyon, prepared for NUWI Lyons Canyon, LLC. Prepared by Dudek, dated December 2024

Other sources consulted are listed in Section 4.1.9, References.

4.1.1 Existing Conditions

Regional Setting

The Project site is in the eastern Ventura Basin within the Transverse Ranges along the northerly flank of the Santa Susana Mountains, which also constitutes the westerly perimeter of the Santa Clarita Valley. The Project site is within an unincorporated area of northerly Los Angeles County (County) and is adjacent to the City of Santa Clarita (City). The County's northern unincorporated areas are generally sparsely populated and include medium to very low-density residential communities, agricultural lands, parts of the Angeles National Forest and Los Padres National Forest, and other types of natural areas and open spaces, including parks and recreational areas (County of Los Angeles 2015). Figure 2-1, Regional Location and Vicinity Map, in Chapter 2, Environmental Setting of this Draft EIR, provides the Project site boundaries in the context of the surrounding community and jurisdictions.

Santa Clarita Valley Planning Area

The Project site is within the Santa Clarita Valley Planning Area of the County's General Plan, which is bordered to the west by the Ventura County line, to the north by the Los Padres National Forest and Angeles National Forest, to the east by the Angeles National Forest, and to the south by a major ridgeline that separates the Santa Clarita Valley from the San Fernando Valley (County of Los Angeles 2015). The physical characteristics of the Santa Clarita Valley Planning Area, in conjunction with the large amount of undeveloped land, offer residents and visitors a vast array of open space that provides plentiful scenic opportunities (County of Los Angeles 2012). The visual elements exhibited within these open spaces include major topographic features (e.g., hillsides, rivers, canyons), oak woodlands, rivers and streams, parks, and other recreational areas. Woodlands are prime examples of resources that derive much of their visual quality from "quantity" (County of Los Angeles 2010). For example, large, uninterrupted woodland areas are more visually striking than isolated pockets of trees. The health of woodland areas also affects visual quality, as unhealthy trees can diminish visual appeal. Brief summaries of Santa Clarita Valley Planning Areas (and ostensibly, the Santa Clarita Valleys) defining physical characteristics and other key visual elements are provided below.

Major Topographic Features

Major topographic features within and surrounding the Santa Clarita Valley Planning Area (Planning Area) contribute to the overall aesthetic quality of the Santa Clarita Valley since they provide visual relief from the otherwise flat, urban horizon of the developed portions of the Planning Area (County of Los Angeles 2010). The San Gabriel, Sierra Pelona and Santa Susana Mountains are the most prominent scenic resources within the Planning Area. These mountains contain well-defined ridgelines, slopes, and canyons, which provide a visual backdrop to the urban environment, create a sense of place for each neighborhood or district, and provide opportunities for residents throughout Santa Clarita Valley to experience the natural environment. In addition, most of the unincorporated County's native plant and animal species reside within hilly and mountainous terrain, including areas that contain oak woodlands (County of Los Angeles 2015). The oak woodlands in the Santa Clarita Valley hillside areas support a high number of broad and gnarled heritage oak trees that are estimated to be within 100 to 600 years old, which further indicate the role hillside areas play in supporting natural scenic elements valuable to the region (County of Los Angeles 2015).

The County has recognized the hillside areas of Santa Clarita Valley to be important visual resources and has adopted hillside management regulations to restrict development on steeper slopes (County of Los Angeles 2010). The County defines Hillside Management Areas (HMAs) as areas with 25% or greater natural slopes (County of Los Angeles 2015, 2022).[1] (Refer to Section 4.1.2, Regulatory Setting, for the regulatory framework applicable to HMAs in the unincorporated County).

Woodlands

Protected forest land within the Angeles and Los Padres National Forests surrounds the Planning Area to the north and southeast (County of Los Angeles 2012). Woodlands[2] within these forests extend into rural and some urban portions of the Planning Area, contributing to its scenic character (County of Los Angeles 2010). Within the County, oak trees (i.e., all native trees of the genus *Quercus*) and oak woodlands (i.e., an oak stand with greater than 10% canopy cover, or that may have historically supported greater than 10% canopy cover) are recognized as significant historical, aesthetic, and ecological resources, and as some of the most picturesque tree and woodland types in the County (Dagit 2015; County of Los Angeles 2022). Oak woodlands occur in scattered locations, primarily in the southerly portions of the Planning Area and contain a diverse habitat including six species of oak, as well as heritage oaks[3] (County of Los Angeles 2012). Several of the County's Significant Ecological Areas (SEAs)[4] have been adopted to protect oak woodland and cottonwood-willow riparian forest areas and other biological resources in the Planning Area, including the Santa Susana Mountain/Simi Hills SEA (County of Los Angeles 2010; 2015). (Refer to Section 4.4, Biological Resources, for a more detailed discussion of SEAs.)

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1 Chapter 22.104 (Hillside Management Areas), of Title 22, Planning and Zoning, of the Los Angeles County Code (County of Los Angeles 2022).

2 Woodlands are vegetation associations visually dominated by trees. Unlike a forest, woodland canopies are open, allowing sunlight to reach the woodland floor. The trees within woodlands can be evenly spaced or, more commonly, grouped into groves (Rodrigue 2016).

3 Heritage oak trees are either of the following: any oak tree measuring 36 inches or more in diameter, measured 4.5 feet above the natural grade; any oak tree having significant historical or cultural importance to the community, notwithstanding that the tree diameter is less than 36 inches (Section 22.174.040 of Title 22, Planning and Zoning, of the County Code) (County of Los Angeles 2022).

4 Chapter 22.14 (Definitions) of Title 22, Planning and Zoning, of the Los Angeles County Code defines an SEA as "…[l]and that is identified to hold important biological resources representing the wide-ranging biodiversity of the County, based on the criteria for SEA designation established by the General Plan and as mapped in the adopted SEA Policy Map" (County of Los Angeles 2022).

Water Bodies

Rivers, streams, and creeks, including ephemeral flows, located in canyon and valley bottoms provide scenic visual relief from urbanization as well as habitat for biological resources. The most significant river feature in the Santa Clarita Valley is the Santa Clara River, which flows approximately 100 miles from its headwaters near Acton to the Pacific Ocean and is one of only two natural river systems remaining in Southern California (County of Los Angeles 2010).

Forests, Parks, and Recreational Areas

The Santa Clarita Valley Planning Area contains 71 acres of local parkland and 14,425 acres of regional parkland, (County of Los Angeles 2015). These local and regional facilities are owned and operated by the County, City, and/or conservancies including the Santa Monica Mountains Conservancy (SMMC) and the Mountains Recreation and Conservation Authority (MRCA). Conservancy lands include the Santa Clarita Woodlands Park, which is a jointly managed (i.e., SMMC and MRCA) 4,000-acre regional park and open space comprised of four main recreation areas: Ed Davis Park at Towsley Canyon, East and Rice Canyons, Pico Canyon, and Mentryville (MRCA 2022a, 2022b). Parks and forestland in the Planning Area also include three California State Parks (Placerita Canyon State Park, Santa Susana Pass State Historic Park, and Castaic Lake Recreation Area) and National Forest lands (e.g., the Angeles National Forest and a small portion of the Los Padres National Forest in the northwest) (County of Los Angeles 2015).

The parks, recreational areas, and forestlands within the Planning Area support public and private recreational uses including multi-use trail systems, museums, community centers, sports facilities (e.g., basketball courts, baseball fields), golf courses, children's play areas (e.g., play structure equipment), equestrian arenas and staging areas, as well as other areas reserved for passive recreation (e.g., picnic areas), and land zoned as open space (County of Los Angeles 2012). These lands also protect visually sensitive resources including hillsides, ridgelines, perennial and seasonal riparian areas, and other critical habitat for plant and animal communities. For further details related to parks and recreational areas within the Santa Clarita Valley, including a list of facilities within the vicinity of the Project site, please refer to Section 4.16, Recreation, of this Draft EIR.

Undeveloped Lands

Much of the privately and publicly held land in the northern, eastern, and western portions of the Planning Area remains undeveloped (County of Los Angeles 2010). Large tracts of undeveloped property border State Route (SR)-14, extending to the boundaries of the Angeles National Forest. Similarly, much of the area to the west of Interstate (I)-5 and along SR-126 remains as open space or agricultural land (County of Los Angeles 2010). Open space and agricultural lands throughout the Santa Clarita Valley Planning Area provide a buffer to the County's built environment and convey a scenic sense of rural character (County of Los Angeles 2010). These lands include U.S. Bureau of Land Management (BLM) and privately held lands located adjacent and to the west of the Project site.

Urban Form

Development in the Planning Area has been shaped by topography and by the National Forest lands occupying the mountain ranges to the north, east, and south of the Santa Clarita Valley's urban and suburban communities. County land use policies within the Planning Area have reinforced the concentration of urban land uses within the central portions of the Valley by designating significant open space and lower-density residential and agricultural uses between more developed areas and National Forest land (County of Los Angeles 2012). The intent of the land

use policies implemented throughout the Planning Area is to maintain urban uses within the flatter portions of the Santa Clarita Valley that have access to infrastructure, roads, and public facilities, and to minimize encroachment of urban development into hillside, mountains, and forest areas (County of Los Angeles 2010).

Local Setting

Location

Figure 2-1 of Chapter 2 of this Draft EIR provides an overview of the Project site's local setting. The Project site is south of Sagecrest Circle, adjacent to The Old Road on its eastern side, and north of Calgrove Boulevard near Ed Davis Park in Towsley Canyon. The Old Road separates the northeastern boundary of the Project site from the I-5 corridor, which is a highly trafficked regional and interstate travel route and runs parallel to the Project site to the east.

Surrounding Land Uses

Figure 2-2, Surrounding and Nearby Land Uses, of Chapter 2 of this Draft EIR provides an overview of nearby land uses. The Project site is surrounded by The Old Road/I-5, open space, single-family residential, and limited commercial uses. The undeveloped and open space areas surrounding the Project site are characterized by hillside and valley terrain, including steep slopes and defined ridgelines. These areas support a network of dedicated and non-dedicated trails and are covered in contiguous stands of vegetation including (but not limited to) chamise chaparral, California sagebrush, purple sage scrub, mulefat thickets, upland mustards or star-thistle fields, thick-leaf yerba santa scrub, and coast live oak woodland (refer to Section 4.4 of this Draft EIR for a more detailed description of on-site and surrounding vegetation types and communities, including sensitive communities). The location, nature, and general visual character of the areas surrounding the Project site are described briefly below:

- **Land Uses to the North:** The Project site is bound by single-family residential uses on Sagecrest Circle in the Stevenson Ranch residential community development to the north, which is within the unincorporated County. Stevenson Ranch exhibits visual elements typical of other planned residential communities in the area, including low-profile development (e.g., single to two-story residences) with front and rear yard setbacks and irrigated landscaping, including green lawns, ground covers, shrubs, and ornamental trees. The residences are constructed on gently sloping topography with non-reflective building materials and finished in a limited range of neutral earth tones (primarily beige or off-white) with terracotta roofing and various brick or sandstone embellishments. The gentle, south facing slope of the community (e.g., the area closest to the Project site) includes scattered, landscaped vegetation and concrete storm drain infrastructure set into the hillside. The Santa Clara River, which is a critical biological and visual resource within the Santa Clarita Valley, is located approximately 3.8 miles to the north.
- **Land Uses to the East:** The City of Santa Clarita is located east of the Project site, across the I-5 freeway. The Project boundary is not located adjacent to The Old Road, but rather it is offset from the road by varying distances.[5] As illustrated in Figure 2-1, in Chapter 2 of this Draft EIR the northeastern boundary of the Project site is parallel and in close proximity to The Old Road and the I-5 corridor, with residential and commercial uses located on the eastern side of I-5, within the City. Southeast of the Project site's boundary is the City of Santa Clarita's Taylor Trail Wilderness and Open Space and Rivendale Park and Open Space which includes hillside and valley terrain covered in contiguous stands of vegetation, as well as a network

[5] As discussed in Chapter 3, Project Description, property included within APN 2826-022-901 would contribute to the development of Lots 7 and 8.

of local trails, some of which continue onto the Project site (as depicted in Figure 3-5, Conceptual Trails, in Chapter 3 of this Draft EIR).

- **Land Uses to the South:** South of the Project site is undeveloped land within the unincorporated County land along with a small recreational trailhead area within the City's boundaries. The undeveloped open space areas to the south and southeast are characterized by hillside and valley terrain covered in contiguous stands of vegetation. The Santa Clarita Woodlands Park, including Ed Davis Park in Towsley Canyon, is located southwest of the Project site. Southeast of the Project site's boundary is the City's Taylor Trail Wilderness and Open Space and Rivendale Park and Open Space. These areas also support a network of local trails, some of which continue onto the Project site (as depicted in Figure 3-5 of Chapter 3 of this Draft EIR), as well as a paved access road heading west from the Ed Davis Park parking lot adjacent to The Old Road.
- **Land Uses to the West:** West of the Project site is vacant land within the Santa Susana Mountains and lands owned by the BLM, the SMMC, the MRCA, and private landowners. Lands to the west consist entirely of natural open space characterized by hillside and valley terrain covered in contiguous stands of vegetation. These areas also support a limited network of unimproved dirt trails, some of which continue onto the Project site (see Figure 3-5 of Chapter 3 of this Draft EIR).

Project Site

The Project site, which totals approximately 233 acres, is currently undeveloped with no habitable structures or paved roads on-site. Miscellaneous structures are located within the northern, flatter portion of the Project site and include fencing, a metal frame bridge, an abandoned water tank, water wells, a metal drainage pipe, irrigation lines, trails, electrical distribution lines, dirt roads, and an abandoned and plugged oil well. There is also an operating billboard with both north and south facing signage located adjacent to The Old Road on the Project site's northeastern border.

Terrain within the Project site ranges from steep canyons to gently sloping hills, riparian habitat in the central portion of the site, to gently sloping alluvial valleys, which appear to have been historically used as cattle grazing land. As identified on Figure 2-5, Special Management Areas, of Chapter 2 of this Draft EIR, the Project site includes a General Plan designated significant ridgeline located in the southeastern portion of the Project site (County of Los Angeles 2015). Elevations in the Project site range from approximately 1,654 feet above mean sea level (amsl) at the southwest corner to approximately 1,300 feet amsl at the northeast corner. Lyons Canyon runs east—west in a horseshoe shape through the central portion of the Project site.

Similar to adjacent undeveloped areas, the Project site supports contiguous stands of vegetation including (but not limited to) chamise chaparral, California sagebrush, purple sage scrub, mulefat thickets, upland mustards or star-thistle fields, and thick-leaf yerba santa scrub, and sensitive coast live oak woodland (refer to Section 4.4 of this Draft EIR for a more detailed description of on-site vegetation types and communities, including sensitive communities). The Project site is at the interface of undeveloped lands and existing development, and according to the General Plan, the Project site occurs entirely within the Santa Susana Mountains/Simi Hills SEA. The Project is also within and is adjacent to County designated HMAs. As discussed above, HMAs are defined by the County as mountainous or foothill terrain with a natural slope of 25% or greater, and the portions of the Project site that meet this definition are within an HMA (County of Los Angeles 2015, 2022).

Public Views of the Project Site

To understand the anticipated extent of available public views of the Project and more specifically, proposed residential structures, a visibility analysis for the areas within a one-mile radius of the Project's proposed grading footprint was prepared.[6] Figure 4.1-3, Visibility Analysis, depicts the proposed Project's grading footprint, the "on-site" Project boundary, and the anticipated visibility of the Project at buildout. Existing public views of the Project site, other than the double-sided billboard, consist primarily of undeveloped open space characterized by hillside and valley terrain with moderate to steep slopes supporting shrubland, grassland, and woodland habitats. The nature and relative "quality" of a public view is heavily influenced by viewer exposure. Viewer exposure varies depending on several factors including the angle of view, view distance (foreground, midground, and background), the extent of visibility (i.e., whether views are limited by vegetation, topography, or development), and viewer screening conditions (e.g., whether the Project facilities would be "skylined" on ridgelines, "backscreened" by topography and/or vegetation, or screened by structures or vegetation in the foreground). Viewer exposure also considers the duration of view based on viewer activity (e.g., travel route, residential, recreational) and often relates to speed of travel (pedestrian, vehicular, or stationary).

Figure 4.1-4, Key View Map, depicts an aerial photograph of the Project site and surrounding area, and identifies several publicly accessible vantage points (i.e., "Key Views") from which all or part of the Project site grading footprint may be visible. Photographs were taken from the public vantage points for Key Views 1 through 4. These photographs are provided in Figures 4.1-5a through 4.1-5d and depict local views of the Project site available from The Old Road and I-5, which are assumed to represent the most heavily trafficked and publicly-accessible vantage points. Together with the visibility analysis (see Figure 4.1-3), these photographs were used to determine the visibility and viewshed characteristics for Key Views 1 through 4, as described below. The below discussions of visibility and available views to the Project site from trail vantage points (i.e., Key Views 5 through 7) are approximations based on the visibility analysis and/or a review of aerial imagery, trail alignments, intervening terrain, and site plan characteristics.

All seven representative Key Views include important topographic features (e.g., significant ridgelines, HMAs) and biological resources (e.g., woodlands and other natural communities within the Santa Susana Mountains/Simi Hills SEA) which could potentially be impacted due to Project implementation. Each existing view is described in further detail below.

- **Key View 1, I-5 South (Looking Southwest).** Key View 1 (Figure 4.1-5a) is looking southwest towards the Project site from the southbound lane of I-5. Viewers from this vantage point are limited to motorists traveling at high speeds along I-5, which is a major travel route. Visible in Key View 1 is a continuous ridgeline in the background, which also defines the skyline. Several of the ridgelines that compose the skyline of Key View 1 are recognized by the County as "significant" ridgelines, however, the Project's on-site significant ridgeline is not visible from this vantage point due to viewer angle and intervening topography. The skyline of the continuous ridgeline visible in Key View 1 is briefly interrupted by an on-site billboard (view center), as well as an off-site utility pole (view center-left). In the midground, Key View 1

[6] The visibility analysis was primarily used to determine visibility of the Project site in the local vicinity where the proposed Project features would have the highest potential to result in a visual impact. The analysis shows that, due to local topography and vegetation, visibility of the Project site from most adjacent areas is relatively low (i.e., the blue areas in Figure 4.1-3, ranging from 1%-20% visibility). As the viewer moves further away from the Project site to higher surrounding hillside elevations (such as the Rim of the Valley Trail, located approximately 2.3 miles southwest of the Project site boundary), local area reconnaissance and public mapping imagery confirms that, while the Project site may be visible, Project development would not have the potential to block or otherwise obstruct available views. As the visibility analysis does not account for the role intervening distance plays in reducing visual resource impact, the visibility analysis radius was limited to 1 mile.

includes hillsides (including HMAs) covered in grassland, shrubland and wooded habitats, as well as the disturbed grassy and gravel areas of the Project site's mostly flat northeastern corner. In the foreground, panning from north to south, Key View 1 includes: The Old Road (a paved road with sidewalks discontinuing at the Project site boundary); an existing two-story commercial building and ground-level parking lot with security lighting; an existing streetlight; the on-site billboard; and an existing off-site utility pole. Views from this vantage point of the Project site would be largely unobstructed, except for some limited screening provided by a stand of trees, including a large oak tree, located immediately north of the Project site adjacent to the existing commercial parking lot.

- **Key View 2, I-5 North (Looking Northwest).** Key View 2 (Figure 4.1-5b) is looking northwest from the northbound lane of I-5 towards the Project site. Similar to Key View 1, viewers from the Key View 2 vantage point are limited to motorists traveling at high speeds along I-5. Due to viewer angle, which includes the center median of I-5 and topography (i.e., vegetated hillsides), views of the site are generally limited to hillside features adjacent to The Old Road. Panning north to the south, Key View 2 includes views of residences from the Stevenson Ranch community and existing commercial building north of the Project site, several streetlights, and the on-site billboard. The midground of Key View 2 includes the east facing slopes of vegetated hillsides and a single prominent ridgeline in the background (view left).[7] The foreground is dominated by the median crash barrier separating I-5 North from South which partially shields views of the Project site.
- **Key View 3, The Old Road (Looking Southwest).** Key View 3 (Figure 4.1-5c) is looking southwest from The Old Road towards the Project site. Viewers from this vantage point are typically non-stationary, and include local and recreational motorists, pedestrians, and bicyclists. In the foreground is a view of The Old Road, with metal fencing, street signage (view center), overhead power lines, the very prominent existing on-site billboard and guidewires, and a stand of existing trees, including a mature oak tree (view right). The midground includes a north-facing, undisturbed vegetated hillside with mature oak trees. The ridgelines framing the Santa Clarita Valley are included in the background. Views of the Project site from this vantage point are currently unobstructed except for the on-site billboard which blocks views of a portion of the Project site.
- **Key View 4, The Old Road (Looking Northwest).** Key View 4 (Figure 4.1-5d) is looking northwest from The Old Road towards the Project site. The current view is of The Old Road and undisturbed vegetated hillsides with mature oak trees. Viewers from this vantage point are typically non-stationary, including local and recreational motorists, pedestrians, and bicyclists. In the foreground of Key View 4, The Old Road is visible along with the Rivendale Park and Open Space trailhead and parking lot (and associated fencing). The midground includes undisturbed vegetated hillsides with mature oak trees. The on-site billboard is visible in the background (view right). Views of the Project site from this vantage point are unobstructed.
- **Key View 5, Taylor Trail (Looking North).** Key View 5 is looking north from Taylor Trail from a vantage point adjacent to the Project site development footprint to the east where the trail intersects with the Project site. As indicated on the Key View Map (Figure 4.1-4), viewers at this particular vantage point would be standing at approximately 1,360 feet amsl looking across the central portion of the Project site; however, the segment of Taylor Trail running east/west from The Old Road to the Project site ranges from approximately 1,320 feet amsl at the trail entrance at The Old Road to 1,420 feet amsl in more elevated areas towards the trail midpoint where visibility of the Project site ranges from 0% to 60% due to adjacent topography, which intermittently obstructs views of the Project site and surrounding areas. The current foreground view includes on-site hillside (including HMAs) and valley terrain covered in grassland, shrubland and wooded

[7] Due to location and view angle, the on-site significant ridgeline is not visible from Key View 2.

habitats (including oak woodlands with mature oak trees), as well as the disturbed grassy and gravel areas of the Project site's mostly flat northeastern area. The midground view includes commercial and residential development located to north of the Project site. Views of distant mountains and ridgelines are available in the background against the skyline. Views of the Project site from this vantage point are unobstructed.

- **Key View 6, Don Mullally Trail, (Looking North).** Key View 6 is looking north from an elevated segment of the Don Mullally Trail located approximately 0.37 mile southeast of the Project site's southern boundary and 0.69 mile southeast of the Project's grading footprint (as depicted in Figure 4.1-4). This segment of the trail ranges from approximately 1,670 feet amsl to 1,770 feet amsl. The current foreground view includes hillside (including HMAs and the Project's on-site significant ridgeline) and valley terrain covered in grassland, shrubland and wooded habitats (including oak woodlands with mature oak trees). There are also midground views of the disturbed grassy and gravel areas of the Project site's mostly flat northeastern area as well as existing residential and commercial development located to north of the Project site. Views of distant mountains and ridgelines are available in the background against the skyline. Views of the Project site from this vantage point are unobstructed.
- **Key View 7, Rim of the Valley Trail (Looking Northeast).** Key View 7 is looking northeast from an elevated ridgeline area (approximately 3,000 feet amsl) of the Rim of the Valley Trail located approximately 2.3 miles southwest of the Project site's southern boundary and approximately 2.8 miles southwest of the Project's grading footprint (as depicted in Figure 4.1-4).[8] Key View 7 offers broad, sweeping views of the Santa Clarita Valley, including the distant mountains and ridgelines of the Angeles National Forest to the north and northeast. The north/northeast-facing viewsheds and vistas available from the Key View 7 vantage point include hillsides and canyons in the foreground and midground (including hillside and valley terrain on the Project site), the developed, urban areas of the Santa Clarita Valley floor in the midground, and a continuous backdrop of prominent ridgelines framing the Santa Clarita Valley to the north and northeast.

Scenic Vistas

A scenic vista generally provides panoramic or otherwise broad, mid- to long-range views of large geographic areas that contain a landscape valued for its scenic quality, primarily from a public vantage point. Scenic vistas are generally associated with public vantage points. According to Chapter 9, Conservation and Natural Resources Element, of the County's General Plan:

> "A scenic viewshed provides a scenic vista from a given location, such as a highway, a park, a hiking trail, river/waterway, or even from a particular neighborhood. The boundaries of a viewshed are defined by the field of view to the nearest ridgeline. Scenic viewsheds vary by location and community and can include ridgelines, unique rock outcroppings, waterfalls, ocean views or various other unusual or scenic landforms" (County of Los Angeles 2015).

A region's topography can lend aesthetic value through the creation of public view corridors of ridgelines, and through the visual backdrop created by mountains and hillsides (County of Los Angeles 2012). Due to its diverse topography, including mountain backdrops, hillsides and ridgelines, canyons and streams, and a broad river valley, coupled with a substantial amount of open space and/or natural areas, the unincorporated areas of the Santa Clarita Valley contain a wide range of scenic elements and views (County of Los Angeles 2012). According to the Santa Clarita Valley Area Plan—also referred to as "One Valley, One Vision" (OVOV)—scenic vistas may include

[8] This vantage point, which is located outside of the 1-mile radius used in the visibility analysis, is included in order to provide an example of views of the Project site from a regional trail. Regional trails (as differentiated from local trails) are discussed in further detail below under the "Trails" heading.

views of a range of resources, whether natural or manmade, that are considered important scenic resources for preservation (County of Los Angeles 2012). As set forth in the OVOV (and/or the OVOV Program EIR), scenic vistas are available from the following public vantage points within the Santa Clarita Valley:

- Major highways, including I-5, SR-14, and SR-126. The OVOV suggests that views from I-5 "gateway" where the freeway enters Santa Clarita Valley from the south (approximately 3.5 miles southeast of the Project site) are particularly scenic and of value to the region (County of Los Angeles 2010, 2012). Here, motorists traveling north are met with the first views of the Santa Clarita Valley, including undeveloped vegetation covered hillsides and ridgelines;
- Public roadways at major entry points to Santa Clarita Valley, including gateways located at Newhall Pass and along Lake Hughes Road (County of Los Angeles 2012), and through canyons, including Soledad Canyon Road, Bouquet Canyon Road, San Francisquito Canyon Road, Sand Canyon Road, Placerita Canyon Road, Sierra Highway, Golden Valley Road, Lake Hughes Road and Vasquez Canyon Road (County of Los Angeles 2010, 2012);
- The County's public trail system, particularly where these trails traverse ridgelines of the Sierra Pelona, San Gabriel, and Santa Susana Mountains (County of Los Angeles 2010, 2012).

Scenic vistas from public vantage points that include all or portions of the Project site within the boundary of the viewshed (i.e., the field of view to the nearest ridgeline) are available from the adjacent segment of southbound I-5 (looking southwest), as well as from select portions of dedicated local and regional trails to the south and southeast, specifically, from elevated portions of Taylor Trail (a local trail located adjacent and to the east), Towsley Trail (adjacent and to the southeast), Don Mullally Trail (a looped local trail located approximately 916 feet to the south of the Project site's southern boundary) and the Marge Feinberg Rim of the Valley Trail (Rim of the Valley Trail) (a regional trail located approximately 2.3 miles to the southwest of the Project site's southern boundary at its closest point). Although scenic vistas are also available from Wiley Canyon Trail (located approximately 0.46 mile to the southeast of the Project site's southeastern boundary at its closest point), due to the elevation of the trail, which ranges from 1,380 feet amsl to 1,475 feet amsl, and the presence of adjacent and intervening hillsides, which are generally between 1,500 feet to 1,600 feet amsl, views of the Project site are blocked and not within the viewshed of any scenic vistas available from Wiley Canyon Trail.

Trails

Regional Trails

According to the Los Angeles Department of Parks and Recreation (DPR): "Regional trails extend over large expanses of land, providing a continuous route around or through areas such as mountain ranges, or around the rim of a valley" (DPR 2013). The Santa Susana Mountains Trails Master Plan (Trails Master Plan), a comprehensive trails planning document incorporating portions of the Santa Clarita Valley Planning Area east of I-5 and south of the Newhall Ranch Specific Plan Area, identifies two regional riding, hiking, and/or multi-use trails: the Santa Clara River Trail, located approximately 3.8 miles north of the Project site and the Rim of the Valley Trail, approximately 2.3 miles south (DPR 2018a; HMDB 2022).

Figure 4.1-1, Regional Trails Map, shows the boundaries of the Trails Master Plan "Phase II" planning area (which includes the Project site), and identifies the regional trail segments (i.e., the Rim of the Valley Trail and the Santa Clara River Trail) closest to the Phase II planning area and the Project site. Due to distance, topography, and intervening development, the Project site is not visible from any portion of the Santa Clara River Trail. However,

distant north and northeast facing views of the Project site are available from select elevated areas along the Rim of the Valley Trail approximately 2.3 miles to the south.

A part of the SMMC Conservancy Zone, the Rim of the Valley Trail corridor is a circular network of trails connecting the Santa Monica Mountains to all the mountains surrounding the San Fernando, Simi, Conejo, and La Crescenta Valleys (SMMC 2022). Officially recognized in 2000 as the "Marge Feinberg Rim of the Valley Trail",[9] the 200-mile Rim of the Valley Trail represents the backbone of the Rim of the Valley Trail corridor's trail network (SMMC 2022; HMDB 2022). The challenging, long distance Rim of the Valley Trail can be traced along many prominent ridgelines and offers broad, sweeping views of the Santa Clarita Valley as viewed from the south (DPR 2018b). The north-facing viewsheds from the Rim of the Valley Trail segments closest to the Project site typically include hillsides and canyons in the foreground, the developed, urban areas of the valley floor in the midground, and a continuous backdrop of prominent ridgelines framing the Santa Clarita Valley to the north.

Local Trails

Local, dedicated trails adjacent to and/or near the Project site include the following: Taylor Trail (adjacent) to the east; the Towsley Trail (adjacent) and Wiley Canyon Trail (approximately 0.46 mile) to the southeast; and the Don Mullally Trail (approximately 916 feet) to the south. These trails are depicted on Figure 4.1-2, Local Trails Map. As depicted on Figure 4.1-3, Visibility Analysis, the Project site's grading footprint is visible from Taylor Trail and the Don Mullally Trail. Due to topography and intervening vegetation, views of the Project site's grading footprint are not available from the Towsley Trail or Wiley Canyon Trail (see Section 4.1.4, Methodology, for a more detailed discussion of the Project-specific visibility analysis). Although dedicated trails[10] may provide valued riding, hiking, and multi-use opportunities to the public, the dedicated trails identified in Figure 4.1-2 are not considered regional trails pursuant to the County (DPR 2013; County of Los Angeles 2013). Additionally, the non-dedicated trails[11] depicted on Figure 4.1-2 trails are informal and/or private-use trails that do not provide de facto public access. As such, views and/or vistas from non-dedicated trails are not identified or further evaluated in this section.

Scenic Highways

According to Caltrans, the County has two officially designated state scenic highways and 11 eligible state scenic highways (Caltrans 2022a). Route 27 and Route 2, the County's two officially designated state scenic highways, are located 26.5 miles southeast and 23.4 miles south of the Project site, respectively (Caltrans 2022b). The nearest eligible state scenic highway, I-5, runs parallel to the Project site to the east (Caltrans 2022b). Portions of the Project site and surrounding area are visible from both northbound and southbound travel lanes on I-5 (see Figures 4.1-5a and 5.1-5b). On-site scenic resources within view of the I-5 corridor include hillside areas (including HMAs), as well as grassland, shrubland, and woodland habitats with the Santa Susana Mountains/Simi Hills SEA (County of Los Angeles 2015).

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9 Pursuant to Assembly Bill (AB) 1927 (Rim of the Valley).

10 Figure 4.1-2, Local Trails, includes a trail feature referred to as "Dedicated Trail (City or County)". For the purposes of this Draft EIR, dedicated trails refer to formally recognized trails accessible to the public and managed by the MRCA, the SMMC, and/or responsible County or City entities.

11 Figure 4.1-2 also identifies "non-dedicated trails" within, adjacent to, or near the Project site. For the purposes of this analysis, non-dedicated trails are informal and/or private trails that may provide linkages to dedicated trails but are not formally recognized or managed by a public entity and would not provide de facto public access. Non-dedicated trails include Lyons Ranch Road, an unpaved road traversing through the Project site from the northeastern end, traveling south and eventually west, and continuing off-site. Other non-dedicated trails are located throughout the Project site's hillsides, generally meandering between Lyons Ranch Road and Towsley Canyon Road.

Caltrans also includes California Historic Parkways[12] in its State Scenic Highway Program (Caltrans 2008). Figure 4.1-6, Scenic Highways Map, identifies the designated and eligible scenic highways and historic parkways in western Los Angeles County and southeastern Ventura County. Two officially designated county scenic highways and one officially designated historic parkway have been established; however, the nearest officially designated county scenic highway is over 20 miles to the south and the nearest officially designated California Historic Parkway (i.e., the Arroyo Seco Historic Parkway) is over 30 miles to the southeast (Caltrans 2022b).

Light and Glare

There are two types of artificial, or man-made, light sources: (1) point sources (e.g., illuminated signage, street light poles, building lights, vehicle headlights), and (2) indirect sources that reflect light onto adjacent properties (e.g., reflective or light-colored surfaces). Currently, the Project site is undeveloped and does not contain any light sources, with the exception of an existing billboard located in the northeast corner of the Project site adjacent to The Old Road. This billboard includes standard up-lighting angled toward the signage on both its northern and southern exposures, which is designed to illuminate the billboard contents to passing motorists. Additionally, the Project site does not contain expanses of material that would result in glare; however, the Project site is adjacent to a major highway (I-5), which supports a continuous stream of motorists. The highway traffic contributes to point source light pollution at night due to vehicle headlights. In addition, residential/commercial land uses to the north of the Project site and east/northeast of I-5 support lighting typical of an urban setting, including but not limited to street lighting, security lighting, exterior building lights, and light emitted from the interiors of buildings. The nearby land uses (and passing vehicles) also include windows and other glass or metal features that may result in minimal localized glare.

Shadows

The topography of the Project site includes hillside terrain with a General Plan designated significant ridgeline in the southwestern portion of the Project site. These features cast shadows in various locations throughout the site when the sun is low on the horizon. As the Project site is undeveloped, there are no other substantial sources of shadow on-site. In addition, neighboring development to the north is low-profile in nature (e.g., a two-story commercial building and single- to two-story residences) and does not cast a substantial shadow.

4.1.2 Regulatory Requirements

State

State Scenic Highway System

Created by the California State Legislature in 1963, the California Scenic Highway Program includes highways designated by Caltrans as scenic. The purpose of the program is to protect the scenic beauty of California highways and adjacent corridors through conservation and land use regulations. For a highway or route with "outstanding scenic qualities" to be included in the program and on the list of eligible state scenic highways maintained by Caltrans, it must first be nominated by the city or county where it is located. The nomination/eligibility process entails that the city/county identify and define the scenic corridor of the highway to better understand the extent of visual resources requiring conservation. For an eligible highway to be officially designated and included in the program, the local government with jurisdiction over lands abutting the highway must implement a scenic highway

[12] California Streets and Highways Code Article 2.3 Sections 260–283

corridor protection program that safeguards the scenic appearance of the corridor. Corridor protection may be achieved through a variety of means, including regulation of land uses and intensity of development, detailed land and site planning, control of outdoor advertising, consideration of earthmoving and landscaping, and design and appearance of structures and equipment. If the local Caltrans district and Scenic Highway Program coordinators determine that the corridor protection program adequately safeguards the scenic appearance of the corridor, a recommendation to designate the highway as scenic is forwarded to the Caltrans Director (Caltrans 2008). A county highway component was later added to the California Scenic Highway Program in Section 154 of the Streets and Highways Code (Caltrans 2008). Both state and county highway nominations follow the same process and have the same requirements (Caltrans 2008). Route 27 and Route 2, the County's two officially designated state scenic highways, are located 26.5 miles southeast and 23.4 miles south of the Project site, respectively, and are not visible from the Project site (Caltrans 2022b). The nearest eligible state scenic highway, I-5, runs parallel to the Project site to the east and is visible from the Project site (Caltrans 2022b).

California Code of Regulations

Title 24 – California Building Standards Code

Title 24, California Building Standards Code, consists of regulations to control building standards throughout the state. The following components of Title 24 include standards related to lighting:

Title 24, Part 1 – California Building Code / Title 24, Part 3 – California Electrical Code

The California Building Code (Title 24, Part 1) and the California Electrical Code (Title 24, Part 3) stipulate minimum light intensities for pedestrian pathways, circulation ways, parking lots, and paths of egress.

Title 24, Part 6 – California Energy Code

The California Energy Code (Title 24, Part 6) stipulates allowances for lighting power and provides lighting control requirements for various lighting systems, with the aim of reducing energy consumption through efficient and effective use of lighting equipment. California Energy Code Section 130.2 sets forth requirements for outdoor lighting controls and luminaire cutoff requirements. All outdoor luminaires rated above 150 watts shall comply with the backlight, up light, and glare (BUG) ratings in accordance with IES TM-15-11, Addendum A, and shall be provided with a minimum of 40% dimming capability activated to full on by motion sensor or other automatic control. This requirement does not apply to streetlights for the public right of way, signs, or building facade lighting.

California Energy Code Section 140.7 establishes outdoor lighting power density allowances in terms of watts per area for lighting sources other than signage. The lighting allowances are provided by the Lighting Zone, as defined in California Energy Code Section 10-114 of the California Energy Code. Under Section 10-114, all urban areas within California are designated as Lighting Zone 3. Additional allowances are provided for Building Entrances or Exits, Outdoor Sales Frontage, Hardscape Ornamental Lighting, Building Facade Lighting, Canopies, Outdoor Dining, and Special Security Lighting for Retail Parking and Pedestrian Hardscape.

California Energy Code Section 130.3 stipulates sign lighting controls with any outdoor sign that is on during both day and nighttime hours must include a minimum 65% dimming at night. Section 140.8 of the California Energy Code sets forth lighting power density restrictions for signs.

California Vehicle Code

Chapter 2, Article 3 of the California Vehicle Code stipulates limits to the location of light sources that may cause glare and impair the vision of drivers.

Article 3, Offenses Relating to Traffic Devices (21450–21468) (Article 3 enacted by Stats. 1959, Ch. 3.), California Vehicle Code Section 21466.5 provides that no person shall place or maintain or display, upon or in view of any highway, any light of any color of such brilliance as to impair the vision of drivers upon the highway.

Regional and Local

Los Angeles County 2035 General Plan

Conservation and Natural Resources Element

The purpose of the Conservation and Natural Resources Element is to guide the long-term conservation of natural resources and preservation of available open space areas. (County of Los Angeles 2015). The Conservation and Natural Resources Element addresses several conservation areas including visual resources. The following goals and policies are intended to protect scenic and visual resources within the County (County of Los Angeles 2015):

Goal C/NR 13. Protected visual and scenic resource.

Policy C/NR 13.1. Protect scenic resources through land use regulations that mitigate development impacts.

Policy C/NR 13.2. Protect ridgelines from incompatible development that diminishes their scenic value.

Policy C/NR 13.3. Reduce light trespass, light pollution and other threats to scenic resources.

Policy C/NR 13.4. Encourage developments to be designed to create a consistent visual relationship with the natural terrain and vegetation.

Policy C/NR 13.5. Encourage required grading to be compatible with the existing terrain.

Policy C/NR 13.8. Manage development in Hillside Management Areas (HMA) to protect their natural and scenic character and minimize risks from natural hazards, such as fire, flood, erosion, and landslides.

Policy C/NR 13.9. Consider the following in the design of a project that is located within an HMA, to the greatest extent feasible:

- Public safety and the protection of hillside resources through the application of safety and conservation design standards;
- Maintenance of large contiguous open areas that limit exposure to landslide, liquefaction and fire hazards and protect natural features, such as significant ridgelines, watercourses and SEAs.

Policy C/NR 13.9. To identify significant ridgelines, the following criteria must be considered:

- Topographic complexity;
- Uniqueness of character and location;
- Presence of cultural or historical landmarks;
- Visual dominance on the skyline or viewshed, such as the height and elevation of a ridgeline; and
- Environmental significance to natural ecosystems, parks, and trail systems.

The Project's potential to conflict with General Plan goals and policies, including those related to aesthetics, is analyzed in Table 4.11-1, Potential to Conflict with Applicable General Plan Goals and Policies, in Section 4.11, Land Use and Planning, of this Draft EIR.

Santa Clarita Valley Area Plan, One Valley, One Vision (OVOV)

The OVOV is a component of the County's General Plan and is intended to provide focused goals, policies, and maps to guide the regulation of development within the unincorporated portions of the Santa Clarita Valley. This includes objectives and policies to address the goal of protecting the scenic and aesthetic beauty of the planning area (County of Los Angeles 2012). These policies are listed, below.

Objective CO-3.6. Minimize impacts of human activity and the built environment on natural plant and wildlife communities.

Policy CO-3.6.1. Minimize light trespass, sky-glow, glare, and other adverse impacts on the nocturnal ecosystem by limiting exterior lighting to the level needed for safety and comfort; reduce unnecessary lighting for landscaping and architectural purposes, and encourage reduction of lighting levels during non-business nighttime hours.

Objective CO-6.1. Protect the scenic character of local topographic features.

Policy CO-6.1.1. Protect scenic canyons from overdevelopment and environmental degradation.

Policy CO-6.1.2. Preserve significant ridgelines as a scenic backdrop throughout the community by maintaining natural grades and vegetation.

Objective CO-6.2. Protect the scenic character of view corridors.

Policy CO-6.2.1. Where feasible, encourage development proposals to have varied building heights to maintain view corridor sight lines.

Objective CO-6.5. Maintain the scenic character of designated routes, gateways, and vista points along roadways.

Policy CO-6.5.1. In approving new development projects, consider scenic views at major entry points to the Santa Clarita Valley, including gateways located at the Newhall Pass and along Lake Hughes Road, Route 126, Bouquet Canyon Road, Sierra Highway, State Route 14, and other locations as deemed appropriate by the reviewing authority.

Policy CO-6.5.2. Establish scenic routes in appropriate locations as determined by the reviewing agency and adopt guidelines for these routes to maintain their scenic character.

Objective CO-6.6. Limit adverse impacts by humans on the scenic environment.

Policy CO-6.6.1. Enhance views of the night sky by reducing light pollution through use of light screens, downward directed lights, minimized reflective paving surfaces, and reduced lighting levels, as deemed appropriate by the reviewing authority.

Policy CO-6.6.4. Where appropriate, require new development to be sensitive to scenic viewpoints or viewsheds through building design, site layout and building heights.

Objective CO-8.2. Reduce energy and materials consumption and greenhouse gas emissions in public uses and facilities.

Policy CO 8.2.4. Establish maximum lighting levels for public facilities, and encourage reduction of lighting levels to the level needed for security purposes after business hours, in addition to use of downward-directed lighting and use of low-reflective paving surfaces.

Objective CO-8.3. Encourage green building and sustainable development practices on private development projects, to the extent reasonable and feasible.

Policy CO 8.3.9. Limit excessive lighting levels and encourage a reduction of lighting when businesses are closed to a level required for security.

The Project's potential to conflict with OVOV objectives and policies, including those related to aesthetics and visual resources, is analyzed in Table 4.11-2, Potential to Conflict with OVOV Policies and Objectives, within Section 4.11, Land Use and Planning, of this Draft EIR.

Los Angeles County Code

Title 22, Planning and Zoning. Title 22, Planning and Zoning ("Zoning Code") of the Los Angeles County Code ("County Code") includes regulations concerning the location, nature, and extent of development that may occur in the County's unincorporated areas. It also establishes zone-specific height limits, setback requirements, and other development standards, for residential, agricultural, commercial, and all other types of sites. Sections of the Zoning Code applicable to aesthetics and visual resources include Chapter 22.140.170 (Density Controlled Development); Chapter 22.102 (Significant Ecological Areas); Chapter 22.104 (Hillside Management Areas); and Chapter 22.174 (Oak Tree Permit).

Chapter 22.140.170, Density Controlled Development. Chapter 22.140.170 of the Zoning Code establishes standards related to CUPs for density-controlled development. Density controlled development is accomplished by computing density on a project level rather than a lot-by-lot basis, and by the use of smaller lots than are customarily permitted in the zone in which the development is proposed, while retaining the remaining portion of such lot as permanent open space (County of Los Angeles 2022).

Chapter 22.102, Significant Ecological Areas. Chapter 22.14 (Definitions) of the Zoning Code defines an SEA as "…[l]and that is identified to hold important biological resources representing the wide-ranging biodiversity of the County, based on the criteria for SEA designation established by the General Plan and as mapped in the adopted

SEA Policy Map" (County of Los Angeles 2022). Chapter 22.102 establishes regulations to conserve the unique biological and physical diversity of the natural communities found within SEAs by requiring development to be designed to avoid and minimize impacts to SEA resources. Pursuant to Chapter 22.102.080 (SEA Conditional Use Permit), projects that are located within an SEA are subject to SEA Technical Advisory Committee (SEATAC) review, and generally require an SEA CUP, unless it is determined through SEATAC review that a project would not conflict with Sections 22.102.070 (Protected Tree Permit), 22.102.090 (SEA Development Standards) and 22.102.100 (Natural Open Space Preservation) of the Zoning Code.

Chapter 22.104, Hillside Management Areas. Per Chapter 22.14.080 of the Zoning Code, HMAs are defined as areas with 25% or greater natural slopes (County of Los Angeles 2022). The purpose of Chapter 22.104 is to ensure that development in hillside areas "…preserves and enhances the physical integrity and scenic value of [HMAs], to provide open space, and to be compatible with and enhance community character" (County of Los Angeles 2022). Pursuant to Chapter 22.104.101, the County requires that hillside development in the unincorporated areas be located outside of HMAs, to the extent feasible (County of Los Angeles 2022). If it is determined to be infeasible to locate development entirely outside of HMAs, then a project shall concentrate development in the portions of HMAs with the fewest possible "hillside constraints" and shall apply sensitive hillside design techniques tailored to the unique site characteristics (County of Los Angeles 2022).

Whereas the General Plan contains policies to preserve significant natural features in hillside areas, Appendix I of Chapter 22.104 includes the County's Hillside Design Guidelines as a mechanism to implement these policies. The Hillside Design Guidelines include specific and measurable design techniques that can be applied to residential, commercial, and other types of projects. Pursuant to Chapter 22.104.070 (Development by County of Special District), the County is required to review projects proposed wholly or partially within HMAs and prepare a written report that documents substantial compliance with the Hillside Design Guidelines. The reports are subsequently included in a Project's publicly available documents (County of Los Angeles 2022). In addition to compliance with the Hillside Design Guidelines, pursuant to Chapter 22.104.030, a CUP is required for any development located wholly or partially in an HMA. The CUP imposes required conditions of approval (COAs) (Chapter 22.104.150), including COAs pertaining to required preservation of open space (County of Los Angeles 2022).

Chapter 22.174, Oak Tree Permit. The Oak Tree Permit process is established (a) to recognize oak trees as significant historical, aesthetic and ecological resources, and as one of the most picturesque trees in the County, lending beauty and charm to the natural and manmade landscape, enhancing the value of property, and the character of the communities in which they exist; and (b) to create favorable conditions for the preservation and propagation of this unique, threatened plant heritage, particularly those trees that may be classified as heritage oak trees,[13] for the benefit of current and future residents of the County (County of Los Angeles 2022). One purpose of the permit is to preserve and maintain healthy oak trees in the development process. Damage to or removal of oak trees is prohibited unless an Oak Tree Permit is first obtained as provided under this Code section (County of Los Angeles 2022).

[13] Heritage oak trees are either of the following: any oak tree measuring 36 inches or more in diameter, measured 4.5 feet above the natural grade; any oak tree having significant historical or cultural importance to the community, notwithstanding that the tree diameter is less than 36 inches (Section 22.174.040 of the Zoning Code).

4.1.3 Thresholds of Significance

The thresholds used for the analysis of aesthetics impacts are based on the County's adopted CEQA Guidelines, which incorporates Appendix G of the State CEQA Guidelines as well as County-specific thresholds of significance. A project may be deemed to have a significant impact with respect to aesthetics if it would:

Threshold 4.1a: Have a substantial adverse effect on a scenic vista.

Threshold 4.1b: Be visible from or obstruct views from a regional riding, hiking, or multi-use trail.

Threshold 4.1c: Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Threshold 4.1d: Substantially degrade the existing visual character or quality of public views of the site and its surroundings because of height, bulk, pattern, scale, character, or other features and/or conflict with applicable zoning and other regulations governing scenic quality. (Public views are those that are experienced from publicly accessible vantage point).

Threshold 4.1e: Create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area.

4.1.4 Methodology

Visibility Analysis

To understand the anticipated extent of available public views of the Project site and more specifically, proposed residential structures, a visibility analysis for the areas within a one-mile radius of the Project's proposed grading footprint was prepared. Figure 4.1-3 depicts the proposed Project's grading footprint, the "on-site" Project boundary, and the anticipated visibility of the Project at buildout. The visibility analysis takes into consideration the Project's proposed development of 510 dwelling units with a mix of attached and detached dwelling units, and affordable senior housing, as well as a recreation center, open space, pocket parks of natural and improved open space, and associated Project infrastructure, including an approximately 45-foot-tall water tower (see Figure 3-2, Vesting Tentative Tract Map No. 83301, in Chapter 3 of this Draft EIR). Consistent with the Project Description and site plans, the maximum height of residential buildings used in preparation of the visibility analysis was assumed to be no higher than 45 feet for the proposed senior housing, and no higher than 38 feet for the proposed attached and detached townhouses. The Project's proposed approximately 150 acres of natural open space within the western and southwestern portions of the Project site was not incorporated into the visibility analysis, as these areas would not change or otherwise be affected by Project implementation. In addition, the results of the visibility analysis do not reflect potential screening associated with vegetation or other intervening built environment structures at specific vantage points in the surrounding area. Therefore, the visibility analysis is informed by the assumed maximum height of proposed residential buildings and water tower and the height of terrain within the visibility study area.

Scenic Vistas

A scenic vista generally provides long-range views of objects, settings, or features of visual interest, or panoramic (or particularly broad) views of large geographic areas of scenic quality, primarily from a given vantage point. Scenic

vistas are generally associated with public vantage points. The scenic resources that compose scenic vistas include major topographic features such as ridgelines and canyons, woodlands, biological resources (e.g., trees), water bodies, open space, parkland, and historic resources. Within the Santa Clarita Valley, scenic vistas are available throughout the unincorporated County areas, primarily from major highways, roadways, and the public trail system.

Due to the significant local and regional topography, contiguous vegetation cover, and undeveloped nature of the lands on site, to the south, southwest, and west of the Project site, scenic vistas in the vicinity of the Project site (which included all or portions of the Project site within the viewshed) are available from the adjacent segment of southbound I-5 (looking southwest towards the Project site), as well as from select portions of dedicated local and regional trails to the west, south and southeast, specifically, from segments of Taylor Trail (a local trail located adjacent and to the east), Towsley Trail (a local trail located adjacent and to the southeast), Don Mullally Trail (a looped local trail located approximately 916 feet to the south of the southern Project site boundary at its closest point), and The Rim of the Valley Trail (a regional trail located approximately 2.3 miles to the southwest of the Project site's southern boundary). The approximately 150-acre western/southwestern portion of the Project site would be preserved as undisturbed land and would not support any construction activities or proposed development which could potentially have an adverse impact on a scenic vista.

Due to intervening terrain, the northern/northwestern portion of the Project site is not visible from Towsley Trail. Therefore, the Project would not have a substantially adverse effect on the scenic vista available from the Towsley Trail. However, the northern/nonwestern portion of the Project site (which would support proposed development ranging from 26 to 45 feet) is within the public viewshed of scenic vistas available from southbound I-5 (e.g., Key View 1), Taylor Trail (e.g., Key View 5), Don Mullally Trail (e.g., Key View 6), and The Rim of the Valley Trail (e.g., Key View 7). The locations of these Key Views are illustrated on Figure 4.1-4. As such, the assessment of impacts to these scenic vistas focuses on the anticipated changes to existing viewsheds that may result from construction and operation of the Project. The intent of the analysis is to determine whether the Project would impact the quantity, quality, and variety of these scenic vistas as described in the OVOV including through development on prominent ridgelines and hillsides, increased smog and/or light pollution, obstruction of scenic views, signage and streetscape clutter, and/or aesthetically deficient development (County of Los Angeles 2012). A significant impact may occur if the Project introduces incompatible visual elements within a field of view containing a scenic vista or substantially obstructs/alters public views of a scenic vista.

Regional Trails

Regional trails are distinguished from local trails in that they extend over large expanses of land, providing a continuous route around or through areas such as mountain ranges, or around the rim of a valley. The assessment of impacts to views from a regional trail focuses on the anticipated changes to existing views that may result from the construction and operation of the Project. A significant impact may occur if the Project introduces incompatible visual elements within a field of view from a regional trail or substantially obstructs/alters public views from a regional trail.

Scenic Resources

Like scenic vistas, the assessment of impacts to scenic resources within a state scenic highway is informed by alteration of existing scenic resources (including but not limited to trees, rock outcroppings, and historic buildings) and the visibility of Project changes as experienced from a state scenic highway, county scenic highway, or historic parkway. As further illustrated in the analysis below, the nearest state scenic highway, county scenic highway, and historic parkway to the Project site are identified, and visibility of the Project is evaluated based on several factors

including distance from the nearest state scenic highway, county scenic highway, and historic parkway, and the presence of intervening features that would block or obstruct Project alterations from view. If a project would not be visible from a state scenic highway, county scenic highway, or historic parkway, then no impacts to scenic resources within the state scenic highway system would occur.

Visual Quality and Character of Public Views

The visual quality and character analysis considers whether implementation of the Project (including Project related construction activities) would represent a potentially significant impact on the visual setting of the community and the extent to which the Project would be aesthetically compatible with neighboring uses in terms of bulk and scale, architectural style, and other visual considerations, as visible from a publicly accessible vantage point. As such, this analysis evaluates locally available public views of the Project site and identifies potential view obstruction, interruption, and/or degradation that could result from implementation of the Project. It is important to note that the assessment of visual quality and character impacts is a qualitative evaluation, for which no discrete set of quantifiable parameters exists that can be applied.

Applicable Zoning and Regulations Governing Scenic Quality

The analysis discusses the Project's compliance with applicable on-site zoning, as well as other regulations governing scenic quality, including applicable zoning regulations, as well as Chapters 22.102 (Significant Ecological Areas), 22.104 (Hillside Management Areas), 22.174 (Oak Tree Permits); and 22.140.170 (Density-Controlled Developments), of the Zoning Code (County of Los Angeles 2022). The Project's potential to conflict with OVOV and General Plan goals, objectives, and polices applicable to aesthetics and visual resources is analyzed in Section 4.11, Land Use, of this Draft EIR. As stated in CEQA Guidelines Section 15382, a conflict with regulations governing scenic quality would not result in a significant impact unless it would result in an adverse physical change to the environment.

Lighting, Glare, and Shadows

The nighttime illumination and glare analysis addresses the effects of a Project's exterior lighting and/or façade on adjoining uses and areas. The analysis also addresses any potential sources of nighttime illumination and/or glare associated with Project construction activities. The shadow analysis addresses whether Project facilitated buildings or structures would block direct sunlight from adjacent properties. Light, glare, and shadow impacts are determined by comparing the existing light, glare, and shadow sources in the Project site vicinity with potential lighting, glare, and shadow associated with the Project.

4.1.5 Impact Analysis

Threshold 4.1a: Would the project have a substantial adverse effect on a scenic vista?

As discussed above, a scenic vista provides views of objects, settings, or features of visual interest, or panoramic (or particularly broad) long-ranging views of large geographic areas of scenic quality. Scenic vistas are available from Taylor Trail, Don Mullally Trail, and I-5. (For a discussion of potential Project impacts on scenic vistas available from the Rim of the Valley Trail, a regional trail located approximately 2.3 miles to the southwest at its closes point, please refer to Threshold 4.1-b.) These vistas include on-site and site-adjacent visual resources such as woodlands, hillside and valley terrain, and significant ridgelines, as well as distant views that stretch to the regional mountains and ridgelines of the Santa Susana Mountains and Simi Hills to the south and the Angeles National Forest ridgelines

to the northeast. According to the OVOV, a project could have an adverse impact on a scenic vista through development on prominent ridgelines and hillsides, increased smog and/or light pollution, obstruction of scenic views, signage and streetscape clutter, and/or aesthetically deficient development (County of Los Angeles 2012).

Construction Impacts

Project-related construction activities would require the use of construction equipment and storage of materials on the Project site. Site activities include (but not limited to) rough and precise grading for roads (including tree and vegetation removal), building pads and park spaces, utility trenching, pouring of foundations, signage and flagging, and building forms and frames, which would fundamentally alter the existing character of hillside areas within the northern/northwestern portion of the Project site that is within the public viewshed of scenic vistas available from Taylor Trail, Don Mullally Trail, and southbound I-5. The presence of construction equipment, denuded terrain resulting from grading and vegetation removal, stockpiled soils, and other materials in the northern/northwestern Project-site areas would introduce aesthetically deficient features into the existing natural setting. In addition, during late fall and winter, lighting conditions in the local Project site area may dictate that evening lighting operate during late-afternoon or evening construction, introducing a new source of lighting to the Project site (see Threshold 4.1e for a more detailed discussion of potential construction related lighting impacts).[14] A discussion of potential impacts applicable to all scenic vistas as well as analyses specific to scenic vistas available from Taylor Trail, Don Mullally Trail, and southbound I-5, are provided below.

Unlike viewers at a fixed scenic vista vantage point (e.g., tall building, bridge, mountain top) or dedicated lookout point, viewers along I-5, Taylor Trail, and Don Mullally are mobile, and the scenic vistas available from these areas are not static or limited to a particular vantage point. For example, scenic vistas along southbound I-5 are available to motorists traveling at highway speeds and construction activities on the Project site would be experienced within the viewshed for a minute or less. Although pedestrians on trails travel at a much more leisurely pace and can pause to take in the available scenic vistas, pedestrians still experience the scenic viewsheds available along local trails as a whole and are not limited to a single viewshed from a single vantage point. As such, Project-related construction impacts, which are dynamic and incorporate mobile or temporary elements (e.g., construction vehicles, stockpiles of equipment, rough grading and trenching activities), would only affect some of the views along these trails. Many similar views and vistas are continually available to viewers along these trails that do not include the northern/northwestern portion of the Project site and would therefore not be impacted by Project construction. However, as the construction period is anticipated to begin in 2024 and end in 2029, the multi-year presence of construction equipment, denuded terrain resulting from grading and vegetation removal, stockpiled soils, and other materials in the northern/northwestern Project site areas would introduce aesthetically deficient features into the existing natural setting, resulting in a potentially significant aesthetic impact during construction.

In order to address potentially significant adverse effects related to graded conditions and construction equipment, MM-4.1-1, Visual Shielding Plan, is required to improve the overall aesthetic quality of construction areas. The Plan shall require that all construction equipment be stored in the designated staging area(s) strategically placed on the northern portion of the Project site away from open-space areas and local trails to the south. Highly visible portions of the Project site (including the border of the Project site fronting The Old Road, the area near the Taylor Trailhead, and the area where the western leg of the Taylor Trail intersects with the Project site) shall be shielded from public view using a combination of temporary, opaque fencing and/or cloth screening. Upon completion of construction activities for the day, all equipment shall be consolidated in the dedicated staging area(s). Furthermore, any

[14] Currently, the only source of on-site lighting comes from the billboard adjacent to The Old Road on the northeast corner of the Project site.

equipment or machinery not in use for extended periods shall be removed from the Project site, and all construction equipment and materials throughout the Project site shall be maintained in a clean and organized manner. Although immediate views of the Project site would be partially obstructed by the visual shielding, mid- and long-range vistas of hillsides and ridgelines would still be available to the public along I-5 and local trails.

The Project site is organized into "lots", which are illustrated in Figure 3-2 of Chapter 3 of this Draft EIR. Construction activities would primarily be concentrated in the northeastern portion of the Project site. The proposed buildings (i.e., townhouses, senior housing, and recreational facility) would be located within Lots 1 through 13. The proposed water tank would be located on Lot 29 to the southwest of the residential areas. Vertical construction equipment including cranes that would have the highest potential to obstruct views would only be used during the final "vertical" phase of construction, and would be stored in the appropriate staging area(s) when not in use, per MM-4.1-1. The majority of construction equipment required for the Project, including dozers, loaders, rollers, backhoes, paving machines, and water trucks, would generally present a low vertical profile and would not be as visually prominent such that their presence in the landscape as experienced from I-5, Taylor Trail, or Don Mullally Trail would obstruct views of a scenic vista. Temporary construction staging and construction worker parking associated with the Project would be accommodated on the Project site, ensuring that construction equipment and materials would not result in streetscape clutter along The Old Road. Fencing and/or cloth screening in accordance with MM-4.1-1 would partially screen the construction staging area from view. Furthermore, while viewsheds available from I-5, Taylor Trail, or Don Mullally Trail include mid-range and/or distant scenic elements, these viewsheds also include built-environment and other urban landscape features adjacent to the north and east of the Project site (e.g., I-5/existing roadways, highway/roadway traffic, commercial and residential development, utility infrastructure, etc.). As such, Project construction, which would be limited to the northern/northeastern portions of the Project site, would not be incompatible with existing viewshed elements to the north/east.

Regarding night lighting, any required construction related lighting use would generally be limited to early evenings in the fall/winter months, would be focused on active areas of construction (as opposed to full illumination of the site), and would occur during allowable hours of construction. Use of construction night lighting would be infrequent and of short duration, and most construction activities would be completed during daylight hours. As trail use is generally limited to daylight hours, the infrequent and short-duration use of night lighting on the Project site during construction would not impact scenic vistas from the Taylor Trail or Don Mullally Trail. Furthermore, due to the lack of natural lighting, scenic views to regional mountain terrain are generally not available to motorists during nighttime hours as available views are generally limited to the I-5 corridor. Therefore, the use of construction lighting at the Project site would not contribute to a substantial source of light-pollution which could have an adverse effect on the scenic vista available from I-5, Taylor Trail, or Don Mullally Trail. (Response to Threshold 4.1e provides a more detailed discussion of construction related lighting impacts.)

The OVOV states that increased development activity in the region has a potential to contribute to smog, which adversely affects scenic vistas. Reactive hydrocarbons and nitrogen oxides (NO_x)[15] react to form secondary pollutants (primarily oxidants), which, together with sunlight, create the prerequisite conditions for the formation of photochemical smog (or smog). The Project is located within the South Coast Air Basin, where mobile sources (e.g., passenger vehicles, truck transport) account for over 80% of smog-forming pollution (SCAQMD 2022). As discussed in Draft EIR Section 4.17, Transportation, Project construction would not result in a substantial increase in vehicle trips. Heavy equipment would be delivered and removed via large flatbed trucks. However, it is anticipated that delivery of heavy equipment would not occur on a daily basis, but rather periodically throughout the construction phase based on need. In addition, as Project grading would balance soils onsite, no import or export of soils would

[15] NO_x is a general term pertaining to compounds of nitric oxide, nitrogen dioxide, and other oxides of nitrogen.

be required and haul trips on public roadways near the Project site would be minimal. Finally, as discussed in Section 4.3, Air Quality, of this Draft EIR, the South Coast Air Quality Management District (SCAQMD) sets applicable thresholds for construction-related NOx emissions. These thresholds are intended to reduce criteria air pollutants in general, including emissions that contribute to smog and reduced visibility (SCAQMD 2022). As demonstrated in Section 4.3, for regional and localized significance thresholds, MM-4.3-1, Construction Methods, would reduce construction-related NOx emissions to levels substantially below the SCAQMD threshold. For these reasons, Project construction would not be anticipated to contribute to a substantial increase in smog.

Analyses specific to illustrative scenic vista vantage points along I-5, Taylor Trail, and Don Mullaly Trail are discussed in further detail below.

I-5 South Scenic Vistas (e.g., Key View 1). Scenic vistas of the Simi Hills and the distant Santa Susana Mountains are available from southbound I-5 (see Key View 1 in Figure 4.1-4 for an aerial showing viewer location, and Figure 4.1-5a for existing and conceptual Project site viewsheds as experienced from motorists facing southwest on I-5 South). Due to the nature of construction, vehicles and equipment would move around the Project site (i.e., these elements would not be in any one location for a prolonged period) as the various phases of construction are completed. As a result, views of construction equipment and related activities in hillside areas and elsewhere throughout the Project grading footprint would only be intermittently available during the construction period. In addition, as viewed from mobile vantage points available from I-5, construction activity and related effects on the Project site would only be momentarily experienced by viewers traveling at highway speeds through the area and would not encompass the entirety of available views. Furthermore, Project construction equipment, materials, and activities would not be out of character with other common visual elements in the I-5 viewshed (e.g., occasional roadwork, trucks/passenger vehicles, and adjacent development; see existing conditions in Figure 4.15a, which shows adjacent commercial development and roadway infrastructure). Finally, MM-4.1-1, discussed above, requires visual screening (e.g., a combination of temporary fencing/cloth screening) and the storage of construction equipment in appropriate staging areas when not in use. These required measures would minimize potential adverse impacts to views from I-5 during the construction phase.

Taylor Trail Scenic Vistas (e.g., Key View 5). Scenic vistas of the regional terrain and in particular, the prominent hillsides and ridgelines to the west and northwest of the Project site, are available from Taylor Trail, including where the trail intersects the western Project site boundary (see location of Key View 5 in Figure 4.1-4 for relative location of viewer). Construction activities on the Project site would alter available public views from trail users along Taylor Trail to the west and northwest. While activities such as vegetation removal, grading, development of building pads, pouring of foundations, and erection of building frames would be experienced by trail users, development on the Project site would occur on hillsides and flatter terrain that are not visually prominent in the context of the wider viewshed that includes tall and rugged ridgelines and peaks to the west in the background. The broadest scenic vistas available along Taylor Trail are available from the most elevated portions of the trail (e.g., where the trail climbs to over 1,400 feet amsl). These long-range vistas would not be substantially obstructed by Project construction, as the proposed vertical structures on the Project site (including the two- and three-story townhomes closest to the trail alignment) would be situated at a lower elevation than trail users and would not exceed 45 feet. Regarding Key View 5, building frames and forms of proposed townhouses (and site landscaping depending on height at planting) adjacent and to the northwest of the Key View 5 vantage point could obstruct available views to the northwest. However, because foreground construction activities would only occur in close proximity to trail users over a trail segment length of approximately 300 feet, unencumbered views to the northwest and west would be retained after passing this lower lying trail segment. Furthermore, as discussed above, available viewsheds along Taylor Trail include existing urban forms and infrastructure to the north and east, which require occasional

construction and maintenance activities. Thus, Project construction would not be substantially incompatible with the existing viewshed elements. MM-4.1-1 would require construction equipment to be stored in appropriate staging areas away from the Taylor Trail intersection when not in use, which would minimize potential adverse visual impacts.

Don Mullally Trail (e.g., Key View 6). Key View 6 represents one of several vantage points available along Don Mullaly Trail. Scenic regional features including prominent ridgelines are visible along portions of the Don Mullally Trail that are within approximately 916 feet south of the Project site's southern boundary and 0.47 mile south of the Project's grading footprint. However, this trail segment is in a small canyon at an elevation of approximately 1,430 feet amsl. The elevation of intervening topography of over 1,500 feet amsl screens the northern/northeastern portion of the Project site from view of trail users at this location. From more distant segments of the Don Mullally Trail (including the segment located approximately 0.69 mile to the southeast of the Project's grading footprint range from 1,670 feet amsl to 1,770 feet amsl), views to the northern/northwestern portion of the Project site that would be developed and transformed by Project construction activities would be available (this vantage point is represented in Key View 6 in Figure 4.1-4). North- and northeast-facing scenic vistas from elevated segments of the Don Mullally Trail located over 0.69 mile from the Project's development footprint (e.g., Key View 6) consist of broad views that encompass development to the east and west of the I-5 corridor throughout the Santa Clarita Valley and stretch to distant ridgelines in the background viewing distance. Project related construction activities and effects, which would be partially visible on lower elevation hillsides and relatively flat terrain located over 0.69 mile away from trail segments situated at elevations ranging from 1,670 feet amsl to 1,770 feet amsl, would not obstruct available views. Project construction would not occur on visually prominent ridgelines within the viewshed experienced from the Don Mullally Trail or result in the obstruction of scenic views available from segments of the Don Mullally Trail to the southeast of the Project site. Furthermore, and as discussed above, this viewshed includes urban elements adjacent to the north and east of the Project site which represent sources of existing lighting and require occasional construction/maintenance activities. Thus, Project construction would not be substantially incompatible with existing viewshed elements. Furthermore, MM-4.1-1 requires visual screening and appropriate storage of construction equipment when not in use on the northern portion of the Project site away from the trail. These required measures would minimize potential adverse impacts to views from the Don Mullally Trail during the construction phase.

For the reasons discussed above, including (but not limited to) the mobile nature of viewers and dynamic quality of the scenic vistas available to motorists traveling along southbound I-5 and trail users along the Taylor Trail and Don Mullally Trail, elevation differences between the Project site and relative scenic vista vantage points, intervening topography and vegetation, avoidance of construction activity or equipment on significant ridgelines, concentration of construction activity and equipment on the northern/northwestern portion of the Project site, lack of long-range nighttime scenic vistas, lack of smog-related-impacts, primary use of low vertical profile construction equipment, limited duration of construction activities, the presence of existing urban viewshed elements (including buildings and occasional construction and maintenance activities), and implementation of MM-4.1-1 and MM-4.3-1, the scenic vista impacts associated with Project-related construction activities and the presence of construction equipment on the Project site would be less than significant with mitigation.

Operational Impacts

While implementation of the Project would introduce new development and other improvements to an undeveloped site, the proposed uses would be visually compatible with the land uses to the north, northeast, and east, which are largely composed of residential developments similar to the Project. The on-site residential development would include two- to three-story townhouses on Lots 2 through 9 ranging from 26 feet to 38 feet in height and a senior

housing facility with a maximum height of 45 feet on Lot 10, which would incorporate simple lines and be appropriately scaled to be in accordance with the surrounding environment (see Figure 4.1-7, Design and Architectural Styles, and Figure 4.1-8, Senior Citizen Housing). A one-story recreation facility (approximately 20 feet tall) would be located on Lot 13. All buildings would be finished in light sand-colored stucco, with tan, brown, and/or terra cotta concrete "S" tile roofing. Other vertical features on site include an approximately 45-foot-tall water tower located on Lot 29 southwest of the residential area. All electrical infrastructure, including transmission lines, would be underground. The overall planting palette, composed of shade and accent trees, screening shrubs and hedges, groundcovers, vines, and lawn, has been designed to reflect a distinctive sense of place for the Project. A total of 750 ornamental trees and 772 native/mitigation trees would be planted on site (see Figure 3-7, Landscape Plan in Chapter 3 of this Draft EIR which depicts the existing and proposed vegetation on the northern portion of the Project site, proximate to proposed dwelling units). Combined, the compact layout, building design, and landscaping would result in a cohesiveness of design across the developed portion of the Project site. Thus, development of the site with residential and associated uses would not result in an aesthetically deficient development.

In addition, the Project would comply with existing County requirements and laws regulating development in visually sensitive areas (e.g., hillside areas, SEAs), which would reduce impacts to on-site scenic resources included in viewsheds available from I-5, Taylor Trail, and Don Mullally Trail. Pursuant to Chapter 22.140.170 (Density Controlled Development) of the Zoning Code, the Project would employ a density-controlled development program that would cluster development in the lower-lying, northeastern area of the Project site closest to the I-5 corridor. As illustrated in Figure 3-1 of Chapter 3 of this Draft EIR, the Project would conserve approximately 150 acres of the Project site as natural open space. The natural open space would be contiguous and concentrated in the southern/southwestern portion of the Project site and would include many of the Project site's important visual resources, include HMAs, oak woodland habitat, and the on-site, County-designated significant ridgeline. The Project would also be required to comply with Chapter 22.104 (Hillside Management Areas) of the Zoning Code and would implement design features to comply with applicable Hillside Design Guidelines standards (Chapter 22.104, Appendix I), which would further minimize any impacts to hillside areas which could potentially degrade the quality of scenic viewsheds.[16] As discussed further in Sections 4.4, Biological Resources, and 4.11, Land Use and Planning, of this Draft EIR, the Project would also comply with Chapters 22.102 (Significant Ecological Areas) and 22.174 (Oak Tree Permit) of the Zoning Code, which further regulate the location, nature, and extent of development allowable within SEAs, and the disturbance and/or removal of oak trees, respectively.

As listed in Section 4.1.2, Regulatory Requirements, to reduce potential impacts to scenic vistas resulting from increased development in the County's unincorporated areas, the General Plan and the OVOV include goals, objectives, and policies related to the preservation of topography, open space, woodlands, and other scenic resources. The Project's potential to conflict with these elements is evaluated in Section 4.11, Land Use and Planning, of the Draft EIR. As provided in Tables 4.11-1 and 4.11-2, in Section 4.11, the Project would not conflict with any goals, policies, or objectives set forth in the General Plan or OVOV related to aesthetics or visual resources.

As shown on Figures 3-1 and 3-6 of Chapter 3 of this Draft EIR, the Project would construct a paved access road (the existing unpaved Lyons Ranch Road) along the outer northern and western edge of the development area that would serve as a part of an on-site, multi-use trail system and would connect to existing non-dedicated trails in the south/southwest portions of the Project site. As shown on Figure 4.1-2, an existing non-dedicated trail would be dedicated to the County as part of the Project. This proposed dedicated on-site trail (labeled "Existing Trail to be Dedicated" on Figure 4.1-2) and the paved access road (labeled "Proposed Trail" on Figure 4.1-2), would be

[16] For a more detailed discussion of compliance with Hillside Design Guidelines, please refer to the discussion under Threshold 4.1d, below, as well as Section 4.11, Land Use and Planning, of this Draft EIR.

available for public use. Some of the non-dedicated, on-site trails (which are currently private) would, as a result of Project implementation, become public, dedicated trails and would provide access to views of on-site features, including the County-designated significant ridgeline, as well as other hillside and valley terrain supporting grassland, shrubland, and woodland communities within the Santa Susana Mountains/Simi Hills SEA. The Project would also construct a new trailhead near the gated connection of the paved access road to The Old Road at the northeastern corner of the Project, which would encourage access and use of the on-site trails. As depicted on Figure 4.1-2, the on-site proposed to-be-dedicated trails would connect to adjacent public open spaces and trail networks outside of the Project's boundaries, including the City of Santa Clarita's Rivendale Park and Open Space in Towsley Canyon to the south. Therefore, the on-site trails proposed by the Project would increase connectivity to the existing public trail system and ensure that access to views of on-site visual resources (and access to views of other undeveloped lands to the west and south) would be preserved.

Discussions specific to illustrative scenic vista vantage points along I-5, Taylor Trail, and Don Mullaly Trail are discussed in further detail below.

I-5 Scenic Vistas. The OVOV and the OVOV Program EIR suggest that vistas available from I-5 are particularly scenic and of importance to the community in the "gateway" area of I-5 approximately 3.5 miles southeast of the Project site. Here, motorists entering the Santa Clarita Valley from the south are exposed to the first views of the area, its topography, and vegetation. Due to distance and intervening topography, the Project site is not visible from the I-5 gateway area to the southeast. Therefore, the Project would not have a substantially adverse effect on the scenic "gateway" area of I-5. With respect to the segment of I-5 adjacent to the Project site, scenic long-range views that stretch to regional mountains and ridgelines including the Santa Susana Mountains and Simi Hills are occasionally available to motorists traveling south on I-5. The views available from I-5 as depicted in Figure 4.1-5a, Key View 1, of I-5 South (Looking Southwest), constitute a scenic vista as they offer broad, long-range views of objects, settings, or features of visual interest (e.g., distant mountains and ridgelines). As such, development of the Project site is analyzed below for its potential to affect available public views from I-5 to the Santa Susana Mountains and Simi Hills.

An existing and proposed representative view from I-5 south toward the Project site and distant Santa Susana Mountains is presented in Figure 4.1-5a.[17] As illustrated by the proposed view conditions in Figure 4.1-5a, the Project would result in development of the existing north facing hillside areas and the disturbed areas of the Project site's mostly flat northeastern corner. However, due to strategic clustering of development away from any significant ridgelines, and relative heights of proposed on-site buildings and structures (i.e., a maximum height of 45 feet for the senior facility and water tower, and a maximum of 38 feet for proposed townhouses) the Project would not obstruct long range views of the regional mountains and ridgelines including the Santa Susana Mountains and Simi Hills to the south. The low-profile nature of the development, together with required setbacks, fuel modifications zones, ribbons of open space areas in the northern portion of the Project site, and the extensive use of native, broad trees, including coast live oaks (*Quercus agrifolioa*) and western sycamores (*Platanus racemose*), in the proposed landscaping along the northern and eastern Project site perimeters (see Figure 3-7, Landscape Plan, in Chapter 3 of this Draft EIR), the Project, as viewed from I-5 facing southwest, would appear to transition seamlessly into surrounding undeveloped areas to the south and west. Proposed development, concentrated within the northern portion of the site, would be viewed as a similarly scaled extension of existing development adjacent and north of the Project site. In addition, the Project would remove the existing billboard that interrupts views of the ridgelines

[17] This analysis focuses primarily on the Project impact of a scenic vista, which in this instance refers to the distant mountains and ridgelines of the Santa Susana Mountains and Simi Hills available from I-5. For more immediate on-site impacts to foreground views, please refer to the analysis of Key View 1 in Threshold 4.1d.

when viewed from the north along I-5 thereby improving the aesthetics of the streetscape in the foreground and improving views of the Santa Susana Mountains and Simi Hills ridgelines, which act as the skyline in the viewshed background. The Project would comply with all necessary California Building Code and California Vehicle Code requirements applicable to lighting and glare. (For a more detailed discussion of Project related lighting and glare impacts, please refer to the analysis provided under Threshold 4.1e, below). For the reasons discussed above, the Project would not result in a substantial adverse impact to a scenic vista available from I-5.

Don Mullally Trail. Scenic vistas from the elevated Don Mullally trail segments (including the segment located approximately 0.69 mile to the southeast of the Project grading footprint ranging from 1,670 feet amsl to 1,770 feet amsl) vary slightly depending upon vantage point, but all generally include views of vegetated hillside and valley terrain in the foreground, the developed, urban areas of the valley floor (including the residential communities of Newhall Ranch and Stevenson Ranch west of the development studded I-5 corridor, as well as additional low-profile development to the east of I-5) in the midground, and a continuous backdrop of prominent ridgelines in the Angeles National Forest and surrounding areas to the north in the background. The Project site is located near existing urban development to the north, northeast, and east. As north and northeast facing scenic vistas from the Don Mullally Trail are characterized by broad, long-range views that incorporate an array of natural and manmade visual elements, the Project, which would be partially visible in the midground of the viewshed, would appear to blend into the surrounding development along the I-5 corridor, including similarly low-profile residential development to the north, northeast, and east. The undeveloped hillsides in the foreground of the scenic vista from Don Mullally Trail would not be obstructed. Due to the difference in elevation, (e.g., approximately 1,730 feet amsl along the elevated portions of the Don Mullally Trail and a maximum of 1,654 amsl at the Project site), the height limits of proposed development (i.e. a maximum of 45 feet for the water tower and senior facility and 38 feet for the proposed townhouses), and intervening distance (i.e. approximately 0.69 mile), the Project would not obstruct views of the distant ridgelines of the Angeles National Forest in the background, and would therefore not result in a substantial adverse impact to a scenic vista available from Don Mullally Trail.

Taylor Trail. Views from Taylor Trail and in particular, the trail segment nearest to the Project site, the development of Lyons Canyon with two- and three-story residential uses, landscaping, roads, site amenities and improvements would alter the available canyon and hillside scene and transform the Project site. However, and as discussed in the construction analysis above, onsite terrain does not encompass visually prominent terrain and hillsides as experienced from the trail and the height of two- and three-story residential structures across the Project site would generally be similar to or slightly greater than the surface elevation of the nearest trail segment. While structures could result in a brief view obstruction of foreground views from the trail (such as from the segment of the trail that intersects with the Project site), view obstructions would be limited to the north and northwest. The quality of views to the west and southwest to regionally prominent terrain would be maintained for trail users. Further, view obstruction potential would occur over an approximate 300-foot-long trail segment and after passing the area nearest to the proposed residential structures (the nearest of which would be located in Lot 5 to the west of the trail and Lots 6 and 7 to the north), Project visibility would be reduced and effects on views would be minimized. Therefore, due to the brief duration of potential view blockage, the avoidance of visually prominent ridgelines and hillsides as experienced from the trail, and because the Project would develop a compact, clustered development offering a mix of housing units in various typologies that would present an overall compatible visual scene, Project development would not result in substantial adverse impacts to scenic views for trail users from Taylor Trail.

As discussed under the construction impact analysis above, unlike viewers at a fixed scenic vista vantage point (e.g., tall building, bridge) or dedicated lookout point, viewers on I-5, Taylor Trail, and Don Mullally are mobile, and the scenic vistas available from these areas are not static or limited to a particular vantage point. Views and vistas

are dynamic and changing, and many similar views and vistas are continually available to viewers from these locations that do not include the northern/northwestern portion of the Project site and would therefore not be impacted by the Project. While the Project would be within the viewshed of certain scenic vistas available from the Taylor Trail, Don Mullally Trail, and I-5 corridor, a substantial adverse effect would not occur as the Project would: be low-profile in nature and visually consistent with the neighboring urban environment to the north, northeast, and east; reduce streetscape clutter through the removal of an existing roadside billboard; comply with applicable Hillside Design Guidelines and other applicable provisions of the Zoning Code regulating development in HMAs; and implement clustering of residential development, allowing for minimization of the Project's development footprint, and the preservation of the majority of the site as natural land. The preserved lands would include visually sensitive elements such as HMAs, the on-site significant ridgeline, and biological resources within an SEA. Further, as discussed in Section 4.3, Air Quality, the Project would not be anticipated to contribute to a substantial source of smog that could obstruct views of distant regional mountains and ridgelines. As discussed further under Threshold 4.1e, operational lighting would not result in substantial light pollution that could obstruct views of distant regional mountains and ridgelines, including the Santa Susana Mountains and Simi Hills to the south, or the Angeles National Forest ridgelines to the north. Therefore, the Project would not result in a substantial adverse effect on a scenic vista available from I-5 South, Taylor Trail, or Don Mullally Trail, and impacts would be less than significant.

Threshold 4.1b: Would the project be visible from or obstruct views from a regional riding, hiking, or multi-use trail?

The assessment of impacts to existing views from a regional trail focuses on the anticipated changes to existing views that may result from the construction and operation of the of the Project. The intent of the analysis is to determine if views from a regional trail are available in the Project site vicinity and if so, whether the Project could substantially obstruct, interrupt, or degrade existing available views. As discussed in Section 4.1.1, Existing Conditions, the Trails Master Plan, a comprehensive trails planning document, identifies two regional riding, hiking, and/or multi-use trails in the southeast Santa Clarita Valley Planning Area: the Santa Clara River Trail, located approximately 3.8 miles north of the Project site, and the Rim of the Valley Trail, approximately 2.3 miles south (see Figure 4.1-1) (DPR 2018a; HMDB 2022). Due to distance, topography, and intervening development, the Project site is not visible from any portion of the Santa Clara River Trail, which follows the course of the Santa Clara River through lower lying areas of the valley to the north. However, the Rim of the Valley Trail is located along prominent ridgelines of the Santa Susana Mountains to the south of the Project site. These elevated ridgeline areas offer broad, sweeping views of Santa Clarita Valley, including the distant mountains and ridgelines of the Angeles National Forest to the north and northeast. The north/northeast-facing scenic vistas available from the Rim of the Valley Trail segments closest to the Project site include hillside and canyons in the foreground (hillside and canyon terrain including the Project site extends to the midground as well), the developed, urban areas of the Santa Clarita Valley floor in the midground, and a continuous backdrop of prominent ridgelines framing the Santa Clarita Valley to the north in the background.

Construction Impacts

Project-related construction activities would require the use of construction equipment and storage of materials on the Project site. Although distant views of graded areas, stockpiled soils, and other materials generated during construction could potentially be visible from the Rim of the Valley Trail, these activities would not be largely discernable due to the intervening distance from the Project site (i.e., over 2 miles). Furthermore, at approximately 3,000 amsl, the Rim of the Valley Trail is at a significantly higher elevation than the Project site (approximately 1,654 feet amsl at the southwest corner to approximately 1,300 feet amsl at the northeast corner), thus, key visual resources in the foreground (e.g., hillsides and canyons) and available vistas of the Santa Clarita Valley and more distant terrain including mountains and ridgelines of the Angeles National Forest would not be obstructed by

construction activities on the Project site. Additionally, the Project's temporary construction elements would only affect some of the long-range views along this trail. For example, as the Project site is located to the north of the trail, views to the east, west, and south would not be affected by the Project. Furthermore, the long-range viewshed from this trail includes built-environment and other urban landscape features that are adjacent to the north and east of the Project site. These features represent sources of existing lighting and require occasional construction/maintenance activities. As such, Project construction would not be incompatible with the other existing viewshed elements visible from the Rim of the Valley Trail. For the reasons discussed above, Project-related construction activities would not be incompatible with existing viewshed elements and would not obstruct trail-user views from the Rim of the Valley Trail. Therefore, impacts would be less than significant.

Operational Impacts

As discussed above, although the Project site is within view of the Rim of the Valley trail, a regional multi-use trail, due to an intervening distance of over 2 miles, visual resources (e.g., hillsides and canyons) in the foreground of the views and vistas available from the Rim of the Valley Trail would not be obstructed by the Project at build out. Further, at 3,000 amsl, the Rim of the Valley Trail is at a significantly higher elevation than the Project site, which ranges from approximately 1,654 feet amsl at the southwest corner to approximately 1,300 feet amsl at the northeast corner. The tallest features on-site would be approximately 45 feet, which, due to the elevated viewing angle and distant location of viewers along the Rim of the Valley Trail, would not be visually prominent such that Project structures would obstruct long-range views. As such, visual resources in the midground and background of the viewshed (e.g., the urbanized valley floor, the distant mountains, and ridgelines of the Angeles National Forest) would not be obstructed or interrupted as a result of Project implementation.

The Project site is near existing urban development to the north, northeast, and east. Although the Project site would be visible from a regional riding, hiking, or multi-use trail, the north and northeast facing scenic vistas available from the regional Rim of the Valley Trail include an array of natural and manmade visual elements, including urban development along the I-5 corridor and on the floor of the Santa Clarita Valley. Due to clustering of development, building design ranging from 26 to 45 feet in height, landscaping and passive or active open space, improved open space, and preservation of approximately 150 acres of contiguous, natural open space in the southern/southwestern portion of the Project site (the area of the Project site located closest to the Rim of the Valley Trail), the Project would not be a prominent or particularly defining feature in available views of the site from trail users. Rather, Project elements would visually blend in with existing developed areas in the midground of the viewshed, including residential neighborhoods to the immediate north of the Project site and other urbanized areas along the I-5 corridor. Further, due to distance, the difference in elevation between nearest segments of the Rim of the Valley Trail and the Project site, Project elements including residential structures, landscaping, and necessary utilities such as water tanks, would not obstruct views of the undeveloped hillsides in the foreground, nor the distant long-range views of the ridgelines of the Angeles National Forest in the background available to users of the Rim of the Valley Trail. Therefore, the Project would not obstruct available views from a regional riding, hiking, or multi-use trail, and impacts would be less than significant.

Threshold 4.1c: Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

As discussed in Section 4.1.1, there are no officially designated scenic highways that pass by the Project site (Caltrans 2022b). Route 27 and Route 2, the County's two officially designated state scenic highways, are located 26.5 miles southeast and 23.4 miles south of the Project site, respectively. Additionally, the nearest officially designated county scenic highway is over 20 miles to the south, and the nearest officially designated federal historic

parkway (the Arroyo Seco Historic Parkway) is over 30 miles to the southeast. The Project site is visible from I-5, an eligible state scenic highway, and on-site scenic resources within view of the I-5 corridor include grassland, shrubland, and woodland habitats within the Santa Susana Mountains/Simi Hills SEA, as well as hillside areas, including HMAs and a significant ridgeline (County of Los Angeles 2015). While development of the Project site as proposed would alter the character of existing hillside and valley terrain and would require the removal of on-site vegetation communities in development areas to accommodate future residential and associated uses, no corridor protection program has been developed or implemented for I-5, and thus, it has not been officially designated as scenic by the state. Further, due to the size of the Project site in relation to the wider landscape visible from the I-5 corridor in the vicinity, proposed development of the site would not substantially affect the potential for the I-5 corridor to be officially designated as scenic by the state should the County ever prepare a corridor protection program and seek further scenic designation. For these reasons, the Project would not substantially damage scenic resources within a state scenic highway, and impacts would be less than significant.

Threshold 4.1d: Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings because of height, bulk, pattern, scale, character, or other features and/or conflict with applicable zoning and other regulations governing scenic quality? (Public views are those that are experienced from publicly accessible vantage point)

The General Plan recognizes that mountain vistas and other scenic features of the region are a significant resource (County of Los Angeles 2015). According to the OVOV, scenic features and resources can include natural open spaces, topographic formations, and landscapes that contribute to a high level of visual quality (County of Los Angeles 2012). These are significant resources that can be maintained and enhanced to promote a positive image in the community (County of Los Angeles 2012). Many people associate natural landforms and landscapes with scenic resources, such as mountain meadows and oak woodlands (County of Los Angeles 2012). These areas, generally felt by residents to possess natural beauty, provide a positive visual experience, and help to define the aesthetic character of an area (County of Los Angeles 2012). Scenic resources can also include man-made open spaces and the built environment, such as parks, trails, nature preserves, and similar features (County of Los Angeles 2012).

In addition to views available from the nearby The Old Road and I-5 corridor, the Project site is adjacent to a network of dedicated public trails to the south and southeast which provide direct views of the Project site. Views provided in Figures 4.1-6a through 4.1-6d represent vantage points along The Old Road and I-5. Further, the visibility analysis provided in Figure 4.1-3 provides an overview of the percentage of the Project site that can be viewed from locations along nearby local hiking trail vantage points, including Taylor Trail and Don Mullally Trial. These views include important topographic features (e.g., significant ridgelines, HMAs) and biological resources (e.g., oak woodlands and other natural communities) which are considered significant resources within the Santa Clarita Valley Planning area that contribute to a high level of visual quality and help define the aesthetic character of the Project site and surrounding area (County of Los Angeles 2010, 2012, 2015).

The Project's potential to substantially degrade the existing visual character or quality of public views of the Project site and its surroundings, as well as the Project's potential to conflict with applicable zoning or other regulations governing scenic quality, are analyzed below. The visual character and quality analysis considers whether implementation of the Project (including Project related construction activities) would represent a potentially significant impact on the visual setting of the community and the extent to which the Project would be aesthetically compatible with neighboring uses in terms of bulk and scale, architectural style, and other visual considerations, as visible from a publicly accessible vantage point. This analysis evaluates locally available public views of the

Project site and identifies potential view obstruction, interruption, and/or degradation that could result from implementation of the Project.

Construction Impacts

During construction, activities including the removal of miscellaneous structures (i.e., fencing, a metal frame bridge, billboard, metal drainage pipe, etc.), site preparation, including vegetation removal, grading, building construction, and paving across the Project site would alter and transform the existing visual character of the on-site undeveloped hillside and valley terrain. In addition, construction activities would require the use of construction equipment and vehicles which would "activate" the Project site and introduce mobile construction vehicles and equipment not generally associated with the existing Project site. Also, excavated areas, stockpiled soils, and other materials generated during the duration of construction activities could impact the visual quality and character of the Project site and surrounding environment. However, consistent with typical construction best management practices implemented for protection of areas from stormwater pollutants, active areas of construction would be maintained to avoid scattering of trash across the Project site. Construction phasing would facilitate the orderly development of Project elements and would limit the areas of the Project site that are experiencing construction activities at any given time. As such, construction phasing would limit the amount of construction-related visual impacts at a given time. As noted above, construction equipment would be staged on site and the types of equipment would be specific to the phase of construction. Construction of the Project would also be limited to the northern/northeastern portions of the Project site, and views of the southern portion of the Project site would remain natural open space. In addition, the erection of fencing and/or cloth screening around active construction zones and the designated staging area(s) would reduce overall visibility of construction equipment, materials, and activities from viewpoints at similar elevations of the Project site, such as The Old Road, I-5, the Taylor Trailhead, and the intersection of the western leg of the Taylor Trail with the Project site. Visual shielding would not block views of construction activities, equipment, and materials from higher elevations; however, in accordance with MM-4.1-1, all construction-related equipment and materials on the Project site shall be stored in the designated staging area(s) when not in use and shall be maintained in a clean and organized manner. Furthermore, there are urban landscape features located adjacent to the north and east of the Project site that require occasional construction/maintenance activities, which would be visible from viewpoints at higher elevations. Therefore, Project- construction would not substantially degrade views of the Project area when compared to existing conditions. With implementation of MM-4.1-1, and for the reasons discussed above, construction related impacts to visual character and quality of public views of the Project site and its surroundings would be less than significant with mitigation.

Operational Impacts

Photo simulations were prepared to depict views of the Project from public vantage points surrounding the Project site including heavily trafficked I-5. As opposed to an exhaustive investigation of visibility and depiction of with and without Project conditions, the identification of key viewpoints and presentation of photo simulations provide representative views of the Project site with and without Project development. To that end, key views were established on I-5 (proposed Key View 1 [Figure 4.1-5a] and Key View 2 [Figure 4.1-5b]) and The Old Road (proposed Key View 3 [Figure 4.1-5c] and Key View 4 [Figure 4.1-5d]). Key Views 1 through 4, as well as views from Taylor Trail (Key View 5) and Don Mullally Trail (Key View 6), are representative of typical public views that a motorist, pedestrian, trail user, bicyclist, or equestrian would observe in the immediate Project site vicinity. An overhead map showing the key view locations is provided in Figure 4.1-4. Although the Project site is visible from other dedicated trails south/southeast of the Project site, Taylor Trail is located immediately adjacent to the on-site areas within the Project's proposed grading footprint (as opposed to the park and recreational areas to the south/southeast, which are adjacent to the portions of the Project site which would be preserved as natural open space).Therefore, views

from Taylor Trail represent the "worst case scenario" of the Project at buildout as viewed from any public trail in the vicinity.

In addition to the key view locations, and as illustrated on Figure 4.1-3, public views of the Project would be available from several of the local, dedicated trails to the south and southeast of the Project site, intermittently from a segment of Sagecrest Circle to the immediate west of The Old Road, from private yards of residences off Sagecrest Circle, and nearby areas to the east of the I-5 corridor. Mountainous terrain to the west and south would provide views to approximately 40% to 80% of the Project site (see yellow and orange coloring on Figure 4.1-3). However, these areas encompass ridgelines and other steep terrain that are not crossed by public trails and thus, are either difficult to access or provide no dedicated public access. Regarding trails, available views to portions of the Project site would generally be limited to Taylor Trail (located in close proximity to the south and east of the Project site; see Figure 4.1-3) and the more distant trail to the south of the Project site (see label for "Ed Davis Park at Towsley Canyon" on Figure 4.1-3). From these trail segments, between approximately 1% and 20% of the Project site would be visible—the remaining balance of the site would be obscured or blocked by intervening terrain. Regarding lands to the immediate north, the visibility analysis suggests that views of portions of the Project site would also be available from the private rear yards of nearby residences off Sagecrest Circle. However, CEQA does not specifically protect private views; therefore, the analysis focuses on public views.

To the east of the Project site, the visibility analysis of Figure 4.1-3 suggests that views to portions of the Project site (between 1% and 20%) would be available to I-5 motorists and generally, residential lands (and currently vacant lands along Wiley Canyon Road) to the east of the Project site and I-5. Lastly, while Figure 4.1-3 suggests that views to between 20% and 80% of the Project site may be available from elevated terrain to the east of I-5, these areas generally encompass private lands inaccessible to the public and/or private residential properties. Due to the intermittent and partially blocked nature of available views to the Project site from Sagecrest Circle and because views from residential properties to the north comprise private views, photo simulations were not prepared from Sagecrest Circle nor from private residential properties along Sagecrest Circle.

As illustrated by the proposed view conditions in Figures 4.1-5a through 4.1-5d, the Project would result in development of existing undeveloped hillsides and disturbed areas of the Project site's mostly flat northeastern corner. The Project would involve the removal of existing grassland, shrubland and wooded habitats, as well as removal of the existing on-site billboard. The attached and detached homes visible from public vantage points surrounding the Project site would predominantly incorporate two- to three-story buildings ranging from 26 feet to 38 feet in height. These residential buildings would include simple lines, a light sand stucco finish, and tan, brown, and/or terra cotta concrete "S" tile roofing. The maximum height of any on-site building would be four stories or 45 feet; however, buildings of this height would be limited to Lot 10,[18] which would be screened by proposed landscaping (see proposed Key Views 1 and 3 illustrated in Figures 4.1-5a and 4.1-5c, respectively), or otherwise obstructed from view by topography and/or other proposed development (see proposed Key Views 2 and 4, illustrated in Figures 4.1-5b and 4.1-5d, respectively). Buildings visible from public vantage points around the Project site would be predominantly light sand in color, with earthy brown and/or jewel-toned embellishments of green and blue incorporated into the trims, eaves, corbels, and doors. The proposed homes throughout Lots 2 through 9 would exhibit either Irving Gill, Spanish Modern, or Wrightian architectural styles, which are common throughout much of the architectural landscape in the Santa Clarita Valley, and include cubed shapes and simplicity of form, with slight variations upon closer inspection, such as curved entryways (Irving Gill) or craftsman style-wood façade detailing around windows (Wrightian) (see Figure 4.1-7). Lot 10, which includes the 48 unit senior housing building, would incorporate design elements from both the Wrightian and Irving Gill architectural styles, and would

[18] See Figure 3-2 in Chapter 3 of this Draft EIR for the location of proposed lots and a land use summary table of the Project site.

be scaled and finished to blend into the surrounding residential community (see Figure 4.1-8). These architectural styles, together with a coordinated color palate, would help achieve a cohesiveness of design across the developed, northern portion of the Project site, which would contribute to the visual quality of the Project site as viewed from public vantage points.

As illustrated in the proposed view scenarios depicted in Key Views 1 through 4 (Figures 4.1-5a through 4.1-5d), the most prominent and visible Project features, as observed from I-5 and The Old Road, would include two to three-story attached homes on Lots 7, 8, and 9. In Key View 1 (Figure 4.5-5a), in addition to the two to three-story attached homes, the 45-foot tall senior housing building on Lot 10 is visible to the north. As viewed from Taylor Trail (Key View 5), the most visible aspect of the Project's developed features would be the two to three-story detached homes within Lots 5, which is located in the northeastern portion of the Project site adjacent to the Taylor Trail open space.

The highest density development on site would be located within Lot 2 (i.e., 18.8 dwelling units per acre). As viewed from The Old Road and I-5 (Key Views 1 through 4), development of Lots 2, 3, 4, 5, and 6, as well as proposed infrastructure on the western hillside areas (e.g., the debris basin on Lot 14 and the 45-foot tall water tank on Lot 29) would largely be screened or otherwise obstructed from public view due to the planned development within Lots 7, 8, and 9 and landscaping along the Project site's perimeter, which would include native coast live oaks, western sycamores, and other ornamental trees and shrubs. As viewed from Taylor Trail (Key View 5), development on Lots 2, 3, 4, 8, 9, and 10 would be screened by topography, proposed landscaping, and proposed residential development within Lots 5, 6, and 7. Proposed landscaping for the Project site is illustrated in Figure 3-7 of Chapter 3 of this Draft EIR. In addition, an existing stand of trees, which includes a large, mature oak, adjacent to the northeast corner of the Project site would remain and partially screen the proposed development within Lots 8 and 9, as viewed from the northeast (Key Views 1 and 3).

While the existing hillside closest to The Old Road would be graded to accommodate two to three-story attached homes within Lots 7 (to the east) and 6 (toward the Project-site center), this area would remain elevated in comparison to public vantage points along The Old Road, I-5, Taylor Trail trailhead, and the Taylor Trail segment closest to The Old Road. Grading activities occurring on the hillside, as well as elsewhere throughout the Project site, would incorporate required drainage and erosion control measures, and would be designed in accordance with the standards set forth in the California Building Code, which, in addition to minimizing risks from erosion, would ensure graded areas remain visually compatible with the existing terrain. While necessary Project elements, including retaining walls, detention basins, and the elevated water tank in the western hillside area of the Project site, may be visible from surrounding trail segments, these structures and features would be experienced within the context of the overall Project and would not be viewed as singularly defined objects. Regarding retaining walls, the largest walls (up to 16-feet high) would be installed in the northern portion of the Project site, would be relatively distant from the Taylor Trail, and generally obscured from view of trail users by intervening Project development including two- to three-story residential structures and landscaping. As with all outward facing hillside areas within the Project's development footprint, the east facing hillside adjacent to The Old Road would be landscaped with a mix of native and ornamental trees, shrubs, and groundcover, which would help support a seamless transition into the undeveloped areas to the south and southeast. The proposed landscaping adjacent to The Old Road would also screen proposed residential development within Lot 7 as viewed from the east.

As visible from Taylor Trail facing west and north, the Project would result in obstructions and interruptions of existing public views of scenic natural resources, including mid-range views of on-site hillside and valley terrain, contiguous vegetated areas, heritage oak trees, and undisturbed lands to the west of the Project site. Although views looking north from Taylor Trail already include existing developed areas, the Project would develop land that is in closer proximity to the trail and therefore would be more visible. However, as depicted in Figure 4.1-3, only

between approximately 1% and 20% of the Project site would be visible from Taylor Trail (the remaining balance of the site would be obscured or blocked by intervening terrain), meaning that that the majority of the viewshed from Taylor Trail would not be obstructed, interrupted or otherwise degraded as a result of Project implementation. As depicted in Figure 4.1-5d. adjacent to the southern side of "Street B", the Project would include features to create a more naturalized transition between the development on the Project site and the off-site open space areas to the south (including the Taylor Trail trailhead and parking lot). "Street B" would be lined on both the north and the south side of the street with a mix of small and medium street trees spaced 25-feet on center. In addition to the trees, the south side of the "Street B" right-of-way would include either a retaining wall or a 6-foot-tall treated chain-link fencing and associated screening shrubs (e.g. laurel sumac, sweet bay, Indian laurel, coffeeberry). The shrub screening in the "B Street" right-of-way would be followed by varying distances of slope plantings, native habitat plantings, and bioretention rim planting that would continue to the southern edge of the Project site to facilitate a smooth a visual transition.

Further, and as discussed under Threshold 4.1a, above, onsite terrain does not encompass visually prominent terrain and hillsides as experienced from Taylor Trail and the height of two- and three-story residential structures across the Project site would generally be similar to or slightly greater than the surface elevation of the nearest trail segment. While structures could result in brief view blockage from the trail (such as from the segment of the trail that intersects with the Project site), view blockage would be limited to the north and northwest. The quality of views to the west and southwest to regionally prominent terrain would be maintained. Further, view blockage potential would occur over an approximate 300-foot long trail segment and after passing the area nearest to residential structures, Project visibility would be reduced and effects on views would be minimized.

As previously discussed, the clustering of development within the Project's northeastern areas would allow for approximately 150 acres of undeveloped lands in the southern/southwestern portion of the Project site to remain natural open space. This would be assured through required compliance with COAs set forth by the density-controlled development CUP. The preserved lands would include valuable visual resources, including HMAs, grasslands, shrubland, and woodlands within an SEA, and the on-site significant ridgeline. Therefore, due to the brief duration of potential view blockage, the avoidance of visually prominent ridgelines and hillsides as experienced from the trail, and because the Project would develop a compact, clustered development offering a mix of housing units in various typologies that would present an overall compatible visual scene, Project development would not result in substantial obstruction or interruption of scenic views from Taylor Trail.

As discussed under Thresholds 4.1a and 4.1b, while implementation of the Project would introduce residential uses and other improvements to an undeveloped site, the proposed uses are compatible with the land uses to the north, northeast, and east, which are largely composed of residential developments similar to the Project. While the Project would be visible from public vantage points represented in Key Views 1 through 4, and elsewhere along dedicated trails to the south and south east, and would partially obstruct and/or interrupt existing views of existing visual resources (particularly from Key View 5 at the Taylor Trail), the Project would not substantially degrade the visual quality and character of the Project site or surrounding areas as the Project would develop a high-quality mix of residential components, attached, and detached homes and senior housing, with a focus on natural open space conservation and orderly development of the Project site. As described above, the Project would be scaled and visually consistent with neighboring urban development, and the homes provided would be of a quality that meets and/or exceeds that of adjacent and nearby homes. Furthermore, the natural open space, on-site trails, and trail head improvements proposed by the Project would serve to provide important missing linkages in the existing dedicated trail network and would expand trail facilities consistent with the objectives of the Santa Susana Trails

Master Plan. These linkages would preserve access to on-site visual resources, as well as views of undeveloped and undisturbed lands to the west and south.

As discussed in Section 4.11, Land Use and Planning, even with proposed clustering, the parcels to be developed on the Project site would be of sufficient size to accommodate required yards, landscaping, and setbacks, which would incorporate climatically appropriate landscaping, and would provide a visual "break" from developed areas visible to the public. The Project would also result in improvements to the public streetscape along The Old Road. The Project would reduce streetscape clutter through the removal of an existing roadside billboard and the undergrounding of existing overhead utility lines and would include a new 8-foot-wide concrete sidewalk to be installed along the western frontage of the Project site for use by the public (see proposed Key View 3). In addition, and as discussed in further detail below, the Project would be consistent with applicable zoning and other regulations governing scenic quality in the unincorporated County areas, including Chapters 22.102 (Significant Ecological Areas), 22.104 (Hillside Management Areas), 22.174 (Oak Tree Permits); and 22.140.170 (Density-Controlled Developments), of the County Code, as well as applicable goals, policies, and objectives contained in the OVOV and General Plan. Therefore, although the Project would result in limited obstruction and/or interruption of views from publicly accessible vantage points, for the reasons described above, including the limited nature of visibility from I-5, The Old Road, and dedicated trails in the Project site vicinity (including Taylor Trail and Don Mullally Trail as illustrated in Figure 4.1-3), the high-quality nature and cohesiveness of design exhibited by on-site development and landscaped areas (as illustrated in Figure 3-7 in Chapter 3 of this Draft EIR, as well as Figures 4.1-7, and 4.1-8), the preservation of approximately 150 acres of the Project site as natural open space, the inclusion of on-site pocket parks and HOA maintained open spaces, and compliance with existing regulations, the Project would not result in the substantial degradation of visual quality or character of the Project site and surrounding areas, and impacts would be less than significant.

Applicable Zoning

Zoning is used as a tool to regulate building components, including components that affect the visual quality of development, such as building height, use types, and the "necessary, proper, and comprehensive groupings and arrangements of the various industries, businesses, and population of the unincorporated area of the County" (Zoning Code Section 22.02.020). By demonstrating compliance with applicable zoning, conflicts related to aesthetics are less likely to occur, as zoning regulations indicate the extent and type of suitable development permitted by the County "in accordance with a well-considered master plan of land use for the development of the entire County…" (Zoning Code Section 22.02.020).

As depicted on Figure 2-7, Existing Zoning Designations, of Chapter 2, Environmental Setting, of this Draft EIR, the Project site has the following zoning designations: Heavy Agricultural (A-2-2 and A-2-1) and Unlimited Commercial-Development Program (General Commercial [C-3] and General Commercial-Development Program [C-3-DP]). The Project would include residential development (i.e., attached and detached townhouses) within the C-3-DP, A-2-1, and A-2-2 zones and senior housing within the A-2-1 and C-3-DP zones. The residential building component of the senior housing facility would be entirely within the 8.04-acre C-3-DP zone, with portions of the proposed accessory parking lot, as well as the primary means of vehicular ingress/egress, located on portions of A-2-1 zoned land.

As stated in County Zoning Code Section 22.16.030 and 22.20.030, the Project's proposed development of townhouses and senior housing (i.e., adult residential facilities serving seven or more persons) are conditionally permitted within the C-3 and A-2 zones. As discussed in Chapter 3 of this Draft EIR, the Project would require a CUP for the following: development in a Hillside Management Area; development in a Significant Ecological Area; density-controlled development; grading in excess of 100,000 cubic yards; development of townhouses within the A-2 zone;

and an administrative housing permit to facilitate the increased production of affordable housing and senior citizen housing. In accordance with State Density Bonus Law, and as part of the administrative housing permit, the Project Applicant is requesting the following incentives:

- Request to allow surface parking for very-low-income senior housing to be located within an A-2-1 zone.
- Request to allow the applicability of Density-Controlled Development (DCD) in the C-3-DP-zoned portion of the Project site.

Additionally, the Project Applicant is requesting the following waivers:

- Maximum Height as provided by County Code Section 22.16.050(B)
  - The Project requests to exceed maximum height of 35 feet in the underlying A-2 zone and seeks a maximum height of 38 feet above grade within the A-2 zone.
- Building Separation as provided by County Code 22.110.050(A)(1)
  - The Project requests to allow 9 feet of building separation instead of 10 feet of building separation.
- Maximum retaining wall height per County Code 22.110.070(B)(4)
  - The Project requests a maximum retaining wall height of 17.5 feet.
- Multi-family housing in DCD development per County Code 22.140.170(C)(3)
  - The Project proposes senior affordable housing in the C-3-DP-zoned portion of the Project site.
- Natural Open Space Preservation of 65% of Project site per County Code 22.102.100(A)(2)(a)
  - The Project proposes the permanent preservation of approximately 66% of the Project site as natural open space.
- Retaining Walls Topped with Walls or Fences per LACC 22.110.070(B)(4)(b)
  - The Project includes retaining walls that are topped by non-view-obscuring fences in both cut and fill conditions. These fences would exist in required yards in some circumstances, and would not exceed six feet in total height.

The CUP requires conditions of approval for the Project. Once the CUP is approved, including the requested incentives and waivers, the Project would be in compliance with applicable zoning regulations governing scenic quality. In accordance with required development standards, Project development would not exceed 45 feet in the C-3-DP zone (County Zoning Code Table 22.20.040-A). Therefore, the Project would not conflict with applicable zoning regulations governing scenic quality, and impacts would be less than significant.

Other Regulations Governing Scenic Quality

Chapter 22.102, Significant Ecological Areas

As discussed in Section 4.4, Biological Resources, the Project site and surrounding adjacent area are within the Santa Susana Mountains/Simi Hills SEA. Chapter 3 (SEA Protected Trees) of the Los Angeles County SEA Ordinance Implementation Guide (Implementation Guide; County of Los Angeles 2020) describes tree protection regulations. Protected Trees are designated by species and trunk diameter of a minimum listed size specific to each SEA. As detailed in the Biota Report (provided as Appendix C of this Draft EIR), the Project site includes 664 SEA-Protected Trees within the survey area. Of the 664 SEA-Protected Trees, which include southern California black walnut, Fremont cottonwood, coast live oak, scrub oak, valley oak, red willow, arroyo willow, and blue elderberry, a total of

51 are classified as heritage trees, including 46 coast live oaks and 5 valley oaks. A total of 334 of the SEA-Protected Trees would be impacted by the Project, including 312 non-heritage trees and 22 heritage trees (Appendix C).

As the Project site's SEA Protected Trees currently provides aesthetic benefits such as shade and canopy coverage, removal of these trees could result in degradation of the site's existing visual quality. However, as detailed further in Draft EIR Section 4.4, at a minimum, removal of any SEA Protected Tree would require mitigation in the form of two replacement plantings for non-heritage trees and ten replacement plantings for heritage trees, which would require 772 replacement trees to be planted. In accordance with MM-4.4-16 (discussed in Section 4.4 of this Draft EIR), the required replacement trees would be planted where suitable growing conditions are present and would remain in perpetuity, growing to provide verdant canopy coverage that mimics the valued visual elements of the existing SEA Protected Trees proposed for removal. Furthermore, the Project would be required to demonstrate compliance with the requirements of Chapter 22.102 of the Zoning Code through a Burden of Proof statement detailing how the Project will meet each SEA finding. Therefore, the Project would not conflict with elements of Chapter 22.102, Significant Ecological Areas pertaining to scenic quality.

Chapter 22.104, Hillside Management Areas

According to the OVOV, topographical features such as ridgelines and hillsides have "valuable aesthetic and visual qualities intrinsic to the Valley landscape" (County of Los Angels 2012). The Project site is within a HMA defined in the Zoning Code (Section 22.104) as having 25% or greater natural slopes. Specifically, the Project site consists of a number of natural hillside areas containing slopes exceeding 25% and 50% grade. The Project site is also designated as Residential 2 (H2) per the OVOV. Regarding the Residential 2 (H2) designation, OVOV states: "density-controlled development (clustering), in accordance with the provisions of the Zoning Ordinance, is encouraged on lands with significant environmental and/or topographical features or resources, in order to preserve open space for protection of these natural features or resources, or to provide recreational amenities" (County of Los Angeles 2012). As such, the Project would utilize density-controlled development (per Chapter 22.140.170 of the Zoning Code). In compliance with the Hillside Design Guidelines, development would be located on the flattest portion of the Project site (Design Measure 1.2), which would allow for the preservation of contiguous open space on the southern portion of the Project site (including hillsides and a County-designated significant ridgeline), as well as improved open space and landscaped areas ribboned through the developed northern portions of the Project site (please refer to section 4.11, Land Use and Planning, for a more detailed discussion of compliance with Chapter 22.104). As such, the Project would not conflict with the provisions set forth in Chapter 22.104 (HMAs) or Appendix I (Hillside Design Guidelines) of the Zoning Code governing the scenic quality of hillsides.

Chapter 22.174, Oak Tree Permits

Project construction would follow standard avoidance and protective measures consistent with the purpose as outlined in Chapter 22.174.010 of the Zoning Code. The Project would preserve oak trees and associated vegetation in large portions of the Project site through preserving open space areas in the southerly and westerly portions of the Project site. Oak trees and associated vegetation are considered important visual resources on the Project site. Although oak trees are proposed for removal, the Project would receive a permit to facilitate allowable removal. Further, even with the proposed removal of individual trees to accommodate proposed development, a substantial number of existing trees would remain on site (in particular, in the southern portion of the site that would not be developed) and this area would retain and convey its existing natural qualities. As such, the Project would not conflict with Chapter 22.174, Oak Tree Permits, of the Zoning Code, for the purposes of regulations governing scenic quality.

Chapter 22.140.170, Density-Controlled Development

Consistent with OVOV's direction, to avoid developing on open hillsides and other sensitive areas, the Project Applicant is requesting approval of a Density-Controlled Development CUP to allow the Project's proposed development to be clustered on approximately 41 acres of the Project site positioned proximate to the Project frontage on The Old Road and adjacent to existing development along the I-5 corridor. In total, the area of land within the Project's grading limits, as well as a surrounding construction buffer area, includes 72.55 acres that are in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space. Through the Density-Controlled Development CUP, the Applicant will be able to preserve approximately 175 acres of the approximately 233-acre Project site as natural and improved open space, including approximately 150 acres of contiguous open space to the south, allowing the Project to visually blend into the public, undeveloped park and recreation areas to the south. The Project would comply with the requirements of Chapter 22.140.170, Density-Controlled Development, of the Zoning Code.

Potential Conflicts with the General Plan and the OVOV

Applicable policies from the General Plan and OVOV listed in Section 4.1.2, Regulatory Requirements, above, are designed to enhance and protect scenic resources that contribute to the County's valued views. For example, in accordance with Policy CO 10.25, the Project would utilize clustering of development to retain approximately 150 acres of natural on-site open space in the southern portion of the Project site, as well as ribboned throughout the developed areas to the north. By concentrating growth near existing adjacent development and the I-5 corridor, open space would continue to provide a scenic landscape and backdrop to Project as viewed from public vantage points. The Project's potential to conflict with other OVOV and General Plan goals, objectives, and policies applicable to aesthetics and visual resources is analyzed in Section 4.11, Land Use, of this Draft EIR. As determined in Section 4.11, the project would not conflict with goals, objectives, and/or polices governing scenic quality set forth in either the General Plan or the OVOV, and impacts would be less than significant within mitigation incorporated (specifically, MM-4.4-16 from Section 4.4, Biological Resources, related to SEA Protected-Tree impacts)

As evidenced by the above analysis, the Project would not conflict with regulations governing scenic quality, including Chapters 22.102 (Significant Ecological Areas), 22.104 (Hillside Management Areas), 22.174 (Oak Tree Permits); and 22.140.170 (Density-Controlled Developments), of the Zoning Code, as well as applicable goals, policies, and objectives contained in the OVOV and General Plan, and impacts would be less than significant with mitigation incorporated.

Threshold 4.1e: Would the project create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area?

Construction Impacts

Construction activities associated with the Project may occur Monday through Saturday, 6:30 a.m. to 8 p.m., as permitted by Chapter 12.12, Building Construction Noise, of the County Code (County of Los Angeles 2022). As such, during most of the year, nighttime lighting would not be required during construction; however, during late fall and winter, lighting conditions in the local Project site area may dictate that evening lighting operate at construction sites. Under this scenario, typically dark evening views of the Project area would potentially be affected by temporary use of lighting on the construction site. Due to the nature of construction, vehicles and equipment would move around the site (i.e., these elements would not be in any one location for a prolonged period) as individual phases of activity are completed. Thus, the temporary use of lighting in one particular area would not operate for an

extended duration and construction lighting, if needed, would be directed to specifically illuminate active areas of construction. As trail use is limited to daylight hours, views from dedicated trails would not be available at night, therefore, nighttime views from trails would not be adversely affected by Project-related construction activities. Further, roadside construction activities and lighting are commonplace along the I-5 corridor.

During construction, windows and exteriors of construction vehicles and equipment would represent sources of potential localized glare capable of being received at off-site locations. Glare may be generated during hours of active construction and when vehicles and equipment are stored on site; however, due to the mobile nature of vehicles and equipment, glare is not anticipated to be received at any one location for a particularly long duration of time. Rather, glare generated by construction activities may be briefly experienced at off-site locations with views toward active areas of construction but would not be visible elsewhere in the visual landscape. In addition, the proposed Project building materials predominantly include non-reflective material, including light-sand colored stucco, neutral terracotta or brown-toned concrete "S" tile, and wood (see Figures 4.1-7 and 4.1-8). Due to the limited use of construction lighting, as well as the use of predominantly non-reflective building materials, which would not result in a substantial source of lighting or glare, the Project would not adversely affect day or nighttime views in the area, and short-term construction impacts would be less than significant.

Operational Impacts

Lighting and Glare

The long-term development and occupancy of residences on the Project site would result in new sources of light and glare primarily from interior and exterior lights on/in the new residences, and street and ambient lighting along onsite streets. These varied sources of lighting could impact the nearby areas by illuminating areas that have not had nighttime lighting in the past and could contribute to an overall increase in the area's ambient lighting.

Although the Project site is proximate to lands within the Rural Outdoor Lighting District (Chapter 22.80, Rural Outdoor Lighting District of the Zoning Code), the Project site itself is not within the Rural Outdoor Lighting District boundary and is therefore not required to comply with applicable Chapter 22.80 Zoning Code provisions (County of Los Angeles 2014). However, as previously discussed, the Project would utilize a clustered development program to minimize impacts associated with the Project footprint, which would subsequently minimize the footprint of on-site lighting and light spillage onto adjacent areas, including open space areas. The Project site would not include prohibited outdoor lighting, as detailed in Chapter 22.80, including drop-down lenses, mercury vapor lights, ultraviolet lights, or searchlights, laser lights, or other outdoor lighting that flashes, blinks, alternates, or moves. Outdoor lighting on-site would be maintained in good repair and function as designed, as the Project's lighting would be managed by the on-site HOA. Additionally, outdoor lighting would be fully shielded on-site. The preservation of approximately 150 acres of contiguous natural open space in the south and southwest portion of the Project site would result in lighting being absent within most of the Project site (i.e., natural open space areas). Furthermore, as discussed in Section 4.4, Biological Resources of this Draft EIR, the Project Applicant is required to implement MM-4.4-12, Lighting Plan, requiring preparation and submittal of a lighting plan to the County for approval. At a minimum, MM-4.4-12 would provide a lighting plan that would adhere to the Rural Outdoor Lighting District requirements. For the purposes of potential biological resource impacts, the plan must demonstrate compliance with the Chapter 22.80 of the Zoning Code. The lighting plan shall prioritize safety while minimizing environmental effects, emphasizing low, shielded lighting that avoids native habitats and prevents light spillage. The lighting shall be minimal in intensity and duration, utilizing warm sources like low-pressure sodium, high-pressure sodium, and low-color-temperature light emitting diodes, with a maximum of 2,200 Kelvins. Certain lighting types, such as mercury vapor and fluctuating lights, are prohibited. Additionally, construction materials must be non-reflective, and

landscape screens are recommended to guard native habitats from vehicle glare. Although the Project's lighting and glare impacts from a visual resources perspective would be less than significant without mitigation, compliance with MM-4.4-12 (required to address potentially significant biological resources impacts) would further minimize new sources of light and glare associated with the Project.

As previously discussed in Section 4.1.2, Regulatory Requirements, the California Building Code has several development standards to control lighting. In accordance with the California Building Code, the Project would be required to incorporate lighting with minimum light intensities for pedestrian pathways, circulation ways, parking lots, and paths of egress for safety and wayfinding. All exterior lighting would be in compliance with the California Building Code. Further, for development proposed within on-site HMAs, the Project would be required to comply with the sensitive hillside design measures set forth in the County's Hillside Design Guidelines (Appendix I of Chapter 22.104 of the Zoning Code), which include specific measures for residential streetlights and limits residential lighting for security purposes. These measures include requirements to incorporate downward-projecting, hooded light fixtures that minimize light trespass, and would help ensure that the Project would not adversely affect nighttime views. As stated previously, MM-4.4-12 requires that the lighting plan prepared for the Project address and confirm to the Rural Outdoor Lighting District, as well as other detailed requirements. These measures would align with the requirements of the Rural Outdoor Lighting District to minimize lighting intrusion to off-site, open space areas.

The Project would consolidate light and glare sources toward the northeast portion of the Project site where there are currently light and glare sources from streetlights and vehicles traveling along The Old Road and I-5 to the east, the existing commercial lighting from the commercial building and parking lot to the north (which includes security lighting), and residential lighting from the residential development to the north. Further, residential development on the Project site would not be constructed with glare-producing materials. As illustrated in Figures 4.1-7 and 4.1-8, buildings would be finished in light sand colored stucco and terracotta or neutral brown toned concrete "S" tile roofing. Reflective materials would be limited to the recessed vinyl windows, and a limited amount of glare produced by required street and walkway lights, decorative exterior lighting, and address signs. The Project would comply with Title 24 standards related to solar photovoltaics (e.g., solar panels) on residential buildings. The Project would also include solar panels on the recreation center in accordance with MM-4.8-3 (discussed in Section 4.8, Greenhouse Gas Emissions, of this Draft EIR). Although the required solar panels have the potential to produce glare during sunlight hours, solar panels are generally designed to absorb light and employ anti-reflective coatings and textures to reduce glare. Glare from these panels would only be occasionally experienced at acute angles and from higher-elevation vantage points. Furthermore, localized glare is currently present in this area as a result of overhead streetlights, security lighting in the adjacent commercial parking lot, and passing vehicles. In addition, the California Vehicle Code requires "limits to the location of light sources that may cause glare and impair the vision of drivers." Consistent with the California Vehicle Code, "no person shall place or maintain or display, upon or in view of any highway, any light of any color of such brilliance as to impair the vision of drivers upon the highway." As the Project would not introduce a substantial source of highly- reflective material to the Project site and would comply with the sensitive hillside design measures set forth in the County's Hillside Design Guidelines applicable to lighting, the Project would not contribute to an excess of glare along The Old Road frontage and would therefore not conflict with provisions of the California Vehicle Code.

For the reasons discussed above, with the Project's use of non-reflective building material and residential clustering to limit the Project's development footprint and compliance with applicable provisions of the Zoning Code, California Vehicle Code, and California Building Code, Project lighting and materials would be contained within the Project site

and would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Therefore, the impact associated with lighting and glare during operation would be less than significant.

Shadows

As the Project site is undeveloped, there are no substantial sources of shadow on-site. Impacts related to shade and shadow are of most concern when tall buildings are proposed adjacent to low-profile sensitive uses, such as single-family residential communities, or active agricultural production, which relies on appropriate sun exposure. There is no active agricultural production occurring in the areas adjacent to the Project site. The Project buildings would range in height from approximately 26 to 45 feet, which, due to the Project's proposed setbacks and building placement, including clustering of buildings to reduce the development footprint, would not arise to a level of prominence necessary to result in a shadow nuisance. In addition, the neighboring residential development to the north is, on average, at a higher elevation then the Project site, and would not be impacted by shadow cast by Project buildings. Therefore, the Project would not create a new source of substantial shadow, and impacts would be less than significant.

4.1.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines Cumulative impacts are considerable if the incremental effects of an individual project are considerable when viewed in connection with the effects of past, present, and reasonably foreseeable future projects (i.e., cumulative projects). Cumulative projects used for this analysis are presented in Table 2-2 of Section 2.6, Cumulative Impacts, and on Figure 2-8, Cumulative Projects Location Map, of Chapter 2 of this Draft EIR. The geographic context for the cumulative analysis, as it relates to aesthetics, is the local area surrounding the Project site (which includes development in the immediately surrounding areas). This is considered the area within view of the Project site, and therefore, the area most likely to experience changes in visual character or experience light and glare impacts from the Project. Cumulative impacts require the analysis of other projects located within the Project viewshed. Therefore, of the cumulative projects included in Table 2-2 and Figure 2-8 of Chapter 2, the following aesthetics analysis analyzes the cumulative impacts of the following cumulative projects: LA1, Canyon View Estates; LA2, Tentative Tract Map 74979; LA3, Aidlin Hills; LA13, Conditional Use Permit for Clock Tower; and SC1, Wiley Canyon.

Threshold 4.1a Would the project have a substantial adverse effect on a scenic vista?

Although the Project specific impacts to scenic vistas are less than significant (as discussed above), a cumulatively considerable impact could potentially occur if (1) Cumulative Projects LA1, LA2, LA3, LA13, and SC1 were to independently propose development on prominent ridgelines and hillsides, increase smog and/or light pollution, obstruct scenic views along various roadways, add street signage and streetscape clutter, and propose aesthetically deficient development, resulting in an impact (significant or otherwise), and (2) if the combined result of these project-specific impacts along with the proposed Project could be determined to have a cumulatively substantial adverse effect on a scenic vista.

In order for there to be a cumulative effect to a particular scenic vista, construction and/or operation of Project and one or more of cumulative projects would need to be visible within a single viewshed. There is a potential for this scenario to occur along the Rim of Valley Trail and elevated segments of the Don Mullally Trail to the south, and possibly other elevated trail locations to the south and/or public roadway segments to east of the Project site (such

as along Wiley Canyon Road). Further, as the Project and Cumulative Projects LA2, LA13, and SC1 are currently in the planning phase, there is a potential for all three projects, including the proposed Project, to be under construction at the same time.[19] For a viewer to be able to see multiple project sites within a single viewshed, they must be located at a relatively substantial distance from the Project site and related project sites and at a higher elevation. For example, the Rim of the Valley Trail is located over 2 miles from the Project site vicinity, and the segment of the trail offering vistas of the local vicinity are over 3,000 feet amsl, while the Project and cumulative projects' sites generally range from approximately 1,300 amsl to slightly over 1,700 amsl. Similar to the Project, Cumulative Projects LA1, LA2, LA3, LA13, and SC1 are located adjacent to existing development to the east and west of the I-5 corridor. The Project, along with the cumulative projects, are predominantly residential, which would be visually compatible with the land uses adjacent or near to the Project site (e.g., low-profile, residential development, neighborhood serving and general commercial uses), with the exception of LA13, which is a wireless telecommunication facility project. As such, although the Project and cumulative projects may be visible within a single viewshed (e.g., from distant and relatively elevated vantage points such as the Rim of the Valley Trail), these views would include an array of visual elements and vistas, of which the cumulative projects and the Project would only be a component. As proposed development is compatible with surrounding existing development, the Project and cumulative projects would blend into existing urban landscape located along the I-5 corridor and throughout the lower-lying Santa Clarita Valley areas. The existing scenic viewsheds would not be obstructed, and the combined effect of scenically compatible development would be less than significant. Additionally, Cumulative Projects LA1, LA2, and LA3 all contain open space lots, which would provide a visual buffer between development of the respective projects and the surrounding open space areas of the Santa Clarita Valley.

In addition, the cumulative projects would be required to comply with existing laws regulating development in visually sensitive areas. For the Project, Cumulative Projects LA1, LA2, LA3, and LA13, this would include compliance with County Zoning Code provisions set forth in Chapters 22.104 (Hillside Management Areas and Appendix I, Hillside Design Guidelines), 22.102 (Significant Ecological Areas), and 22.174 (Oak Tree Permit) of the Zoning Code, which would further minimize any impacts to hillside areas and scenic biological resources (including oak trees), which could potentially degrade the quality of scenic viewsheds. Although Cumulative Project SC1 does not appear to include any HMAs, Cumulative Project SC1 would be required to comply with Santa Clarita Municipal Code Section 17.51.040 (Oak Tree Preservation), as well as the City's Community Character and Design Guidelines, and all applicable development standards pursuant to the Santa Clarita Municipal Code.

As established above, in order for the Project and one or more of cumulative projects to be visible within a single viewshed, viewers would need to be standing at a relatively distant and elevated vantage point, such as the Rim of the Valley Trail to the south. Regarding construction activities and the presence of construction equipment (or any other construction related features which could potentially cause view blockages), the relative elevation of the viewer (i.e., over 3,000 feet amsl at the Rim of the Valley Trail vantage point) compared to elevation of Project and cumulative project construction sites (ranging from 1,300 amsl to slightly over 1,700 amsl), would mean that there is low potential for view blockages to occur. Regarding potential smog impacts, the SCAQMD sets applicable thresholds for construction-related NOx emissions. These thresholds are intended to reduce criteria air pollutants in general, including emissions that contribute to smog and reduced visibility. The Project and cumulative projects are required to comply with all applicable SCAQMD thresholds and impose mitigation, as necessary, to ensure impacts are reduced to less than significant levels. Although the region in general suffers from adverse visual impacts due to smog formation, the Project's contribution would not be cumulatively considerable due to implementation of required mitigation measures aimed at reducing NOx though the use of Tier 4 Final or better

[19] Cumulative Project LA1is already approved and would likely be completed prior to construction of the Project or Cumulative Projects LA2 and SC1.

diesel engines during construction (see MM-4.3-1 in Draft EIR Section 4.3, Air Quality) and a Transportation Demand Management Program aimed at discouraging single-occupancy vehicle trips, which can contribute to smog formation through vehicle exhaust (see MM-4.17-2 in Draft EIR Section 4.17, Transportation).

Due to differences in elevation, construction and operation of the Project and Cumulative Projects LA1, LA2, LA3, LA13, and SC1 would not result in view obstructions which would adversely affect a scenic vista available from a public vantage point. Further, the Project and cumulative projects would blend into existing urban landscape located along the I-5 corridor and would be required to comply with existing City and County laws regulating scenic quality. These laws include preservation of open space and hillside management (which would minimize adverse impacts to visual resources with the viewshed of a scenic vista. The Project, in combination with Cumulative Projects LA1, LA2, LA3, LA13, and SC1, would not have a substantially adverse effect of a scenic vista, and impacts would not be cumulatively considerable.

Threshold 4.1b: Would the project be visible from or obstruct views from a regional riding, hiking, or multi-use trail?

As discussed above, the Project and cumulative projects would be visible from select portions of the regional Rim of the Valley Trail. However, due to elevation differences and the relative distance of the Rim of the Valley Trail to the Project and cumulative projects, these views would include an array of visual elements and vistas, of which the cumulative projects and Project would only be a component. Similar to the Project, Cumulative Projects LA1, LA2, LA3, LA13, and SC1 are located adjacent to existing development to the east and west of the I-5 corridor and would generally include residential land uses visually compatible with the other nearby land uses (e.g., low-profile residential development). The Rim of the Valley Trail is located approximately 2.3 miles to the south/southwest and at a significantly higher elevation (i.e., over 3,000 feet) than the Project and cumulative projects. As such, due to distance, elevation, and the types of development proposed (i.e., lower profile residential and limited commercial and/or mixed uses) buildout of the Project and cumulative projects would appear to blend into the existing urban landscape along the I-5 corridor and throughout the low-lying Santa Clarita Valley areas. Further, the Project and cumulative projects (including construction activities) would generally only be visible in the midground of the viewshed and due to distance and elevation differences, would not obstruct views in the foreground (of hillside and canyon terrain) or background (of the mountains and ridgelines of the Angeles National Forest and surrounding areas).

Although the local Project vicinity (including Cumulative Projects LA1, LA2, LA3, LA13, and SC1) would be distantly visible from the from the Rim of the Valley Trail, the Project, in combination with the cumulative projects would not be a prominent feature in the viewshed or obstruct views from a regional riding, hiking, or multi-use trail. Further, as the elevation of the Rim of the Valley Trail (i.e., over 3,000 amsl) is substantially higher than all Cumulative Projects (LA1, LA2, LA3, LA13, and SC1) elevations, obstruction related to construction or implementation of the Project and cumulative projects would not occur. Because the Project and cumulative projects are located over 2 miles to the north and at lower elevations than Rim of the Valley Trail, the Project and cumulative projects would not obstruct scenic elements within the viewshed, and impacts to views from a regional trail would not be cumulatively considerable.

Threshold 4.1c: Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

As discussed in Section 4.1.1, there are no officially designated scenic highways in the local vicinity of the Project or cumulative projects. However, the Project and Cumulative Projects LA1, LA2, LA3, LA13, and SC1 would be visible from I-5, an eligible state scenic highway. Scenic resources within view of the I-5 corridor on the Project site, the

sites for Cumulative Project LA1, LA2, and LA13, include hillside areas (including HMAs) and oak woodlands. The site for Cumulative Project SC1 is relatively flat to gently sloping and does not include any HMAs. Although Cumulative Project SC1 site supports scattered trees, there do not appear to be any woodland areas, or other particularly scenic on-site elements, such as rock outcroppings.

While development of the Project site and Cumulative Projects LA1, LA2, LA3, and LA13 would alter the character of existing hillside and valley terrain and would require the removal of on-site vegetation communities in development areas to accommodate future residential and associated uses, no corridor protection program has been developed or implemented for I-5, and thus, it has not been officially designated as scenic by the state. Further, due to the various sizes of the Project site, Cumulative Projects LA1, LA2, LA3, and LA13, in relation to the wider landscape visible from the I-5 corridor, and because these sites are adjacent to previously developed urban areas, the implementation of these projects would not substantially affect the potential for the I-5 corridor to be officially designated as scenic by the state should the County ever prepare a corridor protection program and seek further scenic designation. For these reasons, the Project and cumulative projects would not substantially damage scenic resources within a state scenic highway, and impacts would not be cumulatively considerable.

Threshold 4.1d: Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings because of height, bulk, pattern, scale, character, or other features and/or conflict with applicable zoning and other regulations governing scenic quality. (Public views are those that are experienced from publicly accessible vantage point)

The Project site and most of the proposed sites for the Cumulative Projects LA1, LA2, LA3, LA13, and SC1 are currently undeveloped, with the exception of LA3, which is partially constructed. As such, implementation of the Project, in combination with the cumulative projects, would introduce development and construction activities where development and construction activities do not currently exist or occur, thereby changing the visual character of public views of these sites and the surrounding areas. However, as previously discussed, the Project would preserve approximately 150 acres of land in the southern/southwest portion of the Project site as natural open space. Similarly, LA1, LA2, and LA3, among most of the other cumulative projects listed in Chapter 2 would include open space, particularly east of I-5, nearby existing, off-site open space The preservation the cumulative project sites' lands as undeveloped natural open space would substantially reduce potential changes in visual character and quality to surrounding areas related to construction and implementation of the Project and Cumulative Projects LA1, LA2, LA3, LA13, and SC1, especially views from existing public trails in surrounding open space areas. As discussed above, differences in elevation and the relative distance required to view multiple sites in a single viewshed would ensure that visual resources are not obstructed from view. In addition, available renderings of the Project (see Figure 4.1-7 and 4.1-8) and a description of Cumulative Project LA1 provided in the applicable Mitigated Negative Declaration (MND) for Canyon View Estates (Project No. 2016-002179) show that the quality of residential development proposed on these sites would be high, and would not be out of character with development in the surrounding areas (County of Los Angeles 2019). While implementation of the Project and cumulative projects would involve temporary construction activities and would introduce residential uses and other improvements to undeveloped sites, the proposed uses are visually compatible with the surrounding land uses, which are largely composed of residential developments similar to the Project and cumulative projects. As such, the Project and cumulative projects would not appear to be visually out of character with the existing local setting. Although construction activities (including grading and clearing of vegetation) may temporarily degrade the visual character and quality of the previously undeveloped sites, the resulting development, landscaping, and open space features would be of a high-visual quality, which would not degrade the existing visual character and quality of the undeveloped sites.

Like the Project, Cumulative Projects LA1, LA2, LA3, LA13, and SC1 would be required to comply with the zoning of their respective sites and other applicable regulations governing scenic quality. For the Project and other projects in the County, including LA1 through LA14, this would include required compliance with County Zoning Code provisions set forth in Chapters 22.104 (Hillside Management Areas and Appendix I, Hillside Design Guidelines), 22.102 (Significant Ecological Areas), and 22.174 (Oak Tree Permit) of the Zoning Code, which would further minimize any impacts to hillside areas and scenic biological resources (including oak trees) which could potentially degrade the character and/or quality of public views of these sites and/or surrounding areas. Cumulative Projects SC1 through SC26 would be required to comply with similar provisions set forth by the City, including Section 17.51.040 (Oak Tree Preservation) of the Santa Clarita Municipal Code, as well as the City's Community Character and Design Guidelines, and all other applicable development standards regulating scenic quality. Therefore, because the Project and cumulative projects would preserve extensive natural open space (which would minimize impacts related to changes to the existing visual character of previously undeveloped sites) and would be required to comply with applicable zoning and all other provisions governing scenic quality set forth by their respective jurisdiction (e.g., County, City), the Project and cumulative projects would not substantially degrade the existing visual character or quality of public views and/or conflict with applicable zoning and other regulations governing scenic quality, and impacts would not be cumulatively considerable.

Threshold 4.1e: Would the project create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area?

The cumulative context for light and glare would be other development in the surrounding area that could contribute to an increase in light and glare. The Project could combine with the Cumulative Projects LA1, LA2, LA3, LA13, and SC1 to adversely affect day or nighttime views in the area. Construction activities associated with the Project and Cumulative Projects LA1, LA2, LA3, and LA13 may occur Monday through Saturday, 6:30 a.m. to 8 p.m., as permitted by the Chapter 12.12, Building Construction Noise, of the County Code (County of Los Angeles 2022). As such, during the majority of the year, nighttime lighting would not be required during construction. The use of nearby trails is limited to daytime use, and therefore, nighttime views would not be affected for trail users. Further, roadside construction activities and lighting are commonplace along the I-5 corridor and other public roadsides. In addition, available renderings of the Project (see Figure 4.1-7 and 4.1-8) and the characteristics of other nearby cumulative projects (low-density residential projects), suggest that building materials would not be highly reflective. Reflective materials would be limited to glass used for windows and metal detailing (such as railings, getters, etc.), which would not represent a substantial new source of glare which could adversely affect daytime views.[20] Thus, the Project in combination with the Cumulative Projects would not result in significant cumulative impact on light or glare.

The Project in combination with the Cumulative Projects LA1, LA2, LA3, LA13, and SC1 would create a new source of light in an area where there is minimal light. The Project would consolidate development in the northeast portion of the Project site adjacent to the Stevenson Ranch residential development and near I-5. Lighting would be contained within the Project site and would be required to comply with all applicable County requirements and the California Green Building Code to ensure lighting would be low intensity, fully shielded, and directed downward to prevent excessive brightness or light trespass onto adjacent properties. With these measures in place, Project lighting would not trespass into other areas and would not contribute to cumulative light impacts. The Project would

[20] As many of the Cumulative Projects detailed in Chapter 2, Environmental Setting, are in the planning phases, information regarding specific building materials is not yet available, however, as the type of development proposed is similar to that of the Project and the surrounding development (e.g., residential, mixed-use development), building materials utilized would not be anticipated to represent a substantial source of glare.

not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Cumulative Projects LA1 through LA14 would be required to comply with the Rural Outdoor Lighting District Ordinance, while Cumulative Projects SC1 through SC26 would be required to comply with the outdoor light standards set forth in Section 17.51.050 of the City's Municipal Code. Regarding shadow, the uses proposed by the Project and Cumulative Projects include predominantly low-lying residential uses which would not include buildings that would be of adequate height to result in a shade or shadow nuisances to adjacent sensitive uses (e.g., agricultural, residential). Therefore, there would be no cumulative impact associated with shadow. When considered in combination with the impacts of the Cumulative Projects, the Project's incremental contribution to light and glare would not be cumulatively considerable because the Project would not include lighting that would affect other areas also affected by lighting from other Cumulative Projects.

4.1.7 Mitigation Measures

MM-4.1-1 Visual Shielding Plan. Prior to the issuance of a grading permit, the Applicant/Developer shall prepare a Visual Shielding Plan (Plan) to improve the overall aesthetic quality of construction areas. Plan requirements shall include the following:

- **Designated Staging Areas:** The Plan shall require the establishment of one or more designated staging area(s) intended for the storage of construction equipment and vehicles, stockpiles, waste bins, and other construction-related materials during Project construction. The designated staging area(s) shall be located within the grading area on the northern portion of the Project site, strategically placed away from publicly-maintained trails and open-space areas to the south. Upon completion of construction activities for the day, all equipment shall be consolidated in the designated staging area(s) and any equipment or machinery not in use for a period of three of more months shall be removed from the Project site.
- **Visual Shielding:** To address potential aesthetic impacts from construction equipment and activities, the Plan shall require establishment of visual shielding in the form of temporary, opaque fencing and/or cloth screening along the Project-site boundary fronting The Old Road as well as in the vicinity of the Taylor Trailhead and where the western leg of the Taylor Trail intersects with the Project site. Temporary, opaque fencing and/or cloth screening shall also be installed around the designated construction staging areas(s). The color palette of temporary fencing and/or cloth screening shall be restricted to neutral earth tones (e.g., shades of brown, green, gray, or beige).
- **Project Site Cleanliness/Management:** All construction-related equipment and materials on the Project site shall be maintained in a clean and organized manner.
- **Monitoring:** Monthly inspections shall be conducted to assess the effectiveness of the Plan. Any failed or poorly-performing visual shielding (e.g., damaged fencing and/or cloth screening) shall be replaced or repaired as soon as possible.

The Plan shall be reviewed and approved by the County to ensure compliance with this mitigation measure. Visual shielding and establishment of designated staging areas shall commence prior to grading or soil disturbance activities and shall be maintained throughout the construction period and until the site is permanently stabilized and/or developed.

See MM-4.3-1, Construction Equipment, of Section 4.3, Air Quality, and MM-4.4-16, SEA Protected Tree Replacement/Compensation, from Section 4.4, Biological Resources.

4.1.8 Level of Significance After Mitigation

Construction impacts regarding scenic vistas would be less than significant with mitigation incorporated. Operational impacts regarding scenic vistas would be less than significant.

Construction and operational impacts regarding views from a regional riding, hiking, or multi-use trail would be less than significant.

Construction and operational impacts regarding scenic resources within a state scenic highway would be less than significant.

Construction and operational impacts regarding the existing visual character or quality of public views of the site and its surroundings and/or conflicts with applicable zoning and other regulations governing scenic quality be less than significant with mitigation incorporated.

Construction and operational impacts regarding a new source of substantial shadows, light, or glare would be less than significant.

4.1.9 References

Caltrans (California Department of Transportation). 2008. *Scenic Highways Guidelines*. Last accessed May 30, 2022. https://dot.ca.gov/-/media/dot-media/programs/design/documents/scenic-hwy-guidelines-04-12-2012.pdf.

Caltrans. 2022a. "Scenic Highways." Last accessed May 30, 2022. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

Caltrans. 2022b. "California State Scenic Highway System Map." Last accessed May 30, 2022. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.

County of Los Angeles. 2010. *Santa Clarita Valley Area Plan, One Valley One Vision Program Environmental Impact Report*. https://planning.lacounty.gov/long-range-planning/santa-clarita-valley-area-plan/.

County of Los Angeles. 2012. *Santa Clarita Valley Area Plan, One Valley One Vision*. Last accessed May 20, 2022. https://planning.lacounty.gov/wp-content/uploads/2022/10/Santa-Clarita-Valley-Area-Plan.pdf.

County of Los Angeles. 2013. County of Los Angeles Trails Manual. Revised June 2013. Accessed January 2024. https://trails.lacounty.gov/Files/Documents/1138/LA%20County%20Trails%20Manual%20%28Revised%2020171031%29.pdf.

County of Los Angeles. 2014. County of Los Angeles Rural Outdoor Lighting District. Last accessed June 1, 2022. https://planning.lacounty.gov/wp-content/uploads/2023/11/Final_Adopted-District-Map.pdf.

County of Los Angeles. 2015. *Los Angeles County General Plan*. Adopted October 6, 2015. Last accessed May 20, 2022. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

County of Los Angeles. 2019. *Canyon View Estates*. Project No. 2016-002179; Tract Map No. 74650; Conditional Use Permit No. 2016004409; Oak Tree Permit No. RPPL2017009209; and Environmental Assessment No. 20160044100. Last accessed June 10, 2022.

County of Los Angeles. 2020. Significant Ecological Areas (SEA) Ordinance Implementation Guide. January 2020. Las accessed January 2024. https://planning.lacounty.gov/wp-content/uploads/2022/11/SEA-IG-6-30-20_Full.pdf.

County of Los Angeles. 2022. *Los Angeles County Code*. Last accessed May 27, 2022. https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances?nodeId=LOS_ANGELES_CO_CODE.

Dagit. R. 2015. "Oak Woodland Conservation Management Planning in Southern CA – Lessons Learned." Last accessed June 8, 2022. https://www.fs.usda.gov/psw/publications/documents/psw_gtr251/psw_gtr251_471.pdf.

DPR (Los Angeles County Department of Parks and Recreation). 2013. *County of Los Angeles Trails Manual*. Revised June 2013. Last accessed May 23, 2022. https://trails.lacounty.gov/Files/Documents/121/LA%20County%20Trails%20Manual%20%28Revised%2006-20-13%29%20RS%202016.pdf.

DPR. 2018a. Santa Susana Mountains Trails Master Plan (Phase II). December 2018. Accessed January 2024. https://parks.lacounty.gov/santa-susana-mountains-trails-master-plan-phase-ii-aims-to-promote-multi-use-regional-trails-in-the-santa-clarita-valley/.

DPR. 2018b. *Santa Susana Mountains Trails Master Plan (Phase II) Final Mitigated Negative Declaration*. SCH: 2017111009. Last accessed May 27, 2022. https://trails.lacounty.gov/Files/Documents/133/Santa%20Susana%20Mts%20Trails%20MP_MND_Vol%20I.pdf.

HMDB (Historical Marker Database). 2022. "Marge Feinberg Rim of the Valley Trail (Saddletree Ranch Trailhead)". Last accessed May 27, 2022. https://www.hmdb.org/PhotoFullSize.asp?PhotoID=490017.

MRCA (Mountains Recreation and Conservation Authority). 2022a. "About". Last accessed May 19, 2022. https://mrca.ca.gov/about/.

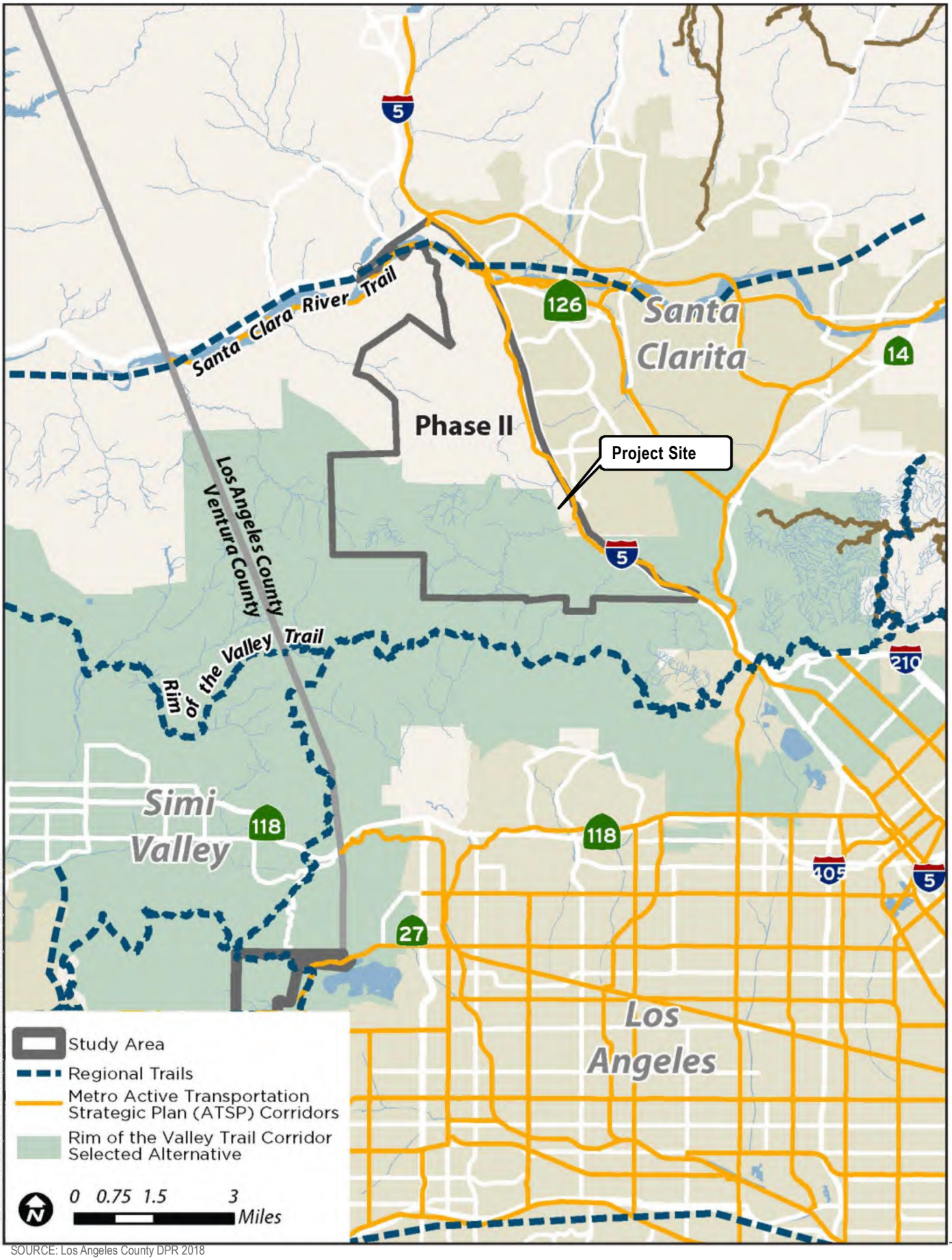
MRCA. 2022b. "Santa Clarita Woodlands Park". Last accessed May 20, 2022. https://mrca.ca.gov/parks/park-listing/santa-clarita-woodlands-park/.

Rodrigue.2016. "GEOG/ES&P 330, California Ecosystems, Woodlands." Updated February 2016. Last accessed January 2024. https://home.csulb.edu/~rodrigue/geog330/woodlands.html.

SCAQMD (South Coast Air Quality Management District). 2022. *2022 Air Quality Management Plan*. Adopted December 2022. Last accessed January 2024. https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=16.

SMMC (Santa Monica Mountains Conservancy). 2022. "The Santa Monica Mountains and Rim of the Valley Trail Corridor." Last accessed May 27, 2022. https://smmc.ca.gov/the-santa-monica-mountains-and-rim-of-the-valley-corridor/.

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SOURCE: Los Angeles County DPR 2018

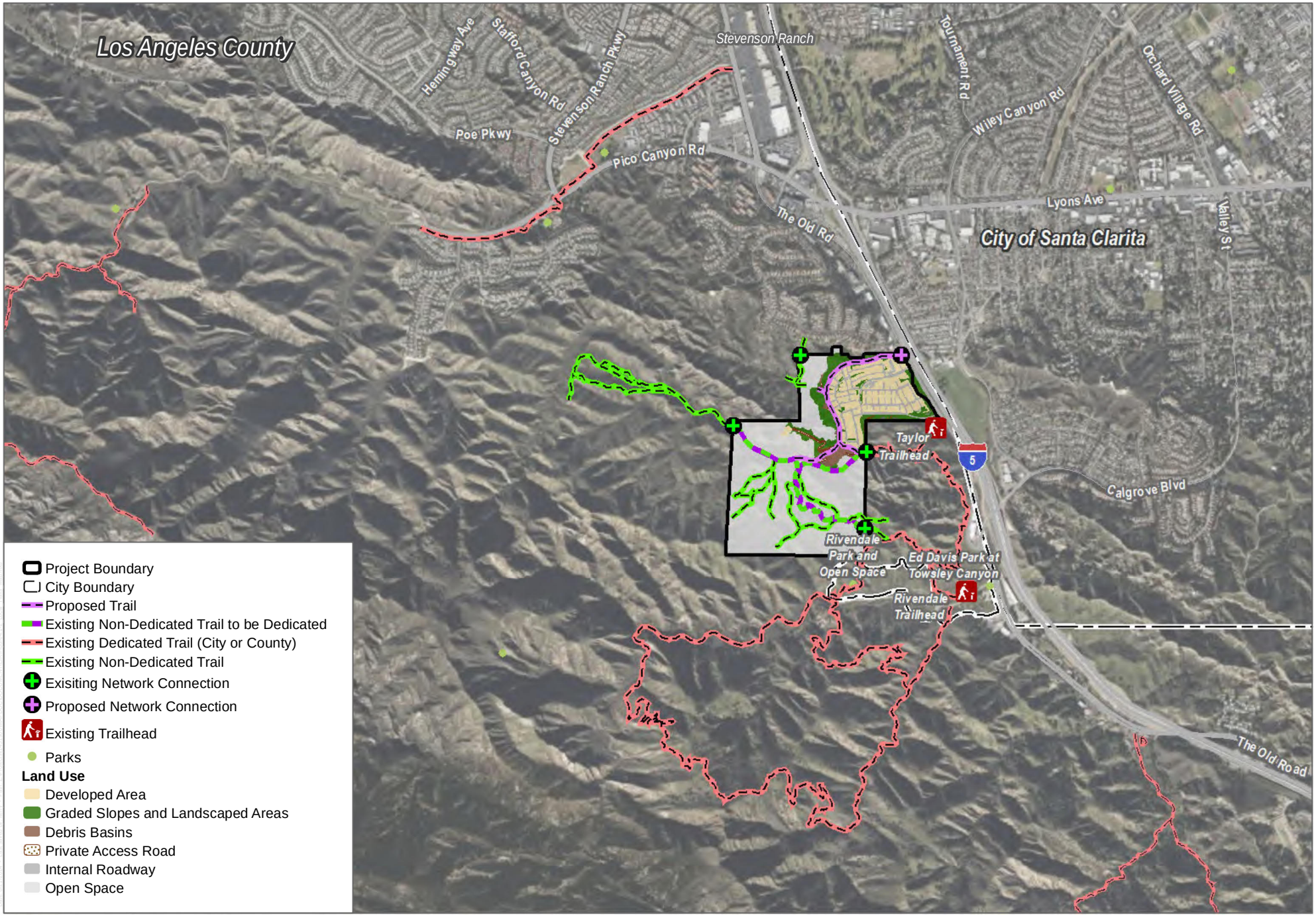
FIGURE 4.1-1

Regional Trails Map

Trails at Lyon Canyon Project

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SOURCE: Bing Maps 2023, Open Street Map 2019

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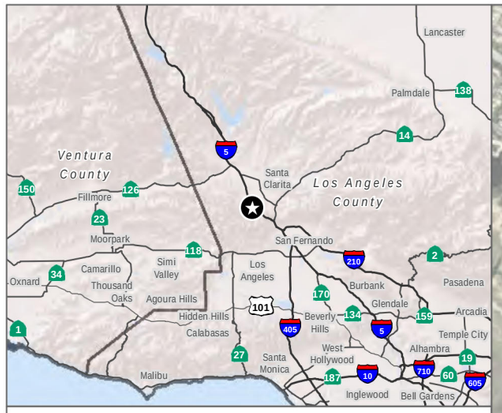
0 1,250 2,500 Feet

FIGURE 4.1-2

Local Trails Map

Trails at Lyons Canyon Project

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- Project Boundary
- Project Grading Footprint
- Visibility Study Area (1-mile radius)
- Proposed Trail
- Existing Non-Dedicated Trail to be Dedicated
- Existing Dedicated Trail (City or County)
- Existing Non-Dedicated Trail
- Existing Trailhead
- Public Parks and Open Space

Percent of Project Visible*

- 1% - 20%
- 21% - 40%
- 41% - 60%
- 61% - 80%
- 81% - 100%

** Project visibility based on observers with 5.5-foot eye level height. Observervations from above-ground features such as trees or building rooftops were excluded from this map. Elevation model reflects vegetation and structures that existed in 2016.*

SOURCE: Bing Maps, Open Street Map, USGS

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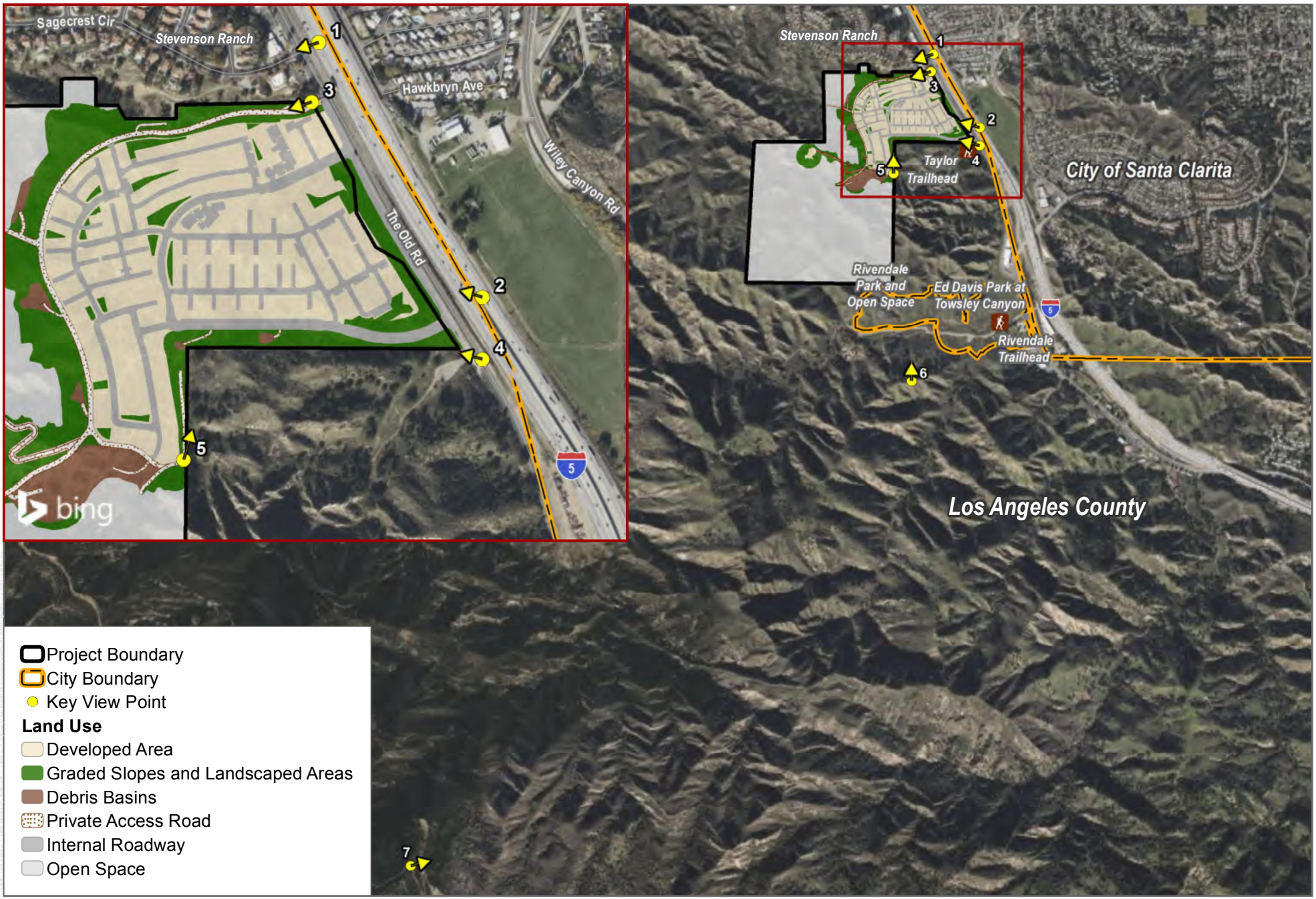
0 750 1,500 Feet

FIGURE 4.1-3

Visibility Analysis

Trails at Lyons Canyon Project

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SOURCE: Bing Maps 2021, Open Street Map 2019

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0 1,200 2,400 Feet

FIGURE 4.1-4

Key View Map

Trails at Lyons Canyon Project

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I-5 South (Looking Southwest)



Existing Conditions



Proposed Conditions

FIGURE 4.1-5A

Key View 1

Trails at Lyons Canyon Project

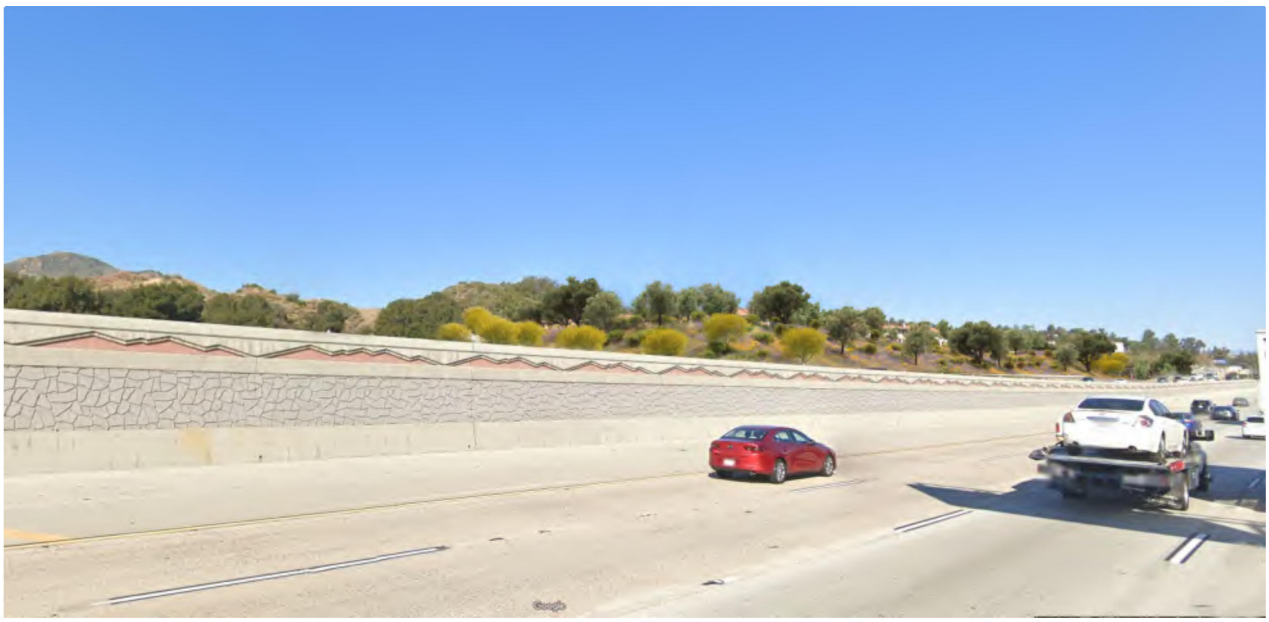
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I-5 North (Looking Northwest)



Existing Conditions



Proposed Conditions

FIGURE 4.1-5B

Key View 2

Trails at Lyons Canyon Project

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The Old Road (Looking Southwest)



Existing Conditions



Proposed Conditions

FIGURE 4.1-5C

Key View 3

Trails at Lyons Canyon Project

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The Old Road (Looking Northwest)



Existing Conditions



Proposed Conditions

FIGURE 4.1-5D

Key View 4

Trails at Lyons Canyon Project

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SOURCE: Bing Maps 2021, Open Street Map 2019, Caltrans 2022

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FIGURE 4.1-6

Scenic Highways Map

Trails at Lyons Canyon Project

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FIGURE 4.1-8

Senior Citizen Housing

Trails at Lyons Canyon Project

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4.2 Agriculture/Forest

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to agriculture and forestry resources, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts analysis, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data and reports from Los Angeles County (County) and the California Department of Conservation's (DOC's) Farmland Mapping and Monitoring Program (FMMP), as well as the following:

Appendix C Biota Report, Trails at Lyons Canyon, prepared by Dudek, dated December 2024

Appendix F Revised Phase 1 Environmental Site Assessment for Lyons Canyon in Unincorporated Santa Clarita, California, prepared by Stantec, dated April 3, 2023

Other sources consulted are listed in Section 4.2.9, References.

4.2.1 Existing Conditions

This section describes the existing conditions at the Project site and in surrounding areas and identifies the resources that could be affected by the Project.

Regional Setting

Agricultural Resources in the Santa Clarita Valley Planning Area

Farmland Mapping and Monitoring Program (FMMP) "Important Farmland Maps"

According to the Santa Clarita Valley Area Plan (also referred to as "One Valley, One Vision" [OVOV]): "Agricultural resources of significance to the land use planning process are those which have been classified by the California Department of Conservation [DOC] as important to the local or [S]tate agricultural economy" (County of Los Angeles 2012).

Pursuant to Section 65570 of the California Government Code (GOV), the DOC's FMMP produces maps and statistical data used for analyzing impacts on California's agricultural resources (DOC 2022a). The State's agricultural land is rated by the DOC according to soil quality and irrigation status (DOC 2022a). The FMMP uses the United States Department of Agriculture's (USDA's) National Resource Conservation Service's (NRCS') soil survey and digital soil data to inform its rating system and to compile what are known as "Important Farmland Maps", which illustrate the distribution of FMMP ratings (also referred to herein as "designations") across the State (DOC 2022b). Important Farmland Maps are updated by the FMMP approximately every two years using a computer mapping system, aerial imagery, public review, and field reconnaissance (DOC 2022a).

FMMP designations illustrated on the Important Farmland Maps include land designated Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-Up Land, and Other Land (see Section 4.2.2, Regulatory Requirements, for definitions). The largest category of FMMP-designated farmland in the Santa Clarita Planning Area is Grazing Land, of which there is over 61,000 acres (County of Los Angeles 2012). Much of this land remains vacant in the undeveloped foothills surrounding the Santa Clarita Valley and adjacent National Forest land (County of Los Angeles 2012).

Agricultural Resource Areas

Agricultural Resource Areas (ARAs) are areas where the County promotes the preservation of agricultural land (County of Los Angeles 2014). These areas are protected by policies to prevent the conversion of farmland to incompatible uses (County of Los Angeles 2014). ARAs consist of Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Unique Farmland (as identified by the FMMP) and farms that have received permits from the Los Angeles County Agricultural Commissioner/Weights and Measures (County of Los Angeles 2015a). According to the County's General Plan, the ARAs exclude the following (County of Los Angeles 2015a):

- Significant Ecological Areas (SEAs)
- Approved specific plan areas
- Approved large-scale renewable energy facilities
- Lands outside of the Santa Clarita Valley and Antelope Valley Planning Areas
- Lands designated Public and Semi-Public

The County encourages the preservation and sustainable utilization of agricultural land, agricultural activities, and compatible uses within ARAs (County of Los Angeles 2014). Approximately 740 acres (or 2 percent) of the County's ARAs are designated within the Santa Clarita Valley Planning Area (County of Los Angeles 2015a). The rest of the County's ARAs (approximately 98 percent) are located within Antelope Valley Planning Area to the east of the Santa Clarita Valley Planning Area (County of Los Angeles 2015a).

"Agricultural Land" Pursuant to State CEQA Guidelines

Pursuant to the CEQA Statutes (California Public Resources Code [PRC] Section 21060.1, Agricultural Land), "agricultural land" is defined as land with an FMMP rating of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. As such, for environmental review purposes under CEQA, the Santa Clarita Valley Planning Area contains approximately 1,846 acres of agricultural land, which is located primarily in the western planning area along the Santa Clara River corridor (County of Los Angeles 2012; DOC 2022c). The acreage of agricultural land (pursuant to CEQA) in the Santa Clarita Valley Planning Area by FMMP rating is shown in Table 4.2-1, (CEQA) Agricultural Land in the Santa Clarita Valley Planning Area, below.

Table 4.2-1. (CEQA) Agricultural Land in the Santa Clarita Valley Planning Area

State Farmland Designation	Acres in County	Acres in City of Santa Clarita	Total Acres in Santa Clarita Valley Planning Area
Prime Farmland	1,172.36	128.70	1,301.06
Farmland of Statewide Importance	178.25	0	178.25
Unique Farmland	364.11	2.45	366.56
Total Acreage (Approximate)	**1,715**	**131**	**1,846**

Source: County of Los Angeles 2012.

Williamson Act Contract Lands

The Williamson Act provides tax incentives to retain prime agricultural land and open space in agricultural use, which subsequently slows its conversion to urban development, as detailed further in Section 4.2.2, Regulatory Requirements. According to the Santa Clarita Valley Area Plan EIR and the Los Angeles County General Plan 2035 (General Plan), there are no lands under a Williamson Contract within the Santa Clarita Valley Planning Area (City of Santa Clarita 2010; County of Los Angeles 2012). The only Williamson Act contracts in effect in the County are for land on Santa Catalina Island (County of Los Angeles 2014).

Forestry Resources

Forests are distinguished from woodlands in that the crowns of forest trees generally overlap; woodlands consist of open stands of trees, usually with 25 to 60 percent tree cover (County of Los Angeles 2014). Forest land is defined 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 12220[g]). Timberland is defined 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 any commercial species used to produce lumber and other forest products, including Christmas trees" (PRC Section 4526). Title 22, Planning and Zoning (Zoning Code) of the Los Angeles County Code (County Code) does not contain zones specifically for forest use or production of forest resources (County of Los Angeles 2014).

Approximately 49 percent (237 square miles) of the Santa Clarita Valley Planning Area consists of National Forest land, including lands within the Angeles National Forest and (to a lesser extent) the Los Padres National Forest (County of Los Angeles 2012). Predominant vegetation within National Forest lands includes mixed chaparral with hardwood and conifer forests at higher elevations, and riparian vegetation along stream. Despite the large extent of National Forest lands in the Santa Clarita Valley Planning Area, very little of its area contains forest or woodlands, as defined above. Most of the land area in the Angeles National Forest is chaparral (County of Los Angeles 2014); however, oak woodland within the Angeles National Forest extends into some rural portions of the Santa Clarita Valley Planning Area, contributing to its scenic character (City of Santa Clarita 2010). Oak woodlands—which are defined as oak stands with greater than 10 percent canopy cover, or that may have historically supported greater than 10 percent canopy cover—occur in scattered locations, primarily in the southerly portions of the Santa Clarita Valley Planning Area and contain a diverse habitat including six species of oak (Dagit 2015; County of Los Angeles 2012). According to the Los Angeles County General Plan Update Draft EIR (General Plan EIR), forest land within the County is protected through the County's Significant Ecological Area (SEA) Ordinance (codified in Chapter 22.102 of the Zoning Code) (County of Los Angeles 2014).

As discussed above, the Zoning Code does not contain zones specifically for forest use or production of forest resources. However, pursuant to Chapter 22.16 (Agriculture, Open Space, Resort and Recreations, and Watershed Zone); management of forest resources (e.g., forest preserves, harvesting of miscellaneous forest products) is permitted within certain open space zones (County of Los Angeles 2014). Because there are no substantial areas of privately-owned forest in in the Santa Clarita Valley Planning Area (or elsewhere in the County), there is no land used for commercial logging (timberland) (County of Los Angeles 2015a).

Significant Ecological Areas (SEAs)

The SEA designation is given to land in the County that contains irreplaceable biological resources, including native tree cover. The SEA Ordinance establishes regulations to conserve the unique biological and physical diversity of the natural communities found within SEAs by requiring development to be designed to avoid and minimize impacts to SEA resources. The SEA Conditional Use Permit (CUP) includes required review of the SEA Protected Tree Standards, incorporating the Protected Tree Permit otherwise administered under the County Oak Tree Ordinance (codified in Chapter 22.174 of the Zoning Code). As shown on Figure 2-5, Special Management Areas, of Chapter 2, Environmental Setting, of this Draft EIR, the Project site and surrounding adjacent area are within the Santa Susana Mountains/Simi Hills SEA (SEA) and would thus be subject to the conditions set forth in the SEA Ordinance, including those pertaining to protection of native tree species. The standards and methods used to achieve compliance with the SEA Ordinance are detailed in the County's SEA Ordinance Implementation Guide (County of Los Angeles 2020a). According to the General Plan EIR, a project's compliance with the SEA Ordinance would reduce potentially significant project related impacts to forest land within the County to less than significant levels (County of Los Angeles 2014).

Local Setting

Agricultural Resources at the Project Site (or Local Vicinity)

Zoning

As depicted on Figure 2-7, Existing Zoning Designations, of Chapter 2, Environmental Setting, of this Draft EIR, the Project site is primarily zoned Heavy Agricultural (A-2). Most of the site is zoned A-2-2, which, pursuant to Section 22.110.130 (Required Area and Width) of the Zoning Code, has a two-acre lot minimum (County of Los Angeles 2022a). A small section in the northwest corner of the site is zoned A-2-1, which, pursuant to Section 22.11.130, has a one-acre lot minimum (County of Los Angeles 2022a). The Project site is also adjacent to agriculture zones to the west and southeast (County of Los Angeles 2022b). According to the Phase I Environmental Site Assessment prepared for the Project, no evidence of agricultural use (i.e., row crops) was observed (Appendix F). Under existing conditions, there are no active agricultural operations on or adjacent to the Project site.

Other on-site zoning includes General Commercial (C-3), General Commercial-Development Program (C-3-DP), and Residential Planned Development (RPD-1-1.4U) in the northeastern portion of the Project site (County of Los Angeles 2022a).

FMMP Important Farmland Designations

As depicted in Figure 4.2-1, Agriculture Resources, the Protect site includes Grazing Land and Other Land (DOC 2022a). FMMP designations in surrounding areas include Urban and Built Up Lands (to the north, northwest, and east), Other Land (to the north), and Grazing Land (to the northeast, west, south, and east) (see Section 4.2.2, Regulatory Setting, for definitions of relevant FMMP designations).

ARAs

As discussed above, ARAs exclude SEAs (County of Los Angeles 2015a). As the Project site is located entirely within the SEA, lands on the Project site do not qualify as an ARA (County of Los Angeles 2015a).

"Agricultural Land" Pursuant to State CEQA Guidelines

As depicted in Figure 4.2-1, the Project site does not contain any Prime Farmland, Farmland of Statewide Importance, or Unique Farmland (DOC 2022c). As such, the Project site does not contain any agricultural land, as defined under the CEQA Statutes (PRC Section 21060.1).

Forestry Resources on the Project Site (or Local Vicinity)

The Project site contains approximately 23 acres of coast live oak (*Quercus agrifolia*) forest and woodland alliance,[1] approximately 1 acre of red willow (*Salix laevigata)* forest and woodland alliance, and approximately 0.09-acre California walnut grove (*Juglans californica)* forest & woodland alliance, see Appendix C for further details regarding on-site plant communities. Forest land is defined 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 12220[g]). As the Project site supports at least 10-percent native tree cover (predominantly oak forest and woodland alliance),[2] and as this tree cover provides public benefits related to aesthetics, fish and wildlife, biodiversity, water quality,[3] and recreation, the Project site contains forest land pursuant to PRC Section 12220(g). As the Project site is not suitable for growing commercial tree species used to produce lumber and other forest products, including Christmas trees, the Project site does not contain any timberland pursuant to PRC Section 4526.

SEAs and Protected Trees

Native trees are those that evolved and occur naturally in a given location (County of Los Angeles 2020a). The County's oak woodlands are specifically identified in the General Plan as being important resources that provide an abundance of aesthetic, ecological, and economic benefits to residents (County of Los Angeles 2015a). The intent of the tree protection regulations in the SEA Ordinance is to encourage responsible management of native trees within SEAs, including oak woodland species (County of Los Angeles 2020a). As detailed in the Biota Report, provided as Appendix C of this Draft EIR, the Project site and the proposed off-site fuel modification zones support 849 SEA-protected trees, including 54 heritage-sized oak trees (Appendix C).[4]

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1 The California Native Plant Society (CNPS) defines a vegetation alliance as "…[a] category of vegetation classification which describes repeating patterns of plants across a landscape. Each alliance is defined by plant species composition, and reflects the effects of local climate, soil, water, disturbance, and other environmental factors" (CNPS 2022).

2 In addition to the Coast live oak, red willow, and California walnut trees within the forest and woodland alliance cover, the site supports native tree species such as scrub oak (*Quercus berberidifolia*), valley Oak (*Quercus lobata*), blue elderberry (*Sambucus nigra*), arroyo willow (*Salix lasiolapis*), and Fremont cottonwood (*Populus fremontii*). All of these tree species are recognized as protected species under the County's SEA Ordinance (refer to the Biota Report [Appendix C] for further details related to on-site vegetation alliances and native tree species).

3 According to the Food and Agriculture Organization of the United Nations: "Forests help maintain high water quality, influence the volume of available water, and regulate surface and groundwater flows" (FAO 2022).

4 Heritage oak trees are either of the following: any oak tree measuring 36 inches or more in diameter, measured 4.5 feet above the natural grade; any oak tree having significant historical or cultural importance to the community, notwithstanding that the tree diameter is less than 36 inches (Section 22.174.040 of the Zoning Code).

4.2.2 Regulatory Requirements

Federal

There are no federal regulations that pertain to farmland and forestry resources that would apply to the Project.

State

Department of Conservation Farmland Mapping and Monitoring Program (FMMP)

Pursuant to GOV Section 65570, the FMMP produces maps and statistical data used for analyzing impacts on California's agricultural resources (DOC 2022a). The study area for these maps, commonly referred to as "Important Farmland Maps," is contiguous with modern soil surveys developed by the USDA (DOC 2022d). A classification system that combines technical soil ratings and current land use is the basis for the Important Farmland Maps. Most public land areas, such as National Forests and Bureau of Land Management (BLM) holdings, are not mapped (DOC 2022d).

For environmental review purposes under CEQA, the categories of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland constitute 'agricultural land' (PRC Section 21060.1). The remaining categories are used for reporting changes in land use as required for FMMP's biennial farmland conversion report (DOC 2022d). Per Section 21060.1 of the CEQA Statutes, the FMMP ratings are used to help determine what does and does not qualify as "agricultural land" pursuant to CEQA. The FMMP ratings are as follows (DOC 2022d):

- **Prime Farmland.** Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Farmland of Statewide Importance.** Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Unique Farmland.** Farmland of lesser quality soils used for the production of 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 in California. Land must have been cropped at some time during the four years prior to the mapping date.
- **Farmland of Local Importance.** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. The County identifies Farmland of Local Importance as producing lands that would meet the standard criteria for Prime or Statewide but are not irrigated.
- **Grazing Land.** Land on which the existing vegetation is suited to the grazing of livestock.
- **Urban and Built-Up Land.** Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. 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.** 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 nonagricultural land surrounded on all sides by urban development and greater than 40 acres is also mapped as Other Land.

As illustrated in Figure 4.2-1, the Project site includes Other Land and Grazing Land (DOC 2022c).

California Land Conservation Act (Williamson Act)

The Williamson Act provides tax incentives to retain prime agricultural land and open space in agricultural use, which subsequently slows its conversion to urban development. The Williamson Act requires a 10-year contract between the County and landowners who enter into contracts with local government for long-term use restrictions on qualifying agricultural and open space land. As stated above in Section 4.2.1, Existing Conditions, according to the General Plan EIR, the only Williamson Act contracts in effect in the County are for land on Santa Catalina Island (County of Los Angeles 2014). Pursuant to the General Plan and the Santa Clarita Valley Area Plan EIR, there are no lands under a Williamson Act contract within the Santa Clarita Valley Planning Area, including the Project site (City of Santa Clarita 2010; County of Los Angeles 2012).

CEQA Statutes Public Resources Code (PRC)

PRC 2100 et seq., as amended, defines forest land and timberland resources, provided below:

PRC Section 12220(g). "Forest land" is 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. "Timberland" means 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.

As discussed in Section 4.2.1., the Project site's zoning does not permit the management of forestry resources, and the site is not suitable for commercial timber production. Therefore, pursuant to PRC Section 12220(g), PRC Section 4526, and Chapter 22.16 and 22.20 of the Zoning Code, the Project site does not contain any forest land or timberland.

California Government Code

The GOV provides the following definition for "timberland production zone":

GOV Section 51104(g). "Timberland production zone" or "TPZ" means an area which has been zoned pursuant to Section 51112 or 51113 [of the GOV] and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses.

The Project site does not contain any timberland (as discussed in Section 4.2.1) and has not been zoned pursuant to GOV Sections 51112 or 5113. Therefore, the Project site is not a TPZ.

Local

Los Angeles County 2035 General Plan

Special Management Areas

Special Management Areas (SMAs) are land use overlays in the General Plan. SMAs are defined by the County as areas that require additional development regulations due to the presence of natural resources, including agriculture and forest resources, as discussed below (County of Los Angeles 2015a).

Agricultural Resource Area (ARA). ARAs consist of farmland identified by the FMMP, including Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Unique Farmland (County of Los Angeles 2015a). In addition, the ARAs include lands that received permits from the Los Angeles County Agricultural Commissioner/Weights and Measures (County of Los Angeles 2015a). The ARAs exclude the following: SEAs; approved specific plan areas; approved large-scale renewable energy facilities; lands outside of the Santa Clarita Valley and Antelope Valley; and lands that are designated Public and Semi-Public (County of Los Angeles 2015a).

Significant Ecological Areas (SEA). The SEA designation is given to land in the County that contains irreplaceable biological resources (County of Los Angeles 2015a). The Project site is located entirely within the Santa Susana/Simi Hills SEA (County of Los Angeles 2015a) (see Section 4.4, Biological Resources, of this Draft EIR for further discussion of potential Project impacts to the SEA).

General Plan Goals, Policies, and Guiding Principles

The General Plan includes guiding principles, which inform the County's goals, policies, and implementation actions. The following guiding principle is applicable to agricultural resources (County of Los Angeles 2015a):

> Promote excellence in environmental resource management: Carefully manage the County's natural resources, such as air, water, wildlife habitats, mineral resources, agricultural land, forests, and open space in an integrated way that is both feasible and sustainable.

The Conservation and Natural Resources Element of the County's General Plan provides goals and policies relevant to agricultural resources. The policy relevant to agriculture and the Project is listed below (County of Los Angeles 2015a).

> Policy C/NR 9.5. Discourage the conversion of native vegetation to agricultural uses.

There are no General Plan goals or policies pertaining to forestry or timberland resources.

County of Los Angeles Title 22, Planning and Zoning (Zoning Code)

Chapter 22.16, Agricultural, Open Space, Resort and Recreation, and Watershed Zones. Chapter 22.16 of the Zoning Code outlines the purpose, use restrictions, and general regulation of agricultural uses in the County's unincorporated areas (County of Los Angeles 2022a). According to Section 22.16, the Heavy Agricultural (A-2) zone is established to permit a comprehensive range of agricultural uses in areas particularly suited for agricultural activities. Permitted uses are intended to encourage agricultural activities and other such uses required for the inhabitants of the community. The A-2 zones of A-2-2 and A-2-1 allow for uses such as crops, animal hospitals, dairies, dog kennels, and oil wells (County of Los Angeles 2022a). The A-2 zone may also provide single-family

residential development, outdoor recreational uses, and public and institutional facilities. The permitted uses in agricultural zones do not include management of forestry resources (County of Los Angeles 2022a).

Section 22.16.30, Development of Townhouses within A-2 Zones. As stated in Chapter 22.16.30, Land Use Regulations for Zones A-1, A-2, O-S, R-R, and W of the Zoning Code, a Conditional Use Permit (CUP) is required for development of townhouses within the A-2 zone, pursuant to Section 22.158.050. The Project includes multi-family residential housing within the A-2-1 and A-2-2 zones (County of Los Angeles 2022a). Additionally, a CUP is required for development of adult residential facilities in an A-2 Zone.

Chapter 22.102, Significant Ecological Areas. Chapter 22.14 (Definitions) of the Zoning Code defines an SEA as "…[l]and that is identified to hold important biological resources representing the wide-ranging biodiversity of the County, based on the criteria for SEA designation established by the General Plan and as mapped in the adopted SEA Policy Map" (County of Los Angeles 2022b). Chapter 22.102 establishes regulations to conserve the unique biological and physical diversity of the natural communities found within SEAs by requiring development to be designed to avoid and minimize impacts to SEA resources. Pursuant to Chapter 22.102.080 (SEA Conditional Use Permit), projects that are located within an SEA are subject to SEA Technical Advisory Committee (SEATAC) review, and generally require an SEA CUP, unless it is determined through SEATAC review that a project would not conflict with Sections 22.102.070 (Protected Tree Permit), 22.102.090 (SEA Development Standards) and 22.102.100 (Natural Open Space Preservation) of the Zoning Code. In support of this SEATAC review process, the Implementation Guide was issued on January 16, 2020. The SEA CUP now incorporates review of the SEA Protected Tree Standards, incorporating the Protected Tree Permit otherwise administered under the County's Oak Tree Ordinance. All projects that are located within an SEA must provide a Burden of Proof statement detailing how a project will meet each required SEA finding. Burden of Proof statements provide details as to how a project meets the findings, either through project design elements or mitigation measures.

Chapter 22.140.170, Density Controlled Development. Chapter 22.140.170 of the Zoning Code establishes standards related to CUPs for density-controlled development. Pursuant to Chapter 22.14 (Definitions) "density controlled development" is the concentration of dwelling units on one or more portions of a lot resulting in the remainder of the lot being free of buildings or structures, as opposed to development spread throughout the entire lot (County of Los Angeles 2022a). Density controlled development is accomplished by computing density on a project level rather than a lot-by-lot basis, and by the use of smaller lots than are customarily permitted in the zone in which the development is proposed, while retaining the remaining portion of such lot as permanent open space (County of Los Angeles 2022a).

Chapter 22.174, Oak Tree Permit. Chapter 22.174 (Oak Tree Permit) of the Zoning Code codifies the County's Oak Tree Ordinance, established by the County (a) to recognize oak trees as significant historical, aesthetic and ecological resources, and as one of the most picturesque trees in the County, lending beauty and charm to the natural and manmade landscape, enhancing the value of property, and the character of the communities in which they exist; and (b) to create favorable conditions for the preservation and propagation of this unique, threatened plant heritage, particularly those trees that may be classified as heritage oak trees,[5] for the benefit of current and future residents of the County. One purpose of the permit is to preserve and maintain healthy oak trees in the development process.

[5] Heritage oak trees are either of the following: any oak tree measuring 36 inches or more in diameter, measured 4.5 feet above the natural grade; any oak tree having significant historical or cultural importance to the community, notwithstanding that the tree diameter is less than 36 inches (Section 22.174.040 of the Zoning Code).

The County requires permits prior to removing or damaging oaks unless subject to exemptions (e.g., emergency, utility maintenance, and tree maintenance, and for trees planted in road rights-of-way to maintain line-of-site or to relocate trees causing damage to roadway improvements). Otherwise, in unincorporated areas, native oak trees that are at least 8 inches in diameter (or, for trees with multiple trunks with a combined diameter measuring at least 12 inches) at 4.5 feet above grade, shall not be cut, destroyed, removed, relocated, or damaged, unless an oak tree permit is first obtained under the provisions of Chapter 22.174. This chapter of the Zoning Code also extends to include encroachment with the protected zone of such trees. The "protected zone," is that area within the dripline of an oak tree and extending therefrom to a point at least 5 feet outside the dripline, or 15 feet from the trunks of a tree, whichever distance is greater.

Under Chapter 22.174.040, where a change in grade is proposed, the change within the protected zone of each plotted tree shall be specified, including the location of all oak trees proposed to be removed and/or relocated, or within 200 feet of proposed construction, grading, landfill or other activity. Each tree shall be assigned an identification number on the plan and the protected zone shall be shown for each plotted tree and the location and size of all proposed replacement trees, proposed and existing land uses, location of all surface drainage systems, and other development features which the director deems necessary to process the application must be plotted. If a change is proposed to oak trees or oak woodlands located within an SEA, review of the SEA Protected Tree Standards—as part of the SEA CUP review and approval process—would incorporate the Protected Tree Permit otherwise administered under the provisions of Chapter 22.174.

As established in Chapter 22.174.070, impacted oak trees may require replacement at a minimum ratio of two to one. Replacement oak trees must be properly cared for and maintained for a period of two years and replaced if mortality occurs within that period. Where feasible, replacement oak trees should consist exclusively of indigenous oak trees and be certified as grown from a seed source collected in Los Angeles or Ventura County. The process of replacement shall be supervised in the field by a person who, in the opinion of the Los Angeles County Fire Department, has expertise in the planting, care, and maintenance of oak trees.

Santa Clarita Valley Area Plan (One Valley, One Vision)

The Santa Clarita Valley Area Plan (also referred to as "One Valley, One Vision" [OVOV]) is a component of the General Plan and is intended to provide focused goals, policies, and maps to guide the regulation of development within the unincorporated portions of the Santa Clarita Valley Planning Area. The following goals and policies are applicable to agricultural resources in the Santa Clarita Valley Planning Area:

> Policy LU 1.1.7. Preserve and protect important agricultural resources, including farmland and grazing land, through designating these areas as Rural Land on the Land Use Map where appropriate.

> Policy CO 10.1.9. Preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas, and other open space that provides nature carbon sequestration benefits.

An analysis of potential to conflict with policies of the OVOV is included in Section 4.11, Land Use and Planning, of this Draft EIR.

4.2.3 Thresholds of Significance

The thresholds used for the analysis of agriculture/forest impacts are based on the County's adopted CEQA Guidelines, which incorporates Appendix G of the State CEQA Guidelines as well as County-specific thresholds of significance. The State CEQA Guidelines state that, "[I]n determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board." A project would have a significant impact with respect to agriculture/forest if it would:

A. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the 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, with a designated Agricultural Resource Area, or with a Williamson Act contract.
C. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220 (g)), timberland (as defined in Public Resources Code § 4526), or timberland zoned Timberland Production (as defined in Government Code § 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.

4.2.4 Methodology

Impacts on agriculture and forest resources are analyzed below based on programs, policies, and precise resource definitions provided by the General Plan, Santa Clarita Valley Area Plan, DOC (including the FMMP), PRC (i.e., State CEQA Guidelines), and GOV. For the purposes of this analysis, and pursuant to the State CEQA Guidelines, the term "Farmland" as defined under Appendix G (Section II[a]), shall also refer to "agricultural land" pursuant to PRC Section 21060.1 (as defined in Section 4.2.1, Existing Conditions). In order for there to be a potentially significant or significant impact to agriculture or forest resources, these resources (as defined by the State CEQA Guidelines, the General Plan, Santa Clarita Valley Area Plan, DOC, PRC and/or GOV), must be present and available on-site. If these resources, as defined pursuant to the relevant sources listed above, are determined in the course of this analysis not to be present on-site, then no impacts to agriculture or forest resources would occur as a result of Project implementation.

4.2.5 Impact Analysis

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant

environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Threshold 4.2a: Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

As discussed in Section 4.2.1 and 4.2.2, for environmental review purposes under CEQA, and as shown on the maps prepared pursuant to the FMMP (GOV Section 65570), the categories of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland Importance constitute 'agricultural land' (i.e., Farmland) (PRC Section 21060.1). The Project site does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. As such, the Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use and therefore, there would be no impact.

Threshold 4.2b: Would the project conflict with existing zoning for agricultural use, with a designated Agricultural Resource Area, or with a Williamson Act contract?

The Project site is primarily zoned A-2, Heavy Agricultural, which, per Section 22.16.010 of the Zoning Code, permits a comprehensive range of agricultural uses in addition to single-family uses. Under existing conditions, there are no agricultural operations occurring within the Project site. The Project would cluster development within a portion of the Project site, through the approval of a density-controlled development (Chapter 22.140.170), which is allowable within the A-2 zones. The Project would preserve approximately 177 acres of A-2 zoned open space, including approximately 150 acres of natural open space. With approval of applicable discretionary CUPs and an administrative housing permit, the Project would not conflict with existing agricultural zoning.

As discussed in Section 4.2.1, ARAs and Williamson Act contract lands are areas where the County (and State) promote the preservation of agricultural land (County of Los Angeles 2014). These areas are protected by policies to prevent the conversion of farmland to incompatible uses (County of Los Angeles 2014). However, according to the County, ARAs exclude lands within SEAs (County of Los Angeles 2015a). As the Project site is located entirely within the SEA, lands on the Project site do not qualify as an ARA (County of Los Angeles 2015a). Further, according to the Santa Clarita Valley Area Plan Program EIR and the General Plan, there are no lands under a Williamson Contract within the Santa Clarita Valley Planning Area, including the Project site (City of Santa Clarita 2010; County of Los Angeles 2015a). As such, there would be no conflict with a designated ARA or with a Williamson Act contract.

The Project proposes to develop a mix of attached and detached housing types within portions of the A-2-1 and A-2-2 zones. The A-2 zones of A-2-2 and A-2-1 allow for uses such as crops, animal hospitals, dairies, dog kennels, and oil wells, but may also provide the land necessary for single-family residential development, outdoor recreational uses, and public and institutional facilities (County of Los Angeles 2022a), and other uses with approval of CUPs.

Single family residential uses may be allowed within the A-2-2 and A-2-1 zones. As discussed in response to Threshold 4.2a above, pursuant to the State CEQA Guidelines, and as shown on the maps prepared pursuant to the FMMP (see Figure 4.2-1, Agriculture Resources), there is no agricultural land (i.e., Farmland) at the Project site (DOC 2022c). On-site FMMP designations include Other Land and Grazing Land, which do not qualify as agricultural

land pursuant to PRC Section 21060.1, Agricultural Land. Furthermore, there are currently no agricultural activities within the Project site, including grazing activities.

As discussed in Section 4.2.1, Existing Conditions, the Project site is located entirely within the SEA, which, pursuant to the County's SEA Ordinance Implementation Guide, may allow for "…activities intended to maintain a specific habitat condition, which may include animal grazing, when recommended by the County Biologist" and approved by the County's Department of Regional Planning (DRP) (County of Los Angeles 2020a).[6] Implementation of the Project would require approval of a discretionary SEA CUP, in accordance with Chapter 22.102 of the Zoning Code (County of Los Angeles 2022a). Pursuant to the County's SEA Ordinance Implementation Guide, grazing activities are only permitted within an SEA to maintain specific habitat conditions within preserved natural open space areas (County of Los Angeles 2020a). Grazing activities within an SEA must be detailed in a management plan to be reviewed by the County Biologist and approved by DRP (County of Los Angeles 2020a). As general agricultural grazing activities (i.e., grazing for purposes other than habitat maintenance, as reviewed by the County Biologist and approved by the DRP) are not permitted on-site or elsewhere within the SEA, the Project would not conflict with County policies for protection of agricultural resources, including grazing (County of Los Angeles 2020a; DOC 2022d). Further, implementation of the Project would not preclude grazing activities for habitat maintenance purpose—if deemed necessary by the County Biologist and DRP, and pursuant to the Project's required discretionary SEA CUP—within the proposed approximately 150 acres of natural open space, which includes Grazing Land, as identified on maps prepared by the FMMP, in the southern portion of the Project site (County of Los Angeles 2020a; DOC 2022c). As defined by the DOC and FMMP, Other Land is not considered an agricultural use type, rather, it is a designation used by the FMMP to help report changes in land use as required for FMMP's biennial farmland conversion report and would therefore not be included in the evaluation of "existing zoning for agricultural use" (DOC 2022d).

Implementation of the Project's proposed density controlled development as well as single-family residential, townhouses, and a senior housing facility development would be allowed with approval of applicable A-2 CUPs (Zoning Code Section 22.16.030 in accordance with Chapter 22.158 [Conditional Use Permits]), including a density controlled development CUP (Zoning Code Section 22.140.170), and a CUP for Townhouses within an A-2 zone (Zoning Code Section 22.140.600 [Townhouses]). The development of 47 very low-income senior citizen units and one manager's unit within one multi-family building would be located in the portion of the site zoned commercial (C-3-DP) adjacent to areas currently zoned A-2 and C-3. Although the existing zoning for the site includes agriculture, the Project site does not include Farmland as defined in this analysis or any other active agricultural uses.

With approval of the CUPs and administrative housing permit, and with the Project's proposed preservation of natural open space, the Project's residential development would not conflict with existing zoning for agricultural use. Further, and as provided in Section 22.16.010(B)(1) of the Zoning Code, the Project would include approximately 150 acres of natural open space lots supporting a dedicated trail network, approximately 24 acres of Homeowners' Association-(HOA) maintained open space, and approximately 2.59 acres of active and passive open space areas, in accordance with permitted uses in the A-2 zones of A-2-1 and A-2-2 (County of Los Angeles 2022a). As discussed above, the Project site does not include any portion of an ARA or land under a Williamson Act contract (City of Santa Clarita 2010; County of Los Angeles 2015). Therefore, the Project would have no impact related to conflicts with a designated ARA or with a Williamson Act contract. Further, and for the reasons discussed

6 As discussed in Chapter 3, Project Description, of the Draft EIR, and, pursuant to Chapter 22.202 (Significant Ecological Areas [SEA]) of the Zoning Code, residential development may be permitted within an SEA subject to a discretionary SEA CUP (County of Los Angeles 2020a).

above, the Project would not conflict with existing zoning for agricultural use and impacts would be less than significant.

Threshold 4.2c: Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220 (g)), timberland (as defined in Public Resources Code § 4526), or timberland zoned Timberland Production (as defined in Government Code § 51104(g))?

As discussed in Section 4.2.1, the Project site contains at least 10% native tree cover, including coast live oak, red willow, and California walnut grove forest and woodland, which provides public benefits related to aesthetics, fish and wildlife, biodiversity, water quality, and recreation (see Appendix C, Biota Report for further details regarding onsite forest and woodland communities). Therefore, pursuant to PRC Section 12220g, the Project site contains forest land. However, while there is forest land present on-site, the Project-site's existing zoning is agriculture (A-2-1 and A-2-2), commercial (C-3-DP and C-3), and residential (RPD 1-1.4U). Therefore, the Project site does not have land zoned for forest land, timberland, or timberland zoned Timberland Production, as defined by the PRC. Further, the Project site is not available for growing commercial tree species used to produce lumber and other forest products, including Christmas trees. Therefore, pursuant to PRC Section 4526, the Project site does not contain timberland. In addition, the Project site has not been zoned pursuant to GOV Sections 51112 or 5113 and is therefore not considered to be a TPZ, as defined in GOV Section 51104(g).

As there is no zoning for forest land, timberland, or TPZ on site, the Project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)), timberland (as defined in PRC Section 4526), or timberland zoned Timberland Production (as defined in GOV Section 51104(g), and there would be no impact.

Threshold 4.2d: Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The Project site supports scattered communities of native tree cover such as coast live oak, red willow, and California walnut throughout at least 10% of the Project site. Thus, as defined by PRC Section 12220(g), the Project site contains forest land. Further, as detailed in Chapter 3, Project Description, the Project would require an Oak Tree Permit in accordance with Chapter 22.17, Oak Tree Permits, of the County Code. The Project would also require approval of a CUP to remove SEA-protected trees. Per the County's General Plan EIR, compliance with the conditions set forth in Chapter 22.102 (Significant Ecological Areas) of the Zoning Code, including approval of the required SEA CUP, would reduce potential impacts to on-site forestland to less than significant.

As shown on Figure 2-5, Special Management Areas, of Chapter 2, Environmental Setting, the Project site and surrounding adjacent area are within the SEA. Chapter 3 (SEA Protected Trees) of the Los Angeles County SEA Ordinance Implementation Guide (Implementation Guide; County of Los Angeles 2020a) describes tree protection regulations. The County Code defines Protected Trees and Heritage Trees by species and trunk diameter of a minimum listed size specific to each SEA, detailed further in Section 4.4, Biological Resources, of this Draft EIR. Per the requirements of Chapter 22.102 of the Zoning Code, since the Project would require removal of more than two Protected Trees and/or Heritage Trees, the Project would require discretionary SEA CUP review. For all listed native trees with multiple trunks, the tree is protected if the combined diameter of the two largest trunks equals eight inches or more. Furthermore, to be designated as a Heritage Tree, a SEA Protected Tree must have a single trunk that measures 36 inches or more in diameter, or two trunks that collectively measure 54 inches or more in diameter.

As detailed in the Biota Report, provided as Appendix C of this Draft EIR, of the 664 SEA-protected trees, 334 would be impacted by the Project. The 334 SEA-protected tree impacts would be comprised of 265 removals, 16

encroachments (trees that would not be removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds would be anticipated), and 50 SEA-protected trees that would be located within a debris basin (Appendix C).[7] As detailed further in Section 4.4, Biological Resources, of this Draft EIR, at a minimum, MM-4.4-16 requires that the removal of any SEA protected tree be mitigated in the form of two replacement plantings for non-heritage trees and ten replacement plantings for heritage trees, which would require 772 replacement trees to be planted. In accordance with MM-4.4-16 (discussed in Section 4.4 of this Draft EIR), the required replacement trees would be planted where suitable growing conditions are present and would remain in perpetuity. Pursuant to the General Plan EIR, forest land within the County is protected through the County's SEA Ordinance, and for projects within the County, "…[c]ompliance with the SEA Ordinance will reduce potential impacts to forest land to a less than significant level". Thus, while development of the Project would result in the loss or conversion of forestland to non-forest use, because the Project is located within the SEA, it would be subject to the provisions of the SEA Ordinance. Compliance with the SEA ordinance, including approval of the required SEA CUP, as well as applicable mitigation measures, including MM-4.4-16, SEA Protected Trees Replacement/Compensation, set forth in Section 4.4, would reduce forest land impacts to less than significant levels, and Project impacts would be less than significant with mitigation incorporated.

Threshold 4.2e: 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?

As depicted in Figure 4.2-1, the Project site does not contain, nor is it adjacent to, any land designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland (DOC 2022c). There are no existing agricultural uses on or adjacent to the Project site. The Project would not result in the conversion of Farmland to non-agricultural use, nor would it create land use conflicts with existing agricultural uses as no agricultural uses exist on or adjacent to the Project site. There would be no impact regarding Project changes in the existing environment, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

Regarding the Project's potential to involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use, native tree cover (which may be defined as forest land pursuant to PRC 12220[g]) on and adjacent to the Project site is within the SEA. The Project would conserve approximately 150 acres of this forest land within the SEA. However, for portions of forest land within the Project site that would be developed, the Project, as well as any future development proposed in areas adjacent to the Project site, would be subject to the provisions of the SEA Ordinance, which requires mitigation to address the removal of any SEA protected trees. As stated in response to Threshold 4.2(d), above, pursuant to the General Plan EIR, compliance with the County's SEA Ordinance would reduce potential impacts to forest land to less than significant levels (County of Los Angeles 2014). Thus, while the Project could involve changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use, compliance with the SEA ordinance, demonstrated through implementation of MM-4.4-1 and MM-4.4-16 (see Section 4.4, Biological Resources), would reduce these impacts to less than significant.

[7] It should be noted that the 50 SEA-protected trees that would be located within a debris basin would not be removed but would be considered impacted due to the potential of future damage as a result of the creation of the debris basins and associated flooding.

4.2.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project in combination with other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., cumulative projects) used for this analysis are presented in Table 2, List of Cumulative Projects, of Section 2.6, Cumulative Impacts, and shown on Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR. For purposes of agriculture and forestry resources, the geographic area of cumulative impacts includes unincorporated County (Cumulative Projects LA1 through LA14), further detailed below.

Threshold 4.2a: Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Regarding cumulative impacts from conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use, as shown on the maps prepared pursuant to the FMMP, cumulative Farmland (i.e., Farmland and/or "agricultural land" pursuant to State CEQA Guidelines and PRC Section 21060.1, respectively) impacts could occur if other cumulative projects within the unincorporated County would result in conversion of Farmland to non-agricultural use in conjunction with the Project. According to the FMMP, between 2016 and 2018, the County converted 788 acres of Farmland to non-agricultural uses (DOC 2018). This indicates an existing significant cumulative impact due to the loss of Farmland in the County. As no Farmland is present on the Project site, development of the Project would not contribute to the loss of Farmland within the unincorporated County. Therefore, implementation of the Project would not have a significant contribution to an existing cumulative impact.

Threshold 4.2b: Would the project conflict with existing zoning for agricultural use, with a designated Agricultural Resource Area, or with a Williamson Act contract?

Cumulative agriculture resource impacts regarding conflicts with existing zoning for agricultural use, with a designated ARA, or with a Williamson Act contract, could occur if other cumulative projects in the unincorporated County, in combination with the Project would result in zoning, ARA, or Williamson Act incompatibility impacts. As discussed above, there is no Prime Farmland, Farmland of Statewide Importance, or Unique Farmland present on the Project site, nor does the Project site contain any ARAs or land under a Williamson Act contract.

Based on local reconnaissance and a review of available aerial imagery, there are no operational farms (or grazing activities) present on sites identified for Cumulative Projects LA through LA14. Portions of Cumulative Projects LA1 through LA14 are also located within an SEA, which preclude designation of an ARA, pursuant to the General Plan (County of Los Angeles 2015a). Further, as stated in the Santa Clarita Valley Planning Area Program EIR and the General Plan, there are no lands under a Williamson Act contract in the Santa Clarita Valley Planning Area (City of Santa Clarita 2010). According to the General Plan EIR, the only Williamson Act contracts in effect in the unincorporated County are for land on Santa Catalina Island (County of Los Angeles 2014). The General Plan EIR did not identify a cumulatively significant impact with respect to conflicts with a Williamson Act contract or ARAs (County of Los Angeles 2014). Therefore, there is no cumulative impact related to conflicts with ARAs or a Williamson Act contract.

As discussed in Section 4.2.5, Impact Analysis, in response to Threshold 4.2b, the Project would propose development within on-site A-2 zones and FMMP Grazing Land where residential is a permitted use and senior

housing are conditionally permitted uses. With approval of applicable discretionary CUPs and administrative housing permit, and with the Project's proposed preservation of approximately 150 acres of natural open space, the Project would not conflict with existing zoning for agricultural use, and impacts would be less than significant. As such, the Project would not contribute to a cumulatively considerable impact.

As detailed further in Section 4.4, Biological Resources, in addition to the project, other Cumulative Projects included in this Draft EIR are located within the same SEA as the Project site, including Cumulative Projects LA1, LA2, LA3, and LA13. Grazing activities within an SEA must be detailed in a management plan to be reviewed by the County Biologist and approved by the County's DRP (County of Los Angeles 2020a). As general agricultural grazing activities (i.e., grazing for purposes other than habitat maintenance, as reviewed by the County Biologist and approved by the DRP) are not permitted within Grazing Land in an SEA, and as the proposed residential development would not exceed one dwelling units per two acres—pursuant to Chapter 22.16 and Section 22.110.130 of the Zoning Code, the Project would not result in a cumulatively considerable impact regarding existing zoning for agricultural use, including the existing FMMP designation of Grazing Land or the County's A-2 zone.

The Certified Program EIR for the General Plan states that impacts arising from land use incompatibility between agricultural uses and urban uses were identified as significant and unavoidable in the Certified Program EIR for the Santa Clarita Valley Area Plan for the Santa Clarita Valley Planning Area, where the Project and Cumulative Projects LA1, LA2, LA3, and LA13 are located (County of Los Angeles 2014). However, as discussed above, although the Project and Cumulative Projects may include existing zoning for agricultural use (either pursuant to the County or the FMMP), there are no active agricultural uses taking place on the Project site or on the sites identified for Cumulative Projects LA1, LA2, LA3, or LA13, among others. Therefore, there is no cumulative impact regarding conflicts with existing zoning for agricultural use, an ARA, or a Williamson Act contract and the Project would not result in a significant contribution to an existing cumulative impact.

Threshold 4.2c: Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220 (g)), timberland (as defined in Public Resources Code § 4526), or timberland zoned Timberland Production (as defined in Government Code § 51104(g))?

Regarding cumulative impacts from conflicts with existing zoning for or rezoning of forest land (as defined in PRC Section 12220 [g]), timberland (as defined in PRC Section 4526), or timberland zoned Timberland Production (as defined in GOV Section 51104[g]), impacts to these forestry resources could occur if the Project, in combination with other cumulative projects within the unincorporated County would result in a cumulative impact due to conflicts with existing zoning and/or conversion of forest land, timberland, or a TPZ. The General Plan EIR did not identify any substantial, adverse cumulative impacts to forestry resources in the County (County of Los Angeles 2014).[8] There is no existing cumulative impact to forestry resources, timberland or a TPZ in the County (as identified in the General Plan EIR). Therefore, development of the Project would not result in a significant contribution to an existing cumulative impact.

[8] The California Natural Resources Agency adopted amendments Appendix G of the State CEQA Guidelines on December 30, 2009, which changed the title of the "Agriculture Resources section to "Agriculture and Forestry Resources" and added the current environmental checklist questions (addressed herein) pertaining to forestry resource. The amendments were effective as of March 18, 2010. As the NOP for the Draft EIR for the Santa Clarita Valley Area Plan was filed in July 2008, the EIR was not required to evaluate impacts to forestry resources, as they relate to Appendix G Section II (c), (d), and (e) (i.e., Thresholds 4.2c through 4.2e of this section) (Renner 2021). However, as stated above, the Adopted General Plan EIR prepared in 2015 did not identify any cumulative significant impacts to forest land or zoning for forest use (County of Los Angeles 2015b).

Threshold 4.2d: Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Regarding cumulative impacts from the loss of forest land or conversion of forest land to non-forest use, cumulative forestry resources impacts would occur if other cumulative projects within the unincorporated County, in combination with the Project would result in the loss of forest land or conversion of forest land. The General Plan EIR did not identify any substantial, adverse cumulative impacts to forestry resources in the County (County of Los Angeles 2014). While the Project site contains forest land, pursuant to the General Plan EIR, "…forest land within Los Angeles County is protected through the County's SEA Ordinance…" and "…compliance with the SEA Ordinance will reduce potential impacts to forest land to a less then significant level" (County of Los Angeles 2014). As detailed further in Section 4.4, Biological Resources, of this Draft EIR, at a minimum, MM-4.4-16 requires that the removal of any SEA protected tree be mitigated in the form of two replacement plantings for non-heritage trees and ten replacement plantings for heritage trees, which would require 772 replacement trees to be planted. In accordance with MM-4.4-16 (discussed in Section 4.4 of this Draft EIR), the required replacement trees would be planted where suitable growing conditions are present and would remain in perpetuity. The Project would remove trees that would be classified as forest land which would be subject to the provisions of the SEA Ordinance. As stated in response to Threshold 4.2(d), above, pursuant to the General Plan EIR, compliance with the County's SEA Ordinance would reduce potential impacts to forest land to less than significant levels (County of Los Angeles 2014). Additionally, as detailed in MM-4.4-2 of Section 4.4, Biological Resources, if adequate habitat cannot be preserved off-site, on-site establishment and restoration would be conducted in the On-Site Conservation Area. Several cumulative projects, including, for example, Cumulative Projects LA1, LA2, LA3, and LA13, are within the SEA, which is the same SEA as the Project site, and would thus be subject to the same provisions of the SEA Ordinance, which would reduce any potential impacts to forest land to less than significant levels. According to the Biological Resources Report prepared for Cumulative Project SC1, although located outside of an SEA, Cumulative Project SC1 does not support 10% native tree cover[9] and does not therefore contain any forest land, pursuant to PRC Section 12220(g) (ESA 2021). The Project and Cumulative Projects LA1, LA2, LA3, and LA13, among others of Table 2-2 of Chapter 2, Environmental Setting, are within an SEA, thus no existing cumulative impact to forestry resources in the County exists (as identified in the General Plan EIR). Therefore, development of the Project would not result in a significant contribution to an existing cumulative impact, and cumulative impacts would be less than significant with mitigation.

Threshold 4.2e: 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?

Regarding cumulative impacts from other Project-related 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, cumulative agriculture and/or forestry resources impacts could occur if other cumulative projects, in combination with the Project within the unincorporated County would result in conversion of Farmland to non-agricultural use or forest land to non-forest use. The General Plan EIR did not identify any substantial, adverse cumulative impacts to forestry resources (County of Los Angeles 2014); However, as discussed above, an existing significant cumulative impact was identified for agriculture resources in the County related to conversion of mapped Farmland to non-agriculture use (DOC 2018). As addressed above under Section 4.2.5 for Thresholds 4.2a, 4.3b,

[9] Most of the project site for Cumulative Project #3 contains ruderal vegetation or is already developed (ESA 2021). Of the approximately 45 acre study area evaluated in the Wiley Canyon (Smiser Ranch) Development Biological Resources Report, only (approximately) 2.33 acres were identified as supporting a native woodland vegetation alliance. Cumulative Project #3 is located on an approximately 31-acre site (ESA 2021). As such, the Project site does not support at least 10% of native tree cover, and does not contain any forestland pursuant to PRC Section 12220(g).

and 4.3e, no Farmland is present on or adjacent to the Project site, or on or adjacent to the sites identified for Cumulative Projects LA1, LA2, LA3, and L13, nearest to the Project site which are within the unincorporated County, or within an incorporated City within the County (SC1). Similar to the Project, within the unincorporated County lands, several other cumulative projects are within an SEA, and are adjacent to undeveloped lands within the SEA that may support 10% or greater native tree cover, and thus may qualify as forest land pursuant to PRC Section 12220(g). However, as discussed above under Section 4.2.3 for Thresholds 4.3d and 4.3e, forest lands in the County are protected under the SEA Ordinance, and any development within or adjacent the Project Site or sites for Cumulative Projects LA1 through LA14 would be subject to the provisions of the SEA Ordinance which, pursuant to the General Plan EIR, would reduce potential impacts to forest land to less than significant levels (County of Los Angeles 2014). Further, there is no existing cumulative impact to forestry resources in the County (as identified in the General Plan EIR) (County of Los Angeles 2014). As such, development of the Project would not contribute to any cumulatively considerable agriculture or forestry resources impact and would not result in a significant contribution to an existing cumulative impact.

4.2.7 Mitigation Measures

See MM-4.4-1, *On-Site Habitat Preservation*, and MM-4.4-16, *SEA Protected Tree Replacement/Compensation*, from Section 4.4, Biological Resources.

4.2.8 Level of Significance After Mitigation

There would be no impact regarding conversion of Farmland to a non-agricultural use.

There would be a less than significant impact regarding conflict with existing zoning for agricultural use, with a designated ARA or Williamson Act contract.

There would be no impact regarding conflicts with existing zoning for forest land, timberland, or timberland zoned Timberland Production, or the potential to cause the rezoning of forest land, timberland, or timberland zoned Timberland Production.

There would be a less than significant impact with mitigation regarding loss of forest land or conversion of forest land to non-forest use.

There would no impact regarding changes in the existing environment which could result in conversion of Farmland to non-agricultural. There would be a less than significant impact with mitigation incorporated regarding changes in the existing environment which could result in conversion of forest land to non-forest use.

4.2.9 References

City of Santa Clarita. 2010. *Santa Clarita Valley Area Plan, One Valley One Vision Program Environmental Impact Report*. https://santaclarita.gov/planning/environmental-impact-reports-completed/one-valley-one-vision-general-plan/.

City of Santa Clarita. 2022. *Santa Clarita Municipal Code*. Accessed June 22, 2022. https://www.codepublishing.com/CA/SantaClarita/#!/SantaClarita17/SantaClarita1735.html#17.35.

CNPS (California Native Plant Society). 2022. "What is An Alliance?". *CNPS: A Manual of California Vegetation Online*. Accessed July 11, 2022. https://vegetation.cnps.org/whatsalliance.

County of Los Angeles. 2012. *Santa Clarita Valley Area Plan, One Valley One Vision*. Accessed February 6, 2024. https://planning.lacounty.gov/wp-content/uploads/2022/10/Santa-Clarita-Valley-Area-Plan.pdf.

County of Los Angeles. 2014. *Los Angeles County General Plan Update Draft Environmental Impact Report*. June 2014. Accessed February 6, 2024. https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

County of Los Angeles. 2015a. *Los Angeles County General Plan*. Adopted October 6, 2015. Accessed May 20, 2022. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

County of Los Angeles. 2018. Alternate Los Angeles County 2016-2018 Land Use Conversion. Accessed February 6, 2024.

County of Los Angeles. 2020a. *Significant Ecological Areas (SEA) Ordinance Implementation Guide.* Effective January 16, 2020. Last accessed June 22, 2022. https://planning.lacounty.gov/long-range-planning/significant-ecological-areas-program/implementation-guide/.

County of Los Angeles. 2022a. "Z-Net (Find Your Zoning)." Accessed June 20, 2022. https://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=7700eea9d54d46b18efb615f86cba25c.

County of Los Angeles. 2022b. *Los Angeles County Code*. Accessed May 13, 2022. https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances?nodeId=LOS_ANGELES_CO_CODE.

Dagit, R. 2015. "Oak Woodland Conservation Management Planning in Southern CA – Lessons Learned." Accessed June 8, 2022. https://www.fs.usda.gov/psw/publications/documents/psw_gtr251/psw_gtr251_471.pdf.

DOC (California Department of Conservation). 2018. "Alternate Los Angeles County 2016-2018 Land Use Conversion Table A-13." Accessed June 23, 2022. https://www.conservation.ca.gov/dlrp/fmmp/Documents/fmmp/pubs/2016-2018/alternate_conversion/Alternate_Los_Angeles_County_2016-2018_Land_Use_Conversion.pdf.

DOC. 2022a. "Farmland Mapping & Monitoring Program." Accessed June 20, 2022. https://www.conservation.ca.gov/dlrp/fmmp/.

DOC. 2022b. "CA Prime and Statewide Soils." Accessed June 21, 2022. https://www.conservation.ca.gov/dlrp/fmmp/Pages/CA-Prime-and-Statewide-Soils.aspx.

DOC. 2022c. "California Important Farmland Finder." Accessed June 20, 2022. https://maps.conservation.ca.gov/DLRP/CIFF/.

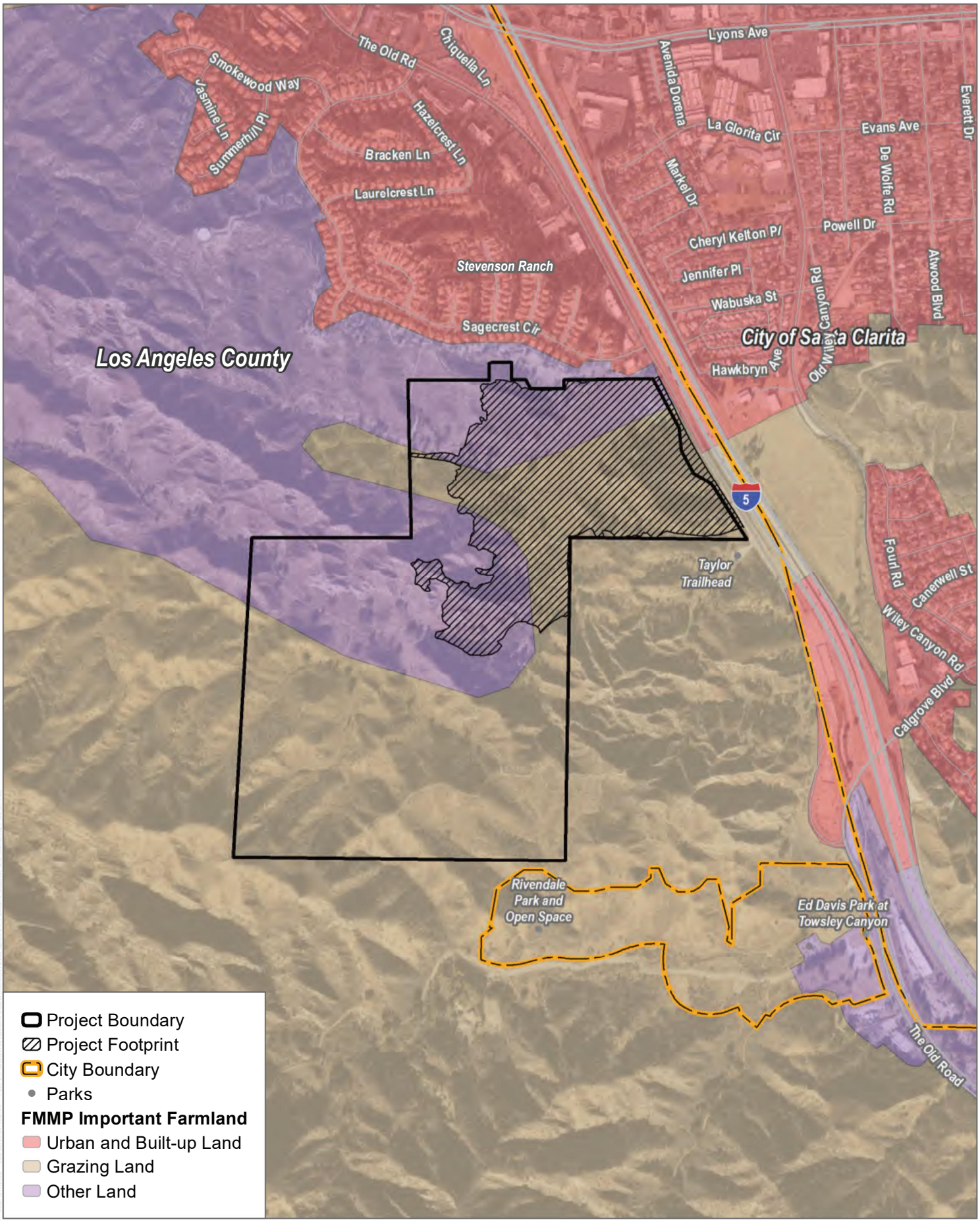
DOC. 2022d. "Important Farmland Categories." Accessed June 20, 2022. https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx.

ESA (Environmental Science Associates). 2021. *Wiley Canyon (Smiser Ranch) Development Biological Resources Report*. Prepared for the City of Santa Clarita. August 2020; Revised November 2021.

FAO (Food and Agriculture Organization of the United Nations). 2022. "Forest and Water". Sustainable Forest Management (SFM) Toolbox. Accessed July 11, 2022. https://www.fao.org/sustainable-forest-management/toolbox/modules/forest-and-water/basic-knowledge/en/.

Renner, I. 2021. "CEQA – Agriculture and Forestry Resources." LegalSound. Accessed February 2024. https://legalsound.net/real-estate-law/ceqa-agriculture-and-forestry-resources.html.

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SOURCE: Bing Maps 2021, Open Street Map 2019, CA DOC 2018

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FIGURE 4.2-1

Agriculture Resources

Trails at Lyons Canyon Project

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4.3 Air Quality

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to air quality, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts analysis, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data and reports from the California Air Resources Board (CARB), U.S. Environmental Protection Agency (EPA), and South Coast Air Quality Management District (SCAQMD), as well as the following:

Appendix B-1 Air Quality and Greenhouse Gas Emission Calculations, prepared by Dudek, dated November 2023

Appendix B-2 AERMOD and HARP2 Modeling Output Files, prepared by Dudek, dated January 2024

Appendix J Transportation Impact Analysis, prepared by Fehr and Peers, dated November 2023

Other sources consulted are listed in Section 4.3.9, References.

4.3.1 Existing Conditions

This section discusses the existing environmental setting relative to air quality at the Project site and surrounding area.

South Coast Air Basin

The metropolitan portions of the County are within the South Coast Air Basin (SCAB). The SCAB is a 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. Projects located within the SCAB are subject to the rules and regulations imposed by the SCAQMD, as well as the California Ambient Air Quality Standards (CAAQS) adopted by CARB and National Ambient Air Quality Standards (NAAQS) adopted by the EPA, as detailed below in Section 4.3.2, Regulatory Setting.

Climate and Topography

The SCAB's air pollution problems are a consequence of the combination of emissions from the nation's second-largest urban area, meteorological conditions that hinder dispersion of those emissions, and mountainous terrain surrounding the SCAB that traps pollutants as they are pushed inland with the sea breeze (SCAQMD 2017). Meteorological and topographical factors that affect air quality in the SCAB are described below.[1]

Climate

The SCAB is characterized as having a Mediterranean climate (typified as semiarid with mild winters, warm summers, and moderate rainfall). The general region lies in the semi-permanent high-pressure zone of the eastern Pacific; as a result, the climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

[1] The discussion of meteorological and topographical conditions of the SCAB is based on information provided in the Final 2016 Air Quality Management Plan (SCAQMD 2017).

Moderate temperatures, comfortable humidity, and limited precipitation characterize the climate in the SCAB. The average annual temperature varies little throughout the SCAB, averaging 75°F. However, with a less-pronounced oceanic influence, the eastern inland portions of the SCAB show greater variability in annual minimum and maximum temperatures. All portions of the SCAB have recorded temperatures over 100° F in recent years. Although the SCAB has a semiarid climate, the air near the surface is moist because of the presence of a shallow marine layer. Except for infrequent periods when dry air is brought into the SCAB by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. Annual average relative humidity is 70% at the coast and 57% in the eastern part of the SCAB (SCAQMD 1993). Precipitation in the SCAB is typically 9 to 14 inches annually and is rarely in the form of snow or hail because of typically warm weather. However, annual precipitation averages about 18.19 inches at the Project site, falling mostly from October through May (WRCC 2022).[2] Most of the rainfall in Southern California occurs between late fall and early spring, with most rain typically occurring in the months of January and February. Overall, Los Angeles's climate is characterized by relatively low rainfall, with warm summers and mild winters. Average temperatures range from a high of 92.2° F in July to a low of 40.0° F in December (WRCC 2022).

Sunlight

The presence and intensity of sunlight are necessary prerequisites for the formation of photochemical smog. Under the influence of the ultraviolet radiation of sunlight, certain primary pollutants (mainly reactive hydrocarbons and oxides of nitrogen [NO_x][3]) react to form secondary pollutants (primarily oxidants). Since this process is time dependent, secondary pollutants can be formed many miles downwind of the emission sources. Southern California also has abundant sunshine, which drives the photochemical reactions that form pollutants such as ozone (O_3) and a substantial portion of fine particulate matter ($PM_{2.5}$ or particulate matter 2.5 microns or less in diameter). In the SCAB, high concentrations of O_3 are normally recorded during the late spring, summer, and early autumn months, when more intense sunlight drives enhanced photochemical reactions. Because of the prevailing daytime winds and time-delayed nature of photochemical smog, oxidant concentrations are highest in the inland areas of Southern California.

Temperature Inversions

Under ideal meteorological conditions and irrespective of topography, pollutants emitted into the air mix and disperse into the upper atmosphere. However, the Southern California region frequently experiences temperature inversions in which pollutants are trapped and accumulate close to the ground. The inversion, a layer of warm, dry air overlaying cool, moist marine air, is a normal condition in coastal Southern California. The cool, damp, and hazy sea air capped by coastal clouds is heavier than the warm, clear air, which acts as a lid through which the cooler marine layer cannot rise. The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above mean sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet above mean sea level, the terrain prevents the pollutants from entering the upper atmosphere, resulting in the pollutants settling in the foothill communities. Below 1,200 feet above mean sea level, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Usually, inversions are lower before sunrise than during the daylight hours.

[2] Local climate data for the County is based on the most-representative station measured by the Western Regional Climate Center, which is the Newhall climatological station.

[3] NO_x is a general term pertaining to compounds of nitric oxide, nitrogen dioxide, and other oxides of nitrogen.

Mixing heights for inversions are lower in the summer and inversions are more persistent, being partly responsible for the high levels of O_3 observed during summer months in the SCAB. Smog in Southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods, allowing them to form secondary pollutants by reacting in the presence of sunlight. The SCAB has a limited ability to disperse these pollutants due to typically low wind speeds and the surrounding mountain ranges.

As with other regions within the SCAB, the County is susceptible to air inversions, which trap a layer of stagnant air near the ground where pollutants are further concentrated. These inversions produce haziness, which is caused by moisture, suspended dust, and a variety of chemical aerosols emitted by trucks, automobiles, furnaces, and other sources. Elevated concentrations of coarse particulate matter (PM_{10}; particulate matter 10 microns or less in diameter) and $PM_{2.5}$ can occur in the SCAB throughout the year, but they occur most frequently in fall and winter. Although there are some changes in emissions by day of the week and by season, the observed variations in pollutant concentrations are primarily the result of seasonal differences in weather conditions.

Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The national and California standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O_3, nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide, PM_{10}, $PM_{2.5}$, and lead. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants. These pollutants, as well as TACs, are discussed in the following paragraphs.[4]

Ozone (O_3). O_3 is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors. These precursors are mainly NO_x and volatile organic compounds (VOCs). The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O_3 exists in the upper atmosphere O_3 layer (stratospheric O_3) and at the Earth's surface in the troposphere (ground-level O_3).[5] The O_3 that EPA and CARB regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe. Ground-level O_3 is a harmful air pollutant that causes numerous adverse health effects, described below, and is thus considered "bad" O_3. Stratospheric, or "good," O_3 occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O_3 layer, plant and animal life would be seriously harmed.

O_3 in the troposphere (near the surface) causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes,

[4] The descriptions of the criteria air pollutants and associated health effects are based on EPA's "Criteria Air Pollutants" (EPA 2018a), as well as CARB's "Glossary" (CARB 2019a) and "Fact Sheet: Air Pollution Sources, Effects and Control" (CARB 2009).

[5] The troposphere is the layer of the Earth's atmosphere nearest to the surface of the Earth. The troposphere extends outward about 5 miles at the poles and about 10 miles at the equator.

reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes (EPA 2013).

Inhalation of O_3 causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms. Exposure to O_3 can reduce the volume of air that the lungs breathe in, thereby causing shortness of breath. O_3 in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. The occurrence and severity of health effects from O_3 exposure vary widely among individuals, even when the dose and the duration of exposure are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O_3 exposure. While there are relatively few studies on the effects of O_3 on children, the available studies show that children are no more or less likely to suffer harmful effects than adults. However, there are a number of reasons why children may be more susceptible to O_3 and other pollutants. Children and teens spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults. Also, children are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults. Children, adolescents, and adults who exercise or work outdoors, where O_3 concentrations are the highest, are at the greatest risk of harm from this pollutant (CARB 2019b).

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as VOCs (also referred to as reactive organic gases). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of anthropogenic and bio-pedogenic hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate ambient air quality standards for VOCs as a group.

Nitrogen Dioxide (NO_2). NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide, which is a colorless, odorless gas. NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

A large body of health science literature indicates that exposure to NO_2 can induce adverse health effects. The strongest health evidence, and the health basis for the ambient air quality standards for NO_2, results from controlled human exposure studies that show that NO_2 exposure can intensify responses to allergens in allergic asthmatics. In addition, a number of epidemiological studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO_2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO_2 exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher levels of exposure compared to children with lower exposure levels. In addition, children with asthma

have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB 2019c).

Carbon Monoxide (CO). CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the Project location, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

CO is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, light-headedness, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2019d).

Sulfur Dioxide (SO_2). SO_2 is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels.

Controlled human exposure and epidemiological studies show that children and adults with asthma are more likely to experience adverse responses with SO_2 exposure, compared with the non-asthmatic population. Effects at levels near the 1-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath, and chest tightness, especially during exercise or physical activity. Also, exposure at elevated levels of SO_2 (above 1 part per million [ppm]) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality. Older people and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects (CARB 2019e).

SO_2 is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in particulate matter (NRC 2005). People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their SO_2-induced increase in airflow resistance is greater than in healthy people, and it increases with the severity of their asthma (NRC 2005). SO_2 is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways (NRC 2005).

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Coarse particulate matter (PM_{10}) consists of particulate matter that is 10 microns or less in diameter, which is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter ($PM_{2.5}$) consists of particulate matter that is 2.5 microns or less in diameter, which is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility.

A number of adverse health effects have been associated with exposure to both $PM_{2.5}$ and PM_{10}. For $PM_{2.5}$, short-term exposures (up to 24-hour duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. In addition, of all of the common air pollutants, $PM_{2.5}$ is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and worldwide based on the World Health Organization's Global Burden of Disease Project. Short-term exposures to PM_{10} have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits (CARB 2017).

Long-term exposure (months to years) to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10} exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer (CARB 2017).

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient (IQ) performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

Sulfates. Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO_2 in the atmosphere and can result in respiratory impairment, as well as reduced visibility.

Vinyl Chloride. Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer (CARB 2021a).

Hydrogen Sulfide. Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, sewage treatment plants, and stagnant runoff from clogged water basins. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

Visibility-Reducing Particles. Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism. Sources of visibility-reducing particles are the same as for $PM_{2.5}$.

Non-Criteria Air Pollutants

Toxic Air Contaminants (TACs). A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic non-cancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In the state of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics “Hot Spots” Information and Assessment Act, AB 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples include diesel particulate matter, certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills and oil and gas facilities. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and non-carcinogenic effects. Non-carcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

Diesel Particulate Matter (DPM). DPM is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More than 90% of DPM is less than 1 micrometer in diameter (about 1/70 the diameter of a human hair), and thus is a subset of $PM_{2.5}$ (CARB 2019f). DPM is typically composed of carbon particles ("soot," also called black carbon) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene (CARB 2019f). The CARB classified "particulate emissions from diesel-fueled engines" (i.e., DPM) (17 CCR 93000) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines: on-road diesel engines, including trucks, buses, and cars, and off-road diesel engines, including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (Propper et al. 2015). To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000). Because it is part of $PM_{2.5}$, DPM also contributes to the same non-cancer health effects as $PM_{2.5}$ exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies (CARB 2019f). Those most vulnerable to non-cancer health effects are children, whose lungs are still developing, and older people, who often have chronic health problems.

Odorous Compounds. Odors are generally regarded as an annoyance or a quality-of-life impact, rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. In a phenomenon known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; microclimate; relative humidity; temperature; topography; and the sensitivity of receptors.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. The SCAQMD identifies sensitive receptors as residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). The Project is approximately 110 feet south of existing residential land uses. The Project would also introduce new residential receptors to the site.

Background Health Risk

The SCAQMD conducted its first Multiple Air Toxics Exposure Study (MATES) in 1986 and 1987. The SCAQMD provided updates and expanded information in the MATES program as follows: MATES II (2000), MATES III (2008), MATES IV (2015), and MATES V (2021). MATES IV and V include a monitoring program, an updated emissions inventory of TACs, and a modeling effort to characterize risk across the SCAB. MATES focuses on the carcinogenic

risk from exposure to air toxics but does not estimate mortality or other health effects from particulate exposures. The key findings of MATES IV are as follows (SCAQMD 2015a):

- During the study period, the average SCAB cancer risk from air toxics based on the annual average levels calculated from the 10 monitoring sites data was approximately 418 per 1 million, meaning that out of every 1 million people, 418 have an increased risk of contracting cancer. This is about 65% lower than the estimated risk from the 2004–2006 time period. Diesel exhaust was the key driver for air toxics risk, accounting for 68% of the total air toxics risk estimated from monitoring. None of the annual averages of pollutants measured were above the chronic reference exposure levels for noncancer health effects developed by the California Office of Environmental Health Hazard Assessment.
- Ambient levels of most substances measured were lower compared to that of the MATES III, which was conducted in 2004–2006, reflecting the success of various control strategies to reduce exposure to air toxics. DPM showed the most dramatic reductions, with the levels found about 65% lower compared to MATES III.
- Model estimated air toxics risk showed an overall SCAB-wide reduction, with the greatest reductions occurring near the ports. The SCAB-wide estimated population-weighted risk was 57% lower in MATES IV compared to MATES III.
- Regional modeling analysis shows the highest risks from air toxics surrounding the port areas, with the highest grid cell risk about 1,000 per 1 million, followed by Central Los Angeles, where there is a major transportation corridor, with grid cell modeled risks ranging from about 700 to 750 per 1 million.

The MATES V interactive map (SCAQMD 2021) indicates that the cancer risks in the area where the Project site is located (zip code 91381), is estimated to be 248, as compared to the Basin-wide average of 455 in 1 million (SCAQMD 2021). The risk levels at the Project site include emission sources such as the I-5, which is around 150 feet to the east/north-east of the Project site.

4.3.2 Regulatory Requirements

Federal

Federal Clean Air Act

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. EPA is responsible for implementing most aspects of the Clean Air Act, including setting NAAQS for major air pollutants; setting hazardous air pollutant standards; approving state attainment plans; setting motor vehicle emissions standards; issuing stationary source emissions standards and permits; and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. NAAQS are established for criteria pollutants under the Clean Air Act, which are O_3, CO, NO_2, SO_2, Coarse PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare State Implementation Plans that demonstrates how those areas will attain the NAAQS within mandated timeframes.

Hazardous Air Pollutants

The 1977 federal Clean Air Act amendments required EPA to identify National Emission Standards for Hazardous Air Pollutants to protect public health and welfare. Hazardous air pollutants (HAPs) include certain VOCs, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 federal Clean Air Act amendments, which expanded the control program for HAPs, 189 substances and chemical families were identified as HAPs.

State

California Criteria Air Pollutants

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established the CAAQS, which are generally more restrictive than the NAAQS. As stated previously, an ambient air quality standard defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harm to the public's health. For each pollutant, concentrations must be below the relevant CAAQS before a geographical area can attain the corresponding CAAQS. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded.

California air districts have based their thresholds of significance for California Environmental Quality Act (CEQA) purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the NAAQS or CAAQS. Since an ambient air quality standard is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the ambient air quality standard, this means that the thresholds established by air districts are also protective of human health. The NAAQS and CAAQS are presented in Table 4.3-1, Ambient Air Quality Standards.

Table 4.3-1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
Ozone (O_3)	1 hour	0.09 ppm (180 µg/m³)	—	Same as Primary Standard
	8 hours	0.070 ppm (137 µg/m³)	0.070 ppm (137 µg/m³)	
Nitrogen dioxide (NO_2)[f]	1 hour	0.18 ppm (339 µg/m³)	0.100 ppm (188 µg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	
Carbon monoxide (CO)	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	

Table 4.3-1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
Sulfur dioxide (SO_2)	1 hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m³)
	24 hours	0.04 ppm (105 µg/m³)	0.14 ppm (for certain areas)[f]	—
	Annual	—	0.030 ppm (for certain areas)[f]	—
Coarse Particulate Matter (PM_{10})	24 hours	50 µg/m³	150 µg/m³	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m³	—	
Fine Particulate Matter ($PM_{2.5}$)	24 hours	—	35 µg/m³	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m³	12.0 µg/m³	15.0 µg/m³
Lead[g]	30-day Average	1.5 µg/m³	—	—
	Calendar Quarter	—	1.5 µg/m³ (for certain areas)	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 µg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m³)	—	—
Vinyl chloride	24 hours	0.01 ppm (26 µg/m³)	—	—
Sulfates	24 hours	25 µg/m³	—	—
Visibility-reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%	—	—

Source: CARB 2016. EPA 2021b.

Notes: ppm = parts per million by volume; µg/m³ = micrograms per cubic meter; mg/m³= milligrams per cubic meter; PST = Pacific Standard Time.

[a] California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility-reducing particles—are values that are not to be exceeded. All others are not to be equaled or exceeded. California Ambient Air Quality Standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a 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/m³ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°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] 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 parts per billion (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.

[g] CARB has 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.

Toxic Air Contaminants

The State Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807. The California TAC list identifies more than 200 pollutants, of which carcinogenic and non-carcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs. In 1987, the legislature enacted the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment Program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. There are several airborne toxic control measures that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

California Health and Safety Code Section 41700

Section 41700 of the Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

Local

South Coast Air Quality Management District

The SCAQMD is the regional agency responsible for the regulation and enforcement of federal, State, and local air pollution control regulations within the SCAB, which includes the metropolitan area of Los Angeles County and the Project site. SCAQMD operates monitoring stations in the SCAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and

conducts source testing and inspections. SCAQMD's Air Quality Management Plans (AQMPs) include control measures and strategies to be implemented to attain the CAAQS and NAAQS in the SCAB. SCAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment.

The most-recently adopted AQMP is the 2022 AQMP (SCAQMD 2022), which was adopted by the SCAQMD governing board on December 2, 2022. The 2022 AQMP is a regional blueprint for achieving air quality standards and healthful air. The strategies of the 2022 AQMP include: wide adoption of zero-emissions technologies; low NO_x technologies where zero-emission technologies are not feasible; federal action; zero-emission technologies for residential and industrial sources; incentive funding in environmental justice areas; and prioritizing benefits on the most disadvantaged communities (SCAQMD 2022). Applicable Rules and Regulations of the SCAQMD

The following SCAQMD rules which may apply to the Project include, but are not limited to, the following:

SCAQMD Rule 401 – Visible Emissions. This rule establishes the limit for visible emissions from stationary sources for a period or periods aggregating more than three minutes in any hour. This rule prohibits visible emissions dark or darker than Ringelmann No. 1 (20%) for periods greater than three minutes in any hour. The Ringelmann system is a method whereby graduated shades of gray, varying by five equal steps between white and black, may be accurately reproduced by means of a rectangular grill of black lines of definite width and spacing on a white background.

SCAQMD Rule 402 – Nuisance. This rule prohibits the discharge of air pollutants from a facility that causes injury, detriment, nuisance, or annoyance to the public or damage businesses or property.

SCAQMD Rule 403 – Fugitive Dust. This rule requires fugitive dust sources to implement best available control measures for all sources and prohibits all forms of visible particulate matter from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust.

SCAQMD Rule 431.2 – Sulfur Content of Liquid Fuels. The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose both of reducing the formation of SO_x and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the SCAQMD. The rule also affects diesel fuel supplied for mobile source applications.

SCAQMD Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines. This rule applies to stationary and portable engines rated at greater than 50 horsepower. The purpose of Rule 1110.2 is to reduce NOx, VOCs, and CO emissions from engines. Emergency engines, including those powering standby generators, are generally exempt from the emissions and monitoring requirements of this rule because they have permit conditions that limit operation to 200 hours or less per year as determined by an elapsed operating time meter.

SCAQMD Rule 1113 – Architectural Coatings. This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the federally designated metropolitan planning organization for the Southern California region and is the largest metropolitan planning organization in the United States.

With respect to air quality planning and other regional issues, SCAG has prepared the 2008 Regional Comprehensive Plan: Helping Communities Achieve a Sustainable Future (2008 RCP) for the region (SCAG 2008). The 2008 RCP sets the policy context in which SCAG participates in and responds to the SCAQMD air quality plans and builds off the SCAQMD AQMP processes that are designed to meet health-based criteria pollutant standards in several ways (SCAG 2008). First, it complements AQMPs by providing guidance and incentives for public agencies to consider best practices that support the technology-based control measures in AQMPs. Second, the 2008 RCP emphasizes the need for local initiatives that can reduce the region's greenhouse gas emissions that contribute to climate change, an issue that is largely outside the focus of local attainment plans. Third, the 2008 RCP emphasizes the need for better coordination of land use and transportation planning, which heavily influences the emissions inventory from the transportation sectors of the economy. This also minimizes land use conflicts, such as residential development near freeways, industrial areas, or other sources of air pollution.

On September 3, 2020, SCAG adopted Connect SoCal, the 2020–2045 RTP/SCS, which is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, planning strategies, and the people whose collaboration can improve the quality of life for Southern Californians. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. As stated above, the SCAQMD adopted the 2022 AQMP, which incorporates these updated regional growth projections (SCAG 2020, SCAQMD 2022).

South Coast Air Basin Attainment Designation in Los Angeles County

Table 4.3-2, South Coast Air Basin Attainment Classification, states the current attainment status of the Los Angeles County portion of the SCAB with respect to the NAAQS and CAAQS.

Table 4.3-2. South Coast Air Basin Attainment Classification

Pollutant	Designation/Classification	
	National Standards	California Standards
Ozone (O_3), 1-hour	No national standard	Nonattainment
Ozone (O_3), 8-hour	Extreme nonattainment	Nonattainment
Nitrogen Dioxide (NO_2)	Unclassifiable/attainment	Attainment
Carbon Monoxide (CO)	Attainment/maintenance	Attainment
Sulfur Dioxide (SO_2)	Unclassifiable/attainment	Attainment
Coarse Particulate Matter (PM_{10})	Attainment/maintenance	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Serious nonattainment	Nonattainment
Lead	Nonattainment	Attainment

Table 4.3-2. South Coast Air Basin Attainment Classification

Pollutant	Designation/Classification	
	National Standards	California Standards
Hydrogen Sulfide	No national standard	Unclassified
Sulfates	No national standard	Attainment
Visibility-Reducing Particles	No national standard	Unclassified
Vinyl Chloride	No national standard	No designation

Source: EPA 2021a (national); CARB 2020 (California).
Notes: Bold text = not in attainment; attainment = meets the standards; attainment/maintenance = achieves the standards after a nonattainment designation; nonattainment = does not meet the standards; unclassified or unclassifiable = insufficient data to classify; unclassifiable/attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.

In summary, the SCAB is designated as a nonattainment area for federal and state O_3 standards and federal and State $PM_{2.5}$ standards. The SCAB is designated as a nonattainment area for State PM_{10} standards; however, it is designated as an attainment area for federal PM_{10} standards. The SCAB is designated as an attainment area for federal and State CO standards, NO_2 standards, and SO_2 standards. While the SCAB has been designated as nonattainment for the federal rolling 3-month average lead standard, it is designated attainment for the State lead standard (EPA 2021a; CARB 2020).

Despite the current nonattainment status, air quality in the SCAB has generally improved since the inception of air pollutant monitoring in 1976. This improvement is mainly a result of lower-polluting on-road motor vehicles, more stringent regulation of industrial sources, and the implementation of emission reduction strategies by SCAQMD. This trend toward cleaner air has occurred in spite of continued population growth. PM_{10} levels have declined almost 50% since 1990, and $PM_{2.5}$ levels have also declined 50% since measurements began in 1999 (SCAQMD 2013). Similar improvements are observed with O_3, although the rate of O_3 decline has slowed in recent years.

Ambient Air Quality

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. The SCAQMD monitors local ambient air quality within the County. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The most recent background ambient air quality data from 2020 to 2022 are presented in Table 4.3-3, Local Ambient Air Quality Data.

The ambient data presented in Table 4.3-3 reflect the highest concentrations reported at the monitoring station located at 22224 Placerita Canyon Rd., Santa Clarita. Of the available monitoring stations within the SCAB, the Santa Clarita station is considered representative of the air quality experienced in the Project vicinity. Ambient concentration estimates for SO_2 were not available at the Santa Clarita monitoring station, so the next nearest monitoring station, located at 1630 North Main Street, Los Angeles, was used for those pollutants. The ambient concentrations and number of days exceeding the ambient air quality standards is also shown in Table 4.3-3.

Table 4.3-3. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2020	2021	2022	2020	2021	2022
Ozone (O_3)									
Maximum 1-hour concentration	ppm	California	0.12	0.148	0.125	0.129	44	30	28
Maximum 8-hour concentration	ppm	California	0.070	0.122	0.104	0.115	75	63	68
		National	0.070	0.122	0.103	0.114	74	61	66
Nitrogen Dioxide (NO_2)									
Maximum 1-hour concentration	ppm	California	0.18	0.046	0.056	0.051	0	0	0
		National	0.100	0.046	0.057	0.052	0	0	0
Annual concentration	ppm	California	0.030	0.009	0.009	0.009	0	0	0
		National	0.053	0.009	0.01	0.009	0	0	0
Carbon Monoxide (CO)									
Maximum 1-hour concentration	ppm	California	20	1.2	1.0	1.5	0	0	0
		National	35	1.2	1.0	1.5	0	0	0
Maximum 8-hour concentration	ppm	California	9.0	0.8	0.7	0.6	0	0	0
		National	9	0.8	0.7	0.6	0	0	0
Sulfur Dioxide (SO_2) North Main Street									
Maximum 1-hour concentration	ppm	National	0.075	0.004	0.002	0.007	0	0	0
Maximum 24-hour concentration	ppm	National	0.14	0.001	0.001	0.001	0	0	0
Annual concentration	ppm	National	0.030	0.0002	0.0004	0.0003	0	0	0
Coarse Particulate Matter (PM_{10})[a]									
Maximum 24-hour concentration	µg/ m³	California	50	64.7	45.0	35.3	(1) —	(0) 0.0	(0) 0.0
		National	150	67.8	47.1	36.9	(0) —	(0) 0.0	(0) 0.0
Annual concentration	µg/ m³	California	20	21.5	19.3	18.0	ND	ND	ND
Fine Particulate Matter ($PM_{2.5}$)[a]									
Maximum 24-hour concentration	µg/ m³	National	35	43.3	30.1	27.2	0	0	0
		California	12	9.0	ND	9.2	0	0	0

Table 4.3-3. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2020	2021	2022	2020	2021	2022
Annual concentration	µg/m³	National	12.0	9.0	ND	9.2	0	0	0

Source: CARB 2021b; EPA 2021c.
Notes: ppm = parts per million by volume; — = not available; µg/m³ = micrograms per cubic meter; ND = insufficient data available to determine the value.
Data taken from CARB iADAM (http://www.arb.ca.gov/adam) and EPA AirData (http://www.epa.gov/airdata/) represent the highest concentrations experienced over a given year.
Exceedances of national and California standards are only shown for O_3 and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed national or California standards during the years shown. There is no national standard for 1-hour O_3, annual PM_{10}, or 24-hour SO_2, nor is there a California 24-hour standard for $PM_{2.5}$.
[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

Title 31 – Green Building Standards.

The Los Angeles County Green Building Standards, which implement and exceed the California Green Building Standards Code (CALGreen), are identified in the Los Angeles County Code, Title 31. Chapter 4 outlines residential mandatory measures, including installation of electric vehicle charging infrastructure, low-impact development, cool roofs, and construction waste management.

Los Angeles County 2035 General Plan

The following local regulations from the General Plan pertaining to air quality would apply to the Project (County of Los Angeles 2015). The Project's potential to conflict with these listed goals and policies is analyzed in Section 4.11, Land Use and Planning, of this Draft EIR.

Air Quality Element

Goal AQ 1. Protection from exposure to harmful air pollutants.

Policy AQ 1.1. Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors.

Policy AQ 1.2. Encourage the use of low or no volatile organic compound (VOC) emitting materials.

Policy AQ 1.3. Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible.

Goal AQ 2. The reduction of air pollution and mobile source emissions through coordinated land use, transportation and air quality planning.

Policy AQ 2.1. Encourage the application of design and other appropriate measures when siting sensitive uses, such as residences, schools, senior centers, daycare centers, medical facilities, or parks with active recreational facilities within proximity to major sources of air pollution, such as freeways.

Policy AQ 2.3. Support the conservation of natural resources and vegetation to reduce and mitigate air pollution impacts.

Policy AQ 3.5. Encourage maximum amounts of energy conservation in new development and municipal operations.

Land Use Element

Policy LU 1.5. In the review of a project-specific amendment(s) to convert OS-C designated lands to other land use designations, ensure that the project-specific amendment(s) does not contribute to the overall loss of open space that protects water quality, provides natural habitats, and contributes to improved air quality.

Policy LU 4.3. Encourage transit-oriented development in urban and suburban areas with the appropriate residential density along transit corridors and within station areas.

Policy LU 4.4. Encourage mixed use development along major commercial corridors in urban and suburban areas.

Policy LU 5.1. Encourage a mix of residential land use designations and development regulations that accommodate various densities, building types and styles.

Policy LU 5.3. Support a mix of land uses that promote bicycling and walking, and reduce VMTs.

Policy LU 11.1. Encourage new development to employ sustainable energy practices, such as utilizing passive solar techniques and/or active solar technologies.

Policy LU 11.2. Support the design of developments that provide substantial tree canopy cover, and utilize light colored paving materials and energy-efficient roofing materials to reduce the urban heat island effect.

Policy LU 11.3. Encourage development to optimize the solar orientation of buildings to maximize passive and active solar design techniques.

Policy LU 11.4. Encourage subdivisions to utilize sustainable design practices, such as maximizing energy efficiency through lot configuration; preventing habitat fragmentation; promoting storm water retention; promoting the localized production of energy; promoting water conservation and reuse; maximizing interconnectivity; and utilizing public transit.

Conservation and Natural Resources Element

Policy C/NR 12.1. Encourage the production and use of renewable energy resources.

Policy C/NR 12.2. Encourage the effective management of energy resources, such as ensuring adequate reserves to meet peak demands.

Public Services and Facilities Element

Policy PS/F 6.8. Encourage projects that incorporate onsite renewable energy systems.

Santa Clarita Valley Area Plan (OVOV)

The General Plan provides goals and policies to achieve County-wide planning objectives for the unincorporated areas and is the foundational document for all community-based plans that serve the unincorporated areas, such as Area Plans, community or neighborhood plans, and Transit Oriented District specific plans. The General Plan identifies 11 Planning Areas, which make up the Planning Areas Framework. The purpose of the Planning Areas Framework is to provide a mechanism for local communities to work with the County to develop plans that respond to their unique and diverse character. Area plans focus on land use and policy issues that are specific to the Planning Area. Community or neighborhood plans cover smaller geographic areas within the Planning Area, and address neighborhood and/or community-level policy issues. An Area Plan must be prepared or updated for each of the 11 Planning Areas, which provides opportunities to update community-based plans, as well as implementation tools of the General Plan, such as specific plans and community standards districts. As detailed further below, the Project site is located within the Santa Clarita Valley Area Plan, also known as "One Valley, One Vision" (OVOV).

The OVOV is a component of the Los Angeles County General Plan and is intended to provide focused goals, policies, and maps to guide the regulation of development within the unincorporated portions of the Santa Clarita Valley, and it would not conflict with both the County's comprehensive General Plan and with the City of Santa Clarita's General Plan. The Santa Clarita Valley Area Plan Update was adopted by the County Board of Supervisors on November 27, 2012. It was created as a joint planning effort with the City of Santa Clarita. The other component is the City of Santa Clarita General Plan, which was adopted by the City of Santa Clarita City Council on June 14, 2011. Together, the County's Area Plan and the City's General Plan provide a unified vision for development and conservation for the entire Santa Clarita Valley (County of Los Angeles 2015).

The Santa Clarita Valley Planning Area is the second largest Planning Area after the Antelope Valley Planning Area. It includes the City of Santa Clarita, the residential communities at the city's periphery, and mountainous areas surrounding the valley. Although most of the unincorporated area in the Planning Area consists of vacant mountainous areas, unincorporated areas near the City of Santa Clarita include a wide variety of land uses. The wide valleys east of the City of Santa Clarita include the communities such as Agua Dulce. These areas consist primarily of single-family residential and farming uses. However, parcels used for industrial and utility uses are scattered throughout these areas. Areas directly north and west of the City of Santa Clarita feature a range of urbanized land uses, including single-family uses, major commercial retail centers along I-5 (including Six Flags Magic Mountain), utilities, and a large concentration of industrial uses west of I-5 and north of SR-126. Rural canyon neighborhoods such as Val Verde are primarily single-family uses surrounded by mountainous undeveloped land (County of Los Angeles 2015).

4.3.3 Thresholds of Significance

In accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to air quality are listed below. A project may have a significant impact if it would:

Threshold 4.3a: Conflict with or obstruct implementation of applicable air quality plans of either the South Coast AQMD (SCAQMD) or the Antelope Valley AQMD (AVAQMD).

Threshold 4.3b: 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 4.3c: Expose sensitive receptors to substantial pollutant concentrations.

Threshold 4.3d: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Section 4.3.4, Methodology, below, details the specific thresholds and methodology used under each CEQA threshold.

4.3.4 Methodology

Threshold 4.3a

The Project site is within the jurisdiction of the SCAQMD and is not within the AVAQMD. Therefore, this evaluation of whether the Project would conflict with or obstruct implementation of the applicable AQMP (CEQA Guidelines, Appendix G, Threshold 1) is based on the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993), Chapter 12, Sections 12.2 and 12.3. The first criterion assesses whether the development of the Project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, which is addressed in detail under Threshold 4.3b. The second criterion is whether the development of Project would exceed the assumptions in the SCAQMD AQMP or increments based on the year of buildout found within the SCAG RTP/SCS for households.

Threshold 4.3b

By its nature, air pollution is largely a cumulative impact. However, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulatively considerable contribution on air quality. If the Project's emissions would exceed the applied significance thresholds, it would have a cumulatively considerable contribution. Conversely, if the emissions from development of the Project does not exceed the project-specific thresholds, it is generally not considered to result in a cumulatively significant impact (SCAQMD 2003a). Accordingly, to evaluate the potential for the Project to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state AAQS, this analysis applies SCAQMD's criteria pollutants thresholds, as shown in Table 4.3-4, below.

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to determine whether the development of the Project would have a significant impact on air quality. The County uses

the SCAQMD thresholds to evaluate proposed development projects and to assess the significance of quantifiable impacts. The potential air quality impacts of a project are, therefore, evaluated according to the thresholds adopted by the SCAQMD in connection with its CEQA 1993 Air Quality Handbook, Air Quality Analysis Guidance Handbook, and additional SCAQMD guidance.

SCAQMD has established Air Quality Significance Thresholds, as revised in April 2019, that set forth quantitative emission significance thresholds below which a project would not have a significant impact on ambient air quality, as shown in Table 4.3-4, SCAQMD Air Quality Significance Thresholds (SCAQMD 2019).

Table 4.3-4. SCAQMD Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	**Construction (pounds per day)**	**Operation (pounds per day)**
VOCs	75	55
NO_x	100	55
CO	550	550
SO_x	150	150
PM_{10}	150	150
$PM_{2.5}$	55	55
Lead[a]	3	3
TACs and Odor Thresholds		
TACs[b]	Maximum incremental cancer risk ≥10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥1 in 1 million) Chronic and acute hazard index ≥1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality Standards for Criteria Pollutants[c]		
NO_2 1-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state)	
NO_2 annual arithmetic mean	0.030 ppm (state) and 0.0534 ppm (federal)	
CO 1-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal)	
CO 8-hour average	9.0 ppm (state/federal)	
PM_{10} 24-hour average	10.4 μg/m³ (construction)[d] 2.5 μg/m³ (operation)	
PM_{10} annual average	1.0 μg/m³	
$PM_{2.5}$ 24-hour average	10.4 μg/m³ (construction)[d] 2.5 μg/m³ (operation)	

Source: SCAQMD 2019.
Notes: SCAQMD = South Coast Air Quality Management District; VOC = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; TAC = toxic air contaminant; NO_2 = nitrogen dioxide; ppm = parts per million by volume; μg/m³ = micrograms per cubic meter.

greenhouse gas emissions thresholds for industrial projects, as added in the March 2015 revision to the SCAQMD Air Quality Significance Thresholds, were not include included in this table as they are addressed within the greenhouse gas emissions analysis and not the air quality analysis.

[a] The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the Project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

[b] TACs include carcinogens and noncarcinogens.

[c] Ambient air quality standards for criteria pollutants are based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.

[d] Ambient air quality threshold is based on SCAQMD Rule 403.

Construction Emissions

Emissions from the construction phase of the Project were estimated using the California Emission Estimator Model (CalEEMod) Version 2022 (CAPCOA 2022). Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the Project applicant and CalEEMod default values when Project specifics were not known.

For purposes of estimating Project emissions (including on-site and off-site construction activities) and based on information provided by the Project applicant and engineers, construction of the Project would commence in May 2025[6] and would last approximately 54 months (or four years and six months), ending in November 2029. The analysis contained herein is based on the following assumptions (duration of phases are approximate):

- **Clear & Grub:** 2 weeks (May 19, 2025 – May 30, 2025)
- **Remedial & Mass Excavation:** 4 months (June 2, 2025 – September 30, 2025)
- **Wet Utilities:** 11 months (June 22, 2025 – May 22, 2026)
- **Finish Grading:** 2 months (October 3, 2025 – November 13, 2025)
- **Pump Station 4:** 3 weeks (April 1, 2026 – April 21, 2026)
- **Dry Utilities:** 5 months (April 13, 2026 – September 3, 2026)
- **Pump Station 5:** 2 weeks (April 22, 2026 – May 5, 2026)
- **18-inch Pipe Installation:** 3 months (May 5, 2026 – July 27, 2026)
- **12-inch Pipe Installation:** 4 months (May 5, 2026 – August 24, 2026)
- **Balancing/Aggregate Base:** 1 month (June 30, 2026 – July 27, 2026)
- **Curb & Gutter:** 1 month (July 26, 2026 – August 24, 2026)
- **Asphalt Paving:** 2 months (August 17, 2026 – September 21, 2026)
- **Building Construction Lots 7, 8, and 9:** 29 months (June 2, 2026 – November 8, 2028)
- **Concrete Flatwork:** 1 month (June 23, 2026 – July 8, 2026)
- **Building Construction Lot 6:** 35 months (September 24, 2026 – September 6, 2029)
- **Building Construction Lot 5:** 35 months (October 14, 2026 – September 10, 2029)
- **Building Construction Lot 4:** 37 months (November 4, 2026 – November 27, 2029)
- **Building Construction Lots 2&3:** 34 months (November 25, 2026 – September 17, 2029)
- **Building Construction Lots 10 and 11:** 11 months (December 8, 2026 – October 26, 2027)
- **Architectural Coating Lots 10 and 11:** 5 months (January 1, 2027 – May 13, 2027)

[6] The analysis assumes a construction start date of May 2025, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

- **Architectural Coating Lots 7, 8, and 9:** 13 months (January 1, 2028 – January 12, 2029)
- **Architectural Coating Lot 6:** 15 months (May 3, 2028 – July 31, 2029)
- **Architectural Coating Lot 5:** 15 months (May 3, 2028 – July 24, 2029)
- **Architectural Coating Lot 4:** 16 months (July 1, 2028 – October 19, 2029)
- **Architectural Coating Lots 2 & 3:** 15 months (July 26, 2028 – October 2, 2029)

The Project is estimated to require 1,460,000 cubic yards of cut and 1,260,000 cubic yards of fill. When accounting for 200,000 cubic yards (15%) of shrinkage, the earthwork will be balanced onsite, and no import or export of soil is required. CalEEMod default trip length values were used for the distances for all construction-related trips. Construction worker, vendor, and haul truck trips are based on CalEEMod default assumptions where Project specific information was not available.

The construction equipment mix and vehicle trips used for estimating the Project-generated construction emissions are shown in Table 4.3-5, Construction Scenario Assumptions.

Table 4.3-5. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Clear & Grub	14	4	400	Rubber Tired Dozers	6	8
				Tractors/Loaders/Backhoes	3	8
				Other Material Handling Equipment	1	8
Remedial & Mass Excavation	52	6	0	Graders	8	8
				Off-Highway Trucks	2	8
				Rubber Tired Dozers	8	8
				Scrapers	12	8
Wet Utilities	80	4	0	Excavators	6	8
				Skid Steer Loaders	6	8
				Tractors/Loaders/Backhoes	6	8
Finish Grading	24	6	0	Graders	6	8
				Off-Highway Trucks	2	8
				Rubber Tired Dozers	6	8
Pump Station 4	8	4	0	Skid Steer Loaders	1	8
				Tractors/Loaders/Backhoes	1	8
Dry Utilities	34	4	0	Tractors/Loaders/Backhoes	8	8
Pump Station 5	8	4	0	NA	NA	NA
18-inch Pipe Installation	8	4	0	Concrete/Industrial Saws	1	8
				Plate Compactors	1	8
				Rollers	1	8
				Tractors/Loaders/Backhoes	1	8

Table 4.3-5. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
12-inch Pipe Installation	8	4	0	Concrete/Industrial Saws	1	8
				Plate Compactors	1	8
				Rollers	1	8
				Tractors/Loaders/Backhoes	1	8
Balancing/ Aggregate Base	16	4	0	Graders	2	8
				Rollers	1	8
				Scrapers	2	8
				Skid Steer Loaders	2	8
Curb & Gutter	14	4	0	Paving Equipment	2	8
Asphalt Paving	16	4	0	Graders	2	8
				Paving Equipment	2	8
				Rollers	1	8
Building Construction Lots 7, 8, and 9	140	30	0	Cranes	2	7
				Forklifts	4	8
				Generator Sets	2	8
				Tractors/Loaders/Backhoes	4	7
				Welders	2	8
Concrete Flatwork	22	4	0	Skid Steer Loaders	2	8
Building Construction Lot 6	116	26	0	Cranes	2	7
				Forklifts	4	8
				Generator Sets	2	8
				Tractors/Loaders/Backhoes	4	7
				Welders	2	8
Building Construction Lot 5	98	20	0	Cranes	2	7
				Forklifts	4	8
				Generator Sets	2	8
				Tractors/Loaders/Backhoes	4	7
				Welders	2	8
Building Construction Lot 4	146	34	0	Cranes	2	7
				Forklifts	4	8
				Generator Sets	2	8
				Tractors/Loaders/Backhoes	4	7
				Welders	2	8

Table 4.3-5. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Building Construction Lots 2&3	148	30	0	Cranes	2	7
				Forklifts	4	8
				Generator Sets	2	8
				Tractors/Loaders/Backhoes	4	7
				Welders	2	8
Building Construction Lots 10 and 11	50	10	0	Cranes	2	7
				Forklifts	4	8
				Generator Sets	2	8
				Tractors/Loaders/Backhoes	4	7
				Welders	2	8
Architectural Coating Lots 10 and 11	8	4	0	Air Compressors	1	6
Architectural Coating Lots 7, 8, and 9	22	4	0	Air Compressors	1	6
Architectural Coating Lot 6	18	4	0	Air Compressors	1	6
Architectural Coating Lot 5	16	4	0	Air Compressors	1	6
Architectural Coating Lot 4	24	4	0	Air Compressors	1	6
Architectural Coating Lots 2&3	24	4	0	Air Compressors	1	6

Source: See Appendix B-1, Air Quality and Greenhouse Gas Emissions Modeling, for details.

Any future construction resulting from implementation of the Project would be required to comply with SCAQMD Rule 403 to control dust emissions during any dust-generating activities. SCAQMD Rule 403 requires implementation of various best available fugitive dust control measures for all construction activity sources within its jurisdictional boundaries. Dust control measures include, but are not limited to, maintaining stability of soil through pre-watering of site prior to clearing, grubbing, cut and fill, and earth-moving activities; stabilizing soil during and immediately after clearing, grubbing, cut and fill, and other earth-moving activities; stabilizing backfill during handling and at completion of activity; and pre-watering material prior to truck loading and ensuring that freeboard exceeds 6 inches. While SCAQMD Rule 403 requires fugitive dust control beyond watering control measures,

compliance with Rule 403 is represented in CalEEMod by assuming twice daily watering of active sites (55% reduction in PM_{10} and $PM_{2.5}$ [CAPCOA 2022]).

Operational Emissions

The following land use types and quantities were assumed in CalEEMod: Parking (Other Asphalt Surfaces): 8.41 acres; Parking (Parking Lot): 235 spaces; Recreational (City Park): 1.96 acres; Recreational (Health Club): 4,540 square feet; Recreational (Recreational Swimming Pool): 13,450 square feet; Residential (Apartments Low Rise): 48 dwelling units; Residential (Condo/Townhouse): 209 dwelling units; and Residential (Single Family Housing): 253 dwelling units.

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from hearths, consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating, water heating, and stoves are calculated in the building energy use module of CalEEMod, as described in the following text.

It is assumed that any future residential development resulting from implementation of the Project would not include woodstoves or wood-burning fireplaces, per SCAQMD Rule 445. SCAQMD Rule 445, Wood Burning Devices, states that "no person shall permanently install a wood-burning device into any new development" (SCAQMD 2020). Exemptions to SCAQMD Rule 445 include where there is no existing infrastructure for natural gas service within 150 feet of the property line or those 3,000 or more feet above mean sea level. All hearths were assumed to use natural gas.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2022). Consumer product VOC emissions are estimated in CalEEMod based on the floor area of residential buildings and on the default factor of pounds of VOC per building square foot per day.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers using during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of residential surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The VOC emission factor is based on the VOC content of the surface coatings and CalEEMod default values, which include 50 grams per liter VOC for residential interior and exterior surfaces. SCAQMD's Rule 1113 (Architectural Coatings) would govern the VOC content for interior and exterior coatings.[7] The CalEEMod default reapplication rate of 10% of area per year is assumed.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers. The emissions associated from landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per residential dwelling unit per day) and number of summer days (when landscape maintenance would generally be performed) and winter days.

[7] SCAQMD Rule 1113 includes a 50 grams per liter VOC content limit for both flat and non-flat coatings, which are the most common coatings for interior and exterior paint applications. Accordingly, the CalEEMod default values applied are generally consistent with the air district architectural coating rules.

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for greenhouse gas emissions in CalEEMod, since criteria pollutant emissions would occur at the site of power plants which are already regulated in terms of criteria air pollutant emissions. These indirect air emissions are not included in the Air Quality analysis. However, natural gas combustion would occur within the Project site itself, in association with equipment that uses natural gas. As such, natural gas use within the Project site is estimated and modeled in CalEEMod. The natural gas use from residential land uses is calculated in CalEEMod based on the Residential Appliance Saturation Study. For nonresidential buildings recreational center), CalEEMod energy intensity values (natural gas usage per square foot per year) assumptions were based on the California Commercial End-Use Survey database. CalEEMod default values for energy consumption assume compliance with the 2019 Title 24 Building Energy Efficiency Standards.

Mobile Sources

Mobile sources for the development scenario would primarily be motor vehicles (automobiles and light-duty trucks) traveling to and from the parcels developed. Motor vehicles may be fueled with gasoline, diesel, or alternative fuels. The default vehicle mix provided in CalEEMod 2022, which is based on CARB's Mobile Source Emissions Inventory model (EMFAC) version 2021, was applied for all land use types. Emission factors representing year 2027 were used to estimate emissions associated with the final buildout year associated with implementation of the Project.

Applied trip generation rates for the buildout development scenario are based on the Institute of Transportation Engineers (ITE) 10th edition trip rates for the proposed land uses (single family housing, condominium/townhouse, and apartments). The trip length (20.5 VMT per capita) from the transportation impact analysis was assumed for the residential land uses based on the VMT analysis (Fehr & Peers 2023). Annual VMT and trips were estimated and input into CalEEMod which can convert annual data into trips and VMT per day.

Combined Construction and Operational Emissions

Project construction would be phased, and the residential uses of Lots 10 and 11 (senior housing) are anticipated to be the first uses to be operational in 2027. However, construction is anticipated to continue through 2029 for the other areas of the Project site, and thus, there would be an overlap of construction and operation for the Project. The operational emissions would increase from 2027 through 2029 as more dwelling units and Project uses become operational. While not established in written SCAQMD guidance including the 1993 Air Quality Handbook or the 2019 thresholds, the SCAQMD has recommended a calculation of combined construction and operational emissions, which is provided herein. To be conservative, the maximum construction emissions (without implementation of MM-4.3-1, MM-4.8-1 through MM-4.8-3, MM-4.8-5, and MM-4.8-8) and total operational emissions were combined and compared to the SCAQMD operational thresholds.

Threshold 4.3c

For project-level analyses, the SCAQMD recommends a localized significance threshold (LST) analysis to evaluate the potential of localized air quality impacts to sensitive receptors in the immediate vicinity of a Project from construction and operation; however, an operational LST analysis is only applicable to land uses with on-site emission sources and is generally not applicable to residential land uses as they do not include substantial on-site sources of localized emissions. The LST methodology was developed to be used as a tool to assist lead agencies to analyze localized impacts associated with project-level impacts.

The assessment of the Project's potential to expose sensitive receptors to substantial pollutant concentrations includes a LST analysis, as recommended by the SCAQMD, to evaluate the potential of localized air quality impacts to sensitive receptors in the immediate vicinity of the Project from construction. For project sites of 5 acres or less, the SCAQMD LST Methodology (2009) includes lookup tables that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance criteria (i.e., the emissions would not cause an exceedance of the applicable concentration limits for NO_2, CO, PM_{10}, and $PM_{2.5}$) without performing project-specific dispersion modeling. Although the proposed development area of the site is greater than 5 acres (estimated to be approximately 112 acres), the Project would disturb less than 5 acres in 1 day, as discussed in detail in the following text, so it is appropriate to use the lookup tables for the LST evaluation. However, according to the SCAQMD Final LST Methodology, "projects whose calculated emission budgets for the proposed construction or operational activities are above the LST emission levels found in the LST mass rate look-up tables should not assume that the project would necessarily generate adverse impacts" (SCAQMD 2008). Therefore, for pollutants where the Project could exceed the applicable look-up table LSTs, air dispersion modeling was conducted to refine the localized impact analysis using the concentration-based air pollutant thresholds pursuant to the SCAQMD Final LST Methodology.

The LSTs for NO_2 and CO represent the allowable increase in concentrations above background levels in the vicinity of a project that would not cause or contribute to an exceedance of the relevant ambient air quality standards, while the threshold for PM_{10} represents compliance with Rule 403 (Fugitive Dust). The LSTs for $PM_{2.5}$ is intended to ensure that construction emissions do not contribute substantially to existing exceedances of the $PM_{2.5}$ ambient air quality standards. The allowable emission rates depend on the following parameters:

- Source-receptor area (SRA) in which the project is located
- Size of the project site
- Distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals)

The Project site is located in SRA 13 (Santa Clarita Valley). LST pollutant screening level concentration data are currently published for 1-, 2-, and 5-acre sites for varying distances. Although the total disturbed acreage would be approximately 112 acres over approximately 308 days, less than 5 acres will be disturbed during any construction phase; thus, Project emissions are compared to the SCAQMD 5-acre thresholds.

The nearest sensitive-receptor land use (i.e., a residence) is located approximately 110 feet north of the Project site boundary. As such, the LST receptor distance was assumed to be 82 feet (25 meters), which is the shortest distance provided by the SCAQMD lookup tables. The LST values from the SCAQMD lookup tables for SRA 13 (Santa Clarita Valley) for a 5-acre Project site and a receptor distance of 25 meters are shown in Table 4.3-6, Construction Localized Significance Thresholds for Source Receptor Area 13 (Santa Clarita Valley).

Table 4.3-6. Construction Localized Significance Thresholds for Source Receptor Area 13 (Santa Clarita Valley)

Pollutant	Threshold (pounds per day)
Construction	
NO_2	246
CO	1,644

Table 4.3-6. Construction Localized Significance Thresholds for Source Receptor Area 13 (Santa Clarita Valley)

Pollutant	Threshold (pounds per day)
PM_{10}	12
$PM_{2.5}$	6

Source: Thresholds: SCAQMD 2008.
Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.
LSTs were determined based on the values for a 5-acre site at a distance of 25 meters from the nearest sensitive receptor.

For any of the Project pollutants emissions that the Project exceeds the applicable LSTs, the localized significance for Project air pollutant emissions was determined by performing dispersion modeling to determine if the pollutant concentrations would exceed relevant concentration-based air pollutant thresholds significance thresholds established by the SCAQMD. The air dispersion modeling methodology was based on generally accepted modeling practices of SCAQMD (SCAQMD 2018). Air dispersion modeling was performed using the EPA's American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Version 21112 modeling system (computer software) with the Lakes Environmental Software implementation/user interface, AERMOD View Version 11.2.0. AERMOD parameters were selected consistent with the SCAQMD and EPA guidance and identified as representative of the Project site and Project activities. Principal parameters of this modeling are presented in Table 4.3-7.

Table 4.3-7. American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters – Construction LST

Parameter	Details
Meteorological Data	AERMOD-specific meteorological data for the Van Nuys Airport air monitoring station (#23130) was used for the dispersion modeling. A 5-year meteorological data set from 2012 through 2016 was obtained from the SCAQMD in a preprocessed format suitable for use in AERMOD.
Urban versus Rural Option	Urban dispersion option was selected per SCAQMD guidelines, which is the SCAQMD policy for all air quality impact analyses in its jurisdiction (SCAQMD 2022).
Terrain Characteristics	The elevation of the site is 1,340 feet above sea level and the surrounding area is predominantly hilly.
Elevation Data	Digital elevation data were imported into AERMOD and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the United States Geological Survey's National Elevation Dataset format with a resolution of 1degree (approximately 30 meters), consistent with the SCAQMD guidance (SCAQMD 2022).
Source Release Characterizations	The modeled line of volume sources was placed to cover the site for exhaust emissions. A plume height dimension of 20 meters, a plume width dimension of 20 meters, and a release height of 10 meters was assumed for off-road equipment and diesel trucks (SCAQMD 2008). For fugitive dust emissions, a polygon area source was placed over the project site with an initial vertical dimension of 1-meter and release height of 0.5 meters (SCAQMD 2008).

Source: See Appendix B-2.

Regarding receptors, the construction scenario used a course Cartesian receptor grid with 150-meter spacing to establish the impact area and evaluate locations of maximum health risk impact. A fine cartesian grid of 20-meter

spacing was placed over the area of maximum risk impact. AERMOD was run twice, once assuming PM_{10} and 24-hour and annual periods and once for $PM_{2.5}$ over a 24-hour average. The emissions during construction in grams/second for PM_{10} and $PM_{2.5}$ were used to estimate the pollutant concentrations at the maximally exposed offsite receptor for each AERMOD run.

Toxic Air Contaminants

The assessment of the Project's potential to expose sensitive receptors to substantial pollutant concentrations also includes a quantitative evaluation regarding exposure to TACs from construction and operation of the Project and associated health risk.

Construction Health Risk Assessment

A construction health risk assessment (HRA) was performed to evaluate potential health risk associated with construction of the Project. The following discussion summarizes the dispersion modeling and HRA methodology; supporting construction HRA documentation, including detailed assumptions, is presented in Appendix B-2.

For risk assessment purposes, PM_{10} in diesel exhaust is considered DPM, originating mainly from off-road equipment operating at a defined location for a given length of time at a given distance from sensitive receptors. Less-intensive, more-dispersed emissions result from on road vehicle exhaust (e.g., heavy-duty diesel trucks). For the construction HRA, the CalEEMod scenario for the Project was adjusted to reduce diesel truck one-way trip distances to ¼ acre to estimate emissions from truck pass-by at proximate receptors (SJVAPCD 2018).

The air dispersion modeling methodology was based on generally accepted modeling practices of SCAQMD (SCAQMD 2018). Air dispersion modeling was performed using the EPA's American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Version 21112 modeling system (computer software) with the Lakes Environmental Software implementation/user interface, AERMOD View Version 11.2.0. The HRA followed the Office of Environmental Health Hazard Assessment (OEHHA) 2015 guidelines (OEHHA 2015) and SCAQMD guidance to calculate the health risk impacts at all proximate receptors as further discussed below. The dispersion modeling included the use of standard regulatory default options. AERMOD parameters were selected consistent with the SCAQMD and EPA guidance and identified as representative of the Project site and Project activities. Principal parameters of this modeling are presented in Table 4.3-8, American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters – Construction HRA.

Table 4.3-8. American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters – Construction HRA

Parameter	Details
Meteorological Data	AERMOD-specific meteorological data for the Van Nuys Airport air monitoring station (#23130) was used for the dispersion modeling. A 5-year meteorological data set from 2012 through 2016 was obtained from the SCAQMD in a preprocessed format suitable for use in AERMOD.
Urban versus Rural Option	Urban dispersion option was selected SCAQMD guidelines, which is the SCAQMD policy for all air quality impact analyses in its jurisdiction (SCAQMD 2022).
Terrain Characteristics	The elevation of the site is 1,340 feet above sea level and the surrounding area is predominantly hilly.

Table 4.3-8. American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters – Construction HRA

Parameter	Details
Elevation Data	Digital elevation data were imported into AERMOD and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the United States Geological Survey's National Elevation Dataset format with a resolution of 1degree (approximately 30 meters), consistent with the SCAQMD guidance (SCAQMD 2022).
Source Release Characterizations	The modeled line of volume sources was placed to cover the site for exhaust emissions. A plume height dimension of 20 meters, a plume width dimension of 20 meters, and a release height of 10 meters was assumed for off-road equipment and diesel trucks (SCAQMD 2008).

Source: See Appendix B-2.

Regarding receptors, the construction scenario used a course Cartesian receptor grid with 150-meter spacing to establish the impact area and evaluate locations of maximum health risk impact. A fine cartesian grid of 20-meter spacing was placed over the area of maximum risk impact. Discrete receptors were also placed in Lots 10 and 11 to represent onsite residential receptors to evaluate potential health risk impacts to future residents onsite during Project construction. Construction of Lots 10 and 11 (senior housing) is the first phase to be completed and would be exposed to the longest duration of construction.

AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the necessary input values for HARP2. The line of volume sources was partitioned evenly based on the 1 gram per second emission rate. The ground-level concentration plot files were then used to estimate the long-term cancer health risk to an individual, and the noncancerous chronic health indices. There is no reference exposure level (REL) for acute health impacts from DPM, and, thus, acute risk was not evaluated.

Cancer risk is defined as the increase in probability (chance) of an individual developing cancer due to exposure to a carcinogenic compound, typically expressed as the increased chances in one million. Maximum Individual Cancer Risk is the estimated probability of a maximally exposed individual potentially contracting cancer as a result of exposure to TACs over a period of 30 years for residential receptor locations. For the construction HRA, the TAC exposure period was assumed to be from third trimester of pregnancy for 4.5 years for all offsite receptor locations (i.e., the assumed duration of Project construction). For onsite exposure, the duration was assumed to be 2.17 years which is the longest exposure duration for an onsite receptor while project construction is active. MERV13 filters were also assumed for the onsite receptors. The exposure pathway for DPM is inhalation only.

The SCAQMD has also established noncarcinogenic risk parameters for use in HRAs since some TACs increase noncancerous health risk due to long-term (chronic) exposures and some TACs increase noncancerous health risk due to short-term (acute) exposures. Chronic exposure is evaluated in the construction HRA. Noncarcinogenic risks are quantified by calculating a hazard index, expressed as the ratio between the ambient pollutant concentration and its toxicity or REL, which is a concentration at or below which health effects are not likely to occur. The chronic hazard index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. A hazard index less of than one (1.0) means that adverse health effects are not expected.

Roadway HRA

For informational purposes only, an HRA was performed to evaluate potential health risks of the proximate I-5 freeway to future sensitive receptors of the Project. The following discussion summarizes the dispersion modeling and HRA methodology; supporting operational HRA documentation, including detailed assumptions, is presented in Appendix B-2.

Operational year 2027 was evaluated consistent with the anticipated completion date of Project construction for Lots 10 and 11. Emissions during the operation of the Project include vehicles traveling on the I-5 freeway. For risk assessment purposes, PM_{10} in diesel exhaust is considered DPM, originating from diesel vehicles traveling on the I-5 freeway. Total Organic Gas (TOG) emissions from gasoline vehicles on I-5 were also estimated along with the TAC speciation from the BAAQMD (BAAQMD 2011).

Emissions from motor vehicles on the I-5 freeway have the highest potential for cancer risk due to the high volume of heavy-duty vehicle traffic and proximity to the Project site. Traffic data was attained from California Department of Transportation Performance Measurement System (PeMS) January 2021 – December 2021 traffic volumes on California state highways. The annual vehicle miles traveled for the northbound and southbound portions of the I-5 freeway was calculated based on the segment length and traffic count volumes.

Data from the U.S. Environmental Protection Agency-approved version of CARB's mobile source emission inventory, EMFAC2021, were used to determine the composition of diesel vehicles within the overall vehicle fleet for Los Angeles County: Light-Duty Automobiles (identified as LDA), Light-Duty Trucks (identified as LDT1 and LDT2), Light-Heavy Duty Trucks (identified as LHDT1 and LHDT2), Medium-Heavy Duty Trucks (identified as medium-duty vehicles (MDV), motorhomes (MH), medium-heavy duty trucks (MHDT), other buses (OBUS), and school bus (SBUS)), and Heavy-Heavy Duty Trucks (identified as HHDT). EMFAC2021 can generate emission factors (also referred to as emission rates) in grams per mile for the fleet in a class of motor vehicles within a county for a particular geographical study year.

EMFAC2021 was run assuming an aggregate speed for each vehicle class, and a vehicle miles traveled-weighted average emission factor was estimated for diesel-fueled vehicles of the following classes: HHDT and Non-Trucks. For gasoline vehicles, EMFAC2021 was run assuming an aggregate speed for each vehicle class, and a vehicle miles traveled-weighted average emission factor for the following classes: LDA, LDT1, LDT2, LHDT1, LHDT2, MCY, MDV, MH, MHDT, OBUS, SBUS, and UBUS. The vehicle miles traveled was calculated by taking the average daily traffic and multiplying it by the distance of the roadway segment evaluated. I-5 northbound was modeled a total length of 1.5 miles and I-5 southbound was modeled a total length of 1.5 miles. The total exhaust PM_{10} and ROG emissions (in pounds per hour and pounds per year) were then calculated for each roadway segment by multiplying the emission factor by the vehicle miles traveled.

For this analysis, Los Angeles County and calendar year 2027 was selected because it is the first potential operating year of a portion of the Project. The annual vehicle growth rate on I-5 is 0.63% per year (SCAG 2020), but the EMFAC2021 vehicle emission factors would decrease over time due to regulatory requirements and fleet turnover (ranging from 0.13% to 56.36%); therefore, assuming the first operational year of 2027 for the analysis would present a conservative analysis. Furthermore, the volume of diesel and gasoline vehicles will also decrease over time as more zero and near-zero emissions vehicles enter the fleet.

Air dispersion modeling methodology was based on generally accepted modeling practices of SCAQMD (SCAQMD 2022). Air dispersion modeling was performed using the EPA's AERMOD Version 21112 modeling system (computer

software) with the Lakes Environmental Software implementation/user interface, AERMOD View Version 11.2.0. The HRA followed OEHHA 2015 guidelines (OEHHA 2015) and SCAQMD guidance to calculate the health risk impacts at all onsite receptors as further discussed below. The dispersion modeling included the use of standard regulatory default options. AERMOD parameters were selected consistent with the SCAQMD and EPA guidance and identified as representative of the Project site and Project activities. Principal parameters of this modeling are presented in Table 4.3-9.

Table 4.3-9. American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters – Roadway HRA

Parameter	Details
Meteorological Data	AERMOD-specific meteorological data for the Van Nuys Airport air monitoring station (#23130) was used for the dispersion modeling. A 5-year meteorological data set from 2012 through 2016 was obtained from the SCAQMD in a preprocessed format suitable for use in AERMOD.
Urban versus Rural Option	Urban dispersion option was selected per SCAQMD guidelines, which is the SCAQMD policy for all air quality impact analyses in its jurisdiction (SCAQMD 2022).
Terrain Characteristics	The elevation of the site is 1,340 feet above sea level and the surrounding area is predominantly hilly.
Elevation Data	Digital elevation data were imported into AERMOD and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the United States Geological Survey's National Elevation Dataset format with a resolution of 1degree (approximately 30 meters), consistent with the SCAQMD guidance (SCAQMD 2018).
Source Release Characterizations	Vehicles traveling on I-5 were modeled as a line of adjacent volume sources for each direction of the freeway with a release height of 1.6 meters, plume height and width of 3.2 meters, and 20.45 meters was assumed to account for the wake of moving vehicles, to represent vehicles traveling northbound and southbound. The plume and release heights are based on a VMT weighted average of light-duty and heavy-duty vehicles (EPA 2015).

Note: See Appendix B-2.

Regarding receptors, the roadway scenario placed receptors every 20 meters on the Project site where the residential land uses are proposed. Similar to the construction scenario, the health risk calculations were performed using the HARP2 ADMRT (dated 22118). AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the necessary input values for HARP2. The line of volume sources was modeled with 1 gram per second evenly partitioned across each volume source. The ground-level concentration plot files were then used to estimate the long-term cancer health risk to an individual, and the noncancerous chronic and acute health indices. For the roadway HRA, the TAC exposure period was assumed to be from third trimester to 30 years for all receptor locations, consistent with the OEHHA 2015 Guidelines (OEHHA 2015). The mandatory exposure pathways were selected.

The 2019 Title 24 building code requires the use of MERV 13 filters in all residential construction. The US EPA reported that the MERV 13 filters remove 90% of particles ranging from 1 to 10 microns (EPA 2018b). For this analysis, Dudek assumed a 90% particulate matter reduction for the air filters. This reduction was not applied to the TOG TAC emissions from gasoline vehicles. The National Human Activity Pattern Survey (NHAPS) was conducted in support by the US EPA to study where people spend their time. The results of the NHAPS showed that on average people spend 87% of their time in enclosed buildings and 6% of their time in enclosed vehicles (Klepeis et al. 2001). This assessment of risk with mitigation includes the accounting for time spent indoors as identified in the NHAPS

and the time spent away from home as recommended by OEHHA (OEHHA 2015). Accounting for the actual time spent indoors and exposure related to the residents within the Project provides a more realistic exposure scenario from TAC emissions from the I-5 freeway.

Carbon Monoxide Hotspots

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed "CO hotspots." The transport of CO is extremely limited, as it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors. The assessment of the potential for the Project to result in a CO hotspot is based on comparison to the SCAQMD 2003 AQMP CO hotspot analysis.

Threshold 4.3d

The potential for the Project to result in other emissions, specifically an odor impact (CEQA Guidelines, Appendix G, Threshold 4), is based on the Project's land-use types and anticipated construction activity, and the potential for the Project to create an odor nuisance pursuant to SCAQMD Rule 402.

4.3.5 Impact Analysis

Threshold 4.3a: Would the project conflict with or obstruct implementation of applicable air quality plans of either the South Coast AQMD (SCAQMD) or the Antelope Valley AQMD (AVAQMD)?

The Project site is within the jurisdiction of the SCAQMD, as detailed above. Therefore, the AVAQMD air quality plans would not apply to the Project and is not considered further. The applicable air quality plan for the Project site is the SCAQMD's 2022 AQMP. The regional emissions inventory for the SCAB is compiled by the SCAQMD and SCAG. The SCAQMD has established criteria for determining consistency with the AQMP in Chapter 12, Sections 12.2 and 12.3, of the SCAQMD's CEQA Air Quality Handbook (SCAQMD 1993). The criteria are as follows:

- **Consistency Criterion No. 1:** The project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2:** The project will not exceed the assumptions in the AQMP or increments based on the year of Project buildout and phase.

Regarding Consistency Criterion No.1, the response to Threshold 4.3b, below, evaluates the potential for the Project to violate any air quality standard or contribute substantially to an existing or projected air quality violation, which applies the SCAQMD mass daily construction and operational thresholds. As discussed in response to Threshold 4.3b, the Project would exceed the SCAQMD's mass daily regional significance threshold for NO_x during construction prior to mitigation. However, with implementation of Mitigation Measure (MM)-4.3-1, the Project would not exceed any of the SCAQMD significance thresholds during construction or operation. Therefore, the Project would not result in an increase in the frequency or severity of existing air quality violations. Therefore, the Project would not conflict with Consistency Criterion No. 1 of the SCAQMD CEQA Air Quality Handbook.

Regarding Consistency Criterion No. 2, while striving to achieve the NAAQS for O_3 and $PM_{2.5}$ and the CAAQS for O_3, PM_{10}, and $PM_{2.5}$ through a variety of air quality control measures, the 2022 AQMP also accommodates planned

growth in the SCAB. Projects are considered consistent with and would not conflict with or obstruct implementation of the 2022 AQMP, if the growth in socioeconomic factors (e.g., population, employment) is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook).

The SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by the SCAG for its RTP/SCS (SCAG 2020), which is based on general plans for cities and counties in the SCAB, for the development of the AQMP emissions inventory (SCAQMD 2022).[8] The SCAG 2020 RTP/SCS, and associated Regional Growth Forecast, are generally consistent with the local plans; therefore, the 2022 AQMP is generally consistent with local government plans.

The Los Angeles County 2035 General Plan (General Plan) land use designation for the Project site is Residential 2 (H2), which would allow for development of the Project as currently proposed. As such, the Project would be consistent with the underlying assumptions within the AQMP.

Based on the data presented in Section 4.14, Population and Housing, of this Draft EIR (Section 4.14-1, Existing Conditions), the Newhall CCD currently has an average persons per household of 2.98 (U.S. Census Bureau 2020).[9] However, the County's Housing Element Update assumes an average persons per household in the unincorporated County to be 3.5 (County of Los Angeles 2022). Therefore, to provide a more conservative analysis, the population generated by the Project would utilize the assumption of average persons per household metric from the County's Housing Element Update. Based on 510 housing units, the Project would result in approximately 1,785 new residents.[10] The Project's proposed population growth would represent 1.33% of the anticipated population growth for the Santa Clarita Valley Planning Area in 2035.[11] According to SCAG's 2020 RTP/SCS, the County had 294,800 housing units in 2016 and would have 419,300 units in 2045, for an annual growth rate of 4,293 units. The proposed 510 residential units at the Project site would represent approximately 11.9% of one year of annual growth assumed in the 2020 RTP/SCS for the unincorporated portion of the County. Furthermore, the Project would be built out over 4.5 years and the 510 units would not become operational within the same year. At full buildout the Project would employ up to 10 persons for the recreational center. According to SCAG's 2020 RTP/SCS, the number of persons employed within the unincorporated portion of the County was 269,100 persons in 2016 and is projected to be 320,100 persons in 2045, for an annual growth rate of 1,759 jobs. Therefore, the Project's 10 employees would not exceed the County's annual projection for jobs. As such, the Project's anticipated population and housing growth would not exceed SCAG's growth projections for the Santa Clarita Valley Planning Area, and the Project's designed population, housing, and employment would not exceed the annual growth projections for the County.

8 Information necessary to produce the emission inventory for the SCAB is obtained from the SCAQMD and other governmental agencies, including CARB, Caltrans, and SCAG. Each of these agencies is responsible for collecting data (e.g., industry growth factors, socioeconomic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. SCAG incorporates these data into their Travel Demand Model for estimating/projecting vehicle miles traveled (VMT) and driving speeds. SCAG's socioeconomic and transportation activities projections in their 2020-2045 RTP/SCS are integrated in the 2022 AQMP (SCAQMD 2022).

9 273,466 persons / 91,857 housing units = 2.977 or 2.98 persons per household

10 510 dwelling units x 3.5 average persons per dwelling unit = 1,785 residents

11 1,785 residents / (237,638 - 104,116) = 0.0135 x 100 = 1.33% anticipated population growth in 2035

Because the Project would be consistent with the SCAQMD's 2022 AQMP, as evaluated above in Consistency Criteria 1 and 2, the Project would result in a less than significant impact regarding conflict or obstruction of implementation of an applicable SCAQMD AQMP with mitigation.

Threshold 4.3b: 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?

Construction Emissions

Construction activities resulting from the Project and off-site improvements would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing from architectural coatings and asphalt pavement application) and off-site sources (i.e., on-road haul trucks, delivery trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. Therefore, such emissions levels can only be estimated, with a corresponding uncertainty in precise ambient air quality impacts. However, modeling the construction activity with CalEEMod based on the assumptions in Section 4.3.4 provides substantial evidence supporting the estimates included in this section.

Construction activities associated with the Project and associated off-site improvements would generate criteria air pollutant emissions from the on- and off-site sources, described above, and detailed in Section 4.3.4, Methodology. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. Construction of the Project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities, which was assumed in the quantification of Project emissions, detailed below. To demonstrate compliance with SCAQMD Rule 403, projects must submit a fugitive dust control plan describing the methods of compliance during construction. Internal combustion engines used by construction equipment, haul trucks, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOCs, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. The application of architectural coatings, such as exterior application/interior paint and other finishes, and application of asphalt pavement would also produce VOC emissions; however, the contractor is required to procure architectural coatings from a supplier in compliance with the requirements of SCAQMD Rule 1113.

Construction emissions were calculated for the estimated worst-case day (summer or winter) over the construction period associated with each phase, as detailed in Section 4.3.4, Methodology. Table 4.3-10, Estimated Maximum Daily Construction Criteria Air Pollutant Emissions - Unmitigated, presents the estimated unmitigated maximum daily construction emissions generated during construction of the Project. Details of the emission calculations are provided in Appendix B-1.

Table 4.3-10. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions – Unmitigated

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per day					
Summer						
2025	22.46	202.33	198.97	0.42	37.36	19.46
2026	7.35	48.92	69.31	0.12	5.11	2.37
2027	15.79	103.15	168.74	0.27	14.00	5.71

Table 4.3-10. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions – Unmitigated

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per day					
2028	22.53	86.61	152.71	0.24	13.86	5.13
2029	17.92	66.28	118.90	0.19	10.75	3.91
Maximum	**22.53**	**202.33**	**198.97**	**0.42**	**37.36**	**19.46**
Winter						
2025	10.90	95.95	105.85	0.17	22.20	12.20
2026	13.63	107.70	164.16	0.27	14.27	6.01
2027	15.74	103.96	162.33	0.27	14.00	5.71
2028	22.51	87.18	146.38	0.24	13.86	5.13
2029	20.01	67.71	116.31	0.20	11.08	4.00
Maximum	**22.51**	**107.70**	**164.16**	**0.27**	**22.18**	**12.19**
SCAQMD's Construction Threshold (Table 4.3-4)	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**Yes**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; SCAQMD = South Coast Air Quality Management District
See Appendix B-1 for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod and provided in Appendix B-1.
The estimates reflect control of fugitive dust (watering two times daily) required by SCAQMD Rule 403.

As shown in Table 4.3-10, although construction-related VOC, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions would not exceed the SCAQMD thresholds during construction, the Project would exceed the SCAQMD mass daily thresholds for NO_x during construction. Therefore, impacts related to exceedance of SCAQMD mass daily regional thresholds during construction of the Project would be potentially significant and mitigation is required to reduce impacts to less than significant.

Table 4.3-11, Estimated Maximum Daily Construction Criteria Air Pollutant Emissions – Mitigated, presents the estimated maximum daily construction emissions generated during construction of the Project with incorporation of MM-4.3-1, Construction Equipment, as discussed in detail in Section 4.3.7, Mitigation Measures. MM-4.3-1 requires the use of Tier 4 Final construction equipment for off-road equipment over 50 horsepower and electric or alternative fueled construction equipment less than 50 horsepower. Details of the emission calculations are provided in Appendix B-1.

Table 4.3-11. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions – Mitigated

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per day					
Summer						
2025	4.85	29.50	242.18	0.41	29.71	12.48
2026	3.14	11.77	70.91	0.10	3.98	1.06
2027	7.04	17.43	164.34	0.22	10.96	2.94
2028	15.12	15.86	144.44	0.19	11.55	3.04
2029	12.20	12.13	112.62	0.15	9.07	2.39
Maximum	**15.12**	**29.50**	**242.18**	**0.41**	**29.71**	**12.48**
Winter						
2025	2.21	16.37	106.02	0.16	18.35	8.69
2026	4.60	18.35	160.55	0.22	10.86	2.91
2027	6.99	18.24	157.92	0.22	10.96	2.94
2028	15.10	16.43	138.11	0.19	11.55	3.04
2029	14.19	12.78	108.92	0.15	9.40	2.47
Maximum	**15.10**	**18.35**	**160.55**	**0.22**	**18.35**	**8.69**
SCAQMD's Construction Threshold (Table 4.3-4)	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; SCAQMD = South Coast Air Quality Management District
The values shown are the maximum summer or winter daily emissions results from CalEEMod and provided in Appendix B-1.
The estimates reflect control of fugitive dust (watering two times daily) required by SCAQMD Rule 403.
The estimates include implementation of MM-4.3-1.
See Appendix B-1 for complete results.

Implementation of MM-4.3-1 would result in mitigated construction emissions summarized in Table 4.3-11. The values shown are the maximum summer or winter daily emissions results from CalEEMod. As shown in Table 4.3-11, emissions of NO_x would be reduced to below the SCAQMD's mass daily regional significance threshold with incorporation of MM-4.3-1.

Operational Emissions

Emissions from the operational phase of the Project were estimated using CalEEMod Version 2020.4.0, based on sources detailed in Section 4.3.4, Methodology. Operational year 2027 was assumed consistent with operation of the Project's first phase, which is conservative, as full buildout is expected in 2029. Detailed calculation assumptions are presented in Section 4.3.4, Methodology. Operation of the Project would generate VOC, NOx, CO, SOx, PM_{10}, and $PM_{2.5}$ emissions from mobile sources, including vehicle trips from residents, customers, employees, and delivery trips; area sources, including the use of consumer products, architectural coatings for repainting, and landscape maintenance equipment; energy sources, including combustion of fuels used for space and water

heating and cooking appliances; and stationary sources, including fugitive emissions from fuel storage and dispensing as well as use of the emergency generator. Table 4.3-12, Estimated Maximum Daily Operational Criteria Air Pollutant Emissions - Unmitigated, presents the maximum daily area, energy, and mobile source emissions associated with operation (year 2027) of the Project, without implementation of mitigation measures. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix B-1.

Table 4.3-12. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions – Unmitigated

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	pounds per day					
Summer						
Area	20.99	8.74	32.75	0.06	0.70	0.69
Energy	0.23	3.97	1.71	0.03	0.32	0.32
Mobile	14.91	12.12	144.88	0.36	34.61	8.94
Total	**36.13**	**24.83**	**179.34**	**0.45**	**35.63**	**9.95**
Winter						
Area	18.42	8.46	3.60	0.05	0.68	0.68
Energy	0.23	3.97	1.71	0.03	0.32	0.32
Mobile	14.74	13.26	131.90	0.35	34.62	8.94
Total	**33.39**	**25.69**	**137.21**	**0.43**	**35.62**	**9.94**
SCAQMD's Operational Threshold (Table 4.3-4)	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: See Appendix B-1 for complete results.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; PDF = project design feature.
Totals may not sum due to rounding.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.

As detailed in Table 4.3-12, operation of the Project uses would be below the SCAQMD's mass daily regional thresholds, without mitigation. However, the Project would implement mitigation measures MM-4.8-1 through MM-4.8-3, MM-4.8-5, and MM-4.8-8 to reduce emissions of greenhouse gases (GHG) below a level of significance (as detailed in Section 4.8, Greenhouse Gas Emissions, of this Draft EIR). These mitigation measures may also reduce criteria air pollutant emissions as a co-benefit during operation.

MM-4.8-2, Electrify Buildings (quantified), would reduce energy-related operational air quality emissions by replacing natural gas with electricity that also has the potential to be provided by renewable, zero-emission sources. MM-4.8-3, Energy Conservation (partly quantified [Energy Star appliances and solar PV on the recreation center]), would also reduce air quality emissions from energy by ensuring building energy efficiency and reducing energy consumption.

Regarding mobile source emissions, MM-4.8-5, Encourage Electric Vehicles (quantified), would facilitate greater adoption and use of EVs by providing EV chargers in 92 single-family residential garages. Similar to building electrification, electrification of the vehicle fleet reduces emissions. Of importance, MM-4.17-2, Transportation

Demand Management Program (not quantified), would reduce mobile source emissions by reducing VMT through discouraging single occupancy vehicle trips and encouraging alternative modes of transportation. MM-4.8-5 and MM-4.17-2 together address the two pathways to reducing mobile source emissions: technological improvements to clean energy and VMT reductions.

MM-4.8-8, Landscape Maintenance Equipment Emission Reductions (not quantified), aims to encourage electric landscape equipment to reduce area-source emissions.

Table 4.3-13, Estimated Maximum Daily Operational Criteria Air Pollutant Emissions - Mitigated, presents the maximum daily area, energy, and mobile source emissions associated with operation (year 2027) of the Project, with implementation of mitigation measures. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix B-1.

Table 4.3-13. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions – Mitigated

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	pounds per day					
Summer						
Area	20.49	0.28	29.15	0.00	0.01	0.01
Energy	0.00	0.05	0.04	0.00	0.00	0.00
Mobile	12.04	8.97	105.59	0.26	24.47	6.32
Total	**32.53**	**9.30**	**134.78**	**0.26**	**24.48**	**6.33**
Winter						
Area	17.92	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.05	0.04	0.00	0.00	0.00
Mobile	11.89	9.81	97.05	0.25	24.47	6.32
Total	**29.81**	**9.86**	**97.09**	**0.25**	**24.47**	**6.32**
SCAQMD's Operational Threshold (Table 4.3-4)	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: See Appendix B-1 for complete results.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; PDF = project design feature.
Totals may not sum due to rounding.
Includes application of mitigation measures MM-4.8-1 through MM-4.8-3, MM-4.8-5, MM-4.8-8, and MM-4.17-2.

The values shown are the maximum summer or winter daily emissions results from CalEEMod. The emissions in Table 4.3-13 show the Project would be less than significant during operation with mitigation.

As detailed in Section 4.3.4, Project construction would be phased, and the residential uses of Lots 10 and 11 are anticipated to be the first uses to be operational in 2027. However, construction is anticipated to continue through 2029 for the other areas of the Project site, and thus, there would be an overlap of construction and operation for the Project. The operational emissions would increase from 2027 through 2029 as more dwelling units and Project uses become operational. While not established in written SCAQMD guidance including the 1993 Air Quality Handbook or the 2019 thresholds, the SCAQMD has recommended a calculation of combined construction and

operational emissions, which is provided herein in Table 4.3-14, Estimated Combined Construction and Operational Criteria Air Pollutant Emissions – Unmitigated. To be conservative, the maximum construction emissions (without implementation of mitigation measures) and total operational emissions were combined and compared to the SCAQMD operational thresholds.

Table 4.3-14. Estimated Combined Construction and Operational Criteria Air Pollutant Emissions - Unmitigated

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per day					
Unmitigated Construction Emissions (Table 4.3-10)	22.53	202.26	198.93	0.42	37.35	19.46
Operational Emissions (Table 4.3-12)	36.13	25.69	179.34	0.45	35.63	9.95
Combined Construction and Operation Emissions	**58.66**	**227.95**	**378.27**	**0.87**	**72.98**	**29.41**
SCAQMD Operational Threshold (Table 4.3-4)	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**Yes**	**Yes**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; SCAQMD = South Coast Air Quality Management.
See Appendix B-1 for complete results.
The estimates reflect control of fugitive dust (watering two times daily) required by SCAQMD Rule 403.

As shown in 4.3-14, the combined construction and operations scenario would exceed the SCAQMD daily significance operational thresholds for VOC and NO_x prior to mitigation during construction activities. Table 4.3-15, Estimated Combined Construction and Operational Criteria Air Pollutant Emissions – Mitigated, provides the maximum construction and operational emissions combined, including reductions from implementation of MM-4.3-1, MM-4.8-1 through MM-4.8-3, MM-4.8-5, MM-4.8-8, and MM-4.17-2.

Table 4.3-15. Estimated Combined Construction and Operational Criteria Air Pollutant Emissions - Mitigated

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per day					
Mitigated Construction Emissions (Table 4.3-11)	15.12	29.43	242.14	0.41	29.69	12.48
Mitigated Operational Emissions (Table 4.3-13)	32.53	9.86	134.78	0.26	24.48	6.33
Combined Construction and Operation Emissions	**47.65**	**39.29**	**376.92**	**0.67**	**54.17**	**18.81**
SCAQMD Operational Threshold (Table 4.3-4)	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; SCAQMD = South Coast Air Quality Management.

See Appendix B-1 for complete results.
The estimates reflect control of fugitive dust (watering two times daily) required by SCAQMD Rule 403.
The estimates include implementation of MM-4.3-1, MM-4.8-1 through MM-4.8-3, MM-4.8-5, MM-4.8-8, and MM-4.17-2.

As shown in Table 4.3-15, after implementation of MM-4.3-1, MM-4.8-1 through MM-4.8-3, MM-4.8-5, MM-4.8-8, and MM-4.17-2, the combined construction and operations scenario would not exceed the SCAQMD daily significance operational thresholds. As demonstrated in Tables 4.3-11 and 4.3-15, all emissions would be below the SCAQMD's mass daily regional thresholds with implementation of MM-4.3-1 for VOC and NO_x emissions during construction, and as such, implementation of the above-mentioned mitigation measures (from Section 4.8, Greenhouse Gas Emissions, and Section 4.17, Transportation), would not be necessary to reduce air quality impacts to less than significant, but would also provide further criteria pollutant reductions.

By its nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development (such as the cumulative emissions from various sources of air pollutants and their precursors within the SCAB, including motor vehicles, off-road equipment, and commercial and industrial facilities), and the SCAQMD develop and implement plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulative contribution on air quality. If a project's emissions would exceed the applied significance thresholds, it would have a cumulative contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant (SCAQMD 2003a).

As discussed in Section 4.3.1, South Coast Air Basin Attainment Designation, the SCAB has been designated as a national nonattainment area for O_3 and $PM_{2.5}$ and a California nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. The nonattainment status is the result of cumulative emissions from various sources of air pollutants and their precursors within the SCAB, including motor vehicles, off-road equipment, and commercial and industrial facilities. Construction and operation of the Project would generate VOC and NO_x emissions (which are precursors to O_3) and emissions of PM_{10} and $PM_{2.5}$. As indicated in Table 4.3-14, Project-generated construction emissions would exceed the SCAQMD emission-based significance thresholds for VOC and NO_x during construction activities prior to mitigation. With implementation of MM-4.3-1 emissions would be reduced to below levels of significance. Therefore, impacts regarding cumulatively considerable net increases of any criteria pollutant for which the Project region is in non-attainment would be less than significant with mitigation. As discussed in the analysis of the Project's potential to conflict with or obstruct implementation of the applicable air quality plan (Threshold 4.3a), the Project would not conflict with the SCAQMD 2022 AQMP.

Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM_{10} and $PM_{2.5}$ emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD.

Based on the Project-generated construction emissions of VOCs and NO_x, the Project would result in a cumulatively considerable increase in emissions of nonattainment pollutants, which would result in a potentially significant impact prior to implementation of mitigation to reduce VOCs and NO_x emissions to below the SCAQMD's mass daily regional significance threshold. However, as detailed in the analysis above, implementation of MM-4.3-1, Construction Equipment, would reduce VOCs and NOx emissions to below the SCAQMD's thresholds. With implementation of MM-4.3-1 during construction activities, impacts regarding cumulatively considerable net increases of any criteria pollutant for which the project region is in non-attainment would be less than significant with mitigation.

Currently, the SCAQMD, CARB, and EPA have not approved a quantitative method to reliably, meaningfully, and consistently translate the mass emission estimates for the criteria air pollutants resulting from the development of the Project to specific health effects. In addition, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days.

In connection with the judicial proceedings culminating in issuance of the *Friant Ranch* (Sierra Club v. County of Fresno 2018 6 Cal.5th 502, Case No. S219783) decision, the SCAQMD and the San Joaquin Valley Air Pollution Control District (SJVAPCD) filed amicus briefs attesting to the extreme difficulty of correlating an individual project's criteria air pollutant emissions to specific health impacts. Both SJVAPCD and SCAQMD have among the most sophisticated air quality modeling and health impact evaluation capabilities of the air districts in California. The key, relevant points from the SCAQMD and SJVAPCD briefs are summarized herein for informational purposes.

In requiring a health impact type of analysis for criteria air pollutants, it is important to understand how O_3 and PM are formed, dispersed, and regulated. The formation of O_3 and PM in the atmosphere, as secondary pollutants,[12] involves complex chemical and physical interactions of multiple pollutants from natural and anthropogenic sources. The O_3 reaction is self-perpetuating (or catalytic) in the presence of sunlight because NO_2 is photochemically reformed from nitric oxide. In this way, O_3 is controlled by both NO_x and VOC emissions (NRC 2005). The complexity of these interacting cycles of pollutants means that incremental decreases in one emission may not result in proportional decreases in O_3 (NRC 2005). Although these reactions and interactions are well understood, variability in emission source operations and meteorology creates uncertainty in the modeled O_3 concentrations to which downwind populations may be exposed (NRC 2005). Once formed, O_3 can be transported long distances by wind, and due to atmospheric transport, contributions of precursors from the surrounding region can also be important (EPA 2008). Because of the complexity of O_3 formation, a specific tonnage amount of VOCs or NO_X emitted in a particular area does not equate to a particular concentration of O_3 in that area (SJVAPCD 2015). PM can be divided into two categories: directly emitted PM and secondary PM. Secondary PM, like O_3, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO_x and NO_x (SJVAPCD 2015). Because of the complexity of secondary PM formation, including the potential to be transported long distances by wind, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area (SJVAPCD 2015). This is especially true for individual projects, where project-generated criteria air pollutant emissions are not derived from a single "point source," but from construction equipment and mobile sources (passenger cars and trucks) driving to, from, and around the project site.

Another important technical nuance is that health effects from air pollutants are related to the concentration of the air pollutant that an individual is exposed to, not necessarily the individual mass quantity of emissions associated with an individual project. For example, health effects from O_3 are correlated with increases in the ambient level of O_3 in the air a person breathes (SCAQMD 2015b). However, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient O_3 levels over an entire region (SCAQMD 2015b). The lack of link between the tonnage of precursor pollutants and the concentration of O_3 and $PM_{2.5}$ formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects; rather, it is the concentration of resulting O_3 that causes these effects (SJVAPCD 2015). Indeed, the ambient air quality standards, which are statutorily required to be set by EPA at levels that are requisite to protect the public health, are established as concentrations of O_3 and $PM_{2.5}$ based on duration of exposure and not as tonnages of their precursor pollutants (EPA 2018a). Because the ambient air quality standards are focused on achieving a particular concentration region-wide, the tools and plans for attaining the ambient air quality standards are regional in nature. For CEQA analyses,

[12] Air pollutants formed through chemical reactions in the atmosphere are referred to as secondary pollutants.

project-generated emissions are typically estimated in pounds per day or tons per year and compared to mass daily or annual emission thresholds. While CEQA thresholds are established at levels that the air basin can accommodate without affecting the attainment date for the ambient air quality standards, even if a project exceeds established CEQA significance thresholds, this does not mean that one can easily determine the concentration of O_3 or PM that will be created at or near the project site on a particular day or month of the year, or what specific health impacts will occur (SJVAPCD 2015).

In regard to regional concentrations and air basin attainment, the SJVAPCD emphasized that attempting to identify a change in background pollutant concentrations that can be attributed to a single project, even one as large as the entire *Friant Ranch* Specific Plan, is a theoretical exercise. The SJVAPCD brief noted that it "would be extremely difficult to model the impact on NAAQS attainment that the emissions from the Friant Ranch project may have" (SJVAPCD 2015). The situation is further complicated by the fact that background concentrations of regional pollutants are not uniform either temporally or geographically throughout an air basin but are constantly fluctuating based upon meteorology and other environmental factors. SJVAPCD noted that the currently available modeling tools are equipped to model the impact of all emission sources in the San Joaquin Valley Air Basin on attainment (SJVAPCD 2015). The SJVAPCD brief then indicated that, "Running the photochemical grid model used for predicting O_3 attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NO_x and VOC in the Valley) is not likely to yield valid information given the relative scale involved" (SJVAPCD 2015).

SCAQMD and SJVAPCD have indicated that it is not feasible to quantify project-level health impacts based on existing modeling (SCAQMD 2015b; SJVAPCD 2015). Even if a metric could be calculated, it would not be reliable because the models are equipped to model the impact of all emission sources in an air basin on attainment and would likely not yield valid information or a measurable increase in O_3 concentrations sufficient to accurately quantify O_3-related health impacts for an individual project.

Nonetheless, following the Supreme Court's *Friant Ranch* decision, some EIRs estimated criteria air pollutant emissions that exceeded applicable air district thresholds and have included a quantitative analysis of potential project-generated health effects using a combination of a regional photochemical grid model[13] and the EPA Benefits Mapping and Analysis Program (BenMAP or BenMAP–Community Edition).[14] The publicly available health impact assessments (HIAs) typically present results in terms of an increase in health incidences and/or the increase in background health incidence for various health outcomes resulting from the project's estimated increase in concentrations of O_3 and $PM_{2.5}$.[15] The five publicly available HIAs reviewed herein have concluded that the evaluated Project's health effects associated with the estimated Project-generated increase in concentrations of

[13] The first step in the publicly available HIAs includes running a regional photochemical grid model, such as the Community Multiscale Air Quality model or the Comprehensive Air Quality Model with extensions to estimate the increase in concentrations of O_3 and $PM_{2.5}$ as a result of project-generated emissions of criteria and precursor pollutants. Air districts, such as the SCAQMD, use photochemical air quality models for regional air quality planning. These photochemical models are large-scale air quality models that simulate the changes of pollutant concentrations in the atmosphere using a set of mathematical equations characterizing the chemical and physical processes in the atmosphere (EPA 2017).

[14] After estimating the increase in concentrations of O_3 and $PM_{2.5}$, the second step in the five examples includes use of BenMAP or BenMAP-Community Edition to estimate the resulting associated health effects. BenMAP estimates the number of health incidences resulting from changes in air pollution concentrations (EPA 2018c). The health impact function in BenMAP-Community Edition incorporates four key sources of data: (i) modeled or monitored air quality changes, (ii) population, (iii) baseline incidence rates, and (iv) an effect estimate. All of the five example HIAs focused on O_3 and $PM_{2.5}$.

[15] The following CEQA documents included a quantitative HIA to address Friant Ranch: (1) California State University Dominguez Hills 2018 Campus Master Plan EIR (CSU Dominguez Hills 2019), (2) March Joint Powers Association K4 Warehouse and Cactus Channel Improvements EIR (March JPA 2019), (3) Mineta San Jose Airport Amendment to the Airport Master Plan EIR (City of San Jose 2019), (4) City of Inglewood Basketball and Entertainment Center Project EIR (City of Inglewood 2019), and (5) San Diego State University Mission Valley Campus Master Plan EIR (SDSU 2019).

O_3 and $PM_{2.5}$ represent a small increase in incidences and a very small percentage of the number of background incidences, indicating that these health impacts are negligible and potentially within the models' margin of error. It is also important to note that while the results of the five available HIAs conclude that the Project emissions do not result in a substantial increase in health incidences, the estimated emissions and assumed toxicity are also conservatively inputted into the HIA and thus, overestimate health incidences, particularly for $PM_{2.5}$.

As explained in the SJVAPCD brief and noted previously, running the photochemical grid model used for predicting O_3 attainment with the emissions solely from an individual project like the *Friant Ranch* project or the Project is not likely to yield valid information given the relative scale involved. The five examples reviewed support the SJVAPCD's brief contention that consistent, reliable, and meaningful results may not be provided by methods applied at this time. Accordingly, additional work in the industry and, more importantly, air district participation, is needed to develop a more meaningful analysis to correlate project-level mass criteria air pollutant emissions and health effects for decision makers and the public. Furthermore, at the time of writing, no HIA has concluded that health effects estimated using the photochemical grid model and BenMAP approach are substantial, provided that the estimated project-generated incidences represent a very small percentage of the number of background incidences, potentially within the models' margin of error.

Health Effects

VOCs and NO_x are precursors to O_3, for which the Project site, within the SCAB, are designated as nonattainment with respect to the NAAQS and CAAQS. The health effects associated with O_3 are generally associated with reduced lung function. The contribution of reactive organic gases and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SCAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O_3 CAAQS/NAAQS tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, because VOC and NO_x emissions associated with Project construction would exceed the SCAQMD threshold prior to mitigation, it could contribute to regional O_3 concentrations and the associated health effects.

Health effects that result from NO_2 and NO_x include respiratory irritation. Although construction of future development allowed for under the Project may generate NO_x emissions, it is not anticipated to contribute to exceedances of the NAAQS and CAAQS for NO_2 because the SCAB is designated as in attainment of the NAAQS and CAAQS for NO_2 and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. As noted above, the Project, would not exceed the applicable SCAQMD NO_x thresholds during construction with mitigation and operation of the Project without mitigation. In addition, because there is the potential for nearby receptors to be affected by off-road construction equipment, the construction of individual parcels could result in potential health effects associated with NO_2 and NO_x during construction.

CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots is discussed in response to Threshold 4.3c, below, and is determined to be a less-than-significant impact. Furthermore, the existing CO concentrations in the area are well below the NAAQS and CAAQS standards as shown in Table 4.3-3. The Project would not exceed the SCAQMD significance thresholds for CO during construction or operation. Therefore, CO emissions from implementation of the Project would not contribute to significant health effects associated with this pollutant.

Construction and operation of the Project would not exceed the SCAQMD thresholds for PM_{10} or $PM_{2.5}$ as shown in Tables 4.3-12 and 4.3-13. While construction is temporary, on the whole of the action, construction of the development allowed for by the Project would not exceed the SCAQMD thresholds for PM_{10} or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or obstruct the SCAB from coming into attainment for these pollutants.

In summary, since the Project would not exceed the SCAQMD significance thresholds during construction with mitigation and operation with no mitigation, the potential health effects associated with criteria air pollutants are considered less than significant. However, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days, and there are currently no modeling tools that could provide reliable and meaningful additional information regarding health effects from criteria air pollutants generated by individual projects within the SCAQMD jurisdiction. For these reasons, conducting a HIA may not yield accurate results and would likely overestimate health effects associated with the Project, especially considering that unlike the situation in *Friant Ranch*, there are no significant air quality impacts after mitigation. Therefore, the Project does not have the potential to violate an air quality standard or contribute substantially to an existing or projected air quality violation and the health effects associated with criteria air pollutants would be considered less than significant.

Threshold 4.3c Would the project expose sensitive receptors to substantial pollutant concentrations?

Localized/Ambient Air Quality

As discussed in Section 4.3.1, sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). The closest off-site sensitive receptors to the Project site include residences 110 feet north of the Project site boundary.

An LST analysis has been prepared to determine potential impacts to nearby sensitive receptors during construction of the Project. As indicated in Section 4.3.4, Methodology, the SCAQMD recommends the evaluation of localized NO_2, CO, PM_{10}, and $PM_{2.5}$ impacts as a result of construction activities to sensitive receptors in the immediate vicinity of the Project site. The impacts were analyzed using methods consistent with those in the SCAQMD's *Final Localized Significance Threshold Methodology* (SCAQMD 2008). According to the *Final Localized Significance Threshold Methodology*, "off-site mobile emissions from the Project should not be included in the emissions compared to the LSTs" (SCAQMD 2008). Transport of construction materials associated with Project construction are not expected to cause substantial air quality impacts to sensitive receptors along off-site roadways. Localized emissions from the trucks would be relatively brief in nature and would cease once the trucks pass through the main streets.

Construction activities associated with the Project would result in temporary sources of on-site fugitive dust and construction equipment emissions. The maximum allowable daily emissions that would satisfy the SCAQMD localized significance criteria for SRA 5 as discussed in Section 4.3.4 are presented in Table 4.3-16, Localized Significance Thresholds Analysis for Project Construction – Unmitigated, and compared to the maximum daily on-site construction emissions generated during the Project.

Table 4.3-16. Localized Significance Thresholds Analysis for Project Construction - Unmitigated

Maximum On-Site Emissions	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Construction Emissions	201.39	189.61	35.55	19.03
SCAQMD LST	*246*	*1,644*	*12*	*6*
LST Exceeded?	**No**	**No**	**Yes**	**Yes**

Source: SCAQMD 2008.
Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.
See Appendix B-1 for complete results.
LSTs are shown for a 5-acre project site corresponding to a distance to a sensitive receptor of 25 meters in SRA 13, Santa Clarita Valley. These estimates implementation of the Project's fugitive dust control strategies, including watering of the Project site and unpaved roads two times per day in accordance with SCAQMD Rule 403.

As shown in Table 4.3-16, construction of the Project would exceed the LST for PM_{10} and $PM_{2.5}$. As mitigation is required during construction (detailed in response to Threshold 4.3b), onsite emissions during construction including MM-4.3-1 are shown in Table 4.3-17, Localized Significance Thresholds Analysis for Project Construction – Mitigated.

Table 4.3-17. Localized Significance Thresholds Analysis for Project Construction - Mitigated

Maximum On-Site Emissions	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Construction Emissions	28.57	232.82	27.89	12.05
SCAQMD LST	*246*	*1,644*	*12*	*6*
LST Exceeded?	**No**	**No**	**Yes**	**Yes**

Source: SCAQMD 2008.
Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.
See Appendix B-1 for complete results.
Localized significance thresholds are shown for a 5-acre project sites corresponding to a distance to a sensitive receptor of 25 meters. These estimates implementation of the Project's fugitive dust control strategies, including watering of the Project site and unpaved roads two times per day in accordance with SCAQMD Rule 403.
Emissions include implementation of mitigation measure MM-4.3-1.

As shown in Table 4.3-17, the Project would exceed the LST for PM_{10} and $PM_{2.5}$ with implementation of MM-4.3-1. As discussed in Section 4.3.4, according to the SCAQMD Final LST Methodology, "projects whose calculated emission budgets for the proposed construction or operational activities are above the LST emission levels found in the LST mass rate look-up tables should not assume that the project would necessarily generate adverse impacts. Detailed air dispersion modeling may demonstrate that pollutant concentrations are below localized significant levels." As such, dispersion modeling has been performed to evaluate the Project's potential impacts to PM_{10} and $PM_{2.5}$ as described in Section 4.3.4. Although emissions of NO_2 and CO did not exceed the LST screening levels in Table 4.3-17, for informational purposes only the dispersion of those pollutants were included in the assessment. Table 4.3-18, Localized Assessment of Project Construction Emissions – Unmitigated, shows the modeling results compared to the SCAQMD ambient air quality standard significance thresholds.

Table 4.3-18. Localized Assessment of Project Construction Emissions – Unmitigated

Pollutant	Averaging Time	Project Concentration	Threshold	Threshold Exceeded?
PM_{10}	24-hour	0.93 µg/m³	10.4 µg/m³	No
	Annual	0.19 µg/m³	1.0 µg/m³	No
$PM_{2.5}$	24-hour	0.59 µg/m³	10.4 µg/m³	No
NO_2	1-hour	0.03 ppm	0.18 ppm	No
	Annual	0.001 ppm	0.03 ppm	No
CO	1-hour	0.06 ppm	20 ppm	No
	8-hour	0.02 ppm	9.0 ppm	No

Source: SCAQMD 2019.
Notes: µg/m³ = micrograms per cubic meter; CO = carbon monoxide; NO_2 = nitrogen dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; ppm = parts per million; SCAQMD = South Coast Air Quality Management District.
See Appendix B-2 for complete results.
These estimates implementation of the Project's fugitive dust control strategies, including watering of the Project site and unpaved roads two times per day in accordance with SCAQMD Rule 403.

As shown Table 4.3-18, the Project would not exceed the concentration-based air pollutant thresholds during construction. Impacts regarding exposure of sensitive receptors to substantial pollutant concentrations would be considered less than significant. The modeling results including implementation of MM-4.3-1 are shown in Table 4.3-19, Localized Assessment of Project Construction Emissions – Mitigated.

Table 4.3-19. Localized Assessment of Project Construction Emissions – Mitigated

Pollutant	Averaging Time (µg/m³)	Project Concentration	Threshold	Threshold Exceeded?
PM_{10}	24-hour	0.61 µg/m³	10.4 µg/m³	No
	Annual	0.12 µg/m³	1.0 µg/m³	No
$PM_{2.5}$	24-hour	0.29 µg/m³	10.4 µg/m³	No
NO_2	1-hour	0.004 ppm	0.18 ppm	No
	Annual	0.0002 ppm	0.03 ppm	No
CO	1-hour	0.06 ppm	20 ppm	No
	8-hour	0.02 ppm	9.0 ppm	No

Source: SCAQMD 2019.
Notes: µg/m³ = micrograms per cubic meter; CO = carbon monoxide; NO_2 = nitrogen dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; ppm = parts per million; SCAQMD = South Coast Air Quality Management District.
See Appendix B-2 for complete results.
These estimates implementation of the Project's fugitive dust control strategies, including watering of the Project site and unpaved roads two times per day in accordance with SCAQMD Rule 403.
Emissions include implementation of MM-4.3-1.

As shown in Table 4.3-19, with implementation of MM-4.3-1, localized construction emissions would not exceed any concentration-based air pollutant thresholds. Therefore, mitigated localized construction impacts, including associated health effects, would be less than significant with mitigation.

Health Effects of Carbon Monoxide

Mobile source impacts occur on two scales. Regionally, Project-related travel would add to regional trip generation and increase the VMT within the local airshed and the SCAB. Locally, traffic generated by the future residential

development facilitated by the Project would be added to the local roadway system near the Project. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles cold-started and operating at pollution-inefficient speeds and is operating on roadways already crowded with non-Project traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. However, because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing.

At the time that the SCAQMD Handbook (1993) was published, the SCAB was designated nonattainment under the CAAQS and NAAQS for CO. In 2007, the SCAQMD was designated in attainment for CO under both the CAAQS and NAAQS as a result of the steady decline in CO concentrations in the SCAB due to turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities. The SCAQMD conducted CO modeling for the 2003 AQMP[16] (SCAQMD 2003b) for the four worst-case intersections in the SCAB: (1) Wilshire Boulevard and Veteran Avenue, (2) Sunset Boulevard and Highland Avenue, (3) La Cienega Boulevard and Century Boulevard, and (4) Long Beach Boulevard and Imperial Highway. At the time the 2003 AQMP was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in the County, with an average daily traffic volume of about 100,000 vehicles per day. Using CO emission factors for 2002, the peak modeled CO 1-hour concentration was estimated to be 4.6 ppm at the intersection of Wilshire Boulevard and Veteran Avenue. When added to the maximum 1-hour CO concentration from 2018 through 2020 within the County (see Table 4.3-3), which was 1.5 ppm in 2019, the 1-hour CO would be 6.1 ppm, while the CAAQS is 20 ppm.

The 2003 AQMP also projected 8-hour CO concentrations at these four intersections for 1997 and from 2002 through 2005. From years 2002 through 2005, the maximum 8-hour CO concentration was 3.8 ppm at the Sunset Boulevard and Highland Avenue intersection in 2002; the maximum 8-hour CO concentration was 3.4 ppm at the Wilshire Boulevard and Veteran Avenue in 2002. Adding the 3.8 ppm to the maximum 8-hour CO concentration from 2018 through 2020 within the County (see Table 4.3-3), which was 1.2 ppm in 2018, the 8-hour CO would be 5.0 ppm, while the CAAQS is 9.0 ppm.

Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would be at least over 100,000 vehicles per day. While intersection volumes are not available for every intersection within the unincorporated County area, as discussed in Appendix J, implementation of the Project would result in a maximum of 4,493 trips per day. The highest volume intersection (The Old Road and Pico Canyon Road) studied in Appendix J under cumulative traffic volumes (which includes existing traffic, the Project, and cumulative projects) would not exceed 30,000 vehicles per day. Accordingly, it is not anticipated that the Project would result in a new congested intersection or substantially exacerbate conditions at congested intersections, nor is it anticipated that the Project would increase volume at any given intersection to more than 100,000 vehicles per day. Therefore, a CO hotspot is not anticipated to occur based on potential future residential development facilitated by the Project. Impacts associated with the potential for CO hotspots to expose sensitive receptors to substantial pollutant concentrations would be less than significant and no mitigation is required.

Toxic Air Contaminants

Construction

As discussed in Section 4.3.4, a construction HRA was performed to estimate the Maximum Individual Cancer Risk and the Chronic Hazard Index for proximate residential receptors as a result of project construction. Results of the construction HRA are presented in Table 4.3-20, Construction Health Risk Assessment Results – Unmitigated.

[16] SCAQMD's CO hotspot modeling guidance has not changed since 2003.

Table 4.3-20. Construction Health Risk Assessment Results – Unmitigated

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk – Residential offsite	Per Million	33.6	10	**Potentially Significant**
Chronic Hazard Index – Residential offsite	Index Value	0.02	1.0	Less than Significant
Maximum Individual Cancer Risk – Residential onsite	Per Million	3.0	10	Less than Significant
Chronic Hazard Index – Residential onsite	Index Value	0.002	1.0	Less than Significant

Source: SCAQMD 2019.
Note: CEQA = California Environmental Quality Act.
See Appendix B-2.

As shown in Table 4.3-20, Project construction activities would result in a Residential Maximum Individual Cancer Risk of 27.1 in 1 million for offsite receptors, which exceeds the significance threshold of 10 in 1 million. Onsite cancer risk would be 3.0 in 1 million which does not exceed the significance thresholds. Project construction would result in a Residential Chronic Hazard Index of 0.01 for offsite receptors and 0.002 for onsite receptors, which is below the 1.0 significance threshold. The Project construction TAC health risk impacts would be potentially significant, and mitigation would be required to reduce these impacts to less than significant. Table 4.3-21, Construction Health Risk Assessment Results – Mitigated, shows the construction health risk results including implementation of MM-4.3-1.

Table 4.3-21. Construction Health Risk Assessment Results – Mitigated

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk – Residential offsite	Per Million	3.8	10	Less than Significant
Chronic Hazard Index – Residential offsite	Index Value	0.002	1.0	Less than Significant
Maximum Individual Cancer Risk – Residential onsite	Per Million	0.4	10	Less than Significant
Chronic Hazard Index – Residential onsite	Index Value	0.0002	1.0	Less than Significant

Source: SCAQMD 2019.
Note: CEQA = California Environmental Quality Act.
See Appendix B-2.
Results include implementation of MM-4.3-1.

The HRA results after incorporation of MM-4.3-1 as presented in Table 4.3-21 show that the Residential Maximum Individual Cancer Risk would be below the significance threshold of 10 in 1 million for both onsite and offsite receptors. Implementation of MM-4.3-1 would reduce emissions from construction to levels below SCAQMD thresholds. Thus, regarding exposure of sensitive receptors to substantial pollutant concentrations, site-specific impacts during construction would be less than significant with mitigation incorporated.

Operation

As the Project consists of a residential development, including recreational uses, the majority of the emissions generated during operation would be from vehicles travelling to and from the site. These vehicles are predominantly gasoline, and the majority of the emissions would be offsite. As such, the Project would not expose sensitive receptors to substantial pollutant concentrations during operations. Impacts would be less than significant during operation.

As discussed in Section 4.3.4, an HRA was performed to estimate the Maximum Individual Cancer Risk and Chronic Hazard Index for residential receptors as a result of emissions from I-5 on future sensitive receptors of the Project. As detailed in Section 4.3.4, this assessment of risk includes the accounting for time spent indoors as identified in the NHAPS and the time spent away from home as recommended by OEHHA (OEHHA 2015). Accounting for the actual time spent indoors and exposure related to the residents within the Project provides a more realistic exposure scenario from TAC emissions from I-5. Results of the roadway HRA are presented in Table 4.3-22, Roadway Health Risk Assessment Results.

Table 4.3-22. Roadway Health Risk Assessment Results

Impact Parameter	Units	Impact Level	CEQA Threshold
Maximum Individual Cancer Risk – Residential	Per Million	8.70	10
Chronic Hazard Index – Residential	Index Value	0.01	1.0
Acute Hazard Index – Residential	Index Value	0.004	1.0

Source: SCAQMD 2019.
Notes: CEQA = California Environmental Quality Act.
See Appendix B-2.
The results include the use of MERV 13 filters as discussed in Section 4.3.4.

As shown in Table 4.3-22, TAC emissions (from the I-5 freeway) would result in a Residential Maximum Individual Cancer Risk of 8.70 in 1 million, a Residential Chronic Hazard Index of 0.01, and a Residential Acute Hazard Index of 0.004. These impact levels would be less than the respective SCAQMD significance thresholds. As such, impacts regarding exposure of sensitive receptors to substantial pollutant concentration during operation of the Project would be less than significant.

Overall, the Project would result in a less than significant impact with implementation of MM-4.3-1 regarding exposure of sensitive receptors to substantial pollutant concentrations during construction, as detailed in Tables 4.3-15 through 4.3-20. As demonstrated in Table 4.3-22, the Project would result in less than significant impacts regarding exposure of sensitive receptors to substantial pollutant concentrations during operation of the Project.

Threshold 4.3d: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Based on available information, the Project is not anticipated to result in other emissions that have not been addressed under Thresholds 4.3a through 4.3c. As such, this analysis focuses on the potential for the Project to generate odors. The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the Project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. In addition, Project construction and operation would be required to comply with SCAQMD Rule 402, Nuisance, which prohibits the discharge of air pollutants from a facility that could cause injury, detriment, nuisance, or annoyance to the public or damage business or property. Therefore, impacts associated with odors during construction would be less than significant. No mitigation is required.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The Project would not include land uses that generate odors as discussed above during operation. The residences may emit odors outside during cooking or application of architectural coatings. These would be limited to the areas adjacent to the source and would not impact substantial numbers of people. These odors would also be short in nature and would disperse rapidly. Any indoor odors would be limited to that building. Therefore, Project operations would result in an odor impact that is less than significant. No mitigation is required.

4.3.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., cumulative projects) used for this analysis are presented in in Section 2.6, Cumulative Impacts, and on Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR. For the purposes of air quality emissions, this cumulative analysis considers emissions within the air basin (i.e., SCAB).

Threshold 4.3a: Would the project conflict with or obstruct implementation of applicable air quality plans of either the South Coast AQMD (SCAQMD) or the Antelope Valley AQMD (AVAQMD)?

As discussed in Section 4.14, Population and Housing, buildout of the Project would not exceed the growth projections for the Santa Clarita Valley Planning Area for population or housing estimates. Further, the Project would help the County achieve its regional housing needs within the RHNA's 6th Cycle determination and the County's Housing Element Update. As discussed in response to Thresholds 4.3a and 4.3b, implementation of the Project would result in construction and operational emissions that would be below the SCAQMD's mass daily regional significance thresholds (with mitigation MM-4.3-1 for construction equipment), and as such, would not conflict with the SCAQMD's consistency criterion for consistency with an applicable AQMP. The impact of the Project, in addition to the additional growth anticipated through cumulative projects listed in Table 2-2, would constitute a less than significant cumulative impact related to AQMP implementation with mitigation. Therefore, the Project would not contribute to a cumulatively considerable impact related to conflicting with the SCAQMD's AQMP.

Threshold 4.3b: 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?

As discussed previously, air pollution by nature is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SCAQMD develops and implement plans for future attainment of ambient air quality standards. The potential for the Project to result in a cumulatively considerable impact, specifically, a cumulatively considerable new increase of any criteria pollutant for which the Project region

is nonattainment under an applicable NAAQS and/or CAAQS, is addressed in response to Threshold 4.3b. Consistent with the finding for the Project, the cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment would be less than significant with mitigation (MM-4.3-1) during construction and less than significant during operation for cumulative impacts. The Project would not result in a cumulatively considerable impact.

Threshold 4.3c: Would the project expose sensitive receptors to substantial pollutant concentrations?

As discussed in response to Threshold 4.3c regarding sensitive receptors, the Project would result in a less than significant impact with mitigation (MM-4.3-1) for construction-related impacts, and a less than significant impact for operational impacts. With mitigation, the Project would not exceed the ambient air quality standards for criteria air pollutants during construction. Similarly, with mitigation, emissions of TACs during construction would not exceed applicable thresholds during construction for offsite or onsite receptors. The Project would also not cause or create a CO hotspot. The Project would not emit substantial quantities of criteria pollutant emissions or TACs during operation. The impact of the Project, in addition to growth, including other Cumulative Projects, could further increase the exposure of air quality pollutants to sensitive receptors. However, Cumulative Projects LA1, LA2, LA3, LA13, SC1, and other nearby projects, as listed in Table 2-2 of Chapter 2, Environmental Setting, would not result in substantial concentrations of TAC emissions during operation as they are predominantly residential and commercial projects with the majority of their emissions (mobile sources) are offsite. Emissions during construction would disperse rapidly from the Project sites and generally occur at magnitudes that would not affect substantial numbers of people. Consistent with the significance finding for the Project, during construction there would be a less than significant cumulative impact with mitigation related to exposure of sensitive receptors to substantial pollutant concentrations from TACs. Consistent with the significance finding for the Project, during operation there would be a less than significant cumulative impact related to exposure of sensitive receptors to substantial pollutant concentrations from TACs.

Threshold 4.3d: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

As discussed in response to Threshold 4.3d in Section 4.3.5 regarding odors or other emissions, the Project would result in a less than significant impact during construction and operation. Odor impacts are generally limited to the immediate area surrounding the source. Potential odors from the Project site would be temporary and limited (due to the type of land uses—recreational and residential are not typically substantial odor-producing land uses) and Cumulative Projects LA1 through LA14 and SC1 through SC26, among other developments in the SCAB, would be subject to SCAQMD Rule 402. Therefore, the Project would not contribute to a cumulatively considerable impact regarding other emissions, such as those leading to odors, which would adversely affect a substantial number of people. The cumulative impact would be less than significant.

4.3.7 Mitigation Measures

MM-4.3-1 Construction Equipment. Heavy-duty diesel-powered construction equipment greater than 50 horsepower shall be equipped with California Air Resources Board (CARB)-certified Tier 4 Final or better diesel engines. The County shall verify and approve all pieces within the construction fleet that would not meet Tier 4 Final standards. Equipment engines must be maintained in good condition and in proper tune as per manufacturer's specifications.

During construction activities, the contractor shall, at a minimum, electrify or use alternative fuels (non-diesel) for the operation of all equipment less than 50 horsepower (welders). In addition, electricity use during the construction activities shall come from the existing electric grid instead of a diesel generator. If a generator is necessary for the completion of construction activities, a non-diesel generator shall be used.

The Project would implement MM-4.8-1 through MM-4.8-3, MM-4.8-5, and MM-4.8-8 to reduce emissions of greenhouse gases (GHG) below a level of significance (as detailed in Section 4.8, Greenhouse Gas Emissions, of this Draft EIR). These mitigation measures may also reduce criteria air pollutant operational emissions as a co-benefit. The Project would also implement MM-4.17-2 (as detailed in Section 4.17, Transportation, of this Draft EIR), requiring a Transportation Demand Management Program, which would reduce mobile source emissions by reducing VMT through discouraging single occupancy vehicle trips and encouraging alternative modes of transportation.

4.3.8 Level of Significance After Mitigation

Impacts to a potential conflict with the SCAQMD 2022 AQMP would be less than significant with implementation of MM-4.3-1.

Regarding cumulatively considerable increases of criteria air pollutants, implementation of MM-4.3-1 would reduce potential construction emissions from the Project to below the SCAQMD significance threshold for NO_x. Operational emissions would be less than significant without mitigation, but implementation of MM-4.8-1 through MM-4.8-3, MM-4.8-5, and MM-4.8-8 from Section 4.8, Greenhouse Gas Emissions, and MM-4.17-2 from Section 4.17, Transportation, would further reduce operational criteria air pollutant emissions. Accordingly, the potential of the Project to violate any air quality standard or contribute substantially to an existing or projected air quality violation would be less than significant with mitigation.

Exposure of sensitive receptors to substantial pollutant concentrations would be less than significant related to CO hotspots. For localized emissions during construction, the Project would result in potentially significant impacts prior to mitigation. With implementation of MM-4.3-1, the Project would not exceed any concentration-based air pollutant thresholds. For construction health effects from TACs, the Project would result in a potentially significant impact to cancer risk prior to mitigation. Implementation of MM-4.3-1 would reduce DPM associated with construction of the Project and the associated cancer risk would be below levels of significance. The freeway HRA showed the Project's future residents would not be exposed to TAC emissions that would cause cancer or non-cancer health impacts above SCAQMD significance thresholds. Impacts to proximate and future sensitive receptors would be less than significant with mitigation.

The Project would result in a less than significant impact regarding other emissions, including those leading to odors, during construction and operation.

4.3.9 References

BAAQMD (Bay Area Air Quality Management District). 2011. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. May 2011. Accessed June 2022. https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/baaqmd-modeling-approach.pdf.

CAPCOA (California Air Pollution Control Officers Association). 2022. *California Emissions Estimator Model (CalEEMod) User's Guide Version 2022.1.* April 2022. http://www.caleemod.com/.

CARB (California Air Resources Board). 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October 2000. Accessed May 2019. http://www.arb.ca.gov/diesel/documents/rrpfinal.pdf.

CARB. 2009. "ARB Fact Sheet: Air Pollution Sources, Effects and Control." Page last reviewed December 2, 2009. Accessed May 2019. http://sntbberry.cityofsanteeca.gov/sites/FanitaRanch/Public/Remainder%20of%20the%20Record/(2)%20Reference%20Documents%20from%20EIR%20&%20Technical%20Reports/Tab%20281%20-%202009-12-02%20ARB%20Fact%20Sheet%20Air%20Pollution%20and%20Health.pdf .

CARB. 2016. "Ambient Air Quality Standards." May 4, 2016. Accessed May 2019. http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.

CARB. 2017. "Inhalable Particulate Matter and Health ($PM_{2.5}$ and PM_{10})." Page last reviewed August 10, 2017. Accessed May 2019. https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm.

CARB. 2019a. "Glossary." Accessed April 2022. https://ww2.arb.ca.gov/about/glossary.

CARB. 2019b. "Ozone & Health." Accessed April 2022. https://ww2.arb.ca.gov/resources/ozone-and-health.

CARB. 2019c. "Nitrogen Dioxide & Health." Accessed April 2022. https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health.

CARB. 2019d. "Carbon Monoxide & Health." Accessed April 2022. https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health.

CARB. 2019e. "Sulfur Dioxide & Health." Accessed April 2022. https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health.

CARB. 2019f. "Overview: Diesel Exhaust and Health." Accessed April 2022. https://www.arb.ca.gov/research/diesel/diesel-health.htm.

CARB. 2020. "Area Designation Maps/State and National." Last reviewed October 2020. http://www.arb.ca.gov/desig/adm/adm.htm.

CARB. 2021a. "Vinyl Chloride & Health." Accessed April 2021. https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health.

CARB. 2021b. "Ambient air quality data." [digital CARB data]. iADAM: Air Quality Data Statistics. Accessed February 2021. http://www.arb.ca.gov/adam/topfour/topfour1.php.

City of Inglewood. 2019. *Inglewood Basketball and Entertainment Center Project EIR*. http://ibecproject.com/D_AirQuality.pdf.

City of San Jose. 2019. *Norman Y. Mineta San Jose International Airport Amendment to the Airport Master Plan EIR*. https://www.sanjoseca.gov/home/showpublisheddocument/61640/637304476542130000.

County of Los Angeles. 2015. *Los Angeles County General Plan 2035*. Department of Regional Planning. Adopted October 6, 2015. Accessed June 2022. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

County of Los Angeles. 2022. *Revised Housing Element*. Department of Regional Planning. Accessed May 2022. https://planning.lacounty.gov/wp-content/uploads/2022/11/housing-element-20220517.pdf.

CSU Dominguez Hills (California State University Dominguez Hills). 2019. *California State University Dominguez Hills Campus Master Plan EIR*. https://www.csudh.edu/Assets/csudh-sites/fpcm/docs/campus-master-plan/2019-09-11-FEIR-appendices.pdf.

EPA (U.S. Environmental Protection Agency). 2008. *Final Ozone NAAQS Regulatory Impact Analysis*. March 2008. https://www3.epa.gov/ttnecas1/regdata/RIAs/452_R_08_003.pdf.

EPA. 2013. *Integrated Science Assessment for Ozone and Related Photochemical Oxidants*. EPA/600/R-10/076F. February 2013. Accessed May 2019. https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=247492.

EPA. 2015. *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas*. November 2015. Accessed June 2022. https://nepis.epa.gov/Exe/ZyPdf.cgi?Dockey=P100NN22.pdf.

EPA. 2017. "Support Center for Regulatory Atmospheric Modeling (SCRAM) - Photochemical Air Quality Modeling." https://www.epa.gov/scram/photochemical-air-quality-modeling.

EPA. 2018a. "Criteria Air Pollutants." March 8, 2018. Accessed May 2019. https://www.epa.gov/criteria-air-pollutants.

EPA. 2018b. *Residential Air Cleaners: A Technical Summary*. July. https://www.epa.gov/sites/production/files/2018-07/documents/residential_air_cleaners_-_a_technical_summary_3rd_edition.pdf.

EPA. 2018c. *Environmental Benefits Mapping and Analysis Program – Community Edition User's Manual*. July 2018. https://www.epa.gov/sites/production/files/2015-04/documents/benmap-ce_user_manual_march_2015.pdf.

EPA. 2021a. "EPA Region 9 Air Quality Maps and Geographic Information." Accessed February 19, 2021. https://www3.epa.gov/region9/air/maps/.

EPA. 2021b. Current Nonattainment Counties for All Criteria Pollutants. Updated February 28, 2021. Accessed March 2021. https://www3.epa.gov/airquality/greenbook/ancl.html.

EPA. 2021c. "AirData: Access to Air Pollution Data." Accessed February 2021. https://www.epa.gov/outdoor-air-quality-data/monitor-values-report.

Klepeis, N.E., W.C. Nelson, W.R. Ott, J.P. Robinson, A.M. Tsang, P. Switzer, J.V. Behar, S.C. Hern, and W.H. Engelmann. 2001. "The National Human Activity Pattern Survey (NHAPS): A Resource for Assessing Exposure to Environmental Pollutants." *Journal of Exposure Analysis and Environmental Epidemiology* 11: 231–252. https://www.nature.com/articles/7500165.

March JPA (March Joint Powers Association). 2019. *K4 Warehouse and Cactus Channel Improvements EIR*. April 2019. https://files.ceqanet.opr.ca.gov/125156-2/attachment/Ehqb2eUJImRQOIgiGAAWSHmDkaoZPmyRK24Uy0s3tld8G3IOWxuuhU_a7PpSB6ecz1qP5JgNptOuCa120.

NRC (National Research Council). 2005. *Interim Report of the Committee on Changes in New Source Review Programs for Stationary Sources of Air Pollutant*s. Washington, DC: The National Academies Press. https://doi.org/10.17226/11208.

OEHHA (Office of Environmental Health Hazard Assessment). 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments 2015*. February 2015. Available: http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf. Accessed January 2024.

Propper, R., P. Wong, S. Bui, J. Austin, W. Vance, Á. Alvarado, B. Croes, and D. Luo. 2015. "Ambient and Emission Trends of Toxic Air Contaminants in California." *Environmental Science & Technology* 49(19): 11,329-11,339.

SCAG (Southern California Association of Governments). 2008. *Regional Comprehensive Plan: Helping Communities Achieve a Sustainable Future*" Accessed March 2020. http://www.scag.ca.gov/NewsAndMedia/Pages/RegionalComprehensivePlan.aspx.

2020. *Connect SoCal: The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies of the Southern California Association of Governments.* Adopted September 3, 2020. Accessed May 2021. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.

SCAQMD (South Coast Air Quality Management District). 1993. *CEQA Air Quality Handbook*.

SCAQMD. 2003a. *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution.* August 2003. http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf.

SCAQMD. 2003b. *Final 2003 AQMP Appendix V Modeling and Attainment Demonstration*s. August 2003. https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2003-air-quality-management-plan/2003-aqmp-appendix-v.pdf?sfvrsn=2.

SCAQMD. 2008. *Final Localized Significance Threshold Methodology*. June 2003, first published. July 2008, revised. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2.

SCAQMD. 2013. *Final 2012 Air Quality Management Plan*. February 2013. Accessed March 2020. https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan.

SCAQMD. 2015a. *MATES-IV, Multiple Air Toxics Exposure Study in the South Coast Air Basin*. May 2015. https://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf?sfvrsn=7.

SCAQMD. 2015b. Brief of Amicus Curiae in Support of Neither Party, *Sierra Club v. County of Fresno*, Case No. S219783 (filed Apr. 13, 2015). https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf.

SCAQMD. 2017. *Risk Assessment Procedures for Rules 1401, 1401.1, and 212*. September 1, 2017. Accessed June 2022. http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/riskassessproc-v8-1.pdf?sfvrsn=12.

SCAQMD. 2018. South Coast AQMD Modeling Guidance for AERMOD. https://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance.

SCAQMD. 2019. "SCAQMD Air Quality Significance Thresholds." Originally published in CEQA Air Quality Handbook, Table A9-11-A. Revised April 2019. http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2.

SCAQMD. 2020. "Rule 455, Wood Burning Devices." Last Amended October 27, 2020. http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-445.pdf.

SCAQMD. 2021. "MATES V Multiple Air Toxics Exposure Study." September 21, 2021. Accessed June 2022. http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v.

SCAQMD. 2022. "Air Quality Management Plan (AQMP)." Adopted December 2, 2022. Accessed April 2023. https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan.

SDSU (San Diego State University). 2019. *San Diego State University Mission Valley Campus Master Plan EIR Additional Information Regarding Potential Health Effects of Air Quality Impacts.* December 2019. https://missionvalley.sdsu.edu/pdfs/feir/appendices/4-2-3-sdsu-mv-health-effects-memo.pdf .

SJVAPCD (San Joaquin Valley Air Pollution Control District). 2015. Brief of Amicus Curiae in Support of Defendant and Respondent, County of Fresno, and Real Party In Interest and Respondent, Friant Ranch, L.P., Sierra Club v. County of Fresno, Case No. S219783 (filed Apr. 13, 2015). https://www.courts.ca.gov/documents/7-s219783-ac-san-joaquin-valley-unified-air-pollution-control-dist-041315.pdf.

SJVAPCD (San Joaquin Valley Air Pollution Control District). 2018. "APR 2030 Project Ambient Air Quality Analysis Applicability Determination Under CEQA." June 12, 2018. https://ww2.valleyair.org/media/bo3hz35n/apr-2030.pdf.

U.S. Census Bureau. 2020. "Newhall CCD." Accessed May 2022. https://data.census.gov/cedsci/profile?g=0600000US0603792110.

WRCC (Western Regional Climate Center). 2022. "Newhall, California (046165)." Accessed June 2022. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6165.

4.4 Biological Resources

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to biological resources and identifies associated regulatory requirements, thresholds of significance, methodology, impacts, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data and reports, as well as the following appendix:

Appendix C Biota Report, Trails at Lyons Canyon, prepared by Dudek, dated December 2024

Appendix E-1 Revised Geotechnical 100-Scale Plan Review- Lyons Canyon Development, Vesting Tentative Tract Map No. 83301- Los Angeles County, California, For NUWI – Lyons Canyon, LLC. Prepared by R.T. Frankian and Associates, dated February 22, 2024.

Appendix F Revised Phase 1 Environmental Site Assessment for Lyons Canyon in Unincorporated Santa Clarita, California, prepared by Stantec, dated April 3, 2023

Other sources consulted are listed in Section 4.4.9, References.

4.4.1 Existing Conditions

This section describes the existing conditions in the regional and local vicinity as well as within the Project site and identifies the biological resources that could be affected by the Project.

Regional Setting

The Project site is in the eastern Ventura Basin within the Transverse Ranges (i.e., an east–west trending series of steep mountain ranges and valleys) along the northerly flank of the Santa Susana Mountains, as shown in Figure 4.4-1, Regional Conditions. The east-west structure of the Transverse Ranges contrasts with the normal northwest trend of much of the rest of coastal California. The Ventura Basin consists of a narrow, elongated, and east–west trending sedimentary trough extending from the Santa Barbara Channel on the west to the San Gabriel fault on the east. The flanks of the Ventura Basin are broken by a series of large reverse/thrust faults, including the Santa Susana and Oak Ridge faults on the southern flank and the Red Mountain and San Cayetano faults on the northern flank. The San Gabriel Fault, the dominant geologic feature in the Santa Clarita Valley, forms the eastern Ventura Basin boundary and separates the Ventura Basin from the structurally similar Soledad Basin (Appendix E-1). No active or potentially active faults are known to exist within the Project site or surrounding area, and the nearest Alquist-Priolo earthquake fault zone is approximately 1.5 miles northwest of the site and was established for surface features identified following the 1994 Northridge earthquake (Appendix E-1).

The Project site occurs entirely within the Santa Susana Mountains and Simi Hills Significant Ecological Area (SEA), as shown on Figure 4.4-2, SEA Map. Although the Project site is located at the interface of undeveloped lands and existing development, it represents the northeastern extent of a County of Los Angeles (County) designated wildlife corridor that provides for wildlife movement from lands associated with the Santa Susana Mountains and Simi Hills SEA to undeveloped lands associated with the San Gabriel Mountains further east, with a substantial east–west movement route in Towsley Canyon south of the Project site. The shrubland, grassland, and woodland habitats within the Project site are contiguous with large tracts of similar habitat communities located on adjacent lands that are both privately held undeveloped land and designated open space associated with Santa Clarita Woodlands

Park, Rivendale Ranch Open Space, and Pico Canyon Park. Except for developed areas to the immediate north and east of the Project site, adjacent undeveloped lands contain contiguous chaparral, coastal sage scrub, and woodlands (Appendix C).

The Project site is in the Upper Santa Clara River East Subbasin hydraulic area (RWQCB 2012). The Santa Clara River Valley East Subbasin is bordered on the north by the Piru Mountains, on the west by impervious rocks of the Modelo and Saugus Formations and a constriction in the alluvium, on the south by the Santa Susana Mountains, and on the south and east by the San Gabriel Mountains. Surface water is drained by the Santa Clara River, Bouquet Creek, and Castaic Creek (Appendix F). Lyons Canyon, located in the central portion of the Project site, drains eastward into the South Fork of the Santa Clara River, which leads to the Santa Clara River approximately 3.75 miles northeast of the Project site (Appendix C).

Local Setting

This section provides the results of general biological surveys, vegetation mapping, habitat assessments and focused surveys for special-status plants and wildlife, and a jurisdictional delineation for waters of the United States (including wetlands) subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB) and streams (including riparian vegetation) and lakes subject to the jurisdiction of the California Department of Fish and Wildlife (CDFW).

Vegetation Communities and Land Cover Types

Vegetation communities within the Project site were mapped according to the List of Vegetation Alliances and Associations (or Natural Communities List). These vegetation communities were named based on the dominant plant species present and were mapped to account for the SEA allowable disturbance thresholds, which included the following:

- SEA Category 1 resources (vegetation communities ranked G1 or S1): no disturbance allowance
- SEA Category 2 resources (vegetation communities ranked G2 or S2): less than or equal to 500 square feet
- SEA Category 3 resources (vegetation communities ranked G3 or S3): less than or equal to 500 square feet
- SEA Category 4 resources (vegetation communities ranked G4/G5 or S4/S5): less than or equal to 5,000 square feet

Vegetation communities and habitats are considered “special-status” based on one or more of the following criteria:

- Global (G) and/or State (S) ranking of Category 3 or less based on CDFW (see notes for Table 4.4-1 below for further explanation)
- Riparian habitat

During vegetation mapping of the Project site, 19 different vegetation alliances and land cover types were identified, as described in Appendix C. Table 4.4-1 provides a summary of vegetation alliances and land cover types and the corresponding acreage on the Project site and in the off-site fuel modification zones, which are referred to as “brush thinning zones” when located off-site (together referred to as the study area). The vegetation alliances and land cover types are shown on Figure 4.4-3, Vegetation Communities and Land Covers. It should be noted that most of the Project site burned in the 2016 Sage Fire. As such, the communities within the fire perimeter are still recovering,

and shrub and tree density are lower than is typical. This has resulted in the interspatial areas consisting of a mix of native and non-native herbaceous annuals and non-native grasses (Appendix C).

Table 4.4-1. Vegetation Communities and Land Covers on the Project Site and Off-Site Fuel Modification Zones

Common Name	Alliance[1]	Ranking[2] (Global/State)	SEA Category	Acreage
Project Site				
Forest and Woodland Alliances				
California walnut grove	*Juglans californica* Forest and Woodland	G3/S3.2	3	0.09
Coast live oak woodland and forest	*Quercus agrifolia* Forest and Woodland	G5/S4	3	22.66
Goodding's willow–red willow riparian woodland and forest	*Salix gooddingii–Salix laevigata* Forest and Woodland	G4/S3	3	1.24
			Subtotal[3]	*24.00*
Shrubland and Grassland Alliances				
Chamise chaparral	*Adenostoma fasciculatum* Shrubland	G5/S5	4	96.62
Disturbed chamise chaparral	*Adenostoma fasciculatum* Shrubland–Disturbed	G5/S5	4	9.73
California sagebrush–(purple sage) scrub	*Artemisia californica–Salvia leucophylla* Shrubland	G5/S5	4	28.40
Disturbed California sagebrush–(purple sage) scrub	*Artemisia californica–Salvia leucophylla* Shrubland–Disturbed	G5/S5	4	10.66
Wild oats and annual brome grasslands	*Avena* spp.–*Bromus* spp. Herbaceous Semi-natural	NA/NA	4	2.62
Mulefat thickets	*Baccharis salicifolia* Shrubland	G4/S4	4	2.95
Upland mustards or star-thistle fields	*Brassica nigra–Centaurea melitensis* Herbaceous Semi-natural Stands	NA/NA	NA	50.62
Salt grass flats	*Distichlis spicata* Herbaceous	GNR/S4	4	0.13
Palmer's goldenbush scrub	*Ericameria palmeri* Provisional Shrubland	G3/S3	3	0.67
Thick leaf yerba santa scrub	*Eriodictyon crassifolium* Provisional Shrubland	G3/S3	3	0.83
[4]Davidson's wild buckwheat/dove weed annual grassland[4]	*Eriogonum davidsonii/Croton setiger* Grassland	NA/NA	4	0.97
California buckwheat scrub	*Eriogonum fasciculatum* Shrubland	G5/S5	4	2.26
Needlegrass–melic grass grassland	*Nassella (Stipa)* spp.–*Melica* spp. Herbaceous	G3G4/S3S4	3	0.07
Basket bush–river hawthorn–desert olive patches	*Rhus trilobata–Crataegus rivularis–Forestiera pubescens* Shrubland	G4/S3.2	3	0.03

Table 4.4-1. Vegetation Communities and Land Covers on the Project Site and Off-Site Fuel Modification Zones

Common Name	Alliance[1]	Ranking[2] (Global/State)	SEA Category	Acreage
			Subtotal[3]	*206.57*
Non-vegetated Land Cover				
Developed land	NA	NA/NA	NA	2.92
			Project Site Total[3]	**233.49**
Off-Site				
Forest and Woodland Alliances				
Coast live oak woodland and forest	*Quercus agrifolia* Forest and Woodland	G5/S4	3	1.60
Shrubland and Grassland Alliances				
Chamise chaparral	*Adenostoma fasciculatum* Shrubland	G5/S5	4	0.70
Upland mustards or star-thistle fields	*Brassica nigra–Centaurea melitensis* Herbaceous Semi-natural Stands	NA/NA	NA	1.29
California buckwheat scrub	*Eriogonum fasciculatum* Shrubland	G5/S5	4	1.33
Basket bush–river hawthorn–desert olive patches	*Rhus trilobata–Crataegus rivularis–Forestiera pubescens* Shrubland	G4/S3.2	3	0.01
			Subtotal[3]	*3.33*
Non-vegetated Land Cover				
Developed land	NA	NA/NA	NA	1.23
			Off-Site Total[3]	**6.16**
			Project and Off-Site Total[3]	**239.65**

Source: Appendix C.
Notes: SEA = Significant Ecological Area; NA = not applicable.

1 The term semi-natural stands vs. alliance are used in the Manual of California Vegetation to distinguish between natural vegetation communities and vegetation types dominated by non-native plants (Sawyer et al. 2009).

2 The conservation status of a vegetation community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = global, N = national, and S = subnational). The numbers have the following meaning (NatureServe 2023): 1 = critically imperiled; 2 = imperiled; 3 = vulnerable to extirpation or extinction; 4 = apparently secure; 5 = demonstrably widespread, abundant, and secure. GNR = Global rank not yet assessed.

3 Totals may not sum due to rounding.

4 This vegetation alliance is not recognized by, and a comparable alliance is not described by, the Manual of California Vegetation. This alliance was developed based upon species representing dominants for this community with the Project site.

Forest and Woodland Alliances

Juglans californica Forest and Woodland Alliance

Juglans californica forest and woodland alliance, with Southern California black walnut (*Juglans californica*) as the dominant species within the tree canopy, is located in the southern portion the site. The alliance has a G3/S3.2 rarity ranking, which means it is a sensitive vegetation community. The membership rules for the alliance include

the following: (1) Southern California black walnut represents greater than 50% relative cover in the tree canopy or greater than 30% relative cover if coast live oak is present (Appendix C).

Quercus agrifolia Woodland Alliance

Quercus agrifolia woodland alliance, with coast live oak (*Quercus agrifolia*) as the dominant species within the tree canopy, is interspersed throughout the site. The alliance has a G5/S4 rarity ranking. The membership rules for the alliance include the following: (1) coast live oak represents greater than 50% relative cover in the tree canopy, and if California bay (*Umbellularia californica*) is present, it represents less than 33% relative cover in the tree canopy; and (2) coast live oak represents greater than 60% relative cover in the tree canopy (Appendix C).

Salix gooddingii–Salix laevigata Forest and Woodland Alliance

Salix gooddingii–Salix laevigata forest and woodland alliance is located in the southwestern portion of the site. The alliance has a rarity ranking of G4/S3. The membership rules for the *Salix gooddingii* alliance include the following: (1) red willow (*Salix laevigata*) represents greater than 50% relative cover in the tree canopy; (2) red willow represents greater than 5% absolute cover and is typically a dominant species in the tree canopy; may be a codominant species in the tree canopy with California buckeye (*Aesculus californica*), incense cedar (*Calocedrus decurrens*), foothill pine (*Pinus sabiniana*), or oak species (*Quercus* spp.); and (3) red willow represents 50% relative cover in the tree canopy or greater than 30% relative cover with other tree willows and often with arroyo willow (*Salix lasiolepis*) in the sub-canopy (Appendix C).

Shrubland and Grassland Alliances

Adenostoma fasciculatum Shrubland Alliance

Adenostoma fasciculatum shrubland alliance is located on hillsides throughout the Project site. The alliance has a G5/S5 rarity ranking. The membership rules for the alliance include the following: (1) chamise (*Adenostoma fasciculatum*) represents greater than 50% relative cover in the shrub canopy when codominant with red shank (*Adenostoma sparsifolium*), manzanita (*Arctostaphylos glauca; A. glandulosa*), and ceanothus (*Ceanothus crassifolius; C. cuneatus; C. greggii*); and (2) chamise has greater than 60% relative cover in the shrub canopy.

This vegetation alliance appears to be the most heavily affected by the Sage Fire, which burned most of the Project site in 2016. As such, this vegetation is in an early seral stage of recovery, with much of the chamise on site occurring as basal resprouts, with fire-following species such as deer weed (*Acmispon glaber*) and bush mallow (*Malacothamnus fasciculatus*) currently occupying the interstitial areas between resprouts. Limited areas of this vegetation alliance within the Project site support a predominance of chamise, though mixed with patches of other chaparral species including black sage (*Salvia mellifera*), toyon (*Heteromeles arbutifolia*), and scrub oak (*Quercus berberidifolia*) (Appendix C).

Adenostoma fasciculatum Shrubland Alliance–Disturbed

Adenostoma fasciculatum shrubland alliance–disturbed is a subset of the *Adenostoma fasciculatum* shrubland alliance and is located on hillsides along the southern portion of the Project site. This vegetation alliance has been heavily affected by the Sage Fire, which burned most of the Project site in 2016. As such, this vegetation is in an early seral stage of recovery, with much of the chamise on site occurring as basal resprouts, but instead of pioneering fire-following native species, the interstitial areas are vegetated with non-natives, such as slender wild

oat (*Avena fatua*), bromes (*Bromus* spp.), tocalote (*Centaurea melitensis*), and black mustard (*Brassica nigra*) (Appendix C).

Artemisia californica–Salvia leucophylla Shrubland Alliance

Artemisia californica–Salvia leucophylla shrubland alliance is located in the southern portion of the Project site. The *Artemisia californica–Salvia leucophylla* shrubland alliance has a G5/S5 rarity ranking. The membership rules for the *Artemisia californica–Salvia leucophylla shrubland alliance* include the following: (1) California sagebrush (*Artemisia californica*) represents greater than three times cover of coyote brush (*Baccharis pilularis*) and other shrub species; (2) California sagebrush represents greater than 60% relative cover in the shrub canopy; (3) California sagebrush has greater than 60% relative cover in the shrub canopy, or laurel sumac (*Malosma laurina*) or orange bush monkeyflower (*Diplacus aurantiacus*) sometimes have greater than 30% relative cover; and (4) both California sagebrush and California buckwheat (*Eriogonum fasciculatum*) represent 30% to 60% relative cover in the shrub layer (Appendix C).

Artemisia californica–Salvia leucophylla Shrubland Alliance–Disturbed

Artemisia californica–Salvia leucophylla shrubland alliance–disturbed, which is a subset of the *Artemisia californica–Salvia leucophylla* shrubland alliance, is in the southern portion of the Project site. This vegetation alliance has been extremely heavily affected by the Sage Fire, which burned most of the Project site in 2016. As such, this vegetation is in an early seral stage of recovery, with occasional laurel sumac and broken stands of California sagebrush and purple sage (*Saliva leucophylla*). Much like the areas vegetated with the *Adenostoma fasciculatum* shrubland alliance–disturbed, the interstitial areas are vegetated with non-natives, such as bromes and occasional black mustard (Appendix C).

Avena spp.–*Bromus* spp. Semi-Natural Herbaceous Stands

Avena spp.–*Bromus* spp. semi-natural herbaceous stands are in the southern portion of the Project site. The community has not been assigned a global or state rarity ranking, as this alliance is not native to the region. The membership rules for the community include the following: (1) slender wild oat represents greater than 50% relative cover, and native herbs are low in cover in the herbaceous layer; (2) wild oat (*Avena* spp.) represents greater than 50% relative cover, and native herbs represent less than 10% relative cover in the herbaceous layer; (3) *Avena* spp. Represents greater than 75% relative cover, and other non-native plants represent less than 5% absolute cover, if present, in the herbaceous layer; (4) false brome (*Brachypodium distachyon*) represents greater than 60% relative cover in the herbaceous layer; (5) ripgut brome (*Bromus diandrus*) represents greater than 60% relative cover, along with other non-natives, in the herbaceous layer and with a variety of annuals at low cover; (6) ripgut brome, soft brome (*Bromus hordeaceus*), and/or false brome represents greater than 80% relative cover separately or codominant with non-natives, and natives usually represent low or insignificant cover; (7) soft brome represents greater than 50% relative cover in the herbaceous layer; and (8) *Avena* spp., false brome, quakinggrass (*Briza* spp.), bromes, filaree (*Erodium* spp.), and/or cat's ear (*Hypochaeris* spp.) represent greater than 50% relative cover individually or in combination; and (9) *Avena* spp., false brome, quakinggrass, bromes, filaree, and/or cat's ear represent greater than 30% relative cover individually or share greater than 50% relative cover in the herbaceous layer (Appendix C).

Baccharis salicifolia Shrubland Alliance

Baccharis salicifolia shrubland alliance is located in the southern portion of the Project site. The alliance has a G4/S4 rarity ranking. The membership rules for the alliance include the following: (1) mulefat (*Baccharis salicifolia*)

represents greater than 30% relative cover in the shrub canopy with blue elderberry (*Sambucus nigra* ssp. *caerulea*); and (2) mulefat represents greater than 50% relative cover in the shrub canopy (Appendix C).

Brassica nigra–Centaurea melitensis Semi-Natural Herbaceous Stands

Brassica nigra–Centaurea melitensis semi-natural herbaceous stands are interspersed throughout the Project site. The community has not been assigned a global or state rarity ranking, as this alliance is not native to the region. The membership rules for the community include the following: (1) black mustard, shortpod mustard (*Hirschfeldia incana*), radish (*Raphanus sativus*), or other mustards occur with non-native species at greater than 80% relative cover in the herbaceous layer, and mustards are the dominant herbs; (2) Geraldton carnation weed (*Euphorbia terracina*) represents 30% relative cover in the herbaceous layer with other non-natives, including black mustard; (3) Geraldton carnation weed or cardoon (*Cynara cardunculus*) represent 50% relative cover in the herbaceous layer with other non-natives, including black mustard and ripgut brome; (4) tocalote represents greater than 90% relative cover with other non-natives in the herbaceous layer; (5) tocalote or yellow star-thistle (*Centaurea solstitialis*), along with false brome, represent greater than 90% relative cover in the herbaceous layer; (6) yellow star-thistle represents greater than 50% relative cover in the herbaceous layer; (7) yellow star-thistle represents greater than 90% relative cover with other non-natives in the herbaceous layer; and (8) black mustard, radish, Italian plumeless thistle (*Carduus pycnocephalus*), yellow star-thistle, or another non-native forb represent greater than 50% relative cover in the herbaceous layer (Appendix C).

Distichlis spicata Herbaceous Alliance

Distichlis spicata herbaceous alliance, as monotypic meadows of salt grass (*Distichlis spicata*), are located within the central portion of the Project site. The *Distichlis spicata* herbaceous alliance has a GNR/S4 rarity ranking. The membership rules for *Distichlis spicata* herbaceous alliance include the following: (1) salt grass represents greater than 30% relative cover in the herbaceous layer, and glasswort (*Sarcocornia* spp.) or pickleweed (*Salicornia* spp.), if present, represent less than 30% relative cover; (2) salt grass represents greater than 50% relative cover in the herbaceous layer, or salt grass represents higher cover than any other single grass species; (3) salt grass and/or Cooper's rush (*Juncus cooperi*) represent at least 30% relative cover with other herbs in the herbaceous layer; (4) southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*) represent greater than 50% relative cover in the herbaceous layer. This alliance may include lower cover of pickleweed, alkali heath (*Frankenia salina*), and other graminoids, including salt grass; (5) salt grass represents greater than 50% relative cover in the herbaceous layer; and (6) salt grass represents greater than 50% relative cover in the herbaceous layer, or greater than 30% relative cover in the herbaceous layer with alkali heath and/or marsh jaumea (*Jaumea carnosa*), and glasswort may be less than 30% relative cover (Appendix C).

Ericameria palmeri Provisional Shrubland Alliance

Ericameria palmeri provisional shrubland alliance, as monotypic stands of Palmer's goldenbush (*Ericameria palmeri*), are located within the northeastern portion of the Project site. The alliance has a G3/S3?[1] rarity ranking. The membership rule for the alliance is Palmer's goldenbush is dominant in the shrub canopy with California buckwheat, California match weed (*Gutierrezia californica*), and sawtooth golden bush (*Hazardia squarrosa*) (Appendix C).

[1] The "?" denotes an inexact numeric rank, and further study is warranted to define the ranking (NatureServe 2023).

Eriodictyon crassifolium Provisional Shrubland Alliance

Eriodictyon crassifolium provisional shrubland alliance, as monotypic stands of hybrid thick leaf yerba santa (*Eriodictyon crassifolium*)/hairy yerba santa (*Eriodictyon trichocalyx*) hybrids, are located within the southern portion of the Project site. The *Eriodictyon crassifolium* provisional shrubland alliance has a G3/S3 rarity ranking. The membership rule for thick leaf yerba santa scrub provisional alliance is thick leaf yerba santa is dominant in the shrub canopy with chamise, red shank, California buckwheat, sugarbush (*Rhus ovata*), basket bush (*Rhus trilobata*), and black sage (Appendix C).

Eriogonum davidsonii/Croton setiger Grassland Alliance

Eriogonum davidsonii/Croton setiger grassland alliance is located within the northwestern portion of the Project site. The alliance has not been assigned a global or state rarity ranking and does not have associated membership rules, as this alliance is not described by the Manual of California Vegetation, Second Edition, but was developed based on the species composition for this portion of the Project site. Davidson's buckwheat (*Eriogonum davidsonii*) and dove weed (*Croton setiger*) represented the dominant species within this alliance on site, along with sparse occurrences of stunted individuals of shortpod mustard and wild oat, which did not represent dominant species within this community. The vegetation community has been assigned as a Resource Category 4 because it has vegetative components in common with non-native grasslands (Appendix C).

Eriogonum fasciculatum Shrubland Alliance

Eriogonum fasciculatum shrubland alliance, as a monotypic stand of California buckwheat, are located within the eastern portion of the Project site. The alliance has a G5/S5 rarity ranking. The membership rules for the alliance include the following: (1) California buckwheat represents greater than 50% relative cover in the shrub canopy when other shrubs, if present, represent less than 50% relative cover; (2) California buckwheat represents greater than 50% relative cover in the shrub canopy or greater than 30% relative cover in the shrub canopy with brittle bush (*Encelia farinosa*); and (3) California buckwheat has greater than 50% relative cover in the shrub canopy (Appendix C).

Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous Alliance

Nassella (Stipa) spp.–*Melica* spp. herbaceous alliance is located within the northeastern portion of the Project site. The alliance has a G3G4/S3S4 rarity ranking. The membership rules for the alliance include the following: (1) purple needlegrass (*Nassella [Stipa] pulchra*) represents greater than 5% absolute cover as a dominant species in the herbaceous layer; (2) purple needlegrass represents greater than 10% relative cover in the herbaceous layer; (3) purple needlegrass and/or nodding needlegrass (*Nassella [Stipa] cernua*) represent greater than 2% absolute cover; (4) purple needlegrass represents greater than 5% absolute cover in the herbaceous layer; (5) nodding needlegrass represents greater than 30% relative cover in the herbaceous layer; (6) California melicgrass (*Melica californica*) and/or purple needlegrass represent greater than 30% relative cover in the herbaceous layer; other species, including rice grass (*Achnatherum lemmonii*), wild oat, bromes, hayfield tarweed (*Hemizonia congesta*), perennial rye grass (*Festuca perennis [Lolium perenne*]), dwarf plantain (*Plantago erecta*), and/or narrowleaf plantain (*Plantago lanceolata*) may be present as dominant/codominant species; (7) Torrey's melicgrass (*Melica torreyana*) represents greater than 30% relative cover in the herbaceous layer often associated with serpentine soils; (8) big squirreltail (*Elymus multisetus*) and/or squirreltail (*Elymus elymoides*) represent greater than 30% relative cover in the herbaceous layer on serpentine soils; and (9) California melic, Torrey's melicgrass, and/or purple needlegrass represent greater than 30% relative cover. Wild oat, bromes, hayfield tarweed, perennial rye

grass, dwarf plantain, and/or clover (*Trifolium* spp.) are present at greater than 50% cover or greater than 30% cover (Appendix C).

Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland Alliance

Rhus trilobata–Crataegus rivularis–Forestiera pubescens shrubland alliance is located in the central portion of the Project site. The alliance has a G4/S3.2 rarity ranking. The membership rules for the alliance include the following: (1) desert olive (*Forestiera pubescens*) represents greater than 50% relative cover in the shrub layer; (2) basket bush represents greater than 50% relative cover in the shrub layer; and (3) blue elderberry (*Sambucus nigra*) represents greater than 50% relative cover in the shrub layer (Appendix C).

Non-vegetated Land Cover

Developed Areas

Developed areas include existing dirt access roads interspersed throughout the Project site and the existing road shoulder associated with The Old Road, along the eastern boundary.

Special-Status Vegetation Alliances (Habitats)

The Project site contains the following seven special-status vegetation types: California walnut grove (*Juglans californica* forest and woodland alliance [G3/S3.2]), Palmer's goldenbush scrub (*Ericameria palmeri* provisional shrubland alliance [G3/S3?]); salt grass flats (*Distichlis spicata* herbaceous alliance [GNR/S4]); basket bush–river hawthorn–desert olive patches (*Rhus trilobata–Crataegus rivularis–Forestiera pubescens* shrubland alliance [G4/S3.2]); southern coast live oak riparian forest (a riparian associated subset of *Quercus agrifolia* forest and woodland alliance); southern riparian scrub, which in this case is the aggregation of the *Salix laevigata* forest and woodland alliance and *Baccharis salicifolia* shrubland alliance; and valley needlegrass grassland (*Nassella* [*Stipa*] spp. herbaceous alliance) (Appendix C).

Soils

The Natural Resources Conservation Service (NRCS) has identified following soil series as occurring within the Project site (NRCS 2022), as shown in Figure 4.4-4, Soils Map, and described in Appendix C: Castaic-Balcom silty clay loams, 30% to 50% slopes, eroded; Castaic and Saugus soils, 30% to 65% slopes, severely eroded; Hanford sandy loam, 2% to 9% slopes; Saugus loam, 30% to 50% slopes; Yolo loam, fan piedmont, 0% to 9% slopes, MLRA 20; and Yolo loam, 2% to 9% slopes.

Special-Status Plants

Prior to conducting fieldwork, pertinent literature on the flora of the region was examined. A thorough archival review was conducted using available literature and other historical records. These resources included data provided by the California Native Plant Society (CNPS), the California Natural Diversity Database (CNDDB), and the results of previous surveys conducted at the site (Appendix C).

Individual plant species are evaluated based on their "special status." Plants are considered "special status" based on one or more of the following criteria (Appendix C):

- Listing through federal Endangered Species Act (FESA) and/or California Endangered Species Act (CESA)
- Occurrence in the CNPS Rare Plant Inventory (Rank 1A/1B, 2A/2B, 3, or 4)

- Occurrence in the CNDDB inventory
- Designated as an SEA protected species

Table 4.4-2 lists the six special-status plant species that are within the Project site and off-site fuel modification areas, as shown in Figure 4.4-5, Special-Status Plant Locations. An additional 18 species have a low potential to occur based on suitable habitat being present and the study area being within the species' range, but years of focused surveys for rare plants have been negative for the species. Another 30 species are not expected to occur due to the absence of suitable habitat for the species on the study area or the study area being outside of the species recorded range (Appendix C).

Table 4.4-2. Special-Status Plant Species Occurring in the Project Site

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Habitat Requirements	Potential to Occur
Calochortus clavatus var. *clavatus*	club-haired mariposa lily	None/None/4.3	Chaparral, cismontane woodland, coastal sage scrub, valley and foothill grassland. Usually occurring on serpentinite, clay, and rocky soils.	Present. The species was detected during focused surveys.
Calystegia peirsonii	Peirson's morning-glory	None/None/4.2	Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland.	Present. The species was detected during focused surveys.
Calochortus plummerae	Plummer's mariposa lily	None/None/4.2	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Present. The species was detected during focused surveys.
Calochortus clavatus var. *gracilis*	slender mariposa lily	None/None/1B.2	Chaparral and coastal sage scrub.	Present. The species was detected during focused surveys.
Juglans californica	Southern California black walnut	None/None/4.2	Chaparral, cismontane woodland, coastal sage scrub, alluvial surfaces.	Present. The species was detected during focused surveys.
Keckiella ternata	scarlet keckiella	None/None/None[1]	Chaparral, lower montane coniferous forest; canyons and slopes.	Present. The species was detected during focused surveys.

Source: Appendix C.
Notes:
[1] Recognized by the County of Los Angeles as a Sensitive Local Native Resource.
Status Abbreviations
CRPR: California Rare Plant Rank
1B: Plants rare, threatened, or endangered in California and elsewhere
4: Plants of limited distribution
.2–Moderately threatened in California (20%–80% of occurrences threatened/moderate degree and immediacy of threat)
.3–Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

As previously mentioned, six special-status plant species were detected within the Project site, as shown in Figure 4.4-5: club-haired mariposa lily (*Calochortus clavatus* var. *clavatus*; California Rare Plant Rank [CRPR] 4.3; Category 4), Plummer's mariposa lily (*Calochortus plummerae*; CRPR 4.2; Category 4), Peirson's morning-glory (*Calystegia peirsonii*; CRPR 4.2; Category 4), scarlet keckiella (*Keckiella ternata*; Sensitive Local Native Resource; Category 3), slender mariposa lily (*Calochortus clavatus* var. *gracilis*; CRPR 1B.2; Category 1), and Southern California black walnut (CRPR 4.2; Category 4).

Club-Haired Mariposa Lily

Club-haired mariposa lily is a perennial bulbiferous herb designated as a CRPR 4.3 (Category 4) species. This species is known from Los Angeles, Santa Barbara, San Benito, San Luis Obispo, and Ventura Counties. Club-haired mariposa lily occurs primarily in serpentinite, clay, and rocky soils in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. The blooming period for this species is typically May through July. This species was detected in the southwestern and northeastern portion of the Project site (Appendix C).

Peirson's Morning Glory

Peirson's morning glory is a perennial rhizomatous herb designated as a CRPR 4.2 (Category 4) species. This species is known from Los Angeles County. Peirson's morning glory occurs in chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland. The blooming period for this species is typically April through June. This species was detected within the eastern portion of the Project site (Appendix C).

Plummer's Mariposa Lily

Plummer's mariposa lily is a perennial bulbiferous herb designated as a CRPR 4.2 (Category 4) species. This species is known from Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. Plummer's mariposa lily occurs primarily in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland. The blooming period for this species is typically May through July. This species was detected in the eastern and western portion of the Project site (Appendix C).

Scarlet Keckiella

Scarlet keckiella is a perennial shrub and is considered a Sensitive Local Native Resource (Category 3) species. This species is known from Los Angeles, Kern, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, and Ventura Counties. Scarlet keckiella occurs primarily in chaparral and cismontane woodland. The blooming period for this species is typically June through September. This species was detected in the central portion of the Project site (Appendix C).

Slender Mariposa Lily

Slender mariposa lily is a perennial bulbiferous herb designated as a CRPR 1B.2 (Category 1) species. This species is known from Los Angeles and Ventura Counties, but there are no other records of the species within the Santa Susana Mountains, and it is therefore considered rare within this region of the County. Slender mariposa lily occurs mostly in chaparral, coastal scrub, and valley and foothill grassland. The blooming period for this species is typically March through June. This species was detected in the eastern portion of the Project site (Appendix C).

Southern California Black Walnut

Southern California black walnut is a perennial deciduous tree designated as a CRPR 4.2 (Category 4) species. This species is known from Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties. Southern California black walnut occurs primarily in chaparral, cismontane woodland, coastal scrub, and riparian woodland. The blooming period for this species is typically March through August, though it is generally detectable year-round. This species was detected in the western and southern portion of the Project site (Appendix C).

Special-Status Wildlife

Special-status wildlife species were evaluated and detected during field surveys by sight, call, tracks, and scat. Site reconnaissance was conducted in such a manner as to allow inspection of the entire Project site by direct observation, including the use of binoculars. Observations of physical evidence and direct sightings of wildlife were recorded in field notes during the site visit.

Wildlife species are evaluated based on their "special status." Wildlife species are considered "special status" based on one or more of the following criteria:

- Listing through the FESA/or CESA
- Designation by the state as a Species of Special Concern (SSC) or California Fully Protected (CFP) species
- Avian species identified on the Los Angeles County Sensitive Bird List

Table 4.4-3 displays the 23 wildlife species that are present or have a moderate or high potential to occur on the Project site. An additional eight species have a low potential to occur based on suitable habitat being present and the study area being within the species' range, but years of surveys have been negative for the species. Another 29 species are not expected to occur due to the absence of suitable habitat for the species on the study area or the study area being outside of the species' recorded range. The habitat assessment for all 60 species that have recorded occurrences in the database search criteria can be found in Appendix C. Additionally, the protocol surveys for burrowing owl (*Athene cunicularia*), southwestern willow flycatcher (*Empidonax traillii extimus*), and coastal California gnatcatcher (*Polioptila californica californica*) were all negative (Appendix C).

Table 4.4-3. Special-Status Wildlife Species Occurring or That Have a Moderate or High Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Invertebrates				
Bombus crotchii	Crotch's bumble bee	None/CSE	Relatively warm and dry sites, including the inner Coast Range of California and margins of the Mojave Desert. Open grassland and scrub communities supporting suitable floral resources.	Present. The species was detected during focused surveys.

Table 4.4-3. Special-Status Wildlife Species Occurring or That Have a Moderate or High Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Danaus plexippus pop. 1	monarch butterfly (California overwintering population)	FC/None	Roosts in winter in wind-protected tree groves along the California coast from northern Mendocino to Baja California, Mexico.	Moderate potential to occur during spring/summer months only. Not expected to occur during winter roosting period.
Reptiles				
Anniella sp. 1	California legless lizard	None/SSC	Common in several habitats but especially in coastal dune, valley-foothill, chaparral, and coastal scrub types.	High potential to occur. Suitable habitat is present for the species, and there are recent local records.
Arizona elegans occidentalis	California glossy snake	None/SSC	Inhabits arid scrub, rocky washes, grasslands, chaparral.	Present. The species was detected during focused surveys.
Aspidoscelis tigris stejnegeri	coastal whiptail	None/SSC	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	High potential to occur. Suitable habitat is present for the species, and there are recent local records.
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	High potential to occur. Suitable habitat is present for the species, and there are recent local records.
Birds				
Accipiter cooperii (nesting)	Cooper's hawk	None/WL	Primarily occurs in riparian areas and oak woodlands, most commonly in montane canyons. Known to use urban areas, occupying trees among residential and commercial uses.	Present. The species was detected during biological surveys.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None/WL[1]	Oak woodlands, arid scrub, and grassland margins.	Present. The species was detected during biological surveys.

Table 4.4-3. Special-Status Wildlife Species Occurring or That Have a Moderate or High Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Artemisiospiza belli belli	Bell's sage sparrow	None/WL	Chaparral and coastal sage scrub along the coastal lowlands, inland valleys, and in the lower foothills of local mountains.	Moderate potential to occur. Suitable habitat is present, but most records of the species are from further inland.
Athene cunicularia	Burrowing owl	None/CSE	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Moderate potential to occur (transient). Protocol surveys for the species were negative for any individuals or diagnostic sign of the species at burrows within the Project site (e.g., pellets, whitewash, and feathers). The Project site provides marginal habitat for the species, so it is not expected to support breeding or overwintering burrowing owl. However, the species can be opportunistic in choosing refugia in burrows or other suitable structures during dispersal and migration, and could be present on site temporarily during those activities.
Cardellina pusilla	Wilson's warbler	None/None[1]	Breeds across Canada and the western United States in willow, alder, and shrubby thickets near streams. Also uses forest edges or forest openings with a dense understory of flowering plants such as aspen stands.	Present. This species was observed foraging within the Project site but was not observed nesting/breeding during 2003–2005, 2015, and 2020–2022 field efforts, and it is not expected to nest on site since the Project site is outside the breeding range of the species.

Table 4.4-3. Special-Status Wildlife Species Occurring or That Have a Moderate or High Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Cathartes aura (breeding)	turkey vulture	None/None[1]	Wide range of foraging habitats in southern California. Nesting occurs on rocky cliffs, caves, mammal burrows, and abandoned hawk or heron nests.	Present. This species was observed foraging within the Project site but was not observed nesting/breeding during 2003–2005, 2015, and 2020–2022 field efforts, and suitable nesting habitat is not present.
Chordeiles acutipennis	lesser nighthawk	None/None[1]	Open areas in arid and semi-arid lowlands. Eggs on the ground, often in areas with small pebbles.	Moderate potential to occur (foraging). Suitable habitat for foraging is present in the eastern portion of the Project site, and there are recent records in the Project vicinity (eBird 2023). Not expected to occur for nesting. Suitable nesting habitat is not present.
Elanus leucurus (nesting)	white-tailed kite	None/FP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Present. This species was observed foraging within the Project site but was not observed nesting/breeding during 2003–2005, 2015, and 2020–2022 field efforts.
Geococcyx occidentalis	greater roadrunner	None/None[1]	Arid scrub, chaparral, savannah, and open woodlands.	High potential to occur. Suitable habitat is present on the Project site and continues to the west.
Picoides villosus	hairy woodpecker	None/None[1]	Deciduous forests and forest edges.	Moderate potential to occur. Suitable habitat is present, but there are many records of the species in the Project vicinity (eBird 2023).

Table 4.4-3. Special-Status Wildlife Species Occurring or That Have a Moderate or High Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Setophaga petechia (nesting)	yellow warbler	None/SSC	Breed in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest, and shrub habitats.	Present. The species was detected during biological surveys, and suitable nesting habitat is present.
Mammals				
Antrozous pallidus	pallid bat	None/SSC	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	Present. The species was detected during focused surveys.
Eumops perotis californicus	western mastiff bat	None/SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Present. This species was detected in a foraging role during focused surveys.
Lasiurus cinereus	hoary bat	None/SSC	Prefers trees at the edge of clearings but have been found in trees in heavy forests, open wooded glades, and shade trees along urban streets and in city parks.	Present. The species was detected during focused surveys.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None/SSC	Occupies a variety of habitats but is most common among shortgrass habitats. Also occurs in sage scrub but needs open habitats.	Moderate potential to occur. Suitable habitat is present in the eastern portion and canyon bottoms of the Project site.

Table 4.4-3. Special-Status Wildlife Species Occurring or That Have a Moderate or High Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Present. The species was detected during focused surveys.
Puma concolor californica	California mountain lion	None/SC	A wide variety of habitats ranging from montane coniferous forest to low elevation desert scrublands.	Present. The species was detected during focused surveys.
Taxidea taxus	American badger	None/SSC	Most abundant in drier open stages of most scrub, forest, and herbaceous habitats, with friable soils.	Present. The species was detected during biological surveys.

Source: Appendix C.
Notes:
[1] Los Angeles County sensitive bird species.
Status Abbreviations
Federal
FC: Federal candidate for listing as endangered or threatened
State
CSE: Candidate for state listing as endangered
FP: California Fully Protected species
SC: State candidate for listing as endangered or threatened
SSC: California Species of Special Concern
WL: CDFW Watch List species

Special-Status Wildlife Detected

During focused surveys conducted for several special-status wildlife species at the Project site in 2021 and 2022, 14 species were observed. Eleven special-status wildlife species were detected within the Project site that may be residents on site or present during essential life functions (i.e., breeding): Crotch's bumble bee (*Bombus crotchii*), California glossy snake (*Arizona elegans occidentalis*), Cooper's hawk (*Accipiter cooperii*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), yellow warbler (*Setophaga petechia*), pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), hoary bat (*Lasiurus cinereus*), San Diego desert woodrat (*Neotoma lepida intermedia*; DMEC 2006), California mountain lion (*Puma concolor californica*), and American badger (*Taxidea taxus*). An additional three special-status wildlife species (birds) were observed foraging on the Project site but are not expected to breed on site due to the absence of suitable habitat associated with breeding: Wilson's warbler (*Cardellina pusilla*), turkey vulture (*Cathartes aura*), and white-tailed kite (*Elanus leucurus*).

Invertebrates

Crotch's Bumble Bee

Crotch's bumble bee was voted as a candidate for listing by the California Fish and Game Commission in June 2019. In a case filed by the Almond Alliance of California, the Sacramento Superior Court of California ruled that insects (including Crotch's bumble bee) are not eligible for listing under CESA in November 2020. In February 2021, the California Fish and Game Commission appealed this decision. On May 31, 2022, the California Appeals Court ruled that Crotch's bumble bee could be regulated as a fish and eligible for protection under CESA, thereby reinstating this species' status as a candidate for listing (SC).

In California, Crotch's bumble bee inhabits open grassland and scrub habitats. This species occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California. This species was historically common in the Central Valley of California but now appears to be absent from most of it, especially in the center of its historic range.

Crotch's bumble bee (Category 1) was detected within the southwest portion of the Project site within the On-Site Conservation Area but was not detected within the Project footprint. The species, however, is considered to have a potential to occur within the Project footprint in the future, based on mobility and the presence of suitable foraging habitat contiguous with occupied habitat in the On-Site Conservation Area (Appendix C). The species has potential to occur in the following alliances within the Project site: *Artemisia californica–Salvia leucophylla* shrubland, *Artemisia californica–Salvia leucophylla* shrubland–disturbed, *Avena* spp.–*Bromus* spp. herbaceous semi-natural, *Ericameria palmeri* provisional shrubland, *Eriodictyon crassifolium* provisional shrubland, *Eriogonum davidsonii/Croton setiger* grassland, *Eriogonum fasciculatum* shrubland, *Nassella* (*Stipa*) spp.–*Melica* spp. herbaceous, and *Rhus trilobata–Crataegus rivularis–Forestiera pubescens* shrubland (Appendix C).

Reptiles

California Glossy Snake

The California glossy snake (SSC; Category 2) was observed within the Project site during 2020 general biological surveys. This species inhabits chaparral, arid scrub, rocky washes, and open grasslands from the eastern San Francisco Bay Area at the northern end of its range to northwestern Baja California at the south end of its range but is absent from the Central Coast of California (California Herps 2021). The species has potential to occur in the following alliances within the Project site: *Adenostoma fasciculatum* shrubland, *Adenostoma fasciculatum* shrubland–disturbed, *Artemisia californica–Salvia leucophylla* shrubland, *Artemisia californica–Salvia leucophylla* shrubland–disturbed, *Avena* spp.–*Bromus* spp. herbaceous semi-natural, *Ericameria palmeri* provisional shrubland, *Eriodictyon crassifolium* provisional shrubland, *Eriogonum davidsonii/Croton setiger* grassland, *Eriogonum fasciculatum* shrubland, *Nassella* (*Stipa*) spp.–*Melica* spp. herbaceous, and *Rhus trilobata–Crataegus rivularis–Forestiera pubescens* shrubland (Appendix C).

Birds

Cooper's Hawk

Cooper's hawk was observed in the Project site and is on the CDFW Watch List (Category 3). The species primarily occurs in riparian areas and oak woodlands, most commonly in montane canyons, and is known to use urban areas,

occupying trees among residential and commercial uses. While the species may forage throughout the Project site, the species is likely to only nest in the *Quercus agrifolia* forest and woodland alliance (Appendix C).

Southern California Rufous-Crowned Sparrow

Southern California rufous-crowned sparrow is on the CDFW Watch List (Category 3). Southern California rufous-crowned sparrow is a resident species in Southern California. It breeds in dry upland habitats with grass and shrub components. The species has potential to occur in the following alliances within the Project site: *Artemisia californica–Salvia leucophylla* shrubland, *Artemisia californica–Salvia leucophylla* shrubland–disturbed, *Avena* spp.–*Bromus* spp. herbaceous semi-natural, *Ericameria palmeri* provisional shrubland, *Eriodictyon crassifolium* provisional shrubland, *Eriogonum davidsonii/Croton setiger* grassland, *Eriogonum fasciculatum* shrubland, *Nassella* (*Stipa*) spp.–*Melica* spp. herbaceous, and *Rhus trilobata–Crataegus rivularis–Forestiera pubescens* shrubland (Appendix C).

Turkey Vulture

Turkey vulture is Sensitive Local Native Resource (Category 3), as a Los Angeles County sensitive bird species. The species nests in rock crevices, caves, ledges, thickets, mammal burrows and hollow logs, fallen trees, abandoned hawk or heron nests, and abandoned buildings. Turkey vulture prefer to nest away from areas of human disturbance. As such, the species is not expected to nest on-site by may forage on the carrion of medium to large wildlife within the more open spaces of the Project site, such as the wild oats and annual brome grasslands.

White-Tailed Kite

The white-tailed kite is a CFP species (Category 1) and has been documented utilizing the Project site in a foraging role but was not observed nesting/breeding during 2003–2005, 2015, and 2020–2022 field efforts. This species inhabits low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Riparian areas adjacent to open areas are primarily used for nesting (Dunk 1995). The species is not expected to nest on the Project site but may use the *Quercus agrifolia* forest and woodland alliance and *Avena* spp.–*Bromus* spp. herbaceous semi-natural alliance for foraging (Appendix C).

Wilson's Warbler

Wilson's warbler is Sensitive Local Native Resource (Category 3), as a Los Angeles County sensitive bird species. Wilson's warbler nests from northern Alaska eastward to Newfoundland and southward along the west coast to Southern California. This species migrates throughout much of North America and winters from Southern California southward into Mexico and Central America. It breeds in riparian woodlands and scrub from the Transverse Ranges in Southern California northward into Canada and Alaska. In Los Angeles County, the species only has historic breeding records (more than 75 years) from high elevations (approximately 7,000 feet) (Allen et al. 2016). As such, the species is not expected to breed on the Project site and is expected to only be a transient during migration (Appendix C).

Yellow Warbler

Yellow warbler (SSC; Category 2) was observed in the Project site. The species as a whole nests from northern Alaska eastward to Newfoundland and southward to northern Baja California and Georgia. The species migrates throughout much of North America and winters from Southern California, Arizona, and the Gulf Coast southward to

central South America (AOU 1998). It breeds in riparian woodlands southward from the northern border of the state generally west of the Sierra Nevada range to the coastal slopes of Southern California and from coastal and desert lowlands up to 2,500 meters (8,000 feet) in the Sierra Nevada range and other montane chaparral and forest habitats (Grinnell and Miller 1944). The species is likely to only nest in trees on the Project site within the *Quercus agrifolia* forest and woodland alliance (Appendix C).

Mammals

Pallid Bat

Pallid bat (SSC; Category 2) was detected during 2021 focused special-status bat surveys. This species inhabits open, dry deserts, grasslands, shrublands, woodlands, and forests. Rock outcrops are the preferred roosting habitat, but this species is also known for tree-roosting. This species would forage throughout the airspace above the Project site and may roost in the trees on the Project site within the *Quercus agrifolia* forest and woodland alliance (Appendix C).

Western Mastiff Bat

Western mastiff bat (SSC; Category 2) was detected foraging over the Project site during 2021 focused special-status bat surveys. This species inhabits open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. This species would forage throughout the airspace above the Project site and may roost in the trees on the Project site within the *Quercus agrifolia* forest and woodland alliance (Appendix C).

Hoary Bat

Hoary bat (SSC; Category 2) was detected foraging over the Project site during 2021 focused special-status bat surveys. This species prefers trees at the edge of clearings but have been found in trees in heavy forests, open wooded glades, and shade trees along urban streets and in city parks. This species would forage throughout the airspace above the Project site and may roost in the trees on the Project site within the *Quercus agrifolia* forest and woodland alliance (Appendix C).

San Diego Desert Woodrat

San Diego desert woodrat (SSC; Category 2) was observed within the Project site during survey efforts conducted under previous ownership for a prior project (DMEC 2006). This species occurs throughout the coastal plane and inland valleys of Southern California. Desert woodrats are found in a variety of shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth (Bleich 1973; Bleich and Schwartz 1975; Brown et al. 1972; Cameron and Rainy 1972; Thompson 1982). The most common natural habitats where this species occurs are chaparral and coastal sage scrub, including *Adenostoma fasciculatum* shrubland, *Adenostoma fasciculatum* shrubland–disturbed, *Artemisia californica–Salvia leucophylla* shrubland, *Artemisia californica–Salvia leucophylla* shrubland–disturbed, *Ericameria palmeri* provisional shrubland, *Eriodictyon crassifolium* provisional shrubland, *Eriogonum davidsonii/Croton setiger* grassland, *Eriogonum fasciculatum* shrubland, *Nassella* (*Stipa*) spp.–*Melica* spp. herbaceous, and *Rhus trilobata–Crataegus rivularis–Forestiera pubescens* shrubland (Appendix C).

California Mountain Lion

Mountain lions associated with the Southern California and Central Coast populations are designated as a state candidate endangered species. On April 16, 2020, the California Fish and Game Commission voted to designate the Southern California and Central Coast mountain lions as a candidate for listing as an endangered species under the CESA. The vote triggered a 1-year review by CDFW to determine whether these mountain lion populations should be formally protected under CESA; however, the listing status of this species is still currently unresolved at the time of this document.

The California mountain lion occurs throughout much of California open space, occurring in or moving through nearly all but the most urbanized settings. This species inhabits a wide range of habitat types where prey items such as mule deer (*Odocoileus hemionus*) and bighorn sheep (*Ovis canadensis*) are present, from interior, arid rocky scrublands, to upper montane coniferous forest, to chaparral, coastal scrub, and woodland habits along the coastal plain.

Tracks and scat of California mountain lion (Category 1) were detected throughout the Project site during the surveys. The proposed Project footprint consists primarily of low to medium ranked habitat by CDFW's Mountain Lion Habitat Suitability dataset (Dellinger et al. 2020) and Mountain Lion Predicted Habitat dataset (CDFW 2023), but a quarter of it is ranked as high, as shown in Figure 4.4-6, Mountain Lion Habitat Suitability, and Figure 4.4-7, Mountain Lion Predicted Habitat. As such, the species could occur throughout most of the Project site during home range movement, dispersal, and foraging. The potential to occur is based on habitat suitability: scrub vegetation, presence of mule deer, and proximity to high-quality habitat on large swaths of public lands to the west and south. However, females keep their young in dens located in rocky terrain or in dense vegetation that provide cover but avoid roads and stay at a distance from human disturbance four times greater (approximately 600 meters) than non-reproductive mountain lions (Center for Biological Diversity 2019). The Project is located adjacent to residential neighborhoods to north, The Old Road and Interstate (I) 5 to the east, and the Riverdale Park and Open Space to the south (there are several hiking trails that connect with unauthorized hiking trails within the Project site), all of which have associated human presence. As such, females of the species are not expected to establish natal dens in the Project site.

American Badger

Diagnostic sign (burrow with claw marks that are indicative of the species) of American badger (SSC; Category 2) was detected within the Project site. This species inhabits arid scrub, prairies, dry meadows, open grasslands, and agricultural areas. The species has potential to occur in the following alliances within the Project site: *Artemisia californica–Salvia leucophylla* shrubland, *Artemisia californica–Salvia leucophylla* shrubland–disturbed, *Avena* spp.–*Bromus* spp. herbaceous semi-natural, *Ericameria palmeri* provisional shrubland, *Eriodictyon crassifolium* provisional shrubland, *Eriogonum davidsonii/Croton setiger* grassland, *Eriogonum fasciculatum* shrubland, *Nassella* (*Stipa*) spp.–*Melica* spp. herbaceous, and *Rhus trilobata–Crataegus rivularis–Forestiera pubescens* shrubland (Appendix C).

Special-Status Wildlife Species with Moderate or High Potential to Occur

State or Federally Listed or Candidate Species

Monarch

Monarch (*Danaus plexippus*; FC) is designated as a federal candidate species. The butterfly is attaining near worldwide distribution but is primarily present in the Americas. Autumnal migrants occasionally go to England, have spread throughout the Pacific Ocean, and are well-established in Australia. However, essential overwintering areas for North American populations are limited to about 100 locations in coastal California and the mountains of Mexico. A few North American adults apparently occasionally overwinter elsewhere, including southern Florida, but their migration status is not clear.

Habitat is a complex issue for this species. In general, breeding areas are virtually all patches of milkweed (*Asclepias* spp.) in North America and some other regions. The critical conservation feature for North American populations is the overwintering habitats, which are primarily high-altitude Mexican conifer forests or coastal California conifer or eucalyptus groves, as identified in the literature. It appears that virtually all North American monarch overwinter in either one of these two areas. Threats to the monarch butterfly include impacts to overwintering habitat from logging, agricultural development, and urban development. Although the Project site does not support overwintering habitat, scrub, grassland, and woodland habitats within the Project site may have the potential to support spring and summer foraging and breeding; however, no distinctive stands of milkweed host plants were documented in the Project site, so the species has a low potential to breed on site (Appendix C).

Non-listed Special-Status Wildlife Species

Nine non-listed special-status wildlife species were determined to have a moderate or high potential to occupy the Project site throughout the various scrub, grassland, and woodland habitats present as year-round residents or in a nesting/breeding role. These species include California legless lizard (*Anniella* sp. 1; SSC; Category 2), coastal whiptail (*Aspidoscelis tigris stejnegeri*; SSC; Category 2), Blainville's horned lizard (*Phrynosoma blainvillii*; SSC; Category 2), Bell's sage sparrow (*Artemisiospiza belli belli*; WL; Category 3), burrowing owl (SSC; Category 2); and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*; SSC; Category 2). The remaining species are bird species identified as County sensitive bird species (Category 3) that were determined to have the potential to occupy the Project site throughout the various scrub, grassland, and woodland habitats present in a live-in or nesting/breeding role. These species include greater roadrunner (*Geococcyx occidentalis*), hairy woodpecker (*Picoides villosus*), and lesser nighthawk (*Chordeiles acutipennis*).

Burrowing owl is included despite the negative results of the protocol surveys for the species. Additionally, the Project site provides marginal habitat for a species that has a preferred habitat in California that is generally typified by short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils (CDFG 2012). As such, the Project site is not expected to support breeding burrowing owl. However, the species can be opportunistic in choosing refugia in burrows or other suitable structure during dispersal, migration, and when overwintering. Since there are burrows present and there are local records of the species, there is a moderate potential for an individual to occur in suitable habitat (i.e., *Avena* spp.–*Bromus* spp. herbaceous semi-natural and *Eriogonum davidsonii/Croton setiger* grassland) in the Project site.

One invertebrate species with moderate potential to occur, Pacoima shoulderband (*Helminthoglypta traskii pacoimensis*; G1G2/T1), is not state or federally recognized as a special-status species or considered sensitive by

SEA guidelines, but it holds high state and global rarity rankings and has the potential to occur within the Project site. Pacoima shoulderband has the potential to occur in association with bark peels and fallen logs within the *Quercus agrifolia* forest and woodland alliance within the Project site (Appendix C).

Nesting Birds and Raptors

The Project site contains trees, shrubs, and ground cover that provide suitable habitat for nesting migratory birds. Impacts to nesting birds are prohibited under the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code.

Southern California holds a diversity of birds of prey (raptors), and many of these species are in decline. For most of the declining species, foraging requirements include extensive open, undisturbed, or lightly disturbed areas, especially grasslands. This type of habitat has declined severely in the region, affecting many species, but especially raptors. A few species, such as red-tailed hawk (*Buteo jamaicensis*) and American kestrel (*Falco sparverius*), are somewhat adaptable to low-level human disturbance and can be readily observed adjacent to neighborhoods and other types of development. These species still require appropriate foraging habitat and low levels of disturbance in vicinity of nesting sites.

With the exception of existing developed areas associated with The Old Road along the eastern boundary of the Project site, the entirety of the approximately 236.84-acre Project site provides suitable foraging and/or nesting habitat for a number of raptor species, including special-status raptors, such as white-tailed kite (Appendix C).

Wildlife Corridors and Habitat Linkages

Typically, habitat in the County's various SEAs consists of large contiguous blocks (core habitat areas) with intervening areas of roads, rural residential development, and other low-intensity disturbance. A primary goal of any land use within the County's various SEAs should be to maintain high levels of connectivity between core habitat areas via a network of core open space areas and wide linkages and corridors. Such linkages should make use of natural topographic features (ridge lines and drainages), vegetative cover (woodlands and scrub), water sources (streams, springs, and ponds), and road undercrossings (bridges and culverts).

Habitat linkages are areas that possess sufficient cover, food, water, or other essential elements and provide connection between two or more habitat areas that are often larger or superior in quality to the linkage. Such linkage sites can be quite small or constricted but can be vital to the long-term health of connected habitats. Linkage values are often addressed in terms of "gene flow" between populations, with movement taking potentially many generations. Considering that the Project site abuts existing development to the east and north (developed areas associated with The Old Road and I-5), it does not serve as a habitat linkage along its eastern margin. The southwestern portion of the Project site, however, includes a large canyon (Lyons Canyon is approximately 600 feet wide at its narrowest point within the Project site), with topography and habitat that may provide a viable connection for wildlife populations occurring within adjacent undeveloped lands to the northwest, south, and west of the Project site, which include the Santa Clarita Woodlands Park and Rivendale Open Space. As such, this topographical feature has the potential to serve as a habitat linkage between existing natural open space to the northwest, west, and south of the Project site.

Wildlife corridors are like linkages but provide specific opportunities for larger, more mobile species to disperse or migrate between areas, generally extensive but otherwise partially or wholly separated regions. Such areas generally are several hundred feet wide and unobstructed and usually possess cover, food, and water. Habitat in

corridors may be quite different than that in the connected areas, but when used by the wildlife species of interest, will function as connections even with differing land cover types.

As shown in Figure 4.4-1, the Project site is located at the interface of the northeastern extent of a considerable tract of undeveloped land associated with the Santa Susana Mountains and Simi Hills SEA and the southwestern margin of contiguous development associated with the City and its associated sphere of influence. Although the Project site is located at the interface of undeveloped lands and existing development, it encompasses the northern 1,500 feet of habitat that provides movement for highly mobile species such as mountain lion, deer, and badger from lands associated with the Santa Susana Mountains and Simi Hills SEA to undeveloped lands associated with the San Gabriel Mountains further east. Additionally, there is a substantial east–west movement route located in Towsley Canyon just south of the Project site, which would be used for more local movement through the Santa Susana Mountains since the I-5 creates a barrier on the eastern end.

Native Wildlife Nursery Sites

A colonial roost of canyon bats (Parastrellus hesperus) was detected during focused bat roost surveys, this roost is located within the On-Site Conservation Area, approximately 400 feet west of the Project footprint (Appendix C). Canyon bat is not a special-status species, but a colony is a sensitive resource. The species prefers rocky canyon walls and cliffs in arid habitats and is active at any time of year (CDFW 2005). Canyon bat females either give birth alone or in small colonies of no more than a dozen individuals (Barbour 1969). The bat surveys were conducted in April and July, so it is assumed that the colony was a maternity colony since canyon bat females give birth in June and July (CDFW 2005). Most young are capable of flight in July (CDFW 2005).

Potential Jurisdictional Wetlands and Waters

The Project site is located within a single watershed, including a central unnamed blue-line drainage feature that originates in Lyon Canyon, west of the Project site, as described in Appendix C. This feature, referred to as Drainage B, flows through the Project site in a southwesterly to northeasterly direction and receives flows from eight tributaries, referred to as Drainages A and C and associated tributaries, within the Project site, including one additional blue-line drainage. Flows within this drainage complex are conveyed off site via an existing culvert beneath The Old Road and I-5 and flow approximately 4 miles to the northeast to the Santa Clara River via the South Fork of the Santa Clara River and ultimately to the Pacific Ocean (Appendix C).

U.S. Army Corps of Engineers Jurisdiction

Table 4.4-4 summarizes potential USACE jurisdictional waters of the U.S. associated with the Project site and off-site areas, as shown in Figure 4.4-8, Potential Waters of the U.S. A description of the potential USACE jurisdictional drainage features associated with the study area is outlined below.

Table 4.4-4. Summary of Potential USACE Jurisdiction for the Project Site and Off-Site Fuel Modification Zones

Drainage Name	Area (acres)		
	Non-wetland Waters	Wetlands	Total[1]
Project Site			
Drainage A	0.21	0.00	0.21
Tributary A-1	0.01	0.00	0.01

Table 4.4-4. Summary of Potential USACE Jurisdiction for the Project Site and Off-Site Fuel Modification Zones

Drainage Name	Area (acres)		
	Non-wetland Waters	Wetlands	Total[1]
Tributary A-2	<0.01	0.00	<0.01
Drainage B (Lyons Canyon)	0.56	0.00	0.56
Tributary B-1	0.06	0.00	0.06
Tributary B-2	0.06	0.00	0.06
Tributary B-3	0.01	0.00	0.01
Tributary B-4	0.05	0.00	0.05
Tributary B-5	0.03	0.00	0.03
Tributary B-6	0.05	0.00	0.05
Tributary B-7	0.01	0.00	0.01
Drainage C	0.07	0.00	0.07
Total[1]	**1.11**	**0.00**	**1.11**

Source: Appendix C.
Notes: USACE = U.S. Army Corps of Engineers.
[1] Totals may not add up due to rounding.

Drainage A

Drainage A, including Tributaries A-1 and A-2, are considered potential non-wetland waters of the U.S. subject to Section 404 of the Clean Water Act (CWA). Drainage A is an earthen drainage feature located within the northern portion of the Project site. This feature is a historic blue-line drainage, as depicted on the Oat Mountain, California quadrangle. This feature enters the Project site from undeveloped land to the west and conveys flows west to east, where flows leave the Project site via an existing culvert beneath The Old Road and I-5. During field evaluations, this feature was dry but exhibited evidence of active flows (destruction of terrestrial vegetation, sediment sorting, and break in bank slope). As such, Drainage A and associated tributaries exhibit evidence of ordinary-high water mark (OHWM) indicators and would be considered potential non-wetland waters of the U.S. (Appendix C).

Vegetation associated with Drainage A consists of a mix of non-native grasses and forbs, such as bromes (Upland or Facultative Upland [UPL and FACU]), Mediterranean grass (*Schismus barbatus*; UPL), wild oat (UPL), and shortpod mustard (UPL). Several coast live oaks (UPL) are associated with the upper banks of this feature (Appendix C).

Drainage B (Lyons Canyon)

Potential USACE jurisdiction associated with the Drainage B, including Tributaries B-1, B-2, B-3, B-4, B-5, B-6, and B-7, are considered potential non-wetland waters of the U.S. subject to Section 404 of the CWA. Drainage B and associated tributaries are a drainage complex located within the central and southern portion of the Project site consisting of earthen channels. Drainage B is a historic blue-line drainage, as depicted on the Oat Mountain, California quadrangle. This feature enters the Project site from undeveloped land to the west and conveys flows west to northeast, where flows converge with Drainage A off the Project site. During field evaluations, this feature was dry but exhibited evidence of active flows (destruction of terrestrial vegetation, sediment sorting, water staining, and break in bank slope). As such, Drainage B and associated tributaries exhibit evidence of OHWM indicators and would be considered as potential non-wetland waters of the U.S.

Vegetation associated with Drainage B consists largely of a mix of phreatophytic hydrophytes, such as mulefat (Facultative [FAC]), Goodding's black willow (*Salix gooddingii*; Facultative Wetland [FACW]), arroyo willow (FACW), and Fremont cottonwood (*Populus fremontii*; FAC) interspersed with unvegetated areas and areas vegetated with non-native grasses and forbs similar to those described for Drainage A, above. Several coast live oaks (UPL) are associated with the upper banks of this feature. Associated tributaries to Drainage B are largely vegetated with non-native grasses and forbs, with several coast live oaks associated with the upper banks (Appendix C).

Drainage C

Potential USACE jurisdiction associated with the Drainage C is considered potential non-wetland waters of the U.S. that are potentially subject to Section 404 of the CWA. Drainage C is an earthen drainage feature located within the central portion of the Project site. This feature originates within the Project site and conveys flows west to east, where surface flows dissipate prior to reaching downstream surface drainages. During field evaluations, this feature was dry but exhibited evidence of active flows (destruction of terrestrial vegetation and break in bank slope). As such, Drainage C exhibits evidence of OHWM indicators and would be considered as potential non-wetland waters of the U.S. Vegetation associated with Drainage C consists of a mix of non-native grasses and forbs with coast live oaks (UPL) associated with the upper banks of this feature (Appendix C).

Regional Water Quality Control Board Jurisdiction

The same areas identified as potential waters of the U.S. (i.e. areas subject to USACE jurisdiction) would be regulated by RWQCB either pursuant to CWA Section 401 or Section 13050[e] of the California Water Code, depending on the status of drainage features as waters of the U.S., as described in Appendix C. Table 4.4-5 summarizes the RWQCB jurisdiction within the study area, and Figure 4.4-8 illustrates this.

Table 4.4-5. Summary of RWQCB Jurisdiction for the Project Site and Off-Site Fuel Modification Zones

Drainage Name	Area (acres)			Linear Feet
	Non-wetland Waters	Wetlands	Total acres[1]	
Project Site				
Drainage A	0.21	0.00	0.21	2,469
Tributary A-1	0.01	0.00	0.01	380
Tributary A-2	<0.01	0.00	<0.01	159
Drainage B (Lyons Canyon)	0.56	0.00	0.56	5,506
Tributary B-1	0.06	0.00	0.06	703
Tributary B-2	0.06	0.00	0.06	1,184
Tributary B-3	0.01	0.00	0.01	236
Tributary B-4	0.05	0.00	0.05	2,016
Tributary B-5	0.03	0.00	0.03	1,323
Tributary B-6	0.05	0.00	0.05	1,022
Tributary B-7	0.01	0.00	0.01	293
Drainage C	0.07	0.00	0.07	1,213
Total[1]	**1.11**	**0.00**	**1.11**	**16,504**

Source: Appendix C.
Notes: RWQCB = Regional Water Quality Control Board.
1 Totals may not add up due to rounding.

California Department of Fish and Wildlife Jurisdiction

As shown in Figure 4.4-9, CDFW Jurisdictional Streams and Associated Riparian Habitat, the Project site contains CDFW jurisdiction that consists of stream courses and riparian vegetation. Table 4.4-6 summarizes CDFW jurisdiction within the Project site. As areas of CDFW jurisdiction are determined by the outermost extent of the drip line of associated riparian canopy or top of bank measurement, associated with non-riparian streambed, areas of CDFW jurisdiction represent SEA Water Resources within the Project site.

Table 4.4-6. Summary of CDFW Jurisdiction for the Project Site and Off-Site Fuel Modification Zones

Drainage Name	Area (acres)		
	Non-riparian Streambed	Riparian Habitat	Total[1]
Project Site			
Drainage A	0.34	0.40	0.75
Tributary A-1	0.01	0.00	0.01
Tributary A-2	<0.01	0.00	<0.01
Drainage B (Lyons Canyon)	0.29	4.19	4.48
Tributary B-1	<0.01	0.91	0.91
Tributary B-2	0.05	0.25	0.30
Tributary B-3	0.01	0.04	0.05
Tributary B-4	0.04	0.16	0.20
Tributary B-5	0.03	0.08	0.11
Tributary B-6	0.04	0.06	0.10
Tributary B-7	0.01	0.00	0.01
Drainage C	0.05	0.24	0.29
Total[1]	**0.86**	**6.33**	**7.19**

Source: Appendix C.
Notes: CDFW = California Department of Fish and Wildlife.
[1] Totals may not add up due to rounding.

Drainage A

Vegetation associated with Drainage A and its tributaries consists of a mix of non-native grasses and forbs, such as bromes, Mediterranean grass, wild oat, and shortpod mustard. Several coast live oaks are associated with the upper banks of this feature.

Drainage B (Lyons Canyon)

Vegetation associated with Drainage B and its tributaries consists largely of a mix of phreatophytes, such as mulefat, Goodding's black willow, arroyo willow, and Fremont cottonwood interspersed with unvegetated areas and areas vegetated with non-native grasses and forbs similar to those described for Drainage A, above. Several coast live oaks are associated with the upper banks of this feature. Associated tributaries to Drainage B are largely vegetated with non-native grasses and forbs, with several coast live oaks associated with the upper banks.

Drainage C

Drainage C is an earthen drainage feature located within the central portion of the Project site. Vegetation associated with Drainage C consists of a mix of non-native grasses and forbs with coast live oaks associated with the upper banks of this feature.

SEA Protected Trees

Table 4.4-7 provides a summary of the species mapped and evaluated within the Project site, and Figure 4.4-10, SEA Protected Trees, shows the locations.

Table 4.4-7. Summary of SEA Protected Trees for the Study Area

Scientific Name	Common Name	Non-heritage[1]	Heritage Trees
Juglans californica[1]	Southern California black walnut	17	0
Populus fremontii	Fremont cottonwood	15	0
Quercus agrifolia	coast live oak	478	46
Quercus berberidifolia	scrub oak	3	0
Quercus lobata	valley oak	13	5
Salix laevigata	red willow	24	0
Salix lasiolepis	arroyo willow	7	0
Sambucus nigra ssp. *caerulea*	blue elderberry	56	0
	Total	**613**	**51**

Notes: SEA = Significant Ecological Area.

1 Southern California black walnut is a special-status species due to its California Rare Plant Rank of 4.2. This species is also ranked as G4/S4 species by the California Natural Diversity Database, indicating it is uncommon but not rare.

For a detailed discussion of the SEA protected trees mapped within the Project site, including survey methods, size, and health rating, please see Appendix C.

County Oak Woodland

Oak woodlands, as defined by the Los Angeles County Oak Woodlands Conservation Management Plan, constituted 24.40 acres of the Project site and 1.57 acres in the off-site fuel modification zone for a total of 27.71 acres, as shown in Figure 4.4-11, County Oak Woodlands. The oak woodlands consist of the *Quercus agrifolia* forest and woodland and additional areas where at least two oaks were together, as defined in the Los Angeles County Oak Woodlands Conservation Management Plan. The oak woodlands are primarily synonymous with the *Quercus agrifolia* forest and woodland description provided in the discussion of SEA Protected Trees but were also found in areas where other species were dominant and defined the community per the Manual of California Vegetation, Second Edition (Appendix C).

Local, Regional, or State Habitat Conservation Plans

The study area is not located within any habitat conservation plan (HCP), natural community conservation plan (NCCP), or other approved local, regional, or state HCP (Appendix C).

4.4.2 Regulatory Requirements

Federal

Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) for most plant and animal species and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. FESA is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend and to provide programs for the conservation of those species, thus preventing extinction of plants and wildlife. FESA defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under FESA, it is unlawful to take any listed species; "take" is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

FESA allows for the issuance of Incidental Take Permits for listed species under Section 7, which is generally available for Projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of HCPs on private property without any other federal agency involvement. Upon development of an HCP, USFWS can issue Incidental Take Permits for listed species.

Migratory Bird Treaty Act

The MBTA (16 USC 703 et seq.), as amended, prohibits the intentional take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so. In December 2017, Department of the Interior Principal Deputy Solicitor Jorjani issued a memorandum (M-37050) that interprets the MBTA's "take" prohibition to apply only to affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs. Unintentional or accidental take is not prohibited. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). The Executive Order requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

Clean Water Act

The 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 operator for 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. RWQCBs administer 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 USACE that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. USACE implementing regulations are found at 33 Code of Federal Regulations (CFR) 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the U.S. Environmental Protection Agency in conjunction

with USACE (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

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. USACE exerts jurisdiction over waters of the U.S., including all waters that are subject to the ebb and flow of the tide; wetlands and other waters such as lakes, rivers, streams (including intermittent or ephemeral streams), mudflats, sandflats, sloughs, prairie potholes, vernal pools, wet meadows, playa lakes, or natural ponds; and tributaries of the above features.

The extent of waters of the U.S. is generally defined as that portion that falls within the limits of an OHWM. Typically, the OHWM corresponds to the water surface elevation of a 2-year flood event (USACE 2008). In addition, waters of the United States may include wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas, defined by USACE as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b]; 40 CFR 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by USACE (Appendix C).

State

California Endangered Species Act

CDFW administers the California Endangered Species Act (CESA), which prohibits the take of plant and animal species designated by the Fish and Game Commission as endangered or threatened in California. Under CESA Section 86, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA Section 2053 stipulates that state agencies may not approve projects that will "jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy."

CESA defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the Commission as rare on or before January 1, 1985, is a threatened species." A candidate species is defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the Commission has published a notice of proposed regulation to add the species to either list." CESA does not list invertebrate species.

California Fish and Game Code

Fully Protected Species. Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code outline protection for fully protected species of birds, mammals, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the "take" of any fully protected species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. Furthermore, it is the responsibility of CDFW to maintain viable populations of all native species. Toward that end, CDFW has designated certain vertebrate species as SSC, because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

Section 1602. Under Section 1602 of the California Fish and Game Code, a project operator is required to notify CDFW prior to any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the code, a "stream" is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting 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. 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, 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.

Nesting Birds. Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 (see Section 1900 et seq. of the California Fish and Game Code) directed CDFW to carry out the legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. CESA expanded on the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the California Fish and Game Code. To align with federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" wildlife into the act as threatened species but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and the project proponent.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires identification of a Project's potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of potential impacts.

Special-Status Plants and Wildlife. The CEQA Guidelines define endangered wildlife or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors" (14 CCR 15380[b][1]). A rare animal or plant is defined in CEQA Guidelines Section 15380(b)(2) as a species that, although not currently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or … [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing as defined further in CEQA Guidelines Section 15380(c).

Special-Status Vegetation Communities. Section IV, Appendix G (Environmental Checklist Form) of the CEQA Guidelines (14 CCR 15000 et seq.) requires an evaluation of impacts to "any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or the USFWS."

Regional and Local

Los Angeles County 2035 General Plan

The General Plan includes guiding principles that inform the County's goals, policies, and implementation actions. The following goals and polices are relevant to the Project and applicable to biological resources (County of Los Angeles 2015):

Goal C/NR 1. Open space areas that meet the diverse needs of Los Angeles County.

> Policy C/NR 1.3. Support the acquisition of new available open space areas. Augment this strategy by leveraging County resources in concert with the compatible open space stewardship actions of other agencies, as feasible and appropriate.

Goal C/NR 2. Effective collaboration in open space resource preservation.

> Policy C/NR 2.2. Encourage the development of multi-benefit dedicated open spaces.
>
> Policy C/NR 3.8. Discourage development in areas with identified significant biological resources, such as SEAs.

County of Los Angeles Significant Ecological Areas

SEAs are officially designated areas within the County with irreplaceable biological resources. The SEA program objective is to conserve genetic and physical diversity within the County by designating biological resource areas that are capable of sustaining themselves into the future. The SEA also protects native trees and provides a list of the protected species and the size of the diameter of the trunk that triggers protection. The SEA Ordinance

establishes the permitting, design standards, and review process for development within SEAs, balancing preservation of the County's natural biodiversity with private property rights. A discretionary SEA Conditional Use Permit application is required for development that cannot demonstrate compliance with Section 22.102.070 (Protected Tree Permit), or Sections 22.102.090 (SEA Development Standards) and 22.102.100 (Natural Open Space Preservation) of the County Code. The Los Angeles County Department of Regional Planning (LACDRP) has issued the SEA Ordinance Implementation Guide (LACDRP 2020) to help proposed development comply with the ordinance.

Significant Ecological Areas Resource Categories

The SEA Ordinance includes SEA Resource Categories 1 through 5. These categories are defined as follows (LACDRP 2020):

- FESA and CESA listed plant and wildlife species, CESA candidate species, CRPR 1A or B, 2A or B, and 3 (CNPS 2022), critically imperiled natural communities (those that have a Global [G] and/or State [S] ranking of 1) (NatureServe 2023), and water resources
- **Category 2:** CDFW SSC and their occupied habitat, and imperiled natural communities (those that have are G2/S2) (NatureServe 2023)
- **Category 3:** Vulnerable natural communities that are G3/S3 (NatureServe 2023), sensitive local native resources, and oak woodlands
- **Category 4:** Apparently secure natural communities that are G4/S4 (NatureServe 2023), secure natural communities that are G5/S5 (NatureServe 2023), and CRPR 4 species
- **Category 5:** All other lands including those dominated by non-native vegetation, agricultural fields, hedges, early successional vegetation that has yet to form into a distinct natural community, cleared or disturbed areas, and non-native trees and shrubs

On-Site Preservation for Significant Ecological Areas Conditional Use Permit

To evaluate the appropriate location and mechanism for preserved natural open space, County staff will first need to determine whether an adequate amount of suitable habitat is present on site. Projects that do not have an adequate amount of suitable habitat available to protect on site will need to provide any necessary natural open space preservation off site. Mitigation areas that fall short of SEA recommended mitigation ratios may be given added conservation value should they possess the following characteristics (LACDRP 2020):

> "Added value" can be given to proposed natural open space areas if they also contain unique or valuable habitat linkage resources, additional special-status species, surface waters, or sensitive habitats, etc. Proposed open-space with such added-value characteristics may be allowed to be smaller than the area that would typically be required and still be determined to be consistent with the SEA Program goals subject to the discretion of the Department and a determination of consistency with the SEA Findings by SEATAC.

Table 4.4-8 lists the recommended preservation ratios for impacts to SEA Resource Categories for projects that require a Conditional Use Permit.

Table 4.4-8 Recommended Preservation Ratios for SEA Conditional Use Permit

SEA Resources	Preservation Ratio[1]
Category 1 ▪ State or federally listed species and their habitats ▪ California Rare Plant Ranks 1, 2, 3 ▪ Natural communities ranked G1/S1 ▪ Water resources (e.g., wetlands, streams, ponds, lakes, vernal pools, marshes) ▪ Beach and dune	5:1
Category 2 ▪ Natural communities ranked G2/S2 ▪ Species of Special Concern and their habitats	4:1
Category 3 ▪ Natural communities ranked G3/S3 ▪ Oak woodland ▪ Sensitive local native resources ▪ Rock outcrops/rocklands	3:1
Category 4 ▪ Natural communities ranked G4/S4/G5/S5 ▪ California Rare Plant Rank 4 ▪ Non-native grasslands	2:1
Category 5 ▪ Wildlife linkage or corridor or open space buffer	1:1

Source: LACDRP 2020.
Note: SEA = Significant Ecological Area; G = Global; S = State.
[1] Ratios are provided as a starting point. With a discretionary Conditional Use Permit, these ratios can be changed based on site-specific factors and Significant Ecological Area Technical Advisory Committee recommendations, to the satisfaction of the Hearing Officer or Commission.

SEA Protected Trees

The SEA Ordinance includes 60 tree species to be protected in addition to already protected oak trees (LACDRP 2020). The SEA Protected Tree List specifies the species of tree protected in each individual SEA and the size of the tree when regulations are applied. A Protected Tree Permit from the County shall be required for development that complies with Section 22.102.090 (SEA Development Standards) with the exception of Subsection 22.102.090.B (SEA Protected Trees) of the County Code, and which includes any of the following impacts:

1. Pruning or trimming of branches of SEA Protected Trees in excess of 2 inches in diameter or 25% of live foliage for one or more trees
2. Encroachments of up to 30% into an SEA Protected Tree's protected zone; any encroachment of more than 30% into the protected zone of a tree shall be considered as a tree removal
3. Removal of up to two SEA Protected Trees that are not designated as heritage trees (single trunk that measures 36 inches or more in diameter, or two trunks that collectively measure 54 inches or more in diameter)

4. Tree relocation poses significant risk to the health or survival rate of a tree; any relocation of an SEA Protected Tree shall, therefore, be processed as a removal

County of Los Angeles Oak Tree Ordinance

County Code Chapter 22.174, Oak Tree Permits, was established for the following reasons:

> (a) to recognize oak trees as significant historical, aesthetic, and ecological resources, and as one of the most picturesque trees in Los Angeles County, lending beauty and charm to the natural and manmade landscape, enhancing the value of property, and the character of the communities in which they exist; and (b) to create favorable conditions for the preservation and propagation of this unique, threatened plant heritage, particularly those trees which may be classified as heritage oak trees, for the benefit of current and future residents of the County. It is the intent of the Oak Tree Permit to maintain and enhance the general health, safety and welfare by assisting in counteracting air pollution and in minimizing soil erosion and other related environmental damage.

The County requires permits prior to removing or damaging oaks unless subject to exemptions (e.g., emergency, utility maintenance, and tree maintenance, and for trees planted in road rights-of-way to maintain line-of-site or to relocate trees causing damage to roadway improvements). Otherwise, in unincorporated areas, native oak trees that are at least 8 inches in diameter (or, for trees with multiple trunks with a combined diameter measuring at least 12 inches) at 4.5 feet above grade, shall not be cut, destroyed, removed, relocated, or damaged, unless an oak tree permit is first obtained as provided in the ordinance. The ordinance also extends to include encroachment with the protected zone of such trees. The "protected zone," is that area within the drip line of an oak tree and extending therefrom to a point at least 5 feet outside the drip line, or 15 feet from the trunks of a tree, whichever distance is greater.

Los Angeles County Oak Woodlands

In response to regulations enacted by the State of California (California Public Resources Code, Section 21083.4), the County adopted the Los Angeles County Oak Woodlands Conservation Management Plan (August 23, 2011; LACDRP 2011) and drafted the Oak Woodlands Conservation Management Plan Guide (March 18, 2014; LACDRP 2014) as an implementing document for the Oak Woodlands Conservation Management Plan. The purpose of the regulations and the adopted Oak Woodlands Conservation Management Plan is to determine whether the development of a proposed project "may result in a conversion of oak woodlands that will have a significant effect on the environment" (County of Los Angeles 2011). Should the proposed project result in loss of oak woodlands, the County requires mitigation measures to offset the losses.

4.4.3 Thresholds of Significance

In accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the CEQA Guidelines, the applicable thresholds of significance with regard to biological resources are listed below. A project may have a significant impact if it would:

Threshold 4.4a: 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 (CDFW) or U.S. Fish and Wildlife Service (USFWS).

Threshold 4.4b: Have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS.

Threshold 4.4c: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.

Threshold 4.4d: 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 4.4e: Convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or other unique native woodlands (juniper, Joshua, southern California black walnut, etc.).

Threshold 4.4f: Conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A. County Code, Title 22, Ch. 22.174), the Significant Ecological Areas (SEAs) (L.A. County Code, Title 22, Ch. 102), Specific Plans (L.A. County Code, Title 22, Ch. 22.46), Community Standards Districts (L.A. County Code, Title 22, Ch. 22.300 et seq.), and/or Coastal Resource Areas (L.A. County General Plan, Figure 9.3).

Threshold 4.4g: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved state, regional, or local habitat conservation plan.

4.4.4 Methodology

Desktop analyses and biological field surveys were conducted to identify and analyze actual or potential impacts to biological resources associated with development of the Project site. Observations of all plant and wildlife species were recorded during each of the abovementioned survey efforts. Full methodology can be found in Appendix C.

Literature Search

Prior to conducting fieldwork, pertinent literature on the flora of the region was examined. A thorough archival review was conducted using available literature and other historical records. These resources included the following:

- CNPS, Rare Plant Program, 2017, Inventory of Rare and Endangered Plants of California query for the following U.S. Geological Survey 7.5-inch topographic quadrangles: Canoga Park, Calabasas, Mint Canyon,

Newhall, Oat Mountain, San Fernando, Simi Valley East, Val Verde, and Van Nuys, California (online edition, v8-03 0.39) (CNPS 2020, 2021, and 2022, as referenced in Appendix C)

- CNDDB query for the following U.S. Geological Survey 7.5-inch topographic quadrangles: Canoga Park, Calabasas, Mint Canyon, Newhall, Oat Mountain, San Fernando, Simi Valley East, Val Verde, and Van Nuys, California (CNDDB 2020, 2021, and 2022, as referenced in Appendix C)
- Previous biological reports prepared by David Magney Environmental Consulting and Rincon Consultants for the Project site under separate ownership (DMEC 2006; Rincon Consultants 2015a, 2015b, and 2015c, as referenced in Appendix C)

Vegetation Mapping

Vegetation communities within the Project site were mapped according to the List of Vegetation Alliances and Associations (or Natural Communities List). The list is based on A Manual of California Vegetation, Second Edition, which is the California expression of the National Vegetation Classification. Where necessary, refinements were made when areas did not fit into exact habitat descriptions (i.e., A Manual of California Vegetation, Second Edition "Membership Rules"). These vegetation communities were named based on the dominant plant species present and were mapped to account for the SEA allowable disturbance thresholds, which included the following: SEA Category 1 resources (vegetation communities ranked G1/S1), no disturbance allowance; SEA Category 2 resources (vegetation communities ranked G2/S2), less than or equal to 500 square feet; SEA Category 3 resources (vegetation communities ranked G3/S3), less than or equal to 500 square feet; SEA Category 4 resources (vegetation communities ranked G4G5/S4S5), less than or equal to 5,000 square feet. Plant communities were mapped in the field directly onto a 200-scale (1 inch=200 feet) aerial photograph.

Special-Status Plant Species and Habitats Evaluated for the Project Site

A literature search was conducted to obtain a list of special-status plants with the potential to occur within the Project site, including previous survey reports prepared for the site by David Magney Environmental Consulting and Rincon Consultants. The CNDDB was also consulted to determine well-known occurrences of plants and habitats of special concern in the region. Other sources used to develop a list of target species for the survey program included the CNPS online inventory (2020, 2021, and 2022). Soils mapped within the Project site were also considered for potential to support special-status plant species.

Based on this information, vegetation profiles and a list of target sensitive plant species and habitats that could occur within the Project site were developed and incorporated into a mapping and survey program to achieve the following goals: (1) characterize the vegetation associations and land use; (2) prepare a detailed floristic compendium; (3) identify the potential for any special-status plants that may occur within the Project site; and (4) prepare a map showing the distribution of any sensitive botanical resources associated with the Project site, if applicable.

General Wildlife Resources

Wildlife species were evaluated and detected during field surveys by sight, call, tracks, and scat. Site reconnaissance was conducted in such a manner as to allow inspection of the entire Project site by direct observation, including the use of binoculars. Observations of physical evidence and direct sightings of wildlife were recorded in field notes during the visit. Scientific nomenclature and common names for vertebrate species referred to in this report follow the Complete List of Amphibian, Reptile, Bird, and Mammal Species in California (CDFW 2016), Standard Common and Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodilians

6th Edition (Collins and Taggert 2009) for amphibians and reptiles, and the American Ornithologists' Union Checklist 7th Edition (2009) for birds. The methodology (including any applicable survey protocols) utilized to conduct general surveys, habitat assessments, and/or focused surveys for special-status wildlife are included below.

Special-Status Wildlife Assessment

A literature search was conducted to obtain a list of special-status wildlife species with the potential to occur within the Project site. Species were evaluated based on three factors: (1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Project site; (2) any other special-status wildlife that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs on the Project site; and (3) species identified by David Magney Environmental Consulting and/or Rincon Consultants. Relying these resources, biologists conducted habitat assessments for special-status animal species on May 22, 2020, and a follow-up visit on August 24, 2020. An aerial photograph, soil map, and/or topographic map were used to determine the community types and other physical features that may support special-status and uncommon taxa within the Project site.

Focused Surveys for Special-Status Wildlife Species

Focused surveys for special-status plant and wildlife species were conducted for the Project site during the 2021 and 2022 spring and summer survey season.

Burrowing Owl. Focused surveys for burrowing owl were conducted for all suitable habitat areas within the Project site during the 2021 breeding season survey period (February 15 through July 15). Surveys were conducted in accordance with survey guidelines described in the 2012 California Department of Fish and Game Staff Report on Burrowing Owl Mitigation. The guidelines stipulate that four focused survey visits should be conducted between February 15 and July 15, with the first visit occurring between February 15 and April 15. The remaining three visits should be conducted 3 weeks apart from each other, with at least one visit occurring between June 15 and July 15 (CDFG 2012). As recommended by the survey guidelines, the survey visits were conducted between morning civil twilight and 10:00 a.m., and/or between 2 hours before sunset and evening civil twilight, when weather conditions during the surveys are conducive to a high level of bird activity.

Surveys were conducted by walking meandering transects throughout areas of suitable habitat. Transects were spaced between 7 meters and 20 meters apart, adjusting for vegetation height and density, in order to provide adequate visual coverage of the survey areas. At the start of each transect, and at least every 100 meters along transects, the survey area was scanned for burrowing owls using binoculars. All suitable burrows were inspected for diagnostic owl sign (e.g., pellets, prey remains, whitewash, feathers, bones, and/or decoration) in order to identify potentially occupied burrows.

Coastal California Gnatcatcher. Focused surveys for the coastal California gnatcatcher were conducted for all suitable habitat areas within the Project site during the 2021 breeding season survey period (March 15 through June 30), with all survey activities conducted by a permitted biologist. Surveys were conducted in accordance with the 1997 USFWS survey guidelines, which during the breeding season (March 15 through June 30) require a minimum of six surveys (per 80-acre habitat polygon) with at least 1 week separating each survey visit. Pursuant to the survey guidelines, the surveys were conducted between sunrise and 12:00 p.m. when weather conditions during the surveys are conducive to a high level of bird activity.

Least Bell's Vireo. Focused surveys for the least Bell's vireo (*Vireo bellii pusillus*) were conducted for all suitable habitat areas within the Project site during the 2021 survey period. Surveys were conducted in accordance with the 2001 USFWS survey guidelines, which stipulate eight surveys should be conducted between April 10 and July 31, with a minimum of 10 days separating each survey visit (USFWS 2001). Pursuant to the survey guidelines, the surveys were conducted between sunrise and 11:00 a.m., when weather conditions are conducive to a high level of bird activity.

Southwestern Willow Flycatcher. Focused surveys for the southwestern willow flycatcher were conducted for all suitable habitat areas within the Project site during the 2021 survey period. Surveys were conducted in accordance with USFWS approved survey guidelines (Sogge et al. 2010), which stipulate five surveys should be conducted between May 15 and July 17, divided into three survey periods. The southwestern willow flycatcher is one of four subspecies of willow flycatcher that occur within Southern California but is the only subspecies that breeds in Southern California. The other subspecies may occur in Southern California during the first and second surveys periods as they migrate through the area onwards to breeding areas but will not breed in Southern California. Therefore, the presence of the southwestern willow flycatcher is determined by willow flycatchers that remain in Southern California during the third survey period. Pursuant to the survey guidelines, the surveys were conducted between sunrise and 11:00 a.m. when weather conditions during the surveys are conducive to a high level of bird activity.

Special-Status Bat Species. Focused bat surveys were conducted within the Project site during the 2021 survey period. Prior to and continuing during the course of the focused surveys, diurnal roost assessments were conducted throughout the Project site to identify potential natural roosting habitat (e.g., rocky outcroppings, cliffs, trees with cavities, trees with loose bark, dead trees, riparian trees, palm trees) and human-made roosting structures (e.g., structures, roof tiles, openings below ground, including wells) that could support roosting on site, including diurnal, nocturnal, hibernacula, and maternity roosts. Inspection of potential roost areas included a search for evidence of occupation, including urine staining, guano or culled insect concentrations, audible social bat vocalizations, and odors often associated with occupied roosts. Those trees and/or structures identified as having the greatest potential of supporting roosting bats were the focus during emergence surveys.

Surveys incorporated a combination of acoustic and emergence (out flight or exit) surveys. Biologists utilized a thermal imager attached to an iPhone or iPad to assist in detecting heat signatures of bats within and exiting potential roost areas. Spotlights were used to aid in visual identification of bat species. In addition, ultrasonic acoustic recording devices were deployed throughout the Project site, with some devices remaining in a passive setting to collect ultrasonic recordings for more than 10 consecutive days. All acoustic data was recorded in full spectrum and was processed and analyzed with Sonobat 4.2.2 bat call analysis software using the California Southwest classifier for species identification. All acoustic calls were manually reviewed and vetted using multiple Sonobat acoustic reference libraries and reference materials.

Jurisdictional Delineation

Prior to beginning the field delineation, a color aerial photograph, a topographic base map of the property, the previously cited U.S. Geological Survey topographic map, and a soils map were examined to determine the locations of potential areas of USACE, RWQCB, and CDFW jurisdiction. Suspected jurisdictional areas were field checked for evidence of stream activity and/or wetland vegetation, soils, and hydrology. Where applicable, reference was made to the USACE (2008a) Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States to identify the width of USACE jurisdiction, and suspected federal wetland habitats on the site were evaluated using the methodology set forth in the USACE (1987) Wetlands Delineation

Manual and the USACE (2008b) Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement. Reference was also made to the 2019 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2019) to identify suspected state wetland habitats. While in the field, the potential limits of jurisdiction were recorded with a submeter Trimble GPS device in conjunction with a color aerial photograph using visible landmarks. Other data were recorded onto the appropriate datasheets.

4.4.5 Impact Analysis

Threshold 4.4a: 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 (CDFW) or U.S. Fish and Wildlife Service (USFWS)?

Special-Status Plants

Direct Impacts

The Project would impact six non-listed special-status plant species, as shown in Figure 4.4-5, including club-haired mariposa lily (CRPR 4.3; Category 4), Peirson's morning glory (CRPR 4.2; Category 4), Plummer's mariposa lily (CRPR 4.2; Category 4), scarlet keckiella (Sensitive Native Local Resource; Category 3), slender mariposa lily (CRPR 1B.2; Category 1), and Southern California black walnut (CRPR 4.2; Category 4), which would be a potentially significant impact.

Black walnut impacts, preservation, and mitigation are discussed in the context of SEA Protected Trees (see Threshold 4.4f, below). Impacts to the remaining five species (club-haired mariposa lily, Peirson's morning glory, Plummer's mariposa lily, scarlet keckiella, and slender mariposa lily) would occur due to the loss of individuals and habitat that supports bulbs and the seedbank of the species during vegetation removal and grading. Impacts to these species would be potentially significant under CEQA absent mitigation and would not be compatible with SEA Resources. Table 4.4-9 summarizes the impacts to each of the species and the proposed preservation required.

Table 4.4-9. Impacts to Special-Status Plants

Species	Category	Preservation Ratio[1]	Impacted	Preserved[2]	Additional Preservation Needed (Individuals)
club-haired mariposa lily	4	2:1	15	100	0
Peirson's morning glory	4	2:1	300	0	600
Plummer's mariposa lily	4	2:1	67	6	134
scarlet keckiella	3	3:1	19[3]	13	44
slender mariposa lily	1	5:1	6	5	25

Notes:
1 Per the Significant Ecological Area Ordinance Implementation Guide.
2 Individuals documented in the proposed Conservation Area (MM-4.4-1).
3 18 on the Project site and 1 in the off-site brush thinning zone.

The Project would result in 150.31 acres of unimpacted natural open space. As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of the total 150.31 acres within a conservation easement. Mitigation Measure (MM) 4.4-1, On-Site Habitat

Preservation, ensures the preservation of this on-site 144.43-acre open space in perpetuity through recordation of a conservation easement (Conservation Area) where the remaining individuals were found during the surveys. MM-4.4-2, Habitat Mitigation and Monitoring Plan, would improve the conditions of portions of the Conservation Area (see Figure 4.4-12, Proposed Habitat Enhancement/Restoration Areas). MM-4.4-3, Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation, would provide a program to collect, propagate, and disseminate these species into the Conservation Area. MM-4.4-4, Biological Monitoring, would provide monitoring to avoid any inadvertent impacts. MM-4.4-5, Demarcation of Disturbance Limits, would delineate the Project footprint to help avoid any inadvertent impacts to special-status plants. MM-4.4-6, Invasive Species Prevention, and MM-4.4-7, Landscaping Plan, would minimize the introduction of non-native plant species that could compete for habitat space with special-status species. As such, with the implementation of MM-4.4-1, MM-4.4-2, MM-4.4-3, MM-4.4-4, MM-4.4-5, MM-4.4-6, and MM-4.4-7, impacts to special-status species would be reduced to less than significant.

Indirect Impacts

Potential short-term or temporary indirect impacts to special-status plants would primarily result from construction activities and include impacts related to or resulting from the activities outside of the Project limits, generation of fugitive dust, increased human activity, and the introduction of pollutants from construction equipment. Excessive dust can decrease the vigor and productivity of plants through effects on light, penetration, photosynthesis, respiration, and transpiration; increased penetration of phytotoxic gaseous pollutants; and increased incidence of pests and diseases. Additionally, invasive plant species could be introduced by the Project during construction and through landscaping installation that could alter the habitat and compete with special-status plants. There is also a potential for the introduction of invasive, non-native plant species during the long-term landscaping of the completed Project. Long-term indirect impacts could also occur due to the increased human presence and associated edge effects that may occur as a result of Project build-out. These indirect impacts could result in additional loss of special-status plants that could be significant. MM-4.4-5, MM-4.4-6, MM-4.4-7, and MM-4.4-13 would reduce potential impacts to less than significant.

Special-Status Wildlife

Several factors were considered when determining whether the Project would have a substantial adverse effect on a special-status wildlife species, including the range/distribution of the species, the relative sensitivity of the species, the size and geographic context of the Project site, the amount of habitat for each species, and the context of use of the site. The loss of habitat for a special-status species is not considered as a substantial adverse effect, and therefore a potentially significant impact, simply because there is an impact. That impact must be shown to have a substantial adverse effect on the resource. In the case of an individual species, the effect of the habitat loss must be substantial and adverse relative to the range of the species (i.e., that the loss of habitat by a particular development activity would adversely affect the species as a whole, and not simply the affect that a development activity would have on a specific population).

Invertebrates

Crotch's Bumble Bee

Crotch's bumble bee typically nests underground, so nesting individuals could be highly vulnerable to injury and mortality during construction, which could crush nests and individuals, if present on site. Harm to or the loss of individuals during construction could be significant due to reducing the numbers of a rare wildlife species and would

require mitigation. MM-4.4-8, Crotch Bumble Bee Pre-construction Surveys, would require pre-construction surveys for Crotch's bumble bee nests, with buffers established around active nests until the nests are deemed inactive.

Crotch's bumble bee is a generalist forager and could forage anywhere on site where suitable floral resources are present. The proposed Project would impact 18.31 acres of habitat with the potential to support foraging by Crotch's bumble bee in the form of coastal scrub, oak woodland, herbaceous, and grassland habitats. Impacts to 18.31 acres of habitat with the potential to support this species would be a significant impact prior to mitigation under CEQA. SEA guidelines recommend preservation of suitable habitat at a 5:1 mitigation ratio, for a total of 91.55 acres of recommended preservation of suitable habitat for this species. As required by MM-4.4-1, the Project would preserve 144.43 acres of native coastal scrub, chaparral, oak woodland, herbaceous, and grassland communities on site within the Conservation Area that would provide nesting and foraging opportunities for the species. Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement. The preservation of this off-site habitat is referred to as "Off-Site Conservation Area".

Indirect impacts to Crotch's bumble bee could occur due to the use of herbicides and pesticides and competition with western honeybee (*Apis mellifera*) (The Xerces Society 2018). The use of herbicides to control weeds can indirectly harm Crotch's bumble bee through removal of flowering species that once provided them with pollen and nectar resources (The Xerces Society 2018). Foraging bumble bees can be poisoned by pesticides when they absorb toxic substances directly through their exoskeleton, drink contaminated nectar, or gather contaminated pollen or when larvae consume contaminated pollen (The Xerces Society 2018). MM-4.4-1 would demonstrate recordation of a conservation easement for the On-Site Conservation area, and requires a Conservation Management Plan (CMP) for the Conservation Area, and it shall include a condition that discourages herbicides and pesticides, and only CDFW-approved herbicides and pesticides may be used. Research has documented that under controlled conditions, honeybees displaced native bees from flowers, altered the suite of flowers that native bees were visiting, had a negative impact on native bee reproduction, and increased the spread of disease between bees (The Xerces Society 2018). The CMP required by MM-4.4-1 shall also have a condition that no commercial bee operations be allowed to use the Conservation Area for storing their apiaries.

MM-4.4-1 and MM-4.4-9 would provide the preservation of areas that are expected to provide forage and nest locations. MM-4.4-2 would improve the conditions of portions of the Conservation Area by providing additional foraging opportunities. MM-4.4-4 would provide monitoring to avoid any inadvertent impacts to potential foraging opportunities by ensuring inadvertent impacts outside of the Project footprint and mitigation measures are implemented. MM-4.4-5 would delineate the Project footprint to help avoid any inadvertent impacts to foraging opportunities by avoiding additional impacts to native vegetation. MM-4.4-6 and MM-4.4-7 would avoid and minimize the introduction of non-native plant species that could compete for habitat space with plants that the species forages on by ensuring that vehicles and equipment used during construction are weed free and prohibiting the use of invasive species in the landscaping. MM-4.4-8 would avoid direct impacts to nests by requiring pre-construction surveys and avoidance buffers. As such, with the implementation of MM-4.4-1, MM-4.4-2, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, MM-4.4-8, and MM-4.4-9, impacts to Crotch's bumble bee would be reduced to less than significant.

Monarch Butterfly

Suitable overwintering habitat for monarch does not occur within the Project footprint, and no distinctive stands of milkweed host plants were noted occurring within the Project footprint, so no direct take of monarch butterfly is expected to occur as a result of the proposed Project. The proposed Project would impact approximately 18.31

acres of habitat with the potential to support foraging monarch butterfly during spring and summer months. Suitable spring and summer foraging habitat occur within the Project site in the form of arid scrub, oak woodland, herbaceous, and grassland habitats. Impacts to 18.31 acres of foraging habitat with the potential to support this species would be a significant impact prior to mitigation under CEQA, and the Project would not be compatible with SEA Resources. SEA guidelines recommend preservation of suitable habitat at a 5:1 mitigation ratio, for a total of 91.55 acres of recommended preservation of suitable habitat for this species. As proposed in MM-4.4-1, the Project would preserve 144.43 acres of native arid scrub, chaparral, oak woodland, herbaceous, and grassland communities on site within the Conservation Area. Given that the Conservation Area is contiguous with large tracts of conserved open natural space that exhibit similar levels of habitat suitability, the on-site conserved habitat possesses added value in that it represents a valuable habitat linkage for monarch butterfly. Additionally, the Conservation Area represents a significant topographical component of a viable wildlife corridor that can benefit long-term movement and genetic health of the species by allowing for foraging and dispersal opportunities between the Santa Susana Mountains/Simi Hills and the San Gabriel Mountains. SEA guidelines recommended preservation would be addressed making the Project compatible with SEA Resources and would reduce proposed impacts to below a level of significance under CEQA.

Direct and indirect impacts to individual monarch could occur due to the use of herbicides and pesticides and the establishment of non-native milkweed species (The Xerces Society 2014). The use of herbicides to control weeds can indirectly harm monarch through killing host milkweeds and altering nectar plant quality and abundance (The Xerces Society 2014). Larvae and adults, and under some circumstances, eggs and pupae, of monarch can be killed or impaired by exposure to pesticides via contact from overspray, drift of spray particles and vapor, runoff, and dust and through ingestion of pesticide-contaminated food and water (The Xerces Society 2014). MM-4.4-1 shall require a CMP for the Conservation Area, and it shall include a condition that discourages herbicides and pesticides, and only CDFW-approved herbicides and pesticides may be used. Tropical or scarlet milkweed (*Asclepias curassavica*) is a non-native milkweed that is often planted in backyard gardens, and its leaves do not die back at the end of summer as do native milkweeds. In the absence of winter dieback, spores of the parasite *Ophryocystis elektroscirrha* accumulate on leaves over time and spread infections to monarch larvae (The Xerces Society 2014). With the implementation of MM-4.4-6 and MM-4.4-7, indirect impacts from non-native milkweeds would be avoided and minimized.

MM-4.4-1 and MM-4.4-9 would demonstrate recordation of a conservation easement, to permanently preserve areas that are expected to provide foraging and breeding opportunities. MM-4.4-2 would improve the conditions of portions of the Conservation Area by providing additional foraging and breeding opportunities. MM-4.4-4 would provide monitoring to avoid any inadvertent impacts to potential foraging opportunities. MM-4.4-5 would delineate the Project footprint to help avoid any inadvertent impacts to foraging and breeding opportunities. MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants that the species forages and breeds on. As such, with the implementation of MM-4.4-1, MM-4.4-2, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, and MM-4.4-9, impacts to monarch would be reduced to less than significant.

Reptiles

Direct impacts to California glossy snake, California legless lizard, Blainville's horned lizard, and coastal whiptail include being struck by moving vehicles or equipment if present on site during construction. These species are also vulnerable to mortality or injury during vegetation and ground-disturbing activities associated with construction because they tend to be cryptic, slow moving, and below ground or under rocks or debris during cooler periods. Indirect impacts to these species would be from the substantial loss of foraging and breeding habitat, as shown in Table 4.4-10, and would be a potentially significant impact prior to mitigation.

Table 4.4-10. Impacts to Special-Status Reptiles

Species	Category	Preservation Ratio	Impacted Habitat (acres)	Preserved Habitat Needed (acres)	On-Site Preserved Habitat[1] (acres)
California glossy snake	2	4:1	34.27	137.08	115.49
California legless lizard	2	4:1	17.38	69.52	51.05
Blainville's horned lizard	2	4:1	5.11	20.44	39.07
coastal whiptail	2	4:1	34.27	137.08	115.49

Note:
[1] Habitat within the proposed Conservation Area (MM-4.4-1).

MM-4.4-1 and MM-4.4-9 would provide the preservation of areas (i.e., On-Site and Off-Site Conservation Areas) that are expected to provide foraging and breeding opportunities. Per Chapter 8 of the SEA Ordinance Implementation Guide, proposed mitigation areas that fall short of SEA recommended mitigation ratios may be given added conservation value should they possess the following characteristics (LACDRP 2020):

> "Added value" can be given to proposed natural open space areas if they also contain unique or valuable habitat linkage resources, additional special-status species, surface waters, or sensitive habitats, etc. Proposed open-space with such added-value characteristics may be allowed to be smaller than the area that would typically be required and still be determined to be consistent with the SEA Program goals subject to the discretion of the Department and a determination of consistency with the SEA Findings by SEATAC.

Given that the proposed 144.43-acre Conservation Area is contiguous with large tracts of conserved open natural space (Santa Clarita Woodlands Park, Rivendale Open Space, Ed Davis Park, and other Mountains Recreation and Conservation Authority managed lands) that exhibit similar levels of habitat suitability, the conserved habitat possesses added value in that it represents a valuable habitat linkage for wildlife. Additionally, the Conservation Area represents a significant topographical component of a viable wildlife corridor that can benefit long-term movement and genetic health of the species by allowing for breeding, foraging, and dispersal opportunities between the Santa Susana Mountains/Simi Hills and the San Gabriel Mountains.

MM-4.4-10, Special-Status Wildlife Relocation Plan, would provide a methodology for pre-construction surveys, and relocation of individuals. MM-4.4-2 would improve the conditions of portions of the Conservation Area by providing additional foraging and breeding opportunities. MM-4.4-4 would provide monitoring to avoid any inadvertent impacts to potential foraging and breeding opportunities. MM-4.4-5 would delineate the Project footprint to help avoid any inadvertent impacts to foraging and breeding opportunities. MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants that the species' prey forages on. As such, with the implementation of MM-4.4-1, MM-4.4-2, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, MM-4.4-9, and MM-4.4-10, impacts to special-status reptiles would be reduced to less than significant.

Birds

The Project would remove nesting habitat that supports or has the potential to support several special-status bird species, which would not be compatible with SEA Resources. Additionally, common bird species protected under MBTA and California Fish and Game Code could nest on the Project site and direct impacts could occur to this species by the removal of active nests that result in mortality to eggs or nestlings. Indirect impacts would include

construction activities that cause adults to abandon active nests and that result in the loss of breeding and foraging habitat, as shown in Table 4.4-11. Indirect impacts would also occur due to the substantial loss of potential breeding and foraging habitat, which would not be compatible with SEA Resources.

Table 4.4-11. Impacts to Special-Status Birds Nesting Habitat

Species	Category	Preservation Ratio	Impacted Habitat (acres)	Preserved Habitat Needed (acres)	Preserved Habitat[1] (acres)
Cooper's hawk	3	3:1	13.09	39.27	12.11
Southern California rufous-crowned sparrow	3	3:1	33.16	99.48	112.10
Bell's sage sparrow	3	3:1	33.16	99.48	112.10
greater roadrunner	3	3:1	33.16	99.48	112.10
hairy woodpecker	3	3:1	0.75	2.25	0
yellow warbler	2	4:1	0.75	2.25	0

Note:
[1] Habitat within the proposed Conservation Area (MM-4.4-1).

MM-4.4-1 and MM-4.4-9 would provide the preservation of the area that is expected to provide foraging and breeding opportunities. Per Chapter 8 of the SEA Ordinance Implementation Guide, proposed mitigation areas that fall short of SEA recommended mitigation ratios may be given added conservation value should they possess the following characteristics (LACDRP 2020):

> "Added value" can be given to proposed natural open space areas if they also contain unique or valuable habitat linkage resources, additional special-status species, surface waters, or sensitive habitats, etc. Proposed open-space with such added-value characteristics may be allowed to be smaller than the area that would typically be required and still be determined to be consistent with the SEA Program goals subject to the discretion of the Department and a determination of consistency with the SEA Findings by SEATAC.

Given that the proposed 144.43-acre Conservation Area is contiguous with large tracts of conserved open natural space that exhibit similar levels of habitat suitability, the conserved habitat possesses added value in that it represents a valuable habitat linkage for wildlife. Additionally, the Conservation Area represents a significant topographical component of a viable wildlife corridor that can benefit long-term movement and genetic health of the species by allowing for breeding, foraging, and dispersal opportunities between the Santa Susana Mountains/Simi Hills and the San Gabriel Mountains.

MM-4.4-11, Nesting Bird Avoidance, would require nesting bird surveys during the typical breeding season, and avoidance buffers and monitoring would be established to avoid impacts to nests. MM-4.4-2 would improve the conditions of portions of the Conservation Area by providing additional foraging and breeding opportunities. MM-4.4-4 would provide monitoring to avoid any inadvertent impacts to potential foraging and breeding opportunities. MM-4.4-5 would delineate the Project footprint to help avoid any inadvertent impacts to foraging and breeding opportunities. MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants that the species' prey forages on. As such, implementation of MM-4.4-1, MM-4.4-2, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, MM-4.4-9, and MM-4.4-11 would reduce impacts to special-

status birds to less than significant and provide the necessary preservation for the Project to be compatible with SEA Resources.

Non-Special-Status Nesting Birds

The project has the potential to impact active nests of non-special-status bird species if vegetation is removed during the nesting season (February 1 to August 31). Impacts to nesting birds are prohibited by the MBTA and California Fish and Game Code. Direct impacts could occur to this species by the removal of active nests that result in mortality to eggs or nestlings. Indirect impacts would include construction activities that cause adults to abandoned active nests and that result in the loss of breeding and foraging habitat, and impacts would be significant prior to mitigation. Implementation of MM-4.4-11 would reduce impacts to less than significant.

Mammals

The Project would remove habitat that supports or has the potential to support special-status mammals, including the American badger, San Diego black-tailed jackrabbit, San Diego desert wood rat, and Southern California mountain lion. Table 4.4-12 summarizes the impacts to the habitat that could support American badger, San Diego black-tailed jackrabbit, and San Diego desert wood rat, with mountain lion being discussed separately. Direct impacts to these species include being struck by moving vehicles or equipment if present on site during construction. Direct impacts could also occur to occupied burrows and middens.

Table 4.4-12. Impacts to Special-Status Mammals

Species	Category	Preservation Ratio	Impacted Habitat (acres)	Preserved Habitat Needed (acres)	Preserved Habitat[1] (acres)
American badger	2	4:1	18.49	73.96	53.73
Mountain lion	1	5:1	82.67	413.35	144.43
San Diego black-tailed jackrabbit	2	4:1	6.15	24.60	41.75
San Diego desert woodrat	2	4:1	33.13	132.52	112.81

Note:
[1] Habitat within the proposed Conservation Area (MM-4.4-1).

Indirect impacts to these species would be from the loss of foraging and breeding habitat. The Project would consolidate light sources toward the northeast portion of the Project site where there are currently light and glare sources from streetlights and vehicles traveling along The Old Road and I-5 to the east, the existing commercial lighting from the commercial building and parking lot to the north (which includes security lighting), and residential lighting from the residential development to the north. However, indirect impacts to mammals, including bats, could occur from new lighting established by the completed Project and its operations. Therefore, the indirect impact associated with lighting during operation could be significant. Implementation of MM-4.4-12, Lighting Plan, would reduce indirect impacts from lighting during operation of the Project to less than significant.

MM-4.4-1 and MM-4.4-9 require recordation of a conservation easement for the required open space in the Conservation Areas, which is expected to provide foraging and breeding opportunities for the species. MM-4.4-2 would improve the conditions of portions of the Conservation Area by preserving remaining foraging and breeding opportunities. MM-4.4-4 would provide monitoring to avoid any inadvertent impacts to potential foraging opportunities. MM-4.4-5 would delineate the Project footprint to help avoid any inadvertent impacts to foraging and breeding opportunities. MM-4.4-6 would

minimize the introduction of non-native plant species that could compete for habitat space with vegetation that the species or their prey rely on. MM-4.4-10 would provide guidance on the relocation of the species (outside the breeding season). As such, implementation of MM-4.4-1, MM-4.4-2, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-9, MM-4.4-10, and MM-4.4-12 would reduce impacts to these special-status mammals to less than significant and provide the necessary preservation for the Project to be compatible with SEA Resources.

California Mountain Lion

Because California mountain lion is an SC species, Project impacts resulting in direct take of California mountain lion would require an Incidental Take Permit under CESA through coordination with CDFW; however, no natal dens have been detected during field efforts that have resulted in extensive cover of the Project site, and none are expected. Therefore, no direct take of California mountain lion is expected to occur with implementation of the proposed Project.

The species could be indirectly affected by the Project due to the loss of potential habitat used by the species and increasing the potential of mountain lion–human interactions. A study titled "Big Cats in the Big City: Spatial Ecology of Mountain Lions in Greater Los Angeles" by Seth Riley, Jeff Sikich, and John Benson was published by the Journal of Wildlife Management in November 2021 (Riley et al. 2021). The focus of the study as described in the article was to better understand mountain lion habitat use near urban and managed areas, which included three predictors: home range, landscape use, and resources selection. To analyze these predictors, researchers used GPS collar telemetry data and modeling software. Two adult males had home ranges that included the Project site, and one sub-adult male had a range that was just south of the site (Riley et al. 2021). The Project would impact 82.67 acres of habitat with the potential to support mountain lion. For reference, the mean home range for adult male mountain lions is 91,923 acres, and the mean home range for sub-adult males is 71,178 acres (Riley et al. 2021). Therefore, even if the entire Project site were part of the territory of a mountain lion, impacts by the Project would only consist of a very small percentage of its territory (i.e., 0.0009% of the average home range for an adult male and 0.12% of the average home range for a sub-adult male). Radio-tracked mountain lions retained mean distances from development that ranged from 1,280 meters (sub-adult males) to 1,930 meters (adult males) across the four age and sex classes (adult females, adult males, sub-adult females, sub-adult males). As such, the species use of the Project site is expected to be transient during foraging, range movement, and looking for mates.

Based upon the premise that female mountain lions do not establish natal dens within 600 meters of human development (Center for Biological Diversity 2019), the Project would reduce habitat suitable for denning by an additional 172 acres beyond the current 600-meter buffer around existing residential development to the north and The Old Road and I-5 to the east and southeast. This would constitute 0.005% of the 33,122 acres average home range for a hypothetical female in the study. Based upon retained mean distances from development maintained by mountain lions, the potential for the use of the 172 acres for establishing natal dens is currently low.

It should be noted that the study found that no mountain lions crossed I-5 in the Project vicinity, with the only crossing of the interstate by a male using the Santa Clara River wash underpass (Riley et al. 2021), which is located approximately 3.90 miles to the north-northwest of the Project site. I-5 in the vicinity of Project site is expected to continue to be a strong barrier to east–west movement for mountain lion between the Santa Susana Mountains and the San Gabriel Mountains. As such, the Project is on the very edge of the home range of the two mountain lions detected on site, and it is not expected to intensify this barrier or increase habitat fragmentation. Residential development to the north of the Project site limits movement by the species in that direction. Mountain lion movement from northwest and west to the south is expected to remain functional despite some constriction along its northern edge by the Project since there are geographic features (ridges and canyons), with hiking trails, within

the Conservation Area that have connectivity to Rivendale Open Space, which is adjacent to the open space in Towsley Canyon. These two open space areas are the closest to the Calgrove Boulevard underpass, which could facilitate movement beneath I-5 and into Wildwood Canyon Open Space and Gates King Open Space. Additionally, the Resource Conservation District of the Santa Monica Mountains (RCDSMM) is working on a feasibility study for the Newhall Pass I-5 Wildlife Crossing, which is expected to provide connectivity between the Santa Susana Mountains and the San Gabriel Mountains.

The Project site is at the northern limits of the study area and the potential locations being analyzed are south of the Project site, with the nearest location being near Towsley Canyon (approximately 0.6-mile south of the Project site), per communication with Clark Stevens, the Executive Officer at RCDSMM. The feasibility study uses indicator species that use a variety of habitats to model potential movement in the study area. Based on the discussion with Mr. Stevens, only one indicator species (greater roadrunner) was expected to have a high usage of the Project site during regional movement due to the onsite areas of chaparral and open woodland, of which the species is associated (Stevens, pers. comm., 2024). With the distance from the Project site to the nearest potential crossing location, and the Conservation Area providing connectivity from the portions of the Santa Susana Mountains to the west and northwest to the northernmost potential crossing location, the Project is expected to have less than a significant impact on potential mountain lion movement through the proposed I-5 crossing.

SEA guidelines recommend preservation of suitable habitat at a 5:1 mitigation ratio, for a total of 413.35 acres of recommended preservation of suitable habitat for this species. As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of suitable habitat for this species on site within the Conservation Area (MM-4.4-1, as preserved in perpetuity through recordation of a conservation easement), and additional habitat is expected to be preserved off site, within the Off-Site Conservation Area (MM-4.4-9). The on-site Conservation Area is located in the southern and western portion of the Project site and is contiguous with large tracts of dedicated natural open space associated with the Santa Clarita Woodlands Park and Rivendale Open Space, the former of which comprises a large block of publicly conserved natural land identified by the Natural Landscape Blocks dataset (CDFW 2017). Both of these adjacent natural open space areas already provide suitable live-in, breeding, foraging, cover, and dispersal habitat for mountain lion, ranked moderate to high for probability of use by CDFW's Mountain Lion Habitat Suitability Dataset (Dellinger et al. 2020), as shown in Figure 4.4-6, and ranked medium to high by CDFW's Mountain Lion Predicted Habitat Dataset (CDFW 2023), as shown in Figure 4.4-7. Additionally, the proposed On-Site Conservation Area consists of Lyons Canyon and associated valleys, which also provide moderate to high levels of suitable live-in, breeding, foraging, cover, and dispersal habitat. The proposed On-Site Conservation Area also provides line-of-sight connections to valley and canyon complexes located within the adjacent Santa Clarita Woodlands Park and Rivendale Open Space and beyond to the Santa Susana Mountains complex, Simi Hills, and the additional conserved lands within them.

Given that the proposed Conservation Area consists of areas identified as medium to high in terms of suitability for live-in, foraging, cover, and movement of mountain lions, and that it is also contiguous with large tracts of conserved open natural space that exhibit similar levels of habitat suitability and function, the proposed Conserved Area possesses added value in that it represents a valuable habitat linkage for mountain lion. Additionally, the Conservation Area represents a significant topographical component of a viable wildlife corridor that can benefit mountain lion movement and the genetic health of local mountain lion populations in the long-term by facilitating movement between the Santa Susana Mountains/Simi Hills and the San Gabriel Mountains, by way of the Calgrove Boulevard undercrossing, one of very few recognized crossing points of I-5.

MM-4.4-2 would improve the conditions of portions of the Conservation Area by providing additional foraging opportunities for the species' prey. MM-4.4-4 would provide monitoring to avoid any inadvertent impacts to potential

foraging opportunities for the species' prey. MM-4.4-5 would delineate the Project footprint to help avoid any inadvertent impacts to foraging opportunities for the species' prey. MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with vegetation that the species or their prey rely on. As such, implementation of MM-4.4-1, MM-4.4-2, MM-4.4-4, MM-4.4-5, MM-4.4-6, and MM-4.4-7 would reduce impacts to mountain lion to less than significant and provide the necessary preservation for the Project to be compatible with SEA Resources.

Following the completion of the Project, indirect and inadvertent impacts to mountain lion could occur due to human occupancy of the Project site and people using the recreational trails in the Conservation Area. These impacts include traffic collisions, human–mountain lion interactions due to the attraction of prey, the use of rodenticides, lighting; and through increased use by recreationalists. MM-4.4-13, Homeowners' Association Covenants, Conditions, and Restrictions, requires that that the community be informed through signage about the potential presence of mountain lions in the community. As such, with the implementation of MM-4.4-13, impacts to mountain lion from human influence would be reduced to less than significant.

Foraging Habitat for Special-Status Wildlife Species

The Project, as proposed, will impact substantial suitable foraging habitat for grasshopper sparrow (*Ammodramus savannarum*; SSC; Category 2), Wilson's warbler (Sensitive Local Native Resource; Category 3), lesser nighthawk (Sensitive Local Native Resource; Category 3), white-tailed kite (CFP; Category 1), pallid bat (SSC; Category 2), western mastiff bat (SSC; Category 2), and several special-status species that have potential to forage within the site, including California condor (*Gymnogyps californianus*; FE, SE, CFP; Category 1), golden eagle (*Aquila chrysaetos*; CFP; Category 1), Swainson's hawk (*Buteo swainsoni*; ST; Category 1), California leaf-nosed bat (*Macrotus californicus*; SSC; Category 2), and Townsend's big-eared bat (*Corynorhinus townsendii*; SSC; Category 2). Impacts to 82.67 acres of foraging habitat for these species would be potentially significant absent mitigation due to the substantial reduction of habitat for wildlife species.

MM-4.4-1 and MM-4.4-9 shall demonstrate recordation of a conservation easement of the On-Site and Off-Site Conservation Area that is expected to provide forage opportunities, for the required open space in the Conservation Areas. MM-4.4-2 would improve the conditions of portions of the Conservation Area by providing additional foraging opportunities. MM-4.4-4 would provide monitoring to avoid any inadvertent impacts to potential foraging opportunities. MM-4.4-5 would delineate the Project footprint to help avoid any inadvertent impacts to foraging opportunities. MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants that the species and the species' prey forage on. As such, implementation of MM-4.4-1, MM-4.4-2, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, and MM-4.4-9 would reduce impacts to foraging habitat to special-status wildlife species to less than significant and provide the necessary preservation for the Project to be compatible with SEA Resources.

Indirect Impacts to Special-Status Wildlife

Potential short-term or temporary indirect impacts to special-status wildlife would primarily result from construction activities and include impacts related to or resulting from the activities outside of the Project limits, generation of fugitive dust, increased human activity, and the introduction of pollutants from construction equipment. Additionally, invasive plant species could be introduced by the Project during construction and installing the landscaping that could alter the habitat for special-status wildlife. These indirect impacts could result the loss of special-status wildlife that could be significant. MM-4.4-4, MM-4.4-5, MM-4.4-6, and MM-4.4-7 would reduce

potential indirect impacts to below a level of significance by providing a clear demarcation of Project limits, monitoring, and avoiding and minimizing the use of invasive plants.

Therefore, as described above, with the implementation of the appropriate mitigation measures, impacts on species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, by CDFW or USFWS would be less than significant.

Threshold 4.4b: Would the project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?

Direct Impacts

Table 4.4-13 summarizes the Project's on-site and off-site direct impacts to vegetation communities and land covers, as shown in Figure 4.4-3. Direct impacts would occur due to removal of vegetation, alteration of soils from grading, and the development of the Project. Additional impacts to *Brassica nigra–Centaurea melitensis* would occur due to proposed habitat restoration in the Conservation Area. Most of the impacts would be potentially significant absent mitigation.

With the implementation of MM-4.4-1, the remaining vegetation communities on the Project site outside of the Project footprint, within the Conservation Area, would be preserved in perpetuity. MM-4.4-9 would provide preservation of communities or appropriate similar communities with comparable ecological value in off-site parcels that would have conservation easements established. MM-4.4-2 would be implemented to restore and enhance these preserved vegetation communities. As such, MM-4.4-1, MM-4.4-2, and MM-4.4-9 would provide sufficient preservation to comply with the SEA Ordinance, and direct impacts to sensitive vegetation communities would be reduced to less than significant under CEQA.

MM-4.4-4, MM-4.4-5, and MM-4.4-6 would avoid inadvertent impacts to vegetation communities by providing an on-site biologist to ensure mitigation measures are implemented, confining Project activities to the defined Project footprint and avoiding the introduction of invasive plant species. Temporary impacts could occur from generation of fugitive dust during construction that could cover leaves and limit photosynthesis; however, it is expected the Project would comply with the South Coast Air Quality Management District's Rule 403 (Fugitive Dust). With the implementation of MM-4.4-4, MM-4.4-5, and MM-4.4-6, inadvertent direct impacts to SEA Resources would be avoided and minimized, and inadvertent direct impacts to sensitive vegetation communities would be reduced to less than significant.

Indirect Impacts

Indirect impacts could occur through the introduction of invasive, non-native plant species for the long-term landscaping of the completed Project. MM-4.4-7 would require that steps be taken to avoid and minimize the introduction of invasive, non-native plant species during construction and operation of the Project. Indirect impacts could also occur during the operations of the Project by the residents of the proposed housing. MM-4.4-12 would provide a lighting plan that would adhere to the Rural Outdoor Lighting District requirements. MM-4.4-13 would provide rules that avoid and minimize actions by the residents that could be detrimental. With the implementation of MM-4.4-7, MM-4.4-12, and MM-4.4-13, and compliance with existing, applicable regulations, indirect impacts to vegetation communities would be reduced to less than significant.

Table 4.4-13. Impacts to Vegetation Communities on the Project Site and Off-Site

Alliance	On-Site Impact (acres)	Off-Site Impact (acres)	Total Impacts (acres)	Preservation Ratio[1]	Preserved Land Needed	Preserved Acres On-Site[2]	Off-Site Preserved Acres Needed
SEA Resource Category 1							
Baccharis salicifolia Shrubland[3, 4]	2.43	0	2.43	5:1	12.17	0.52	11.65
Salix gooddingii–Salix laevigata Forest and Woodland[3, 4]	1.24	0	1.24	5:1	6.22	0	6.22
Sub-Totals:	*3.68*	*0*	*3.68*	5:1	*18.39*	*0.52*	*17.87*
SEA Resource Category 3							
Ericameria palmeri Provisional Shrubland[3]	0.67	0	0.67	3:1	2.00	0	2.00
Eriodictyon crassifolium Provisional Shrubland[3]	0.42	0	0.42	3:1	1.25	0.41	0.84
Juglans californica Forest and Woodland[3]	0	0	0	3:1	0	0.09	0
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous[3]	0.07	0	0.07	3:1	0.20	0	0.20
Quercus agrifolia Forest and Woodland	12.02	1.57	13.59	3:1	40.78	10.28	30.50

Table 4.4-13. Impacts to Vegetation Communities on the Project Site and Off-Site

Alliance	On-Site Impact (acres)	Off-Site Impact (acres)	Total Impacts (acres)	Preservation Ratio[1]	Preserved Land Needed	Preserved Acres On-Site[2]	Off-Site Preserved Acres Needed
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland[3]	0.02	0.01	0.03	3:1	0.08	0.01	0.07
Sub-Totals:	*13.20*	*1.57*	*14.77*	3:1	*44.31*	*10.79*	*33.61*
SEA Resource Category 4[a]							
Adenostoma fasciculatum Shrubland	26.85	0.60	27.44	2:1	54.50	64.68	0
Adenostoma fasciculatum Shrubland–Disturbed	0	0	0	2:1	0	9.73	0
Artemisia californica–Salvia leucophylla Shrubland	0.39	0	0.39	2:1	0.78	28.01	0
Artemisia californica–Salvia leucophylla Shrubland–Disturbed	0	0	0	2:1	0	10.66	0
Avena spp.–*Bromus* spp. Herbaceous Semi-natural	0	0	0	2:1	0	2.62	0
Distichlis spicata Herbaceous	0.07	0	0.07	2:1	0.14	0.07	0

Table 4.4-13. Impacts to Vegetation Communities on the Project Site and Off-Site

Alliance	On-Site Impact (acres)	Off-Site Impact (acres)	Total Impacts (acres)	Preservation Ratio[1]	Preserved Land Needed	Preserved Acres On-Site[2]	Off-Site Preserved Acres Needed
Eriogonum davidsonii/Croton setiger Grassland	0.97	0	0.97	2:1	1.94	0	0
Eriogonum fasciculatum Shrubland	2.26	1.26	3.53	2:1	6.74	0.01	0
Sub-Totals:	*30.54*	*1.86*	*32.40*	2:1	*64.80*	*115.98*	*0*
SEA Resource Category 5[a]							
Brassica nigra – Centaurea melitensis Herbaceous Semi-natural Stands	34.15[b]	1.46	35.61	NA	NA	16.24[b]	NA
Non-SEA Resource Category							
Developed	1.61	1.27	1.85	NA	NA	1.11	NA
Total	**83.17**	**6.17**	**89.31**	**NA**	**127.50**	**144.43**	**NA**

Notes: SEA = Significant Ecological Area; NA = not available.
Totals may not add up due to rounding.

1 SEA Ordinance Implementation Guide (LACP 2020).
2 Within the Conservation Area.
3 Considered as a sensitive community or riparian habitat under the California Environmental Quality Act.
4 Considered a Category 1 due to association with a Water Resource.
a Category Resource 4 and 5 vegetation communities can be preserved with out-of-kind communities of the same category or a higher value category.
b An additional 16.24 acres could be impacted due to restoration activities within the Conservation Area.

Threshold 4.4c: Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?

Direct Impacts

Direct impacts to potential jurisdictional waters and associated riparian vegetation would occur due to vegetation removal and grading. The proposed Project will impact potential jurisdictional waters, none of which support wetlands as shown in Figure 4.4-9. The impacts are summarized in Table 4.4-14. The Project site includes additional areas of potential USACE jurisdiction where impacts would not occur, including approximately 0.66 acres of non-wetland waters preserved within the On-Site Conservation Area. Impacts to potential jurisdictional waters would be a significant impact under CEQA and would not be compatible with SEA Resources. MM-4.4-14, Jurisdictional Waters Compensation, would require off-site compensation to offset the loss of on-site jurisdictional waters that are obtained by the implementation of MM-4.4-1 and MM-4.4-9. MM-4.4-1 would demonstrate recordation of a conservation easement for the Conservation Area, with the remaining on-site jurisdictional waters. MM-4.4-3 would provide a program to collect, propagate, and disseminate these species into the Conservation Area. MM-4.4-9 may provide additional preservation of jurisdictional waters in off-site parcels. MM-4.4-4 would provide monitoring to avoid any inadvertent impacts to potential jurisdictional waters and the implementation of mitigation measures. MM-4.4-5 would delineate the Project footprint to help avoid any inadvertent impacts to jurisdictional waters and to confine impacts to the approved limits of construction. MM-4.4-6 and MM-4.4-7 would avoid and minimize the introduction of non-native plant species to jurisdictional waters. As such, implementation of MM-4.4-1, MM-4.4-3, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, and MM-4.4-14 would reduce impacts to jurisdictional waters to less than significant and provide the necessary preservation for the Project to be compatible with SEA Resources.

Table 4.4-14. Proposed On-Site and Off-Site Impacts to Potential Waters of the United States (USACE and RWQCB Jurisdiction)

Drainage Name	Area (acres)		
	Non-wetland Waters	Wetlands	Total
Project Site			
Drainage A	0.24	0	0.24
Tributary A-1	0	0	0
Drainage B	0.29	0	0.29
Tributary B-1	0.06	0	0.06
Tributary B-3	0.01	0	0.01
Drainage C	0.02	0	0.02
Total[1]	**0.62**	**0**	**0.62**

Notes: USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board.
[1] Totals may not add up due to rounding.

The proposed Project will impact potential CDFW jurisdiction streams and SEA Water Resources, as shown in Figure 4.4-10, portions of which consist of the *Baccharis salicifolia* shrubland alliance and *Salix gooddingii–Salix laevigata* forest and woodland alliance that are already discussed under vegetation communities. The remaining riparian habitat consists of individual coast live oaks associated with the upper banks of the stream courses present within the Project site. Impacts to riparian habitat would be significant under CEQA prior to mitigation, as a sensitive

vegetation community and are given SEA consideration as water SEA Water Resources. Table 4.4-15 summarizes impacts to CDFW jurisdiction and SEA Water Resources.

Table 4.4-15. Proposed Impacts to CDFW Jurisdictional Streams and Associated Riparian Habitat (CDFW Jurisdiction and SEA Water Resources) on the Project Site

Drainage Name	Area (acres)		
	Riparian Habitat	Streambed and Bank	Total[1]
Project Site			
Drainage A	0.55	0.36	0.92
Tributary A-1	0	0	0
Drainage B	2.90	0.11	3.00
Tributary B-1	0.91	<0.01	0.91
Tributary B-3	0.04	<0.01	0.04
Drainage C	0.05	0.02	0.07
Total[1]	**4.45**	**0.49**	**4.94**

Notes: CDFW = California Department of Fish and Wildlife; SEA = Significant Ecological Area.
[1] Totals may not add up due to rounding.

Indirect Impacts

Potential temporary indirect impacts to the South Fork of the Santa Clara River and the on-site drainages could result from construction activities and would include impacts from the generation of fugitive dust and the potential introduction of chemical pollutants (including herbicides). Excessive dust can decrease the vigor and productivity of vegetation through effects on light, penetration, photosynthesis, respiration, and transpiration; increased penetration of phytotoxic gaseous pollutants; and increased incidence of pests and diseases. Erosion and chemical pollution (releases of fuel, oil, lubricants, paints, release agents, and other construction materials) may affect wetlands/jurisdictional waters. The release of chemical pollutants can reduce the water quality downstream and degrade adjacent habitats. However, during construction, erosion-control measures would be implemented as part of the stormwater pollution prevention plan (SWPPP) for the Project. Because the entirety of the Project development footprint would be graded at one time, but construction would occur over time in phases, the erosion measures would need to be maintained until all graded areas are constructed/landscaped. Prior to the start of construction activities, the contractor is required to file a Permit Registration Document with the State Water Resources Control Board in order to obtain coverage under the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2009-009-DWQ, NPDES No. CAS000002) or the latest approved general permit. This permit is required for earthwork that results in the disturbance of 1 acre or more of total land area. The required SWPPP will mandate the implementation of best management practices to reduce or eliminate construction-related pollutants in the runoff, including sediment, for all exposed soils. Therefore, temporary indirect impacts would be less than significant due to compliance with regulations.

Threshold 4.4d: 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?

The Project, as proposed, will potentially impact local wildlife movement by impeding localized movement from undeveloped land in the southern portion of the Project site, privately owned undeveloped lands to the west, and dedicated open space associated with Santa Clarita Woodlands Park and the Rivendale Open Space, to the undeveloped box canyon located within the northwestern portion of the Project site, which extends an additional approximately 0.5 miles to the northwest before terminating at existing single-family development associated with the Stevenson Ranch development.

Dedication of the On-Site Conservation Area (MM-4.4-1, as managed in perpetuity through a conservation easement) will protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space, contributing to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of I-5 that supports east/west movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and San Gabriel Mountains to the east, as shown in Figure 4.4-1, therefore preserving, and thereby avoiding further encroachment on, movement opportunities between regional conserved habitat blocks and reducing potential Project impacts to SEA Resources. As such, with the implementation of MM-4.4-1, impacts to the SEA Resources and wildlife movement due to habitat fragmentation would be reduced to less than significant.

The colonial roost of canyon bats that was detected during focused bat roost surveys within the On-Site Conservation Area is approximately 400 feet west of the Project footprint. This roost will not be directly impacted by the Project; however, noise impacts from Project construction and night lighting from the completed Project could cause indirect impacts. MM-4.4-15, Roosting Bat Survey, would require a roosting bat survey to determine if the roost is still present. MM-4.4-4 would require the roost to be monitored during Project construction activities, and MM-4.4-12 would require a lighting plan that prohibits lighting being focused into the open space areas. No additional resources that represent a wildlife nursery site under CEQA were detected within the Project site; therefore, significant impacts to wildlife nursery sites would not result from proposed Project development.

Threshold 4.4e: Would the project convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or other unique native woodlands (juniper, Joshua, southern California black walnut, etc.)?

Direct impacts would occur to 12.95 acres of oak woodlands, as defined by the Los Angeles County Oak Woodlands Conservation Management Plan (LACDRP 2011), on the Project site and 1.57 acres in the off-site brush thinning zone, for a total of 14.52 acres, as shown on Figure 4.4-11. This requires 3:1 mitigation resulting in the need to preserve 43.56 acres. With the implementation of MM-4.4-1, the remaining oak woodland within the Conservation Area would be preserved in perpetuity. MM-4.4-9 would require the preservation of off-site oak woodland. MM-4.4-2 would be implemented to restore and enhance these preserved vegetation communities. MM-4.4-16 would require replacement trees be planted in the Conservation Area. As such, MM-4.4-1, MM-4.4-2, MM-4.4-9, and MM-4.4-16 would meet SEA guidelines recommended preservation making the Project compatible with SEA Resources and would reduce proposed impacts to below a level of significance under CEQA. MM-4.4-4, MM-4.4-5, MM-4.4-6, and MM-4.4-7 would avoid and minimize inadvertent impacts to SEA Resources. As such, implementation of MM-4.4-1, MM-4.4-2, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, MM-4.4-9, and MM-4.4-16 would reduce impacts to

oak woodland to less than significant and provide the necessary preservation for the Project to be compatible with SEA Resources.

Threshold 4.4f: Would the project conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A. County Code, Title 22, Ch. 22.174), the Significant Ecological Areas (SEAs) (L.A. County Code, Title 22, Ch. 102), Specific Plans (L.A. County Code, Title 22, Ch. 22.46), Community Standards Districts (L.A. County Code, Title 22, Ch. 22.300 et seq.), and/or Coastal Resource Areas (L.A. County General Plan, Figure 9.3)?

Impacts to SEA Protected Trees

Non-Heritage Tree Impacts

Table 4.4-16 provides a summary of proposed impacts to non-heritage SEA protected trees located within the Project site. The 312 non-heritage tree impacts are comprised of 251 removals (trees that have a trunk on or within 2 feet of the grading limits) and 11 encroachments (trees that are not removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds are anticipated), and 50 trees that are located within a debris basin.[2] Trees in which the Project footprint encroaches into the tree protection zone (TPZ) are considered "directly impacted" by the proposed Project, as set forth by the Los Angeles County SEA Ordinance. Direct impacts include tree removal, root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds. Impacts to protected non-heritage trees would be considered as potentially significant prior to mitigation due to substantially degrading the quality of the environment. MM-4.4-16, SEA Protected Tree Replacement/Compensation, addresses SEA guidelines recommended preservation, making the Project compatible with SEA Resources, and reduces proposed impacts to below a level of significance under CEQA.

Table 4.4-16. Summary of Impacts to Significant Ecological Area Protected Trees (Non-Heritage)

Scientific Name	Common Name	Removal	Encroachment	Debris Basins
Juglans californica	Southern California black walnut	2	0	1
Populus fremontii	Fremont cottonwood	9	0	6
Quercus agrifolia	coast live oak	167	8	24
Quercus berberidifolia	scrub oak	1	0	0
Quercus lobata	valley oak	10	0	0
Salix laevigata	red willow	10	0	14
Salix lasiolepis	arroyo willow	7	0	0
Sambucus nigra ssp. *caerulea*	blue elderberry	45	3	5
	Total	**251**	**11**	**50**

[2] It should be noted that the 50 trees located within the debris basin will not be removed but are considered impacted due to the potential of future damage as a result of the creation of the debris basins and associated flooding.

Heritage Tree Impacts

Table 4.4-17 provides a summary of proposed impacts to SEA heritage trees located within the Project site. In total, 22 heritage trees will be directly impacted by the project. The 22 heritage tree impacts consist of 17 heritage tree removals and 5 heritage tree encroachments. Heritage trees in which the Project footprint encroaches into the TPZ are considered "directly impacted" by the proposed Project, as set forth by the Los Angeles County SEA Ordinance. Direct impacts include tree removal, root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds. Impacts to protected heritage trees would be considered as potentially significant prior to mitigation under CEQA. MM-4.4-16 addresses SEA guidelines recommended preservation, making the Project compatible with SEA Resources, and reduces proposed impacts to below a level of significance under CEQA by requiring the replacement of removed trees at 10:1.

Table 4.4-17. Summary of Impacts to Significant Ecological Area Heritage Trees

Scientific Name	Common Name	Removal	Encroachment	Debris Basin
Heteromeles arbutifolia	toyon	0	0	0
Juglans californica	Southern California black walnut	0	0	0
Populus fremontii	Fremont cottonwood	0	0	0
Quercus agrifolia	coast live oak	12	3	3
Quercus berberidifolia	scrub oak	0	0	0
Quercus lobata	valley oak	2	2	0
Salix laevigata	red willow	0	0	0
Salix lasiolepis	arroyo willow	0	0	0
Sambucus nigra ssp. *caerulea*	blue elderberry	0	0	0
	Total	**14**	**5**	**3**

Impacts to Significant Ecological Areas

Pursuant to County Code Section 22.102.080.D, the applicant shall substantiate the following facts:

A Be highly compatible with the SEA Resources, including the preservation of natural open space areas and providing for the long-term maintenance of ecosystem functions.

The Santa Susana Mountains/Simi Hills SEA (SSM/SH SEA) covers approximately 30,236 acres and most of the land is natural open space with very sparse disturbances for ranches, oil wells, and unimproved access roads. On a regional basis, the SSM/SH SEA contains biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution. This includes coastal sage scrub, alluvial scrub, valley oak woodland, valley oak savannah, mainland cherry woodland, native grassland, southern willow scrub, and cottonwood-willow riparian forest (PCR 2000).

The Project's On-Site Conservation Area preserves 144.43 acres of natural open space, representing approximately 62% of the Project site. In addition, the Project's off-site land/habitat preservation program within the Santa Susana

Mountains SEA (the "Off-Site Conservation Area") results in the permanent preservation of an additional 465.39 acres of category 1-4 vegetation communities protected by the SEA ordinance, including 27.47 acres of oak woodland riparian habitat and 54.91 acres of non-riparian oak woodland habitat. As a result, the Project preserves SEA resources at a significantly higher impact-to-preservation ratio than is required by the SEA ordinance and implementing guidelines. Specifically, the Project preserves category 1 resources at a 7.5:1 ratio, category 3 resources at a 4.45:1 ratio, and category 4 resources at a 15.4:1 ratio whereas the SEA Ordinance and implementing guidelines require respective preservation ratios of 5:1, 3:1, and 2:1 for these resource categories. Across all SEA vegetation resource categories (excludes developed areas), the Project preserves 560.20 acres in excess of the requirements of the SEA ordinance and implementing guidelines. In total, considering both the On-site Conservation Area and Off-Site Conservation Area, the Project results in the preservation of 611.13 acres of natural open space (excludes developed areas) containing sensitive SEA resources. Further, 16 preservation, avoidance, and minimization measures have been provided as a part of the Project (MM-4.4-1 through MM-4.4-16), including: conserving in perpetuity 611.13 acres of on-site and off-site natural open space; requiring pre-construction surveys, planning, and biological monitoring during construction; measures protecting against invasive species establishment and spread; preparation of conservation management plans; the provision of an endowment for the permanent maintenance of all conservation areas; nesting bird avoidance; conducting a special status plant seed and bulb survey; and strategically locating development as close as possible to existing urban uses/infrastructure.

The Project site is located at the easternmost perimeter of the SSM/SH SEA, abutting existing residential and commercial development to the north and The Old Road and I-5 to the east. As noted, the vegetation communities on the Project site have been impacted by historic human alterations of the landscape; historical aerials show structures and large areas lacking noticeable vegetation between 1947 and 1985 (NETR 2023). Most portions of the Project site north of Lyons Ranch Road overlap these historical disturbed areas, which retain the signs of past disturbances in the form of a high amount of non-native vegetation (primarily mustards, tocalote, and non-native grasses) as monotypic stands or in the gaps coastal scrub and chaparral communities, and in the understory of the oak woodland.

The Project's dedicated Conservation Area (MM-4.4-1) comprises 144.43 acres. In addition, the Project's off-site land/habitat preservation program (MM-4.4-9) seeks to provide compensation, at an equal or higher value, for the Project's impacts to southern willow scrub. Small portions of the proposed Conservation Area were impacted by these historic disturbances, and non-native vegetation communities became established. Habitat enhancement and creation is proposed within these disturbed areas. As such, with the implementation of MM-4.4-1, MM-4.4-2, and MM-4.4-9, impacts to natural open space areas and long-term maintenance of ecosystem functions would be reduced to less than significant.

B Avoid or minimize impacts to the SEA Resources and wildlife movement through one or more of the following:

1 Avoiding habitat fragmentation

The open space of the SSM/SH SEA allows for connectivity between the Santa Monica Mountains and the San Gabriel Mountains, an important corridor for gene flow and species movement; and relatively undisturbed native, natural communities within Los Angeles County (PCR 2000). The Project site is located at the easternmost perimeter of the SSM/SH SEA, abutting existing residential and commercial development to the north and The Old Road and I-5 to the east. The Project site design clusters residential development adjacent to existing infrastructure and other existing residential and commercial uses to the north. As a result of its clustered design, the Project is

able to permanently preserve 144.43 acres of contiguous natural open space acreage within the On-Site Conservation Area (MM-4.4-1), approximately 62% of the Project site, which minimizes impacts to SEA resources and avoids disruptions to wildlife movement. The Project's proposed off-site conservation area (MM-4.4-9) further preserves an additional 466.70 acres of natural open space adjacent to existing publicly owned lands within the Santa Susana Mountains SEA, ensuring accessible wildlife movement in perpetuity. Additionally, habitat linkages along Lyons Canyon between Rivendale Park and Open Space, Towsley Canyon, and conserved areas to the northwest and west would remain intact and accessible to wildlife due to the preservation of canyons and ridgelines within the On-Site Conservation Area. Moreover, the Calgrove Boulevard underpass will remain unchanged by the Project, which will continue to facilitate wildlife movement beneath I-5 and into Wildwood Canyon Open Space and Gates King Open Space. As such, with the implementation of MM-4.4-1, impacts to the SEA Resources and wildlife movement due to habitat fragmentation would be reduced to less than significant.

2 Minimizing edge effects

Edge effects are minimized due to the Project being sited adjacent to The Old Road/I-5 on the east and development to the north. Some targeted off-site brush thinning would be necessary in the developed areas to the north and in the Rivendale Open Space, which would cause an edge effect in those areas. Additionally, noise generated by the construction, lighting and noise from the operation of the Project, and the potential spread of invasive species during construction and operation would have additional edge effects in the surrounding open space. These impacts could be potentially significant prior to mitigation. MM-4.4-4, MM-4.4-5, and MM-4.4-6 would avoid and minimize edge effects during construction by limiting inadvertent impacts and the spread of invasive species. MM-4.4-7, MM-4.4-12, and MM-4.4-13 would avoid and minimize edge effects during operation of the Project by limiting the spread of invasive species, controlling light pollution, and limiting indirect impacts from the residence of the Project. Additionally, the On-Site Conservation Area (MM-4.4-1) would minimize impacts to the west and southwest by establishing a CMP that would maintain the habitat integrity in perpetuity. As such, with the implementation of MM-4.4-1, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, MM-4.4-12, and MM-4.4-13, impacts to the SEA Resources and wildlife movement due to edge effects would be reduced to less than significant.

3 Siting development in the least sensitive location

The Project site is located at the eastern perimeter of the Santa Susana Mountains/Simi Hills, abutting residential development to the north and The Old Road and I-5 to the east. Portions of the Project site have been impacted by historic human alterations of the landscape; historical aerials show structures and large areas lacking noticeable vegetation between 1947 and 1985 (NETR 2023). Native shrub-dominated vegetation communities did become reestablished over the past 38 years in much of the area, with non-native annuals and grasses dominating the rest and becoming a dominating understory component in the rest. Approximately 35% of the Project has been sited within SEA Resource Category 5 vegetation communities, and approximately 44% is within SEA Resource Category 4 vegetation communities. Approximately 18% is within SEA Resource Category 3 vegetation communities and 3% in SEA Resource Category 1 vegetation communities. As such, approximately 62% of the Project site is within sensitive SEA Resource Categories.

C Buffer important habitat areas from development by retaining sufficient natural vegetation cover and/or natural open spaces and integrating sensitive design features.

The on-site Conservation Area is in the southern and western portion of the Project site and is contiguous with large tracts of dedicated natural open space associated with the Santa Clarita Woodlands Park and Rivendale Open Space. Additionally, the proposed On-Site Conservation Area consists of Lyons Canyon and associated valleys, which

also provide moderate to high levels of suitable live-in, breeding, foraging, cover, and dispersal habitat. The proposed On-site Conservation Area also provides line-of-sight connections to valley and canyon complexes located within the adjacent Santa Clarita Woodlands Park, Rivendale Open Space, and beyond to the Santa Susana Mountains complex, Simi Hills, and the additional conserved lands within them.

Biological monitoring during vegetation removal and grading and the demarcation of the limits of construction would avoid and minimize inadvertent impacts to the On-Site Conservation Area and adjacent open space. Requiring an invasive species prevention plan and landscaping plan to be approved by the County would avoid and minimize indirect impacts to the On-Site Conservation Area and adjacent open space areas from the introduction of non-native plants. Requiring Covenants, Conditions, and Restrictions for the HOA that prohibit detrimental activities to the On-Site Conservation Area would avoid and minimize edge effects during the operation of the completed Project.

Post-construction, the Project would include features to create a more naturalized transition between the development on the Project site and the off-site Rivendale Park and Open Space to the south. The street that runs adjacent to the northern boundary of Rivendale Park and Open Space would be lined on both the north and the south side of the street with a mix of small and medium street trees spaced 25 feet on center. In addition to the trees, the south side of the "B Street" right-of-way would include either a retaining wall or a 6-foot-tall treated chain-link fence and associated screening trees and shrubs (e.g., coast live oak, laurel sumac, sweet bay [*Laurus nobilis*], Indian laurel [*Ficus microcarpa*], coffeeberry [*Frangula californica*]) to further buffer the Project site from the off-site open space areas. The shrub screening in the street right-of-way would be followed by varying distances of slope plantings, native habitat plantings, and bioretention rim planting that would continue to the southern edge of the Project site. The intent of these structural and vegetative features is to add a physical barrier that would discourage terrestrial wildlife movement into the developed portion of the Project site and to create a visibility barrier between the properties, while also providing additional screening for Project-related street lighting, vehicle lighting, and vehicle noise.

D Maintain the ecological and hydrological functions of water bodies, watercourses, and their tributaries.

The Project site is located at the terminus of two main drainages that drain Lyons Canyon in the south and a small, unnamed canyon in the north, with several smaller tributaries draining minor canyons. The two watercourses merge in the northwestern portion of the Project's development footprint. Combined waters flow into an existing culvert located in the northeast portion of the Project site that directs water under The Old Road and I-5 and into the concrete channel of the South Fork of the Santa Clara River. The Project proposes to install detention basins within the western perimeter of the Project's development footprint to retain stormwater and direct Project flows into an underground stormwater system that would direct water to the same destination. Accordingly, the existing drainage patterns and hydrologic conditions remain the same and no changes to the functions of watercourses and their tributaries are caused by the Project. Ecologically, the Project would impact 2.56 acres of riparian-associated vegetation communities; however, the Project proposes to preserve a minimum of 27.47 acres off-site of similar or higher quality habitat within the Santa Susana Mountains SEA, providing a mitigation ratio of 7.6:1, which substantially exceeds the mitigation ratios for same in the SEA ordinance and implantation implementing guidelines (which require a 5:1 mitigation ratio). The preservation of 27.47 acres of off-site riparian vegetation would provide for a greater habitat quality for plants and wildlife and will contribute to the preservation of the overall ecological value of the region. As such, the proposed mitigation lowers the Project's effect on ecological and hydrological functions of water bodies, watercourses, and their tributaries to less than significant.

E Ensure that roads, access roads, driveways, and utilities do not conflict with Priority Biological Resources, habitat areas, or migratory paths.

Project development is strategically clustered adjacent to The Old Road/I-5 to the east and adjacent to existing residential and commercial development to the north. All proposed roads, access roads, driveways, and utilities are located within the Project's development footprint area, allowing approximately 62% of the Project site to be preserved as natural open space within a conservation easement. While the Project site does contain Priority Biological Resources (SEA Resource Categories 1 through 3), preservation, avoidance, and minimization measures, including on-site and off-site natural open space conservation, construction monitoring, surveys, preparation of habitat mitigation plans, and the recordation of conservation easements alongside financial support for ongoing maintenance and monitoring of open space resources serve to limit conflicts with Priority Biological Resources. The Project's on-site and off-site preservation of 593.02 acres of Category 1-4 vegetation communities adjacent to existing public lands would allow for additional Priority Biological Resources to be preserved and migratory paths to be protected in perpetuity. As such, the Project complies with this finding.

F Promote the resiliency of the SEA to the greatest extent possible. For purposes of this finding, SEA resiliency cannot be preserved when the proposed development may cause any of the following:

1 Significant unmitigated loss of contiguity or connectivity of the SEA

The Project does not cause habitat fragmentation or loss of contiguity or connectivity within the SEA because the Project design clusters proposed development adjacent to existing residential and commercial uses to the north and The Old Road/I-5 on the east, allowing approximately 62% of the Project site to be dedicated as a 144.43-acre On-Site Conservation Area; the Project's "clustered development" regime is in keeping with applicable policies for same contained in the controlling Santa Clarita Valley Area Plan (aka, the "One Valley, One Vision" plan). The On-Site Conservation Area will protect in perpetuity a valuable (and presently unprotected) connection between large tracts of adjacent conserved natural open space associated with the City of Santa Clarita's Woodlands Park and Rivendale Park and Open Space, contributing to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of Interstate 5 that supports east/west wildlife movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and the San Gabriel Mountains to the west; this preserves and avoids substantial loss of connectivity within the SEA. Furthermore, the Project preserves an additional 465.38 acres of category 1-4 resources within the Off-Site Conservation Area, facilitating wildlife movement and connectivity within the Santa Susana Mountains SEA in perpetuity. As such, the Project complies with this finding.

2 Significant unmitigated impact to a Priority Biological Resource

The Project site has impacts to Priority Biological Resources (SEA Resource Categories 1 through 3) in the form special-status plants and wildlife, water resources, vegetation communities, and oak woodland. Preservation measures (MM-4.4-1, MM-4.4-2, and MM-4.4-9) and avoidance and minimization measures (MM-4.4-4 through MM-4.4-8 and MM-4.4-10) have been provided to preserve and limit impacts to the remaining Priority Biological Resources in the Conservation Area. Off-site preservation would allow for additional Priority Biological Resources to be preserved. These preservation and avoidance measures would conserve in perpetuity 611.13 acres of on-site and off-site natural open space. As such, impacts to Priority Biological Resources would be reduced to less than significant.

3 Removal of habitat that is the only known location of a new or rediscovered species

No new or rediscovered species are present on the Project site.

Threshold 4.4g: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved state, regional, or local habitat conservation plan?

As discussed in Section 4.4.1, Existing Conditions, the study area is not within any HCP, NCCP, or other approved local, regional, or state HCP (CDFW 2019). Therefore, there are no impacts to HCPs, NCCPs, or other approved local, regional, or state HCPs.

4.4.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., Cumulative Projects) used for this analysis are presented in Section 2.6, Cumulative Projects, and on Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR. As listed in Table 2-2, List of Cumulative Projects, and shown on Figure 2-8, the Cumulative Projects in the vicinity of the Project site consist of 50 projects, including 14 in unincorporated Los Angeles County (LA1 through 14) and 26 in the City of Santa Clarita (SC1 through SC26).

Threshold 4.4a: 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 (CDFW) or U.S. Fish and Wildlife Service (USFWS)?

As detailed in Section 4.4.5, Impact Analysis, the proposed Project would result in impacts to several special-status plant and wildlife species (i.e., species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS). As discussed in the Project-level analysis above, within Section 4.4.5, Impact Analysis, implementation of MM-4.4-1 through MM-4.4-13 would reduce the Project's impacts to special-status plant and wildlife species to less than significant.

Most of the Cumulative Projects within the City involve the development of previously disturbed or developed lands that contain limited native vegetation, many of which are isolated from naturalized areas by surrounding development. As such, these Cumulative Projects would not be expected to support habitat that would be suitable for most special-status plant and wildlife species; therefore, these Cumulative Projects' incremental effects on these resources are not anticipated to be cumulatively considerable. The Cumulative Projects within the County are primarily within undeveloped areas that could support similar habitat and have similar special-status species constraints as the Project. Cumulative Projects in the County of Los Angeles are all located west of I-5 and, apart from LA13, are situated northwest of the Project site, with Cumulative Projects LA1, LA2, and LA3 located within the same SEA (Santa Susana Mountains and Simi Hills SEA) as the proposed Project. Each of the County Cumulative Projects are proximate to existing residential development but are contiguous with large tracts of open space and have the potential to result in the incremental loss of habitat available to special-status plant and wildlife species. Therefore, the Project, in combination with these Cumulative Projects, could add to the cumulative loss of special-status species' habitat. Unless mitigated, these impacts could result in significant cumulative impact.

The Project's impacts to special-status plant and wildlife species, including the loss of suitable habitat, would be reduced to less than significant with implementation of MM-4.4-1 through MM-4.4-13. The Project's contribution to cumulative impacts to special-status species habitat is primarily addressed through the Project-specific mitigation measures that would preserve on- and off-site habitat, consisting of mostly undisturbed native vegetation that are contiguous with large tracts of conserved open space and would be expected to support numerous plant and wildlife species, including the special-status species found on the Project site. With implementation of the mitigation measures discussed above, the Project's incremental effect on special-status species would be less than significant when viewed in connection with the effects of the Cumulative Projects. Further, all Cumulative Projects would be subject to existing and/or future permit restrictions that satisfy regulatory/resource agency requirements. Therefore, the Project's incremental effect on special-status species would not be cumulatively considerable and cumulative impacts on special-status species would be less than significant with mitigation.

Threshold 4.4b: Would the project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?

As detailed in the Project-level analysis above, within Section 4.4.5, Impact Analysis, the Project would result in impacts to sensitive vegetation communities. Implementation of MM-4.4-1, MM-4.4-2, MM-4.4-4 though MM-4.4-7, and MM-4.4-13 would reduce the Project's impacts to sensitive natural communities to less than significant.

Most of the Cumulative Projects within the City involve the development of previously disturbed or developed lands that contain limited native vegetation, many of which are isolated from naturalized areas by surrounding development. As such, these Cumulative Projects would not be expected to support sensitive natural communities; therefore, these Cumulative Projects' incremental effects on these resources are not anticipated to be cumulatively considerable. The Cumulative Projects within the County are primarily within undeveloped areas that could support similar sensitive natural communities as those found on the proposed Project site.

Cumulative Projects in the County of Los Angeles are all located west of I-5 and, apart from Cumulative Project LA13, are situated northwest of the Project site, with Cumulative Projects LA1, LA2, and LA3 located within the same SEA (Santa Susana Mountains and Simi Hills SEA) as the Project. Each of the Cumulative Projects within the unincorporated County lands are proximate to existing residential development but are contiguous with large tracts of open space and have the potential to result in the incremental loss of sensitive natural communities. Therefore, the Project, in combination with these Cumulative Projects, could add to the cumulative loss of sensitive natural communities. Unless mitigated, these impacts could result in significant cumulative impact.

As stated above, the Project's impacts to sensitive natural communities would be reduced to less than significant with implementation of MM-4.4-1, MM-4.4-2, MM-4.4-4 though MM-4.4-7, and MM-4.4-13. The Project's contribution to cumulative impacts to sensitive natural communities is primarily addressed through mitigation measures that would preserve on- and off-site lands consisting of mostly undisturbed native vegetation that are contiguous with large tracts of conserved open space. With implementation of MM-4.4-1, 144.43 acres of the 233.49-acre Project site would be preserved and managed in perpetuity through the Conservation Area. Implementation of MM-4.4-9 would provide for preservation of native vegetation in off-site parcels with comparable ecological value to those natural communities impacted on the Project site. With implementation of the mitigation measures discussed above, the Project's incremental effect on sensitive natural communities would be reduced to less than significant when viewed in connection with the effects of the Cumulative Projects. Further, all Cumulative Projects would be subject to existing and/or future restrictions that satisfy regulatory/resource agency requirements. Therefore, the Project's incremental effect on sensitive natural communities would not be

cumulatively considerable and cumulative impacts on sensitive natural communities would be less than significant with mitigation.

Threshold 4.4c: Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?

As detailed in the Project-level analysis within Section 4.4.5, Impact Analysis above, no state or federally protected wetlands are found on the Project site; however, the Project would result in impacts to potentially jurisdictional waters and associated riparian vegetation prior to implementation of mitigation measures. Implementation of MM-4.4-1, MM-4.4-4 though MM-4.4-7, MM-4.4-9, and MM-4.4-14 would reduce the Project's impacts to potentially jurisdictional waters and associated riparian vegetation to less than significant.

As discussed previously, the Cumulative Projects include 23 projects in the City of Santa Clarita and 13 projects in unincorporated Los Angeles County, three of which (LA1, LA2, and LA3) are located within the Santa Susana Mountains and Simi Hills SEA (see Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR). If any of the Cumulative Projects were to impact jurisdictional waters, these impacts would be subject to regulatory requirements enforced by the USACE and RWQCB for jurisdictional waters protected by the CWA and by CDFW for streambeds protected under California Fish and Game Code, Section 1602. Enforcement of these regulations effectively serves as a programmatic vehicle to keep cumulative impacts to jurisdictional aquatic resources below a level of significance, with these agencies typically requiring no net loss of aquatic resources.

As stated above, the Project's impacts to potentially jurisdictional aquatic resources would be reduced to less than significant with implementation of MM-4.4-1, MM-4.4-4 though MM-4.4-7, MM-4.4-9, and MM-4.4-14. The Project's contribution to cumulative impacts to jurisdictional aquatic resources is primarily addressed through compensatory mitigation at a ratio of 1:1, or as required by the regulatory agencies, through the preservation, enhancement, and/or restoration of jurisdictional waters and associated riparian vegetation. As a result, the Project's impacts to jurisdictional waters would not substantially diminish or threaten to eliminate any of these resources on a regional basis. As discussed above, all Cumulative Projects would be subject to existing and/or future permit restrictions that satisfy regulatory/resource agency requirements. Therefore, the Project's incremental effect on jurisdictional aquatic resources, including state and federally protected wetlands, would not be cumulatively considerable and cumulative impacts on these resources would be less than significant with mitigation.

Threshold 4.4d: 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?

As detailed in the Project-level analysis above, within Section 4.4.5, Impact Analysis, the proposed Project has the potential to impact wildlife movement and native wildlife nursery sites. Implementation of MM-4.4-1, MM-4.4-4, and MM-4.4-12 would reduce the Project's impacts to these resources to less than significant.

Most of the Cumulative Projects within the City involve the development of previously disturbed or developed lands that contain limited native vegetation, many of which are isolated from naturalized areas by surrounding development. As such, development of these Cumulative Projects would not be expected to substantially reduce wildlife movement opportunities and are unlikely to serve as native wildlife nursery sites; as a result, these Cumulative Projects' incremental effects on these resources are not anticipated to be cumulatively considerable.

The Cumulative Projects within the County of Los Angeles are primarily situated within undeveloped areas at the urban-open space interface west of I-5 and, apart from LA13, northwest of the Project site, with Cumulative Projects LA1, LA2, and LA3 located within the same SEA as the proposed Project. Wildlife movement is regionally and locally constrained by existing development, including the City of Santa Clarita and neighboring communities, as well as major highways I-5 and State Route-126. Because of their proximity to major movement barriers, the Cumulative Projects are not expected to add substantially to these movement barriers or cause substantial habitat fragmentation. Moreover, the habitats to be cumulatively impacted by the Cumulative Projects would represent a small percentage of the protected open space lands within the region, which would continue to serve as regional wildlife corridors and habitat linkages. While their proximity to existing development likely limits the extent to which the Cumulative Projects would constrain wildlife movement, because most of the Cumulative Projects are contiguous with large tracts of undeveloped and intact open space, the Cumulative Projects are likely to provide some wildlife movement opportunities and could serve as local habitat linkages. The native habitats present on the Cumulative Project sites could also be used as native wildlife nursery sites. Therefore, the Project, in combination with these Cumulative Projects, has the potential to add to the cumulative loss of wildlife corridors and habitat linkages.

The Project site is located at the easternmost perimeter of the Santa Susana Mountains/Simi Hills SEA, abutting existing residential and commercial development to the north and The Old Road and I-5 to the east. The southwestern portion of the Project site, however, includes a large canyon (Lyons Canyon), with topography and habitat that has the potential to serve as a habitat linkage between existing natural open space to the northwest, west and south of the Project site. The Project design clusters residential development adjacent to existing infrastructure and other existing residential and commercial uses to the north and east, where wildlife movement opportunities are limited and development is not expected to add substantially to existing movement barriers or cause further habitat fragmentation. Moreover, the Calgrove Boulevard underpass, located southeast of the Project site, will remain unchanged by the Project and will continue to facilitate wildlife movement beneath I-5 and into Wildwood Canyon Open Space and Gates King Open Space. Nevertheless, Project development does have the potential to impact wildlife movement along an unnamed canyon in the northwest portion of the Project site, and along Lyons Canyon, which would be narrowed as a result of Project development.

The Project's impact on wildlife movement and wildlife corridors would be reduced to less than significant with implementation of MM-4.4-1, which would result in the dedication of an On-Site Conservation Area over 144.43 acres within the southwestern portion of the 233.49-acre Project site. This mitigation measure will protect in perpetuity a valuable (put presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space, and contribute to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of Interstate 5 that supports east/west movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and San Gabriel Mountains to the east. With implementation of MM-4.4-1, the Project's incremental effect on wildlife movement would be reduced to less than significant when viewed in connection with the effects of the Cumulative Projects. Further, all Cumulative Projects would be subject to existing and/or future permit restrictions that satisfy regulatory/resource agency requirements. Therefore, the Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors and would not contribute to cumulatively considerable significant impacts to these resources.

A colonial roost of canyon bats that was detected during focused bat roost surveys within the On-Site Conservation Area is approximately 400 feet west of the Project Footprint. This roost will not be directly impacted by the Project

and implementation of MM-4.4-4 and MM-4.4-12 would reduce the Project's impacts on native wildlife nursery sites to less than significant by requiring monitoring during Project construction activities and requiring a lighting plan that prohibits lighting being focused into open space areas. Therefore, the Project would not impede the use of native wildlife nursery sites and would not contribute to cumulatively considerable significant impacts to these resources.

Threshold 4.4e: Would the project convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or other unique native woodlands (juniper, Joshua, southern California black walnut, etc.)?

As detailed in the Project-level analysis above, within Section 4.4.5, Impact Analysis, the proposed Project would result in impacts to oak woodlands. Implementation of MM-4.4-1, MM-4.4-2, MM-4.4-4 though MM-4.4-7, MM-4.4-9, and MM-4.4-16 would reduce impacts to oak woodlands to less than significant. As discussed previously, the Cumulative Projects include 23 projects in the City of Santa Clarita and 13 projects in unincorporated Los Angeles County, three of which (LA1, LA2, and LA3) are located within the Santa Susana Mountains and Simi Hills SEA (see Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR). If any of the Cumulative Projects were to impact County-regulated oak woodlands, these impacts would be subject to regulatory requirements enforced the Los Angeles County under the Los Angeles County Oak Woodlands Conservation Management Plan. Enforcement of County regulations effectively serves as a programmatic vehicle to keep cumulative impacts to oak/native woodlands below a level of significance, with the County typically requiring oak woodlands to be preserved and restored so that they are conserved in perpetuity with no net loss of existing oak woodlands. As stated above, the Project's impacts to 17.14 acres of oak woodlands would be reduced to less than significant with implementation of MM-4.4-1, MM-4.4-2, MM-4.4-4 though MM-4.4-7, MM-4.4-9, and MM-4.4-16. The Project's contribution to cumulative impacts to oak woodlands is primarily addressed through compensatory mitigation at a ratio of 3:1, which will be achieved through the preservation in perpetuity of on-site and off-site oak woodlands, as well as enhancement/restoration of existing oak woodlands and planting oak trees within the On-Site Conserved Area. As a result, the Project would meet the Los Angeles County Oak Woodlands Conservation Management Plan's goal for oak woodlands to be preserved and restored so that they are conserved in perpetuity with no net loss of existing oak woodlands. Further, the Cumulative Projects would be subject to existing and/or future permit restrictions that satisfy regulatory requirements. Therefore, the Project's incremental effect on oak woodlands would not be cumulatively considerable and cumulative impacts on this resource would be less than significant with mitigation.

Threshold 4.4f: Would the project conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A. County Code, Title 22, Ch. 22.174), the Significant Ecological Areas (SEAs) (L.A. County Code, Title 22, Ch. 102), Specific Plans (L.A. County Code, Title 22, Ch. 22.46), Community Standards Districts (L.A. County Code, Title 22, Ch. 22.300 et seq.), and/or Coastal Resource Areas (L.A. County General Plan, Figure 9.3)?

The Project site is not located within a Wildflower Reserve Area, Specific Plan, Community Standards District, or a Coastal Resource Area, and as such, would not conflict with nor contribute to a cumulative impact due to a conflict with these local policies. The proposed Project and Cumulative Projects LA1, LA2, LA3, and LA13 are within the area located within the Santa Susana Mountains and Simi Hills SEA (see Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR), and the remaining Cumulative Projects are not within this SEA. As detailed in the Project-level analysis above, within Section 4.4.5, Impact Analysis, the proposed Project would result in impacts to SEA Resources and to SEA protected trees, including heritage and non-heritage protected trees. Implementation of MM-4.4-1 through MM-4.4-16 would reduce the Project's impacts to SEA Resources to

less than significant. Implementation of MM-4.4-16 would reduce the Project's impacts to SEA protected trees to less than significant. Further, Cumulative Projects LA1, LA2, LA3, and LA13 would be subject to existing and/or future permit restrictions that satisfy regulatory/resource agency requirements for potential impacts to resources located within the SEA. Therefore, the projects would not contribute to cumulatively considerable significant impacts on resources identified for preservation by adopted plans. If any of the Cumulative Projects were to impact SEA Resources and/or SEA Protected Trees, these impacts would be subject to regulatory requirements enforced the Los Angeles County under the Los Angeles County SEA Ordinance. Enforcement of County regulations effectively serves as a programmatic vehicle to keep cumulative impacts that could be in conflict with the SEAs below a level of significance.

The Project's impacts to SEA Resources and SEA protected trees would be reduced to less than significant with implementation of MM-4.4-1 through MM-4.4-16. The Project's contribution to cumulative impacts to SEA Resources is primarily addressed through mitigation measures that would ensure that conservation areas (required to be preserved through compliance with Section 22.102.100 D.2) would be conserved in perpetuity within on- and off-site lands consisting of mostly undisturbed native vegetation that are contiguous with large tracts of conserved open space. The SEA Ordinance requires the preservation of 75 percent of the Project site's natural and undisturbed open space area. The Project would preserve approximately 62 percent of the property as natural open space (i.e., 233.49-acre Project site with 144.43 acres of open space placed under conservation easement). For projects that do not comply with Section 22.102.090, as outlined in subsection 22.102.100 D.2., Natural Open Space Preservation Mechanisms, natural open space must be provided within or contiguous with the same SEA through either dedication of land, conservation or mitigation bank, conservation easement, permanent on-site deed restriction, covenant between the County and property owner, or in-lieu fees.

Implementation of MM-4.4-9 would provide for preservation of native vegetation in off-site parcels with comparable ecological value to those natural communities impacted on the Project site. As required by MM-4.4-9, the Project's proposed off-site conservation area further preserves an additional 466.70 acres of natural open space adjacent to existing publicly owned lands within the same SEA as the Project (Santa Susana Mountains SEA). When considering the Project site (233.49 acres) and off-site conservation area (466.70 acres), totaling 700.19 acres, the Project would preserve 611.13 acres (including 144.43 acres of on-site conservation and 466.70 acres of off-site conservation area), which would result in the preservation of approximately 87 percent of natural open space on the combined properties. This would exceed the requirements of the County's requirement for the preservation of 75 percent of the original undivided parcels as natural open space. As a result, the proposed Project preserves SEA resources at a significantly higher impact-to-preservation ratio than is required by the SEA ordinance and implementing guidelines; therefore, the Project's incremental effect on SEA Resources would be reduced to less than significant when viewed in connection with the effects of the Cumulative Projects.

The Project's contribution to cumulative impacts to SEA protected trees is addressed through planting of replacement trees within the Conservation Area. With implementation of MM-4.4-1, MM-4.4-9, and MM-4.4-16, the Project's incremental effect on SEA Resources and SEA protected trees would be reduced to less than significant when viewed in connection with the effects of the Cumulative Projects. Further, all Cumulative Projects would be subject to existing and/or future restrictions that satisfy regulatory/resource agency requirements. Therefore, the Project's incremental effect on SEA Resources and SEA protected trees would not be cumulatively considerable and cumulative impacts on sensitive natural communities would be less than significant with mitigation.

Threshold 4.4g: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved state, regional, or local habitat conservation plan?

The Project does not occur within any proposed or approved HCP or NCCP. Therefore, the Project would not result in a significant direct temporary or permanent impacts to any HCPs/NCCPs or other biological resources protected by regional resource planning. No cumulatively considerable impacts would occur.

4.4.7 Mitigation Measures

MM-4.4-1 On-Site Habitat Preservation

Prior to final map recordation, the on-site conservation easement area shall be designated on the final map, Additionally, a letter of intent shall be obtained from the Conservation Easement holder. Prior to the issuance of a grading permit, the Applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code Section 815.1, that permanently preserves 144.43 acres of open space within the Project boundaries for long-term conservation and management as a natural conservation area ("On-Site Conservation Area"). The following table documents the vegetation communities that would be preserved. The On-Site Conservation Area provides sufficient preservation for Project-related impacts to vegetation communities within Resource Categories 4 and 5 of the Significant Ecological Area Ordinance Implementation Guide.

Vegetation Communities Preserved on the Project Site

Alliance	Unimpacted Acres (Open Space)	Preserved via Conservation Easement
SEA Resource Category 1		
Baccharis salicifolia Shrubland	0.52	0.52
Salix gooddingii–Salix laevigata Forest and Woodland	0	0.0
Sub-Total	*0.52*	*0.52*
SEA Resource Category 3		
Ericameria palmeri Provisional Shrubland	0	0
Eriodictyon crassifolium Provisional Shrubland	0.41	0.41
Juglans californica Forest and Woodland	0.09	0.09
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0	0
Quercus agrifolia Forest and Woodland	10.64	10.28
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.01	0.01
Sub-Total	*11.15*	*10.79*
SEA Resource Category 4		
Adenostoma fasciculatum Shrubland	69.77	64.68
Adenostoma fasciculatum Shrubland–Disturbed	9.73	9.73
Artemisia californica–Salvia leucophylla Shrubland	28.01	28.01
Artemisia californica–Salvia leucophylla Shrubland–Disturbed	10.66	10.66
Avena spp.–*Bromus* spp. Herbaceous Semi-natural	2.62	2.62

Vegetation Communities Preserved on the Project Site

Alliance	Unimpacted Acres (Open Space)	Preserved via Conservation Easement
Distichlis spicata Herbaceous	0.07	0.07
Eriogonum davidsonii/Croton setiger Grassland	0	0
Eriogonum fasciculatum Shrubland	0	0
Sub-Total	*120.87*	*115.77*
SEA Resource Category 5		
Brassica nigra–Centaurea melitensis Herbaceous Semi-natural Stands	16.47	16.24[a]
Non-SEA Resource Category		
Developed[1]	1.31	1.11
Total Acres	**150.31**	**144.43**

Notes: SEA = Significant Ecological Area.
[a] 16.24 acres of this community are proposed to be restored per MM-4.4-2.
[1] Existing trails.

Conservation Management Plan. As part of recording the conservation easement, a Conservation Management Plan (CMP) applicable to the On-Site Conservation Area shall be prepared and submitted to the County of Los Angeles for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The CMP shall set forth the following requirements that shall be implemented by the entity that holds the conservation easement and/or manages and stewards the Conservation Area: (1) there shall be no grading or other construction activities within the On-Site Conservation Area, except for the proposed habitat enhancement/restoration, construction and maintenance of signage, and trail maintenance; (2) off-trail activities (e.g., hiking, biking, horseback riding) shall be prohibited; (3) signage shall be installed at the trailheads and at any access points to the On-Site Conservation Area, which shall include information on the organization that holds the conservation easement, brief descriptions of the restoration activities, protection of biological resources, and restrictions to human activities; (4) signage shall be placed in visible locations that prohibits smoking and that requires that humans and domesticated pets remain within the limits of designated hiking trails, all domesticated pets be on leashes, and owners clean up after domesticated pets; (5) no fencing or other barriers to wildlife movement shall be installed; (6) dog waste bag dispensers and wildlife-proof receptacles for trash shall be provided at appropriate locations on the trail; (7) gasoline-powered maintenance equipment shall be prohibited; (8) commercial honeybee operations shall not be allowed to use the On-Site Conservation Area for storing their apiaries; (9) rodenticides shall be prohibited; (10) herbicides and pesticides shall be discouraged, and only those typically used for invasive plant management in California wildlands shall be allowed, per the California Invasive Plant Council and Pesticide Research Institute's 2015 Best Management Practices (BMPs) for Wildland Stewardship: Protecting Wildlife When Using Herbicides for Invasive Plant Management; (11) arborists certified by the International Society of Arboriculture (ISA) shall conduct surveys every five years that shall include an assessment of potential infestations of invasive shothole borer beetle and other pathogens or invasive insects that can threaten native habitat; (12) at least one annual walk-through survey shall be conducted by a biologist to qualitatively monitor the general condition of

on-site habitats and to check for any new introduction or expansion of invasive plant species; (13) collect and remove trash, repair vandalized signs, and rectify trespass impacts; and (14) provide annual reporting that document the conditions of the Conservation Area.

Approved work shall be outlined in the CMP and in the conservation easement, including monitoring and maintenance efforts or for other activities associated with preserve management, and prohibited activities shall be delineated. The conservation easement holder shall be an entity that has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The California Department of Fish and Wildlife per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968(b). Funding for implementation of the tasks in the CMP shall be provided by a traditional endowment, establishing a community facilities district or landscape management district, or through contractual obligation with the Homeowners' Association or other equivalent mechanism(s).

MM-4.4-2 Habitat Mitigation and Monitoring Plan

After implementation of MM-4.4-9, if the Los Angeles County Department of Regional Planning (Planning) determines that sufficient habitat is not preserved off site, per MM-4.4-9, then on-site establishment and restoration shall be conducted in the On-Site Conservation Area (MM-4.4-1). Prior to the issuance of a grading permit, a qualified biologist shall be retained to prepare a Habitat Mitigation and Monitoring Plan (HMMP) detailing the specific approach for each type of habitat restoration and establishment area, special-status species transplant location, and Significant Ecological Area protected tree transplant/planting and outlining detailed performance standards and monitoring requirements for each, following the monitoring and reporting methods and performance standards listed below. Planning approval of the HMMP shall be required prior to the onset of Project-related ground-disturbing activities. When specified for each habitat type below, the acreages allotted for on-site establishment apply to a total of 16.24 acres of *Brassica nigra–Centaurea melitensis* herbaceous semi-natural stands.

- On-site establishment of 0.84 acre of *Eriodictyon crassifolium* provisional shrubland alliance
- On-site restoration/establishment of 0.07-acre of *Rhus trilobata–Crataegus rivularis–Forestiera pubescens* shrubland alliance
- On-site establishment of 15.20 acres *Quercus agrifolia* forest and woodland alliance

Habitat Restoration/Enhancement Implementation

The following best management practices shall be implemented during the implementation of the habitat restoration/enhancement activities.

Schedule: Establishment of restoration/revegetation sites shall be conducted during the appropriate time of year (between October 15 and January 30), with planting and/or seeding occurring immediately after the restoration sites are prepared.

Stressors: Any stressors causing habitat degradation should be addressed prior to starting restoration. This includes the removal of invasive plants and trash. Removal of invasive species shall include the following:

- Removal of non-native species in patches of native habitat shall be conducted in such a way as to minimize impacts to the existing native vegetation.
- Any proposals for use of herbicide treatments should be accompanied by a plan that demonstrates the following:
  - That other methods of invasive species control have been tested and that a single application of herbicide has been determined to be the best solution
  - That there is a post application plan for revegetation and/or mulching;
  - That the treatment is a one-time application
- Pre-emergent herbicide shall not be used.

Plant Material. The following shall be implemented:

- Details regarding the planned source of their plant material shall be provided.
- All stock from nurseries shall be derived from plants originally collected within cismontane County.
- Plant material used for habitat restoration purposes shall consist of native species that are local to the immediate area of the mitigation site.
- All plant material proposed for use in a habitat restoration program shall be inspected by a County-approved Restoration Biologist to ensure that all container plants are in good health and do not contain pests or pathogens that may be harmful to existing native plants or wildlife species.
- Container plants and other landscaping materials (including organic mulches) should be inspected by the County Planning-approved Restoration Biologist to ensure they do not contain Argentine ant (*Linepithema humile*).
- Native seed mixes shall be inspected by the County-approved Restoration Biologist prior to their application to ensure that they contain the proper species and that seed packages are in good condition and do not contain any pests or pathogens.
- Diseased or infested plant, seed, or landscape materials should be removed from the site and transported to an appropriate off-site green waste facility.
- One application of mulch shall be done, except for areas that shall provide nesting opportunities for native bees.

Maintenance Plan/Guidelines. A Maintenance Plan shall be included that outlines the following: (1) weed control, including cleaning of equipment to prevent further spread or introduction of new weeds; (2) herbivory control; (3) trash removal; (4) irrigation system maintenance; (5) maintenance training; and (6) replacement planting.

Signage and Fencing. Signage specifications shall be developed to indicate the site is a restoration/preserve area and to either indicate that trespassing is not allowed or to instruct

visitors to stay on trails. Specifications on fencing to protect biological resources and restrict human access shall be provided.

Monitoring Methods

Proposed plantings, enhancement/restoration, and receptor sites shall be monitored for 10 years following the completion of seeding or planting. The monitoring program shall consist of the observation and evidence of vegetative growth and the observation of emergent and flowering special-status plant species where required, along with seed production for flowering plants, photo-documentation, and measurements of annual rainfall.

A County Planning-approved Restoration Biologist, restoration specialists, biologists, or horticulturists with appropriate credentials and experience in native habitat restoration shall perform monitoring. Continuity within the personnel and methodology of monitoring shall be maintained insofar as possible to ensure comparable assessments.

The Biologist shall conduct monitoring surveys quarterly during the non-growing season for each enhanced or restored habitat type or particular plant species where required. During the growing period, or as soon as vegetative growth is observed, the enhancement/restoration and receptor sites shall be monitored on a every other week basis through seed production for 10 years to document the growth of the enhanced or restored habitat type or replacement population.

Qualitative surveys, consisting of a general site walkover and habitat characterization, shall be completed during each monitoring visit. General observations, such as growth, flowering, and seed production, as well as pest problems, weed establishment, mortality, and site security, shall be noted in each site walkover. The Project Biologist shall also note observations on native plant recruitment for the purpose of later discussion in the annual reports. Records shall be kept of mortality and other problems, such as insect damage, weed infestation, and soil loss.

Surveying Flowering and Seed Production. In the case of replacement populations for specific species, flowering individuals observed within receptor sites shall be counted. As noted above, quantitative surveys may require multiple visits per month as the blooming period may be staggered along several months (i.e., vegetative growth or non-blooming individuals may not be detected until that individual has bloomed). Peak blooming periods may fluctuate year to year due to seasonal conditions; therefore, multiple visits shall aid in a more accurate count of flowering individuals. Each flowering individual in the restoration plots shall be tallied and recorded on data sheets. The total yearly population shall be calculated each year for the annual monitoring results.

Photo-Documentation. Permanent stations for photo-documentation shall be established prior to or during the first annual monitoring event. Photos shall be taken each monitoring period from the same vantage point and in the same direction each year and shall reflect material discussed in the annual monitoring report.

Monitoring Schedule. During the growing period, or as soon as vegetative growth is observed, each enhancement/restoration and receptor site shall be monitored monthly through seed production for 10 years.

Annual Monitoring Reports. At the end of each monitoring period, an annual report shall be prepared for submittal to County Planning. The report shall summarize the information collected during the qualitative and quantitative monitoring. Each report shall document the monitoring methods and description of the enhancement/restoration and receptor sites and provide copies of field data, photo-documentation, monitoring results, an analysis of success, and recommendations for the project and/or remedial measures if necessary.

Since seeding of particular species may not occur when planned, monitoring shall be tied to the actual implementation date (e.g., the first annual report shall be delivered on January 1st of the year following the first growing season after enhancement/restoration and/or seeding). These reports shall describe the success of the relocation and shall discuss the efficacy of the various methods employed to propagate this species. These reports shall also include the following:

- A list of names, titles, and companies of all persons who prepared the content of the annual report and participated in monitoring activities for that year
- A vicinity map indicating location of the mitigation site
- A mitigation site plan, identifying plot locations, photo station locations, etc. as appropriate
- Copies of all monitoring photographs
- An analysis of all qualitative and quantitative monitoring data

Performance Standards

The performance standards set forth below are to be achieved for the mitigation and monitoring program to be considered successful. Because of the variability of growing conditions and the number of flowering individuals from year-to-year, the performance standards shall be considered to have been achieved if during any of 3 years of the 10-year monitoring period, the target acreage or population number is achieved. Thus, the annual standards provide a guide showing that the program is on a positive trajectory.

- The growing conditions and number of flowering individuals in any given year can vary substantially, based on environmental conditions, such that it is necessary to observe translocated populations over a period of years to accurately determine survival. To this end, this plan includes a 10-year monitoring term to track flowering individuals, which provides the best and easiest indicators to track that the translocation is succeeding.
- Various threats to plants must be minimized to ensure survival and ultimate flowering of seeded individuals leading to future germination/successful reproduction.
- Habitat characteristics including non-native grasses and herbaceous weeds are important and require monitoring to determine that specific enhancement/restoration areas and translocation/receptor sites are exhibiting a positive trajectory.

Should the performance standards be achieved early in the program, monitoring shall continue for the full 10 years to ensure that there is no degradation of the habitat values during the 10-year period.

Performance Standards for 10-Year Monitoring Period

- Flowering of the total number of flowering plants originating from seed shall equal or exceed the number of container individuals counted during the 2-year monitoring period (at least 3 years of the 10-year monitoring period).
- Emergence of leaves for of a minimum of 80% of the translocated bulbs
- Flowering of a minimum of 60% of the translocated bulbs
- Survival of 80% of established individuals
- Habitat subject to translocation must exhibit same or less cover by non-native grasses and forbs than during the initial planting (30%).

Adaptive Management

The HMMP shall include adaptive management strategies in the event the mitigation and monitoring program fails to achieve the performance standards discussed above during the 10-year monitoring period; the Project Applicant shall implement the following remedial measures to attempt to achieve the performance standards:

- If the enhancement/restoration areas or receptor sites are observed to be failing significantly to achieve the performance standard during the 10-year monitoring period, the Biological Monitor shall identify an alternate site(s) in the Conservation Area in which to broadcast seed from a contingency seed supply held at a seed facility (and maintained for at least 10 years). Should the performance standards be achieved, contingency seed would be broadcast in the enhancement/restoration areas or receptor sites.
- If receptor sites appear on track to meet the performance standards, any remaining plant material may be planted after 5 years at the receptor sites (if space allows) or additional acceptable receptor sites shall be identified. This would allow for 5 years of monitoring of the container stock.
- Seeds and/or bulbs shall continue to be harvested from plants maintained in the nursery and installed in the receptor sites on an as-needed basis to ensure translocation/receptor sites are progressing toward final performance.
- The alternate site shall be prepared as outlined for the initial site and modifications incorporated as determined by the Project Biologist in coordination with County Planning. Once an approach has been determined in coordination with the County, the seed would be broadcast at the contingency seed and seeded at the alternate site, and a 10-year program, that includes monitoring and maintenance, would be initiated as set forth above.

MM-4.4-3 Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation

The required Conservation Management Plan (CMP) approved by the County of Los Angeles (County) shall include a Special-Status Plant Mitigation and Monitoring Plan (SSPMMP) that shall provide guidance and methods to preserve the special-status plants known to occur within the Conservation Area (slender mariposa lily [*Calochortus clavatus* var. *clavatus*], Plummer's mariposa lily [*Calochortus plummerae*], Peirson's morning glory [*Calystegia peirsonii*], and scarlet Keckiella [*Keckiella ternata*]), along with a program of special-status plants seed collection and dispersal

within the Conservation Area. The SSPMMP shall also include methods and approach to translocating mariposa lily individuals proposed for impact into the Conservation Area. The SSPMMP shall be developed and implemented with a program that does not conflict with other conservation easement resource management objectives.

The SSPMMP shall provide details on site preparation measures, as well as specific methods for the pre-construction collection of seeds from all four species and the harvest of mariposa lily bulbs from impacted populations. The SSPMMP shall also provide detailed methods for the dispersal of that seed and the translocation of the harvested bulbs into the conservation easement areas within locations with appropriate soils and growing conditions for each species, as determined by a qualified biologist in coordination with the County and California Department of Fish and Wildlife. Finally, the SSPMMP shall provide a schedule and action plan for the maintenance and monitoring programs, including success criteria, and remedial contingency measures to be implemented if efforts are not successful.

Pre-construction surveys shall be conducted in the Project footprint to map slender mariposa lily, Plummer's mariposa lily, Peirson's morning glory, and scarlet keckiella individual locations with a high-accuracy GPS unit and a permanent marker established in the field to locate the individual mariposa lilies for bulb collection. Seeds shall be collected from each species at the appropriate time of year. Mariposa lily bulbs shall remain in the ground until Project development. Prior to Project development, the bulbs shall be translocated within appropriate habitat in the Conservation Area.

Performance Standard. Monitoring shall take place annually for 5 years from the time of establishment of the mariposa lily bulbs. The following success criteria is the minimum required by the end of the 5-year monitoring period:

- 25 slender mariposa lily
- 44 scarlet keckiella
- 600 Peirson's morning glory
- 128 Plummer's mariposa lily

If it appears that the population of these special-status plant species (slender mariposa lily, scarlet keckiella, Peirson's morning glory, and Plummer's mariposa lily) or the vegetation community composition and status are on the decline or have been degraded, remedial activities shall be implemented according to the CMP and the SSPMMP, and monitoring shall continue until the success criteria are met. These activities may include weed control, additional seeding, native plant establishment, or other activities where appropriate.

Annual monitoring reports shall be submitted by August 31 of each year and shall include an evaluation of current monitoring data in relation to previous population observations (during previous monitoring years) and native enhancement efforts for slender mariposa lily, scarlet keckiella, club-haired mariposa lily, Peirson's morning glory, and Plummer's mariposa lily. These reports shall also include any recommendations for remedial management measures and shall discuss other issues that need to be addressed, such as trespassing or vandalism.

MM-4.4-4 Biological Monitoring

Prior to the issuance of a grading permit, the Applicant shall submit the qualifications of potential Biological Monitor(s) to the County of Los Angeles (County) Department of Regional Planning (Planning) for review and approval. The Applicant shall then fund the County Planning-approved Biological Monitor(s) during Project construction to monitor construction activities and to ensure compliance with all mitigation measures. The Biological Monitor shall be present on site during all vegetation removal and each day prior to the commencement of grading activities. The Biological Monitor shall be responsible for conducting a pre-construction clearance survey, and any wildlife (common or special-status) shall be relocated to the Conservation Area. Pre-construction clearance surveys shall be conducted prior to construction of each new phase of the development. The Biological Monitor shall ensure that wildlife do not become entrapped in excavation or trenching areas. Safeguards shall be implemented during daytime periods of non-activity and overnight, such as a placing a platform over trenches, flush with the ground surface; installing escape ramps in trenches; or installing exclusionary fencing. Should relocation of any trapped wildlife be required, construction shall be halted until the Biological Monitor arrives on site and clears the work area (in compliance with all applicable permits and authorizations).

Burrowing owl has the potential to occur as a transient during dispersal and migration. Focused pre-construction surveys for burrowing owl shall be conducted weekly by the Biological Monitor beginning 30 days prior to the commencement of vegetation removal, with the last/fourth survey being conducted three days prior to the commencement of vegetation removal. If burrowing owl are located during any focused pre-construction surveys, or during the monitoring of construction activities, a 500-foot no-work buffer shall be established around the location of the burrow(s), and County Planning and California Department of Fish and Wildlife (CDFW) shall be notified. CDFW shall be consulted regarding the potential need for an Incidental Take Permit per California Fish and Game Code 2081. The no-work buffer shall remain in place until the until the Project Applicant obtains confirmation from CDFW that it can be removed. The results of the surveys and any associated monitoring shall be documented in a Burrowing Owl Survey/Monitoring Report that shall be submitted to County Planning.

The Biological Monitor shall also monitor any colonial roosts located within 500 feet from the Project limits to determine if Project activities are having a detrimental effect on the roost. If bats are exhibiting distress due to noise generated by Project activities, the Biological Monitor shall work with the construction contractor on ways to reduce activities in the proximity of the roost (e.g., limiting the number of tractors in the area). The results of the protective actions will be documented in the daily monitoring report.

The Biological Monitor shall regularly inspect the Project site as needed after the completion of all grading activities. Monthly spot-check monitoring is anticipated to be required throughout the construction of the Project for those areas that are graded but not yet developed/landscaped. During monthly visits, the biological monitor shall do the following: (1) address the potential establishment of invasive species and require weed abatement (if necessary) in accordance with MM-4.4-6, Invasive Species Prevention; (2) address the potential establishment of native vegetation/habitat to reduce the potential for impacts between phases of construction; (3) identify deficiencies, if applicable, with any erosion control measures that have the potential to negatively impact biological resources.

Daily monitoring reports shall be prepared by the Biological Monitor that at a minimum document the results of any surveys conducted, wildlife relocations, construction activities performed, compliance issues observed, and corrective actions taken. The monitoring reports shall include photos. The monitoring reports shall be made available to County Planning and the California Department of Fish and Wildlife at their request.

MM-4.4-5 Demarcation of Disturbance Limits

Prior to commencement of earthwork for each phase of Project construction, the construction limits shall be clearly demarcated (e.g., installation of flagging or temporary high visibility construction fence), as recommended by the Biological Monitor approved by the County of Los Angeles. All construction activities, including equipment staging and maintenance, shall be conducted within the marked disturbance limits to prevent inadvertent disturbance to sensitive vegetation communities outside the limits of work. The flagging shall be maintained throughout construction.

MM-4.4-6 Invasive Species Prevention

The Project shall not include invasive plant species listed on Appendix C of the SEA Ordinance Implementation Guide and in the California Invasive Plant Council inventory in Project landscaping palettes. Project landscape palettes shall be reviewed and approved by the County of Los Angeles (County) to ensure that invasive plant species are excluded. In addition, to prevent the spread of invasive plant species during construction and until the establishment of common landscaped areas associated with the Project, the following measures shall be implemented:

- A Workers Environmental Awareness Training (WEAT) program shall be prepared that shall include invasive species prevention measures implemented by the Project. The WEAT shall include descriptions of the common invasive plants known in the region. The WEAT shall also include descriptions of sensitive resources known to occur on the Project site and the procedures to follow should a sensitive resource be encountered.
- All mobile vehicles and construction equipment shall be washed prior to entering the Project site in an upland location where any seed material from invasive species shall be contained and not carried onto the Project site. Logs of the washing shall be submitted monthly to the County Department of Regional Planning.
- Following the completion of grading activities, for those areas of the Project site that are graded but not yet developed/landscaped, the County-approved Biological Monitor shall conduct monthly spot checks to prevent the introduction or establishment of invasive plant species onto the graded areas (see MM-4.4-4, Biological Monitoring). If invasive species are identified, the Biological Monitor shall remove the plants with hand tools or weeding equipment to prevent propagation.
- All vegetative material removed from the Project footprint shall be transported in a covered vehicle and shall be disposed of at a certified disposal site.

MM-4.4-7 Landscaping Plan

Prior to the issuance of the first grading permit, the Applicant shall prepare a Landscaping Plan for the areas maintained by the Homeowners' Association (HOA) and submit the Landscaping Plan to

the County of Los Angeles for review and approval. The Landscaping Plan for the HOA-maintained areas shall include, but not be limited to, the following requirements:

- The plant species list shall include scientific names, common names, plant container sizes, and quantities.
- Invasive plant species (designated by California Invasive Plant Council) shall not be included in the Landscaping Plan as they could establish off site and have negative impacts to the adjacent habitats.
- Non-native milkweeds shall not be included in the landscaping plan as they could establish off site and have negative impacts to the adjacent habitats.
- The plant layout shall indicate the location of the plant species.
- Planting notes shall include irrigation and plant installation requirements such as mulch requirements.
- Ornamental varietals and selections of native species shall be avoided if they have the potential to hybridize with local native populations.
- Where native species are required, the species shall be indigenous native species of the region (locally indigenous native species).

MM-4.4-8 Crotch's Bumble Bee Habitat Preservation and Minimization Measures

Incidental Take Permit. The Applicant shall consult with the California Department of Fish and Wildlife on obtaining an Incidental Take Permit (ITP), per California Fish and Game Code 2081, for the take of Crotch's bumble bee. Mitigation for direct impacts to Crotch's bumble bee will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished through the preservation of on-site suitable habitat (MM-4.4-1) and off-site suitable habitat (MM-4.4-9). The Applicant shall be obligated to implement all minimization and avoidance measures conditions that are included in the ITP.

Pre-Construction Survey. A pre-construction survey for Crotch's bumble bee (*Bombus crotchii*) shall be conducted within the construction footprint prior to the start of ground-disturbing construction activities occurring during the Crotch's bumble bee nesting period (February 1 through October 31). The survey shall ensure that no nests for Crotch's bumble bee are located within the construction area. The pre-construction survey shall include a habitat assessment and focused surveys, both of which shall be based on recommendations described in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction.

The habitat assessment shall, at a minimum, include historical and current species occurrences; document potential habitat on site including foraging, nesting, and/or overwintering resources; and identify which plant species are present. For the purposes of this mitigation measure, nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and human-made structures that may support bumble bee colonies, such as rock walls, rubble, and furniture. The habitat assessment shall be repeated prior

to February 1 in each year that ground-disturbing activities will occur to determine if nesting resources are present within the impact area. If nesting resources are present in the impact area, focused surveys shall be conducted.

The focused survey shall be performed by a biologist with expertise in surveying for bumble bees and include at least three survey passes that are not on sequential days or in the same week, preferably spaced 2 to 4 weeks apart. The timing of these surveys shall coincide with the colony active period (April 1 through August 31 for Crotch's bumble bee). Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling), and surveyors shall wait at least 1 hour following rain. Optimal surveys are conducted when there are sunny to partly sunny skies and ambient temperatures are greater than 60° Fahrenheit. Surveys may be conducted earlier than April 1 if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 mph). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the nest resources for up to 5 minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after 5 minutes of observation. If a bumble bee worker is detected, then a representative shall be identified to species. Biologists should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point that would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes).

Identification shall include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in the U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographic documentation if able. The bee shall be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee identifying characteristics cannot be adequately captured in the container due to movement, the container shall be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee species, they become active shortly after removal from the cold environment, so photography must be performed quickly.

If Crotch's bumble bee nests are not detected, no further mitigation would be required. The mere presence of foraging Crotch's bumble bees would not require implementation of additional minimization measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources shall be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be

present within the nest as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources.

A written survey report shall be submitted to the County of Los Angeles (County) and CDFW within 30 days of the pre-construction survey. The report shall include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report shall include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers and detailed habitat assessment. If Crotch's bumble bee nests are observed, the survey report shall also include recommendations for avoidance, and the location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report.

If the above measures are followed, it is assumed that the project shall not need to obtain authorization from CDFW through the California Endangered Species Act Incidental Take Permit process. If the nest resources cannot be avoided, as outlined in this measure, the project applicant shall consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee may supersede measures provided in this California Environmental Quality Act document and shall be incorporated into the Habitat Mitigation and Monitoring Plan.

MM-4.4-9 Off-Site Habitat Preservation

Prior to final map recordation, the Applicant shall obtain a Letter of Intent from the future Conservation Easement holder. Prior to issuance of a grading permit, the Applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code Section 815.1, that permanently preserves off-site habitat for long-term conservation and management ("off-site conservation area"). As part of recording the conservation easement for any off-site parcel(s), a Conservation Management Plan (CMP) applicable to the off-site conservation area shall be prepared and submitted to the Los Angeles County (County) Department of Regional Planning (Planning) for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The conservation easement holder shall be an entity that has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The California Department of Fish and Wildlife per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968(b).

One or more of the following options shall be used to provide adequate preservation for Project-related impacts to vegetation communities and wildlife habitat within the Significant Ecological Area (SEA) Ordinance Implementation Guide Resource Categories 1 and 3. The proposed off-site conservation area lands must support resources similar to those disturbed by the Project (i.e., sensitive vegetation communities, special-status plant and wildlife habitats, jurisdictional waters, and protected trees) and be connected with other natural open space areas. To determine that these conditions are present, the Applicant shall fund a biological resources assessment by a

County Planning-approved Biologist for any parcel proposed for preservation, and the results of the assessment shall be submitted to County Planning for their approval to be used as mitigation.

In-Kind and Off-Site in the Santa Susana Mountains and Simi Hills Significant Ecological Area

For parcels within the SEA that support in-kind vegetation communities as those found in the Project site, the preservation ratios for each of the SEA Resource Categories listed would be in accordance with the SEA Ordinance Implementation Guide. The following table indicates the minimum preserved acres required for off-site preservation of in-kind vegetation communities (communities classified as the same as those being impacted by the Project) within the SEA.

In-Kind Vegetation Communities Preserved Off-Site in the Santa Susana Mountains and Simi Hills Significant Ecological Area

Alliance	Required In-Kind Preserved Acres
SEA Resource Category 1 (Mitigated at 5:1)	
Baccharis salicifolia Shrubland	11.65
Salix gooddingii–Salix laevigata Forest and Woodland	6.22
Sub-Total	*17.87*
SEA Resource Category 3 (Mitigated at 3:1)	
Ericameria palmeri Provisional Shrubland	2.00
Eriodictyon crassifolium Provisional Shrubland	0.84[a]
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0.20
Quercus agrifolia Forest and Woodland	30.50[b]
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.07[a]
Sub-Total	*33.61*
Total	**51.48**

Notes: SEA = Significant Ecological Area.
[a] None would be needed if MM-4.4-2, Habitat Mitigation and Monitoring Plan, is implemented.
[b] 15.30 acres shall be needed if MM-4.4-2 is implemented.

Out-of-Kind and Within the Santa Susana Mountains and Simi Hills Significant Ecological Area

Preservation of out-of-kind vegetation communities (communities classified as being different than those being impacted by the Project) that are in the same group (defined by combinations of relatively narrow sets of diagnostic plant species (including dominant and co-dominant species, broadly similar composition, and diagnostic growth forms that reflect biogeographic differences in mesoclimate, geology, substrates, hydrology, and disturbance regimes as defined by the Federal Geographic Data Committee in the 2006 Draft National Vegetation Classification Standard) as the impacted vegetation communities (as defined by the National Vegetation Classification Standards) can be satisfied with the acquisition of parcels within the Santa Susana Mountains and Simi Hills SEA. For preserved lands within the same Resource Category, a multiplier of 1.5 shall be applied to increase lands for preservation, as shown in the following table. For preserved lands within a higher sensitivity Resource Category, a multiplier of 1.25 shall be applied, as shown in the following table. Lower sensitivity Resource Categories may not satisfy mitigation requirements for higher

sensitivity Resource Categories. For the two Resource Category 1 communities, preservation shall be a riparian-associated vegetation community.

Out-of-Kind Vegetation Communities Preserved Within the Santa Susana Mountains and Simi Hills Significant Ecological Area

Alliance	Out-of-Kind-Same Resource Category Preserved Acres	Out-of-Kind-Higher Resource Category Preserved Acres
SEA Resource Category 1 (Mitigated at 5:1)	**1.5 Multiplier**	**1.25 Multiplier**
Baccharis salicifolia Shrubland	17.47	NA
Salix gooddingii–Salix laevigata Forest and Woodland	9.33	NA
Subtotal	*26.81*	*NA*
SEA Resource Category 3 (Mitigated at 3:1)	**1.5 Multiplier**	**1.25 Multiplier**
Ericameria palmeri Provisional Shrubland	3.00	2.50
Eriodictyon crassifolium Provisional Shrubland	1.26[a]	1.0505[a]
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0.31	0.25
Quercus agrifolia Forest and Woodland	45.75[b]	38.13[c]
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.10[a]	0.08[a]
Subtotal	*50.42*	*42.01*
	77.23	*42.01*

Notes: NA = Not Applicable (due to there being no higher Resource Category)

[a] None would be needed if MM-4.4-2, Habitat Mitigation and Monitoring Plan, is implemented.

[b] 22.95 acres will need to be preserved if MM-4.4-2 is implemented.

[c] 19.13 acres will need to be preserved if MM-4.4-2 is implemented.

Vegetation Communities Preserved Within the Santa Clara River Significant Ecological Area

Off-site preservation within portions of the Santa Clara River SEA that are contiguous with the Santa Susana Mountains and Simi Hills SEA shall be considered if the area supports the same resource values as the Project site and is connected with other natural open space. Preservation of vegetation communities shall be acquired within the adjacent Santa Clara River SEA at a multiplier of 2 for in-kind preservation, multiplier of 2.5 for out-of-kind preservation but within the same Resource Category, and a multiplier of 2.25 for out-of-kind preservation but a higher level Resource Category, as shown in the following table. For the two Resource Category 1 communities, preservation shall be a riparian-associated vegetation community.

Vegetation Communities Preserved Within the Santa Clara River Significant Ecological Area

Alliance	In-Kind Preserved Acres	Out-of-Kind-Same Resource Category Preserved Acres	Out-of-Kind-Higher Resource Category Preserved Acres
SEA Resource Category 1 (Mitigated at 5:1)	**2 Multiplier**	**2.5 Multiplier**	**2.25 Multiplier**
Baccharis salicifolia Shrubland	23.30	29.12	NA
Salix gooddingii–Salix laevigata Forest and Woodland	12.45	15.56	NA
Sub-Total	*35.74*	*44.68*	*NA*
SEA Resource Category 3 (Mitigated at 3:1)	**2 Multiplier**	**2.5 Multiplier**	**2.25 Multiplier**
Ericameria palmeri Provisional Shrubland	4.00	5.00	4.50
Eriodictyon crassifolium Provisional Shrubland	1.67[a]	2.09[a]	1.88[a]
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0.41	0.51	0.46
Quercus agrifolia Forest and Woodland	61.00[b]	76.25[c]	68.63[d]
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.13[a]	0.17[a]	0.15[a]
Sub-Total	*67.21*	*84.02*	*75.62*
Total	**102.95**	**128.70**	**75.62**

Notes: NA = Not Applicable (due to there being no higher Resource Category

[a] None would be needed to be preserved off-site if MM-4.4-2 is implemented.

[b] 30.60 acres would be needed if MM-4.4-2 is implemented.

[c] 38.25 acres would be needed to be preserved if MM-4.4-2 is implemented.

[d] 34.43 acres would be needed to be preserved if MM-4.4-2 is implemented.

Preservation of Assessor's Parcel Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

The six parcels are located within the Santa Susana Mountains/Simi Hills SEA, approximately 1 mile south-southwest of the Project site.

Nine vegetation communities were mapped in the six parcels, as listed in the table below. Two SEA Resource Category 3 communities, *Pseudotsuga macrocarpa–Quercus agrifolia* association (bigcone Douglas fir–coast live oak forest) and *Quercus agrifolia* association (coast live oak woodland and forest) occur, primarily on north-facing slopes and canyon bottoms. The seven SEA Resource Category 4 communities are shrub-dominated and consist of chaparral and coastal scrub species.

Assessor's Parcels Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

Vegetation Community	Acres
SEA Resource Category 1	
Quercus agrifolia Association Southern Coast Live Oak Riparian Forest (Water Resources)	27.47
SEA Resource Category 3	
Pseudotsuga macrocarpa–Quercus agrifolia Association	4.02
Quercus agrifolia Association	50.89
Subtotal	*54.91*
SEA Resource Category 4	
Adenostoma fasciculatum–Salvia leucophylla Association	11.35
Adenostoma fasciculatum–Salvia mellifera Mixed Shrub Association	1.16
Adenostoma fasciculatum Association	77.08
Artemisia californica–Eriogonum fasciculatum Association	2.08
Ceanothus crassifolius–Adenostoma fasciculatum–Rhus ovata Association	249.26
Ceanothus crassifolius–Adenostoma fasciculatum Association	14.37
Malacothamnus fasciculatus–Salvia leucophylla Association	2.54
Malosma laurina–Eriogonum fasciculatum Association	12.93
Wild oats and annual brome grasslands Semi-natural Alliance	12.24
Subtotal	*383.01*
Non-SEA Resource Category	
Urban/Developed	1.31
Total	**466.70**

Note: SEA = Significant Ecological Area.

The drainages in the six parcels are part of the Wiley Canyon and Towsley Canyon watersheds that contribute to the South Fork of the Santa Clara River. The desktop analysis resulted in 13.30 acres of potential streams in the six parcels. The method for determining potential adjacent riparian oak forest resulted in 27.47 acres of SEA Category 1 Water Resources. The remaining 54.91 acres of *Pseudotsuga macrocarpa–Quercus agrifolia* association and *Quercus agrifolia* association would be considered upland and SEA Resource Category 3.

As shown in the following table, the off-site conservation area provides sufficient acreage to fully offset impacts to SEA Resource Category 4 vegetation communities (for SEA Resource Category 4, preservation can be out-of-kind if the resource is of the same category.) and to partially offset impacts to SEA Resource Category 3 (for this discussion, the creation of vegetation communities within the *Brassica nigra–Centaurea melitensis* herbaceous semi-natural stands is not included; however, if oak trees are planted as replacement for SEA protected trees, then an argument shall be made that planted oaks also constitute the creation of oak woodland). The 27.47 acres of SEA Category 1 Water Resources and the 54.91 acres of SEA Resource Category 3 provides the necessary acres of preservation for these two categories. The parcels provide an additional 26.72 acres of SEA Resource Category 3 vegetation communities and 503.17 acres of SEA Resource Category 4 vegetation communities.

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Impacts to SEA Resource Category Communities and Proposed Preservation for the Trails at Lyons Canyon Project Using APNs 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

SEA Resource Category	Total Impacts (acres)	Mitigation Requirement (acres)[a]	On-Site Preservation (acres)[b]	In-Kind Off-Site Preserved Acres Needed[c]	In-Kind Acres Provided by the Six Parcels[d]	Out-of-Kind Off-Site Preserved Acres Needed[e]	Out-of-Kind Acres Provided by the Six Parcels[f]	Total Preservation (acres)	Excess Acreage	Preservation to Impact Ratio: Required	Preservation to Impact Ratio: Provided
1	3.68	18.39	0.52	17.87	0	26.74	27.47	27.99	9.60	7.5:1	7.6:1
3	14.77	44.31	10.79	33.52	30.14[g]	5.07	24.77[h]	65.70	21.39	4.5:1	4.45:1
4[i]	32.40	64.80	115.78	0	383.01	NA	NA	498.79	433.99	3:1	15.4:1
5[j]	35.61	NA	16.24[k]	NA	NA	NA	NA	NA	NA	NA	NA

Notes: SEA = Significant Ecological Area; APN = Assessor's Parcel Number; NA = not applicable.

a This is determined by the impacts multiplied by the ratio of preservation required per the County of Los Angeles' SEA Implementation Guide (5:1 for Category 1, 3:1 for Category 3, and 2:1 for Category 4).

b Preserved in the Conservation Area established by the proposed MM-4.4-1.

c In-kind preservation within the Santa Susana Mountains/Simi Hills SEA, per proposed MM-4.4-2.

d APNs 2826-018-034, 2826-017-044, 2826-017-043, and 2826-017-041.

e Out-of-kind preservation within the Santa Susana Mountains/Simi Hills SEA is at 1.5:1 for same category (used for SEA Resources Category 1) and 1.25:1 for a higher category (used for SEA Resources Category 3), per proposed MM-4.4-2.

f Out-of-kind preservation of SEA Resource Category 1 (oak riparian forest).

g In the form of *Quercus agrifolia* Association.

h *Quercus agrifolia* Association preservation used for Project impacts to *Ericameria palmeri* Provisional Shrubland Alliance, *Eriodictyon crassifolium* Provisional Shrubland Alliance, *Nassella* [*Stipa*] spp. - *Melica* spp. Herbaceous Alliance, and *Rhus trilobata* - *Crataegus rivularis* - *Forestiera pubescens* Shrubland Alliance.

i For SEA Resource Category 4, preservation can be out-of-kind if the resource is of the same category.

j No preservation ratio is needed for SEA Resource Category 5, per se, only that the values that it supports (such as movement opportunities) are preserved.

k This would be transformed to a higher value SEA Resource Category if MM-4.4-2 is implemented.

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Mitigation Bank Credits

Off-site purchase of mitigation credit from a County Planning-approved mitigation bank shall be completed prior to the issuance of grading permits. The mitigation bank would have to be located within the Santa Susana Mountains and Simi Hills SEA or be contiguous with the SEA. The credits purchased must meet the acres calculated by using a multiplier of 3 applied to the preservation ratios stated in the SEA Ordinance Implementation Guide for SEA Resource Categories 1 and 3, as shown in the following table.

Mitigation Credits Required to be Purchased from a County-Approved Mitigation Bank

SEA Resource Category	Mitigations Credits Required
1	53.61[a]
3	100.83[b,c]

Notes: County = County of Los Angeles; SEA = Significant Ecological Area.
[a] Riparian scrub.
[b] 91.50 woodland, 8.72 shrubland, and 0.61 grassland
[c] 45.90 woodland, 6.01 shrubland, and 0.61 grassland (totaling 52.52) would be needed if MM-4.4-2 is implemented.

Mitigation lands shall consist of similar or higher quality habitat than found on the Project site. Should credits not be available, then compensation may be in the form a County-approved turnkey project with a mitigation bank and/or other County Planning-approved option. Selected mitigation banks shall be accredited through CDFW and/or the County to have established conservation easements that shall ensure the preservation of the resources in perpetuity.

MM-4.4-10 Special-Status Wildlife Relocation Plan

Prior to commencement of any earthmoving activities or the pre-construction staging of equipment on the Project site, the Project Applicant shall contract with a biologist approved by the County of Los Angeles (County) to develop a Pre-construction Wildlife Survey and Relocation Plan for terrestrial reptiles, including the California newt (*Taricha torosa*), two-striped gartersnake (*Thamnophis hammondii*), Southern California legless lizard (*Anniella stebbinsi*), and coastal whiptail (*Aspidoscelis tigris stejnegeri*). The Pre-construction Wildlife Survey and Relocation Plan shall be submitted to the County for review prior to any ground-disturbing activities within potentially occupied habitat.

The plan shall include at a minimum, the following:

- Protocols for pre-construction surveys to flush out and/or move identified special-status wildlife within the Study Area, as feasible
  - Relocation to the Conservation Area shall be the primary location, unless otherwise approved by the County
- The timing, frequency, and locations where surveys should be conducted
  - Surveys shall be conducted 24 hours prior to construction activities and repeated the morning of the proposed activity
  - Surveys shall be conducted in all areas anticipated to be subject to vegetation clearing

- The habitat and conditions in the proposed relocation site(s)
- The methods that would be used for trapping and relocating identified species
  - All equipment used in the effort shall be cleaned and decontaminated to minimize the spread of herpetofaunal pathogens (per the 2020 article by Julian et al. in the Herpetological Review, Minimizing the Spread of Herpetofaunal Pathogens in Aquatic Habitats by Decontaminating Construction Equipment)
  - Any wildlife handling and relocation methodology from the Streambed Alteration Agreement issued by the California Department of Fish and Wildlife (CDFW) shall be incorporated in the Pre-construction Survey and Relocation Plan
- Protocols for documentation/recordation of the species and number of animals relocated
  - Relocations shall be logged and made available to the County, if requested
- Protocols for notifying CDFW if identified species cannot be relocated
  - Attempts at relocation shall be logged, and notification shall occur within 24 hours
- The timing and frequency of reports documenting the results of the surveys

MM-4.4-11 Nesting Bird Avoidance

Project construction shall be conducted in compliance with the conditions set forth in the Migratory Bird Treaty Act and California Fish and Game Code with methods approved by the California Department of Fish and Wildlife to protect active bird/raptor nests. Vegetation removal shall occur during the non-breeding season for nesting birds (generally late September to early March) and nesting raptors (generally early July to late January) to avoid impacts to nesting birds and raptors.

For the remaining Project activities initiated during the breeding season for nesting birds (March 1–September 30) and nesting raptors (February 1–June 30), a pre-construction survey shall be conducted by the Biological Monitor (MM-4.4-4) for nesting birds and/or raptors within 3 days prior to any work within 300 feet for suitable nesting habitat for non-raptors and within 500 feet for suitable nesting habitat for raptors). If the Biological Monitoring does not find any active nests or immediately adjacent to the impact areas, the Project activity shall be allowed to proceed.

If the Biological Monitor finds an active nest adjacent to the construction area and determines that the nest may be indirectly impacted or breeding activities substantially disrupted, the Biological Monitor shall delineate an appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activity. Any nest found during survey efforts shall be mapped on the construction plans, which will be included in the report(s) documenting the survey(s) that will be submitted to the County within three days of the completion of the survey. The active nest shall be protected until nesting activity has ended. To protect any nest site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by the Biological Monitor: (1) work limits shall be established within a buffer around any occupied nest (the buffer shall be 100–300 feet for nesting non-raptors and 300–500 feet for nesting raptors), unless otherwise determined by the Biological Monitor and (2) access and surveying shall be restricted within the buffer of any occupied nest, unless otherwise determined by the Biological Monitor. Encroachment into the buffer area around a known nest shall only be allowed if the Biological Monitor determines that the proposed activity would not disturb the nest

occupants. Construction can proceed when the Biological Monitor has determined that fledglings have left the nest, or the nest has failed.

MM-4.4-12 Lighting Plan

Prior to issuance of the building permit, the Applicant shall prepare lighting plans for submission and approval by the Los Angeles County (County) Department of Regional Planning (Planning) that identify the type, layout, and luminaire wattage of all exterior fixtures to be employed in association with the Project. The plan shall demonstrate compliance with Chapter 22.80 (Rural Outdoor Lighting District) of the County Code. The lighting plan shall at a minimum address and conform to the Rural Outdoor Lighting District as well as the following requirements, and County Planning must approve all aspects of the final submitted lighting plans.

- Wherever feasible and compatible with requirements for nighttime safety and security, outdoor lighting shall be not be operated adjacent to native habitats.
- Outdoor lighting shall be fully shielded so that bulbs and lenses are not visible and shall cause no light trespass into native habitats or skyward. No lighting shall be directed toward native habitats.
- Light fixtures shall be mounted as low as possible to minimize light trespass.
- The lowest amount of light shall be employed that is needed for the task. The lighting shall only illuminate the area needed and shall be no brighter than necessary. This includes lighting for stage events.
- Motion sensors or automatic controls shall be employed to ensure that lights are not left on longer than necessary.
- Only warm light sources shall be used for outdoor lighting. The amount of blue light emitted shall be minimized, as blue light has been shown to harm human health and endanger wildlife. Warm (or subdued) light sources recommended for use outdoors include low-pressure sodium, high-pressure sodium, and low-color-temperature LEDs. Wherever feasible, lighting color temperature shall not exceed 2,200 kelvins.
- The following types of lighting are prohibited and shall not be used: drop-down lenses, mercury vapor lights, ultraviolet lights, searchlights, laser lights, or other outdoor lighting that flashes, blinks, alternates, or moves.
- Project structures shall utilize non-reflective materials to avoid glare intruding into native habitats.
- Landscape screens shall be employed where feasible to reduce glare from vehicle headlights into native habitats.

MM-4.4-13 Homeowners' Association Covenants, Conditions, and Restrictions

The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions (CC&Rs), which are reviewed and approved prior to final map recordation, then recorded immediately after the final

map records, shall include the following requirements to reduce potential human impacts on adjacent habitats and wildlife species:

- Invasive plant species (designated by the California Invasive Plant Council) shall be prohibited on all residential lots, as they could establish off site and have negative impacts to the adjacent habitats.
- All trash/garbage waste and recycling receptacles shall have locking devices that discourage wildlife foraging in common areas/parks and shall encourage the use of such locking devices on residential receptacles, as feasible.
- Intentional feeding of wildlife, including mule deer, is prohibited.
- The use of rodenticides is prohibited.
- Speed limits of 15 mph shall be posted, and the CCRs shall require residents to comply with the posted speed limits.
- Smoking shall be prohibited in open space areas.
- The HOA shall not use balloons for any community events, and the use of balloons by individual homeowners shall be discouraged.
- Homeowner reprisals against native wildlife species (i.e., killing or harming native wildlife species in any way) if homeowner pets are killed or harmed by wildlife shall be prohibited.
- Public information signage shall be installed at the trailhead and in the recreation facility, and printed information shall be provided to the HOA in order to (1) educate and inform the public about wildlife, especially mountain lions present in the area; (2) advise on proper avoidance measures to reduce human-wildlife conflicts; (3) advise on proper use of open space trails in a manner respectful to wildlife (e.g., dogs on leash, proper waste disposal); and (4) provide local contact information to report injured or dead wildlife. Signage should be written in the language(s) understandable to all those likely to recreate and use the trails. Signage should not be made of materials harmful to wildlife.

MM-4.4-14 Jurisdictional Waters Compensation

Mitigation for up to 4.94 acres of direct impacts to jurisdictional waters shall be implemented through on-site enhancement of remaining jurisdictional waters (per MM-4.4-3) and/or off-site acquisition, such as mitigation bank credits and/or turnkey projects with mitigation banks (as approved by the County of Los Angeles) following the issuance of permits from the U.S. Army Corps of Engineers, Los Angeles Regional Water Quality Control Board, and California Department of Fish and Wildlife, and prior to the issuance of the grading permit.

MM-4.4-15 Roosting Bat Survey

If Project construction initiates between June 1 and August 30, a Los Angeles County Department of Regional Planning (LACDRP)-approved Biological Monitor shall conduct a pre-construction roosting bat survey within one week prior to the start of construction-related activities for the Project. The biologist shall inspect cliff features that could have crevices used for roosting by a colony of canyon bat (*Parastrellus hesperus*) within 500 feet of proposed construction activities and then conduct a roost emergence survey at dusk for any potential roosting features found. Results of the surveys shall be documented in a report and submitted to LACDRP. As stated in MM-

4.4-4, the Biological Monitor shall monitor any colonial roosts located within 500 feet from the Project limits.

MM-4.4-16 SEA Protected Trees Replacement/Compensation

The required Conservation Management Plan (CMP) approved by the County of Los Angeles (County) shall include a Protected Tree Replacement Plan that shall dictate the establishment of replacement trees in the Conservation Area at the numbers specified in the following table. At a minimum, the removal of any SEA Protected Tree shall result in a minimum of two replacement plantings with 10:1 for Heritage Trees. Replacement trees shall be seedlings of the same species being removed and shall be planted within an area where suitable growing conditions are present and where the trees shall be able to remain in perpetuity, which may include the On-Site Conservation Area. Undersized, naturally sprouted trees of the same species growing on site may be protected or transplanted as replacement trees. The replacement trees shall be nurtured and maintained in a condition of good health and shall be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. The following table details the quantity of each species required for planting.

Summary of Individual Species Replacement Quantities

Scientific Name	Common Name	Total Impacted	Replacement Ratio	Total Replacement Required
Heteromeles arbutifolia	toyon	0	2:1	0
Juglans californica	Southern California black walnut	3	2:1	6
Populus fremontii	Fremont cottonwood	15	2:1	30
Quercus agrifolia	coast live oak	191	2:1	382
Quercus agrifolia (Heritage Tree)	coast live oak (Heritage Tree)	15	10:1	150
Quercus berberidifolia	scrub oak	1	2:1	2
Quercus lobata	valley oak	10	2:1	20
Quercus lobata (Heritage Tree)	valley oak (Heritage Tree)	2	10:1	20
Salix laevigata	red willow	24	2:1	48
Salix lasiolepis	arroyo willow	7	2:1	14
Sambucus nigra ssp. *caerulea*	blue elderberry	50	2:1	100
	Total	**318**	**Not Applicable**	**772**

It should be noted that mitigation can include the protection of undersized, naturally sprouted trees of the same species growing on site. In addition, per the County Code, the County may require additional mitigation and monitoring requirements following review of the Significant Ecological Area Conditional Use Permits. At a minimum, the County requires that the replacement trees need

to be nurtured and maintained in a healthy condition and be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees.

The Project Applicant must pay into the County Protected Tree Fund should there not be enough locations within the Conservation Area (on-site and off-site) or Project landscaped areas for replacement trees. At last resort, the Protected Tree Fund payments shall be used by the County in accordance with County Code Section 22.102.070(F)(5).

4.4.8 Level of Significance After Mitigation

With the inclusion of MM-4.4-1 through MM-4.4-13, the Project would have a less-than-significant impact regarding substantial adverse effects, 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 CDFW or USFWS.

With the inclusion of MM-4.4-1, MM-4.4-2, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, MM-4.4-9, MM-4.4-12, and MM-4.4-13, the Project would have a less-than-significant impact regarding substantial adverse effects on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, or regulations or by CDFW or USFWS.

With the inclusion of MM-4.4-1, MM-4.4-3, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, MM-4.4-14, the Project would have a less-than-significant impact regarding substantial adverse effects on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands) through direct removal, filling, hydrological interruption, or other means.

With the inclusion of MM-4.4-1, MM-4.4-4, MM-4.4-12, and MM-4.4-15, the Project would have a less-than-significant impact to 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.

With the inclusion of MM-4.4-1, MM-4.4-2, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, MM-4.4-9, and MM-4.4-16, the Project would have a less-than-significant impact on the conversion of oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or other unique native woodlands (juniper, Joshua, southern California black walnut, etc.).

With the inclusion of MM-4.4-1 through MM-4.4-16, the Project would have a less-than-significant impact related to potential conflicts with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (County Code, Title 12, Chapter 12.36), the County Oak Tree Ordinance (County Code, Title 22, Chapter 22.174), the (SEAs (County Code, Title 22, Chapter 102), Specific Plans (County Code, Title 22, Chapter 22.46), Community Standards Districts (County Code, Title 22, Chapter 22.300 et seq.), and/or Coastal Resource Areas (County General Plan, Figure 9.3).

The Project would not conflict with the provisions of an adopted HCP, NCCP, or other approved state, regional, or local HCP, and there would be no impact.

4.4.9 References

Allen, L.W., K.L. Garrett, and M.C. Wimer. 2016. *Los Angeles County Breeding Bird Atlas*. Los Angeles, California: Los Angeles Audubon.

AOU (American Ornithologists' Union). 1998. *Check-List of North American Birds*. Washington DC: American Ornithologists' Union.

AOU. 2009. *Checklist of North American Birds*. 7th ed. 1998–2009. Washington DC: American Ornithologists' Union

Barbour, R.W. 1969. Bats of America. Univ. Kentucky Press, Lexington, 286 pp.

Bleich, V.C. 1973. "Ecology of Rodents at the United States Naval Weapons Station Seal Beach, Fallbrook Annex, San Diego County, California." Master's thesis; California State University, Long Beach.

Bleich, V.C., and O.A. Schwartz. 1975. "Observations on the Home Range of the Desert Woodrat." *Journal of Mammalogy* 56: 518–519.

Brown, J.H., G.A. Lieberman, and W.F. Dengler. 1972. "Woodrats and Cholla: Dependence of a Small Population on the Density of Cacti." *Ecology* 53: 310–313.

California Herps. 2021. *A Guide to the Amphibians and Reptiles of California*. http://www.californiaherps.com/index.html. Accessed February 2021.

Cameron, G.N., and D.G. Rainey. 1972. "Habitat utilization by *Neotoma lepida* in the Mojave Desert." *Journal of Mammalogy* 53: 251–266.

CDFG (California Department of Fish and Game). 2012. *Staff Report on Burrowing Owl Mitigation*. March 7, 2012. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline=true.

California Department of Fish and Wildlife (CDFW). 2005. California Wildlife Habitat Relationships System-Canyon Bat. Accessed June 2024. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2335&inline=1.

CDFW. 2012. Staff Report on Burrowing Owl Mitigation, March 7, 2012 (a). 34 pp.

CDFW. 2016. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. Dated May 2016.

CDFW. 2017. "Natural Landscape Blocks–California Essential Habitat Connectivity (August 26, 2022)." CEHC (ds621). Sacramento, California. https://wildlife.ca.gov/Conservation/Planning/Connectivity/CEHC.

CDFW. 2019. California Natural Community Conservation Plans. April 2019. Accessed October 2023. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline.

CDFW. 2022. California Natural Diversity Database: RareFind 5. Records of occurrence for USGS 7.5- minute Quadrangle maps: Calabasas, Canoga Park, Mint Canyon, Newhall, Oat Mountain, San Fernando, Simi Valley East, Val Verde, Van Nuys. California Department of Fish and Wildlife, State of California Resources Agency. Sacramento, California.

CDFW. 2023. Mountain Lion Predicted Habitat - CWHR M165 [ds2616]. Accessed August 2023. https://data.cnra.ca.gov/dataset/mountain-lion-predicted-habitat-cwhr-m165-ds2616.

Center for Biological Diversity and the Mountain Lion Foundation. 2019. "A Petition to List the Southern California/Central Coast Evolutionarily Significant Unit (ESU) of Mountain Lions as Threatened under the California Endangered Species Act (CESA)." Accessed September 2023. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=171208andinline.

CNPS (California Native Plant Society). 2022. *Inventory of Rare and Endangered Plants* (online edition, v9-01 1.5). Rare Plant Program. California Native Plant Society, Sacramento, California. Website. Accessed March 2022. http://www.rareplants.cnps.org.

Collins, J.T., and T.W. Taggart. 2009. *Standard Common and Current Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodilians*. 6th ed. Publication of The Center For North American Herpetology, Lawrence.

County of Los Angeles. 2015. *Los Angeles County 2035 General Plan*. Accessed January 2023. https://planning.lacounty.gov/long-range-planning/general-plan/.

Dellinger, J.A., B. Cristescu, J. Ewanyk, D.J. Gammons, D. Garcelon, P. Johnston, Q. Martins, C. Thompson, T.W. Vickers, C.C. Wilmers, H.U. Wittmer, and S.G. Torres. 2020. "Using Mountain Lion Habitat Selection in Management." *Journal of Wildlife Management* 84(2): 359–371.

DMEC (David Magney Environmental Consulting). 2006. *Biological Resources of Lyons Canyon Ranch, Newhall, California. 3 February 2006. (PN05-0201.) Ojai California*. Prepared for the County of Los Angeles, Los Angeles, California, on behalf of D.R. Horton, Woodland Hills, California.

Dunk, J.R. 1995. "White-Tailed kite (*Elanus leucurus*)." In *The Birds of North America*. Edited by A. Poole and F. Gill. Washington DC: The Academy of Natural Sciences, Philadelphia, and The American Ornithologists" Union, Washington, DC.

eBird. 2023. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Accessed August 2023. http://www.ebird.org.

Grinnell, J., and A.H. Miller. 1944. *The Distribution of the Birds of California*. Pacific Coast Avifauna Number 27. Berkeley, California: Copper Ornithological Club. Reprinted by Artemisia Press, Lee Vining, California; April 1986. 617 pp.

LACDRP (Los Angeles County Department of Regional Planning). 2011. *Los Angeles County Oak Woodlands Conservation Management Plan*. May 2011. Accessed January 2023. https://planning.lacounty.gov/wp-content/uploads/2022/11/oakwoodlands_conservation-management-plan.pdf.

LACDRP. 2014. Oak Woodlands Conservation Management Plan Guide. Accessed January 2023. https://planning.lacounty.gov/wp-content/uploads/2022/11/oakwoodlands_conservation-management-plan-guide-20141204.pdf.

LACDRP. 2020. Significant Ecological Areas (SEA) Ordinance Implementation Guide. 133 pp. January 16, 2020.

NatureServe. 2023. "Conservation Status Assessment, Identifying Threatened Species and Ecosystems." NatureServe. https://www.natureserve.org/conservation-tools/conservation-status-assessment.

NETR (Nationwide Environmental Title Research). 2023. Historic Aerials; online viewer. Accessed October 2024. https://www.historicaerials.com/viewer.

NRCS (Natural Resources Conservation Service). 2022. Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Accessed February 2022. https://websoilsurvey.sc.egov.usda.gov/.

PCR. 2000. *Biological Resources Assessment of the Proposed Santa Susana Mountains/Simi Hills Significant Ecological Area*. Accessed September 2023. https://planning.lacounty.gov/wp-content/uploads/2022/11/sea_2000-BRA-SantaSusanaMountainsSimiHills.pdf.

Riley, S.P., J.A. Sikich, and J.F. Benson. 2021. "Big Cats in the Big City: Spatial Ecology of Mountain Lions in Greater Los Angeles." *The Journal of Wildlife Management* 85(8): 1,527–1,542.

Rincon Consultants. 2015a. *The Lyons Canyon Ranch Project (TTN 63653): Rare Plant Survey Update, 2015 Results*. July 27, 2015.

Rincon Consultants. 2015b. *Summary Report of Focused Presence/Absence Surveys for the Lyons Canyon Ranch Project (TTN 63653), Santa Clarita Area, Unincorporated Los Angeles County, California*. August 7, 2015.

Rincon Consultants. 2015c. *Least Bell's Vireo Focused Survey Report, Lyons Canyon Ranch Project, Los Angeles County, California*. August 17, 2015.

RTF&A. 2021. *Geotechnical 100-Scale Plan Review- Lyons Canyon Development, Vesting Tentative Tract Map No. 83301- Los Angeles County, California, For NUWI – Lyons Canyon, LLC*. March 19, 2021. Provided in Appendix E.

RWQCB (Regional Water Quality Control Board). 2012. "Figure 1, EWMP Boundaries." Accessed May 2022. https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/santa_clara/upper/doc/ewmp_map.pdf.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation*. 2nd ed. Sacramento, California: California Native Plant Society Press.

Sogge, M.K., Ahlers, Darrell, and S.J. Sferra. 2010. *A natural history summary and survey protocol for the southwestern willow flycatcher.* U.S. Geological Survey Techniques and Methods 2A-10. 38 p.

Stevens, C. 2024. Locations of the feasibility study for the Newhall Interstate I-5 Wildlife Crossing. Telephone conversation between C. Stevens (Resource Conservation District of the Santa Monica Mountains) and M. Cady (Dudek). June 25, 2024.

SWRCB (State Water Resources Control Board. 2019. *State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. Adopted

April 2, 2019. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/2021/procedures.pdf.

The Xerces Society. 2014. *Petition to Protect the Monarch Butterfly (Danaus plexippus plexippus) Under the Endangered Species Act*. Accessed August 2023. https://xerces.org/sites/default/files/2018-07/14-058_01_monarch-esa-petition.pdf.

The Xerces Society. 2018. *A Petition to the State of California Fish and Game Commission to List the Crotch Bumble Bee (Bombus crotchii), Franklin's Bumble Bee (Bombus franklini), Suckley Cuckoo Bumble Bee (Bombus suckleyi), and Western Bumble Bee (Bombus occidentalis occidentalis) as Endangered under the California Endangered Species Act*. Accessed August 2023. https://fgc.ca.gov/CESA/index.

Thompson, S.D. 1982. "Spatial Utilization and Foraging Behavior of the Desert Woodrat, *Neotoma lepida lepida*." *Journal of Mammalogy* 63: 570–581.

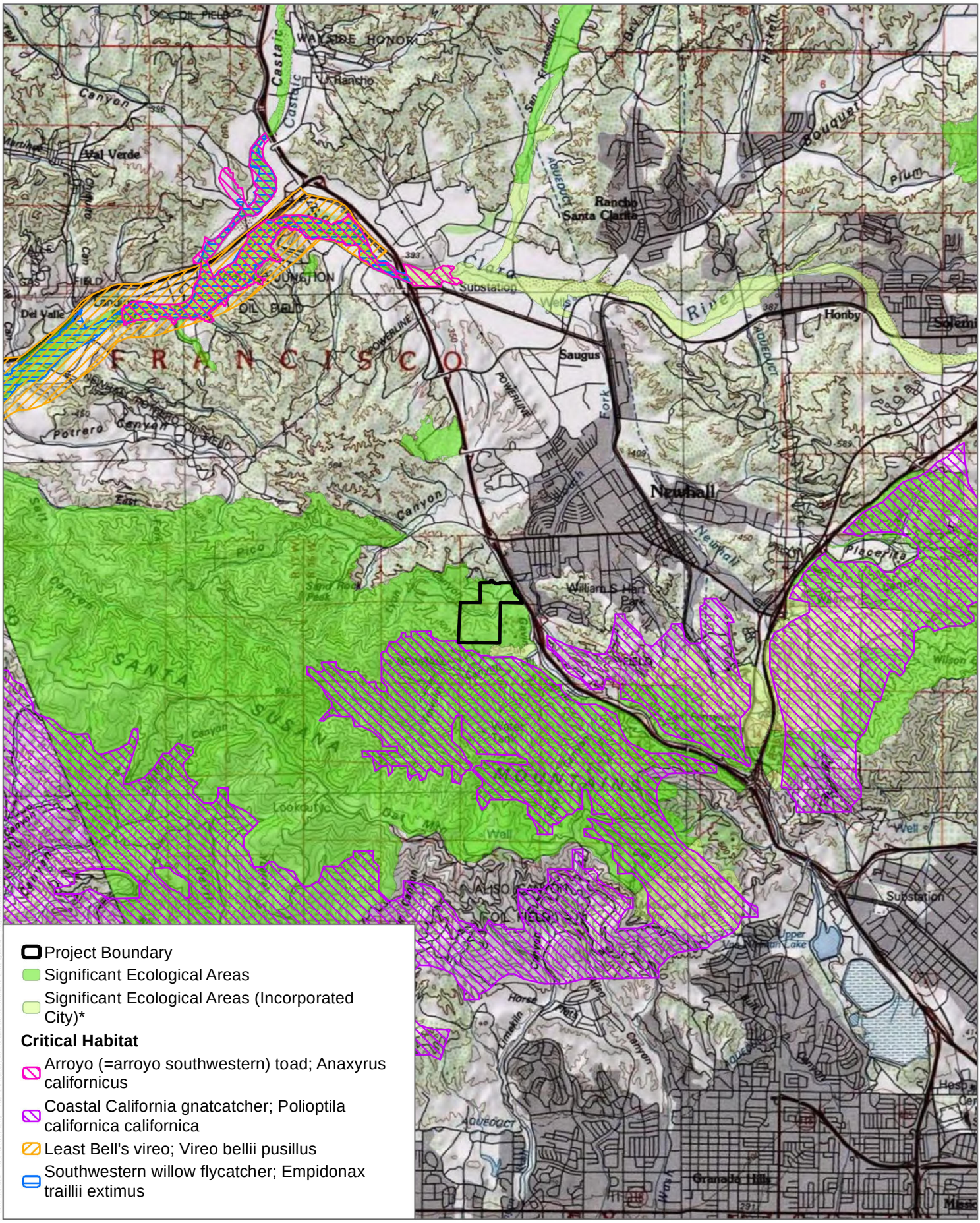
USACE (U.S. Army Corps of Engineers). 1987. *Corps of Engineers Wetlands Delineation Manual*. Online ed. Environmental Laboratory, Wetlands Research Program Technical Report Y-87-1. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station. January 1987. http://www.fedcenter.gov/Bookmarks/index.cfm?id=6403&pge_id=1606.

USACE. 2008a. *A Field Guide to the Identification of the Ordinary High Water Mark (OWHM) in the Arid West Region of the Western United States: A Delineation Manual*. ERDC/CRREL TR-08-12. Prepared by R.W. Lichvar and S.M. McColley for the U.S. Army Corps of Engineers Wetland Regulatory Assistance Program. Hanover, New Hampshire: U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. August 2008.

USACE. 2008b. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. Environmental Laboratory, ERDC/EL TR-08-28. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center. September 2008. http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/reg_supp/trel08-28.pdf.

USFWS (United States Fish and Wildlife Service). 1997. Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines. February 28. https://www.fws.gov/sites/default/files/documents/survey-protocol-for-coastal-california-gnatcatcher.pdf.

USFWS. 2001. *Least Bell's Vireo Survey Guidelines*. January 19.



SOURCE: USGS Topo Maps, County of Los Angeles, USFWS

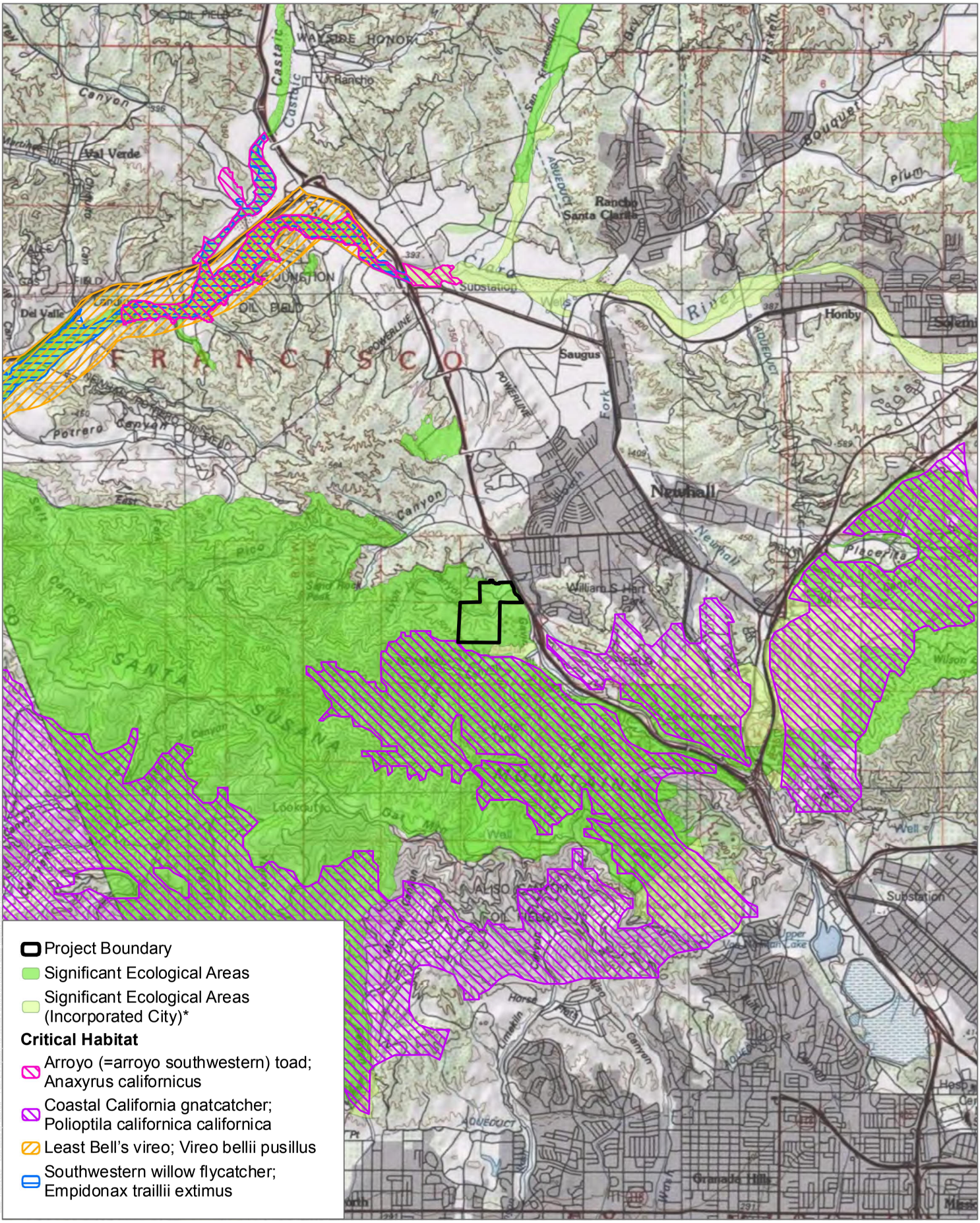
DUDEK

FIGURE 4.4-1

Regional Conditions

Trails at Lyons Canyon Project

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SOURCE: USGS Topo Maps, County of Los Angeles, USFWS

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FIGURE 4.4-2

SEA Map

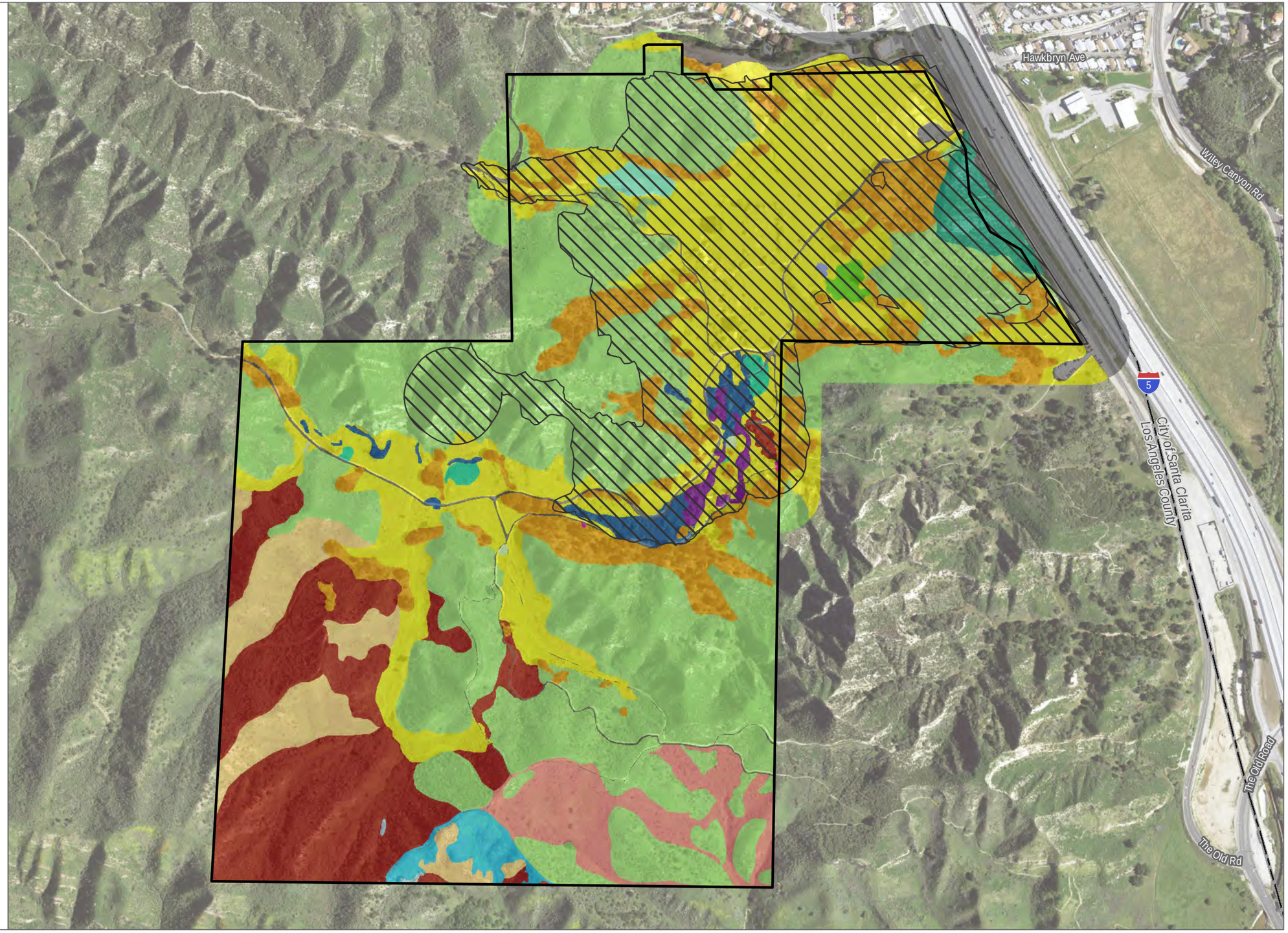
Trails at Lyons Canyon Project

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- Project Boundary
- Project Development Footprint
- City Boundary

Vegetation Communities and Land Covers

- Adenostoma fasciculatum Shrubland Alliance - Category 4
- Adenostoma fasciculatum Shrubland Alliance - Disturbed - Category 4
- Artemisia californica - Salvia leucophylla Shrubland Alliance - Category 4
- Artemisia californica - Salvia leucophylla Shrubland Alliance - Disturbed - Category 4
- Avena spp. - Bromus spp. Herbaceous Semi-natural Alliance - Category 4
- Baccharis salicifolia Shrubland Alliance - Category 4
- Brassica nigra - Centaurea melitensis Herbaceous Semi-natural Stands
- Distichlis spicata Herbaceous Alliance - Category 4
- Ericameria palmeri Provisional Shrubland Alliance - Category 3
- Eriodictyon crassifolium Provisional Shrubland Alliance - Category 3
- Eriogonum davisonii/Croton setiger Grassland Alliance - Category 4
- Eriogonum fasciculatum Shrubland Alliance - Category 4
- Juglans californica Forest and Woodland Alliance - Category 3
- Nassella [Stipa] spp. - Melica spp. Herbaceous Alliance - Category 3
- Quercus agrifolia Forest & Woodland Alliance - Category 3
- Rhus trilobata - Crataegus rivularis - Forestiera pubescens Shrubland Alliance - Category 3
- Salix Gooddingii - Salix laevigata Forest & Woodland Alliance - Category 3
- Developed



SOURCE: NAIP 2020, Open Streets Map 2019, Glen Lukos & Associates 2022

DUDEK

0 245 490 Feet

FIGURE 4.4-3

Vegetation Communities and Land Covers

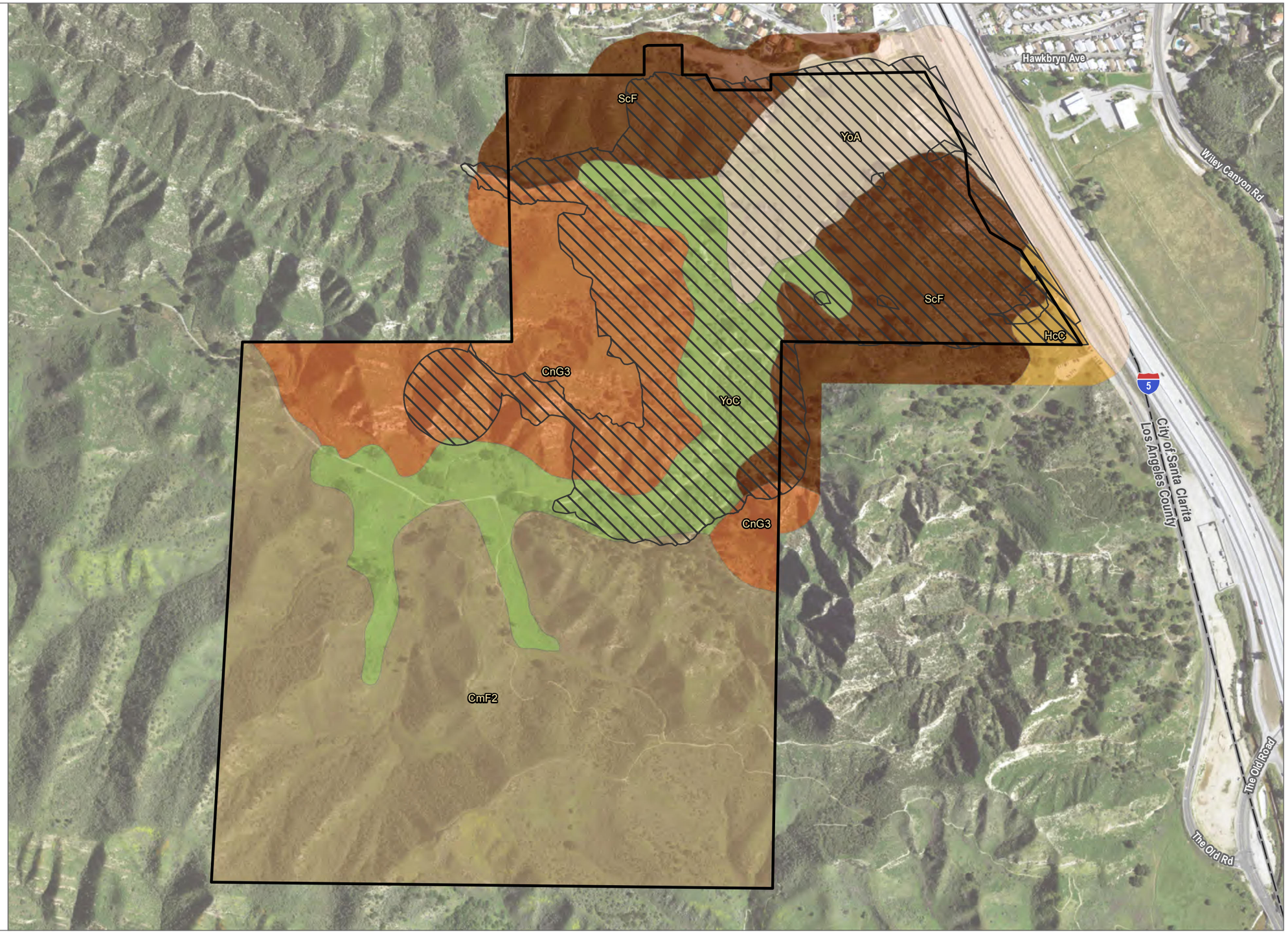
Trails at Lyons Canyon Project

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- Project Boundary
- Project Development Footprint
- City Boundary

Soils

- CmF2; Castaic-Balcom silty clay loams, 30 to 50 percent slopes, eroded
- CnG3; Castaic and Saugus soils, 30 to 65 percent slopes, severely eroded
- HcC; Hanford sandy loam, 2 to 9 percent slopes
- ScF; Saugus loam, 30 to 50 percent slopes
- YoA; Yolo loam, 0 to 2 percent slopes
- YoC; Yolo loam, 2 to 9 percent slopes



SOURCE: NAIP 2020, Open Streets Map 2019, USGS

DUDEK

0 250 500 Feet

FIGURE 4.4-4

Soils Map

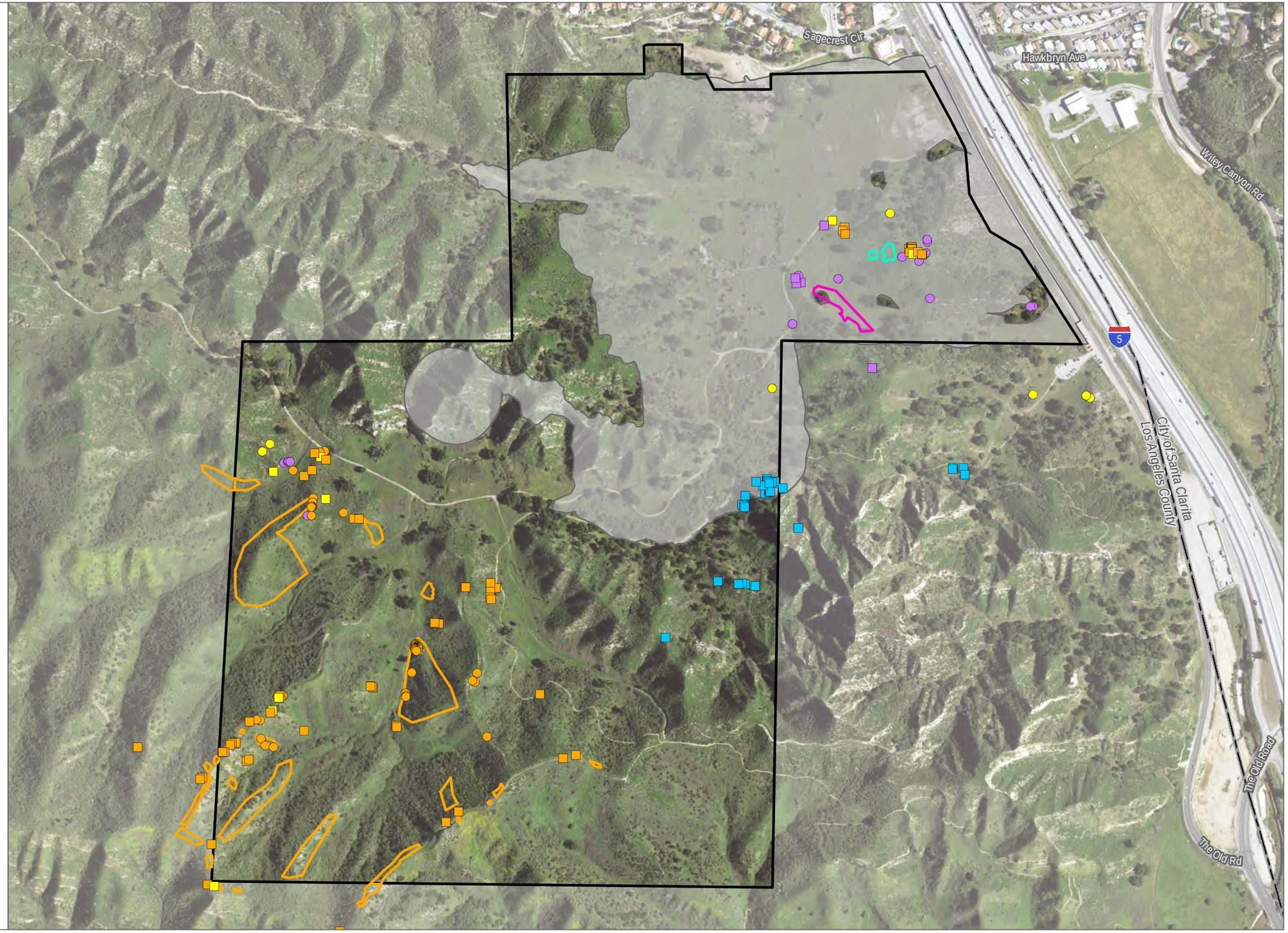
Trails at Lyons Canyon Project

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- Project Boundary
- Project Development Footprint
- City Boundary

Rare Plants

- Clubhair Mariposa Lily
- Peirson's Morning-Glory
- Plummer's Mariposa Lily
- Clubhair Mariposa Lily
- Clubhair Mariposa Lily (2022)
- Plummer's Mariposa Lily
- Plummer's Mariposa Lily (2022)
- Scarlet Keckiella (2022)
- Slender Mariposa Lily
- Slender Mariposa Lily (2022)



SOURCE: NAIP 2020, Open Streets Map 2019, Glen Lukos & Associates 2022

DUDEK

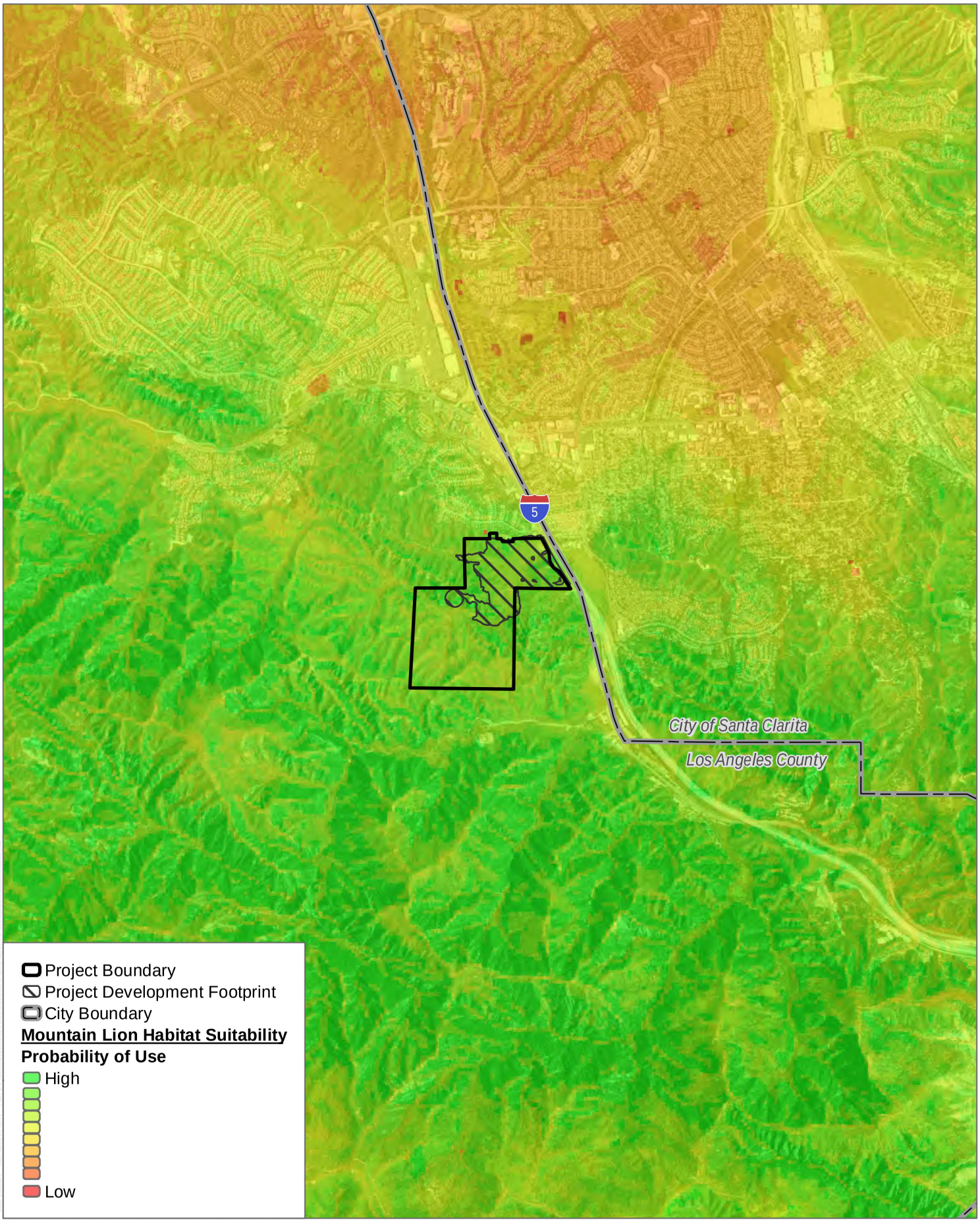
0 245 490 Feet

FIGURE 4.4-5

Special-Status Plant Locations

Trails at Lyons Canyon Project

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SOURCE: NAIP 2020, Open Streets Map 2019, CA DFW

DUDEK

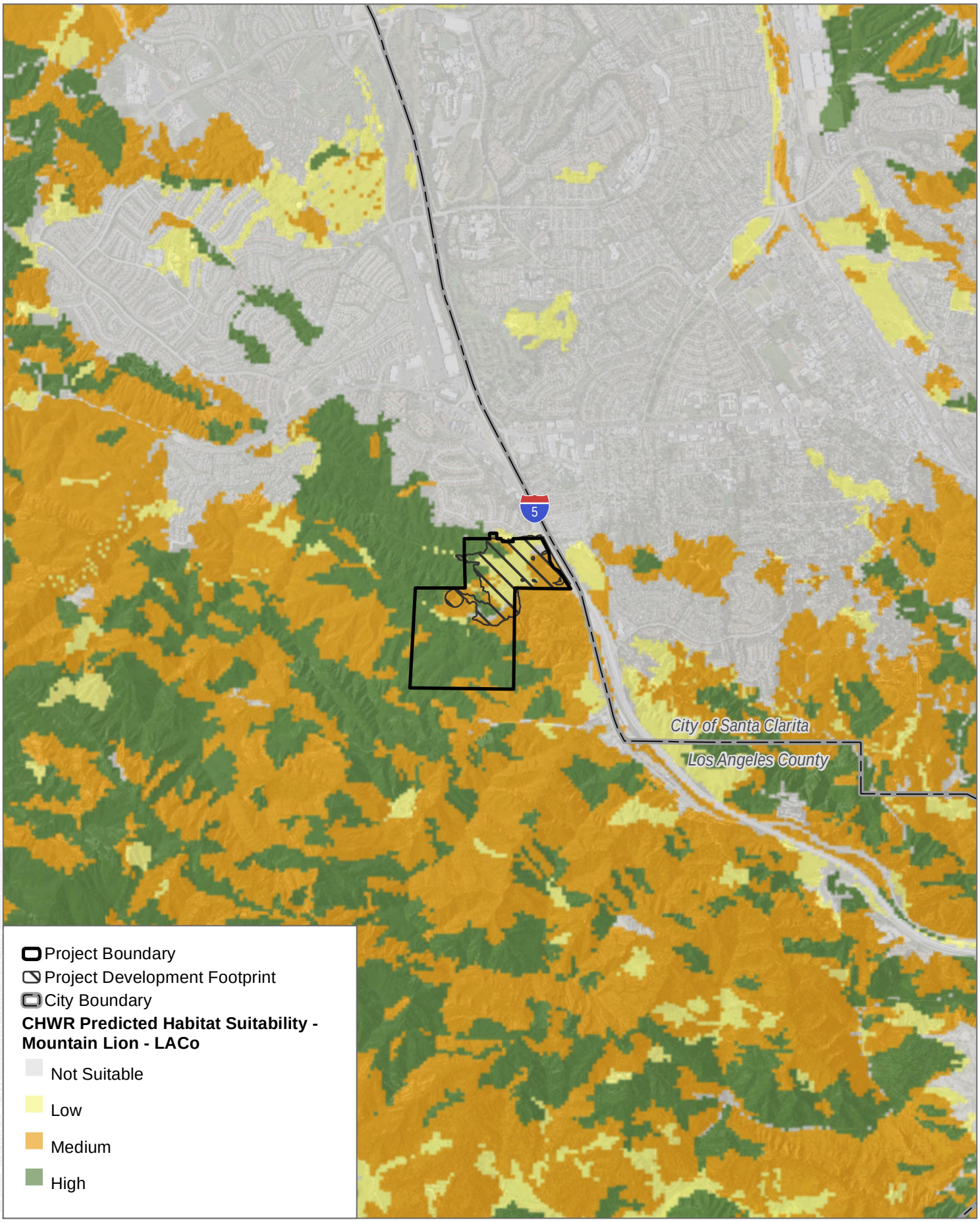
0 1,500 3,000 Feet

FIGURE 4.4-6

Mountain Lion Habitat Suitability

Trails at Lyons Canyon Project

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SOURCE: NAIP 2020, Open Streets Map 2019, CDFW CHWR

DUDEK

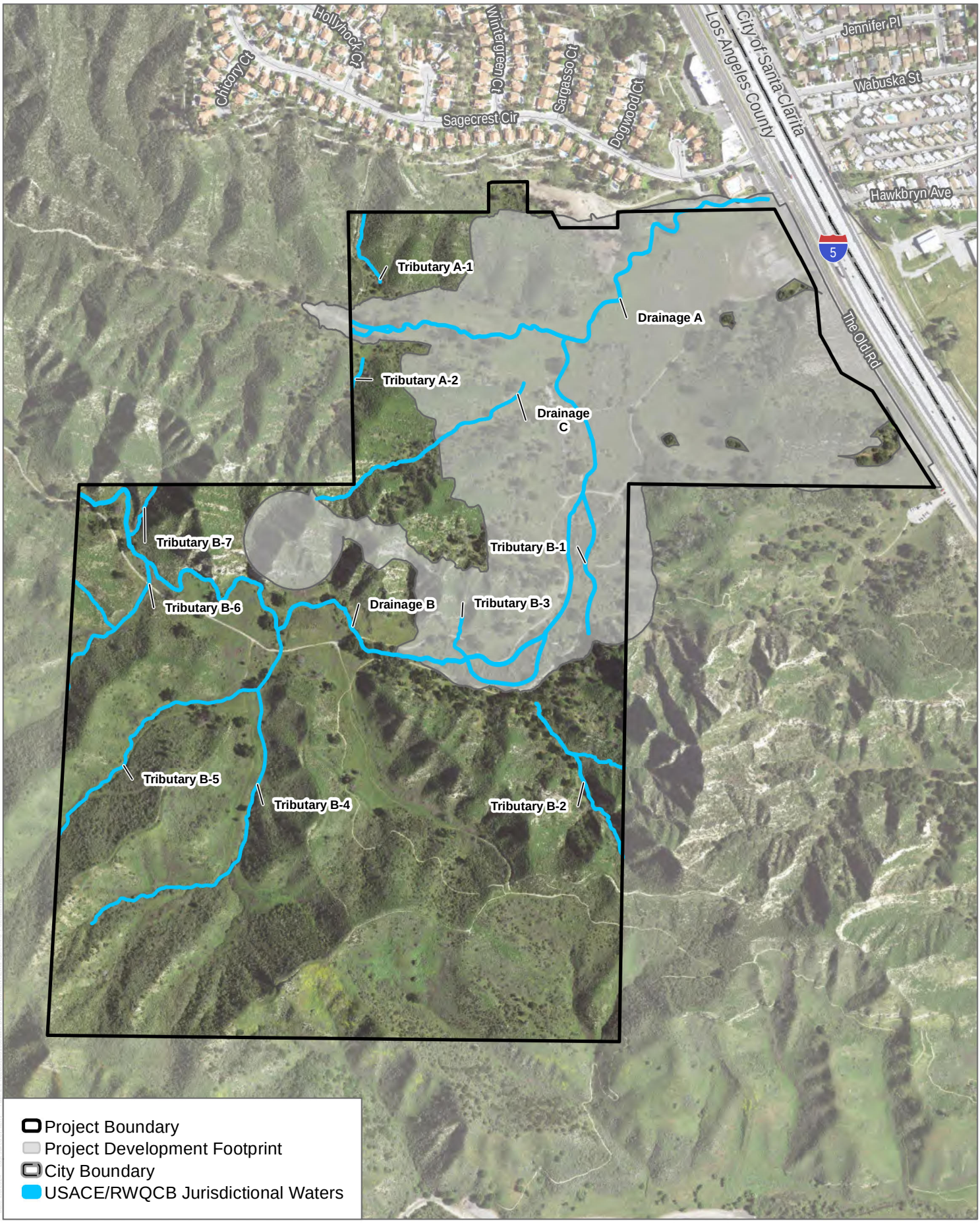
0 0.3 0.6 Miles

FIGURE 4.4-7

Mountain Lion Predicted Habitat

Trails at Lyons Canyon Project

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SOURCE: NAIP 2020, Open Streets Map 2019, Glen Lukos & Associates 2022

DUDEK

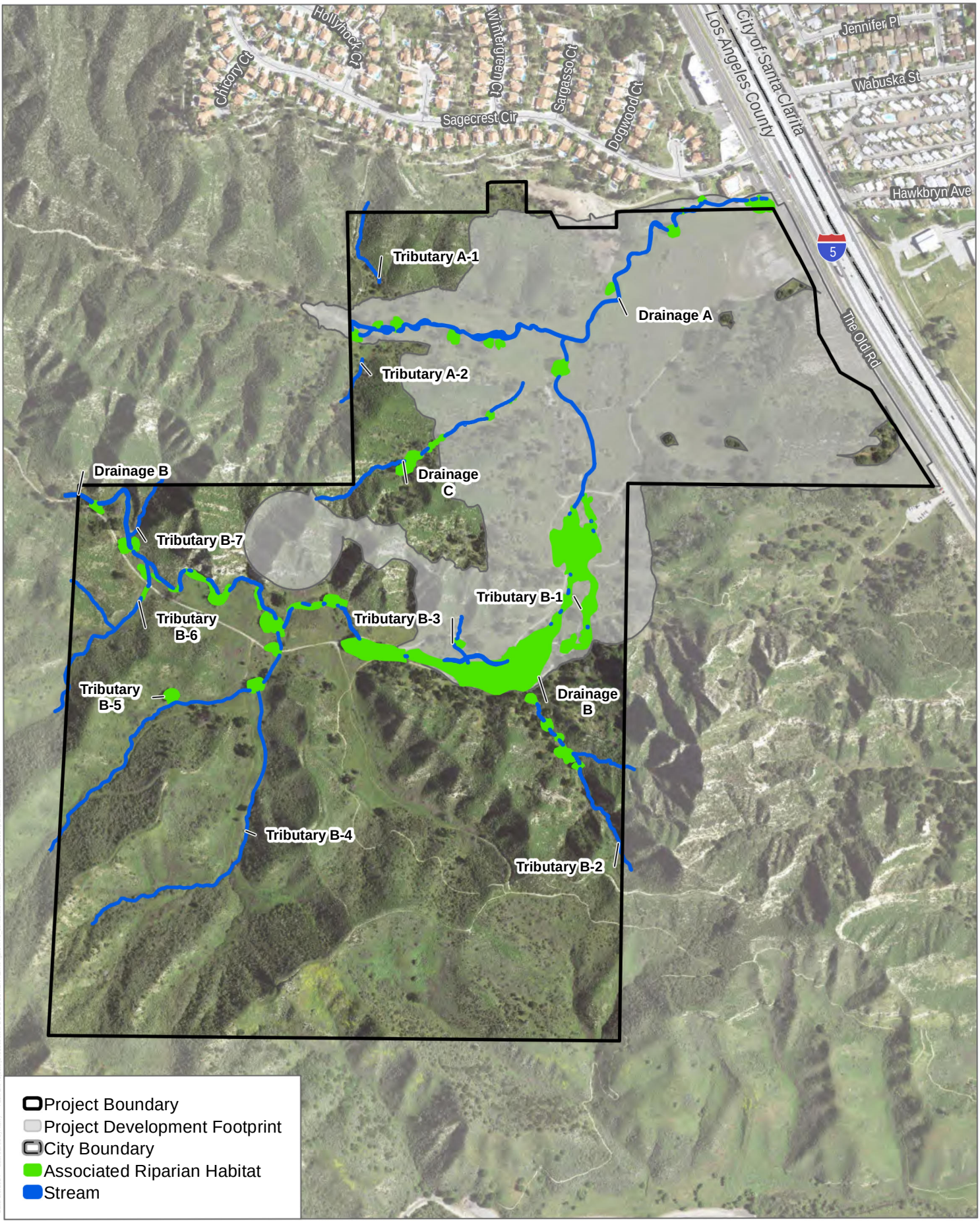
0 250 500 Feet

FIGURE 4.4-8

Potential Waters of the U.S.

Trails at Lyons Canyon Project

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SOURCE: NAIP 2020, Open Streets Map 2019, Glen Lukos & Associates 2022

DUDEK

0 250 500 Feet

FIGURE 4.4-9

CDFW Jurisdictional Streams and Associated Riparian Habitat

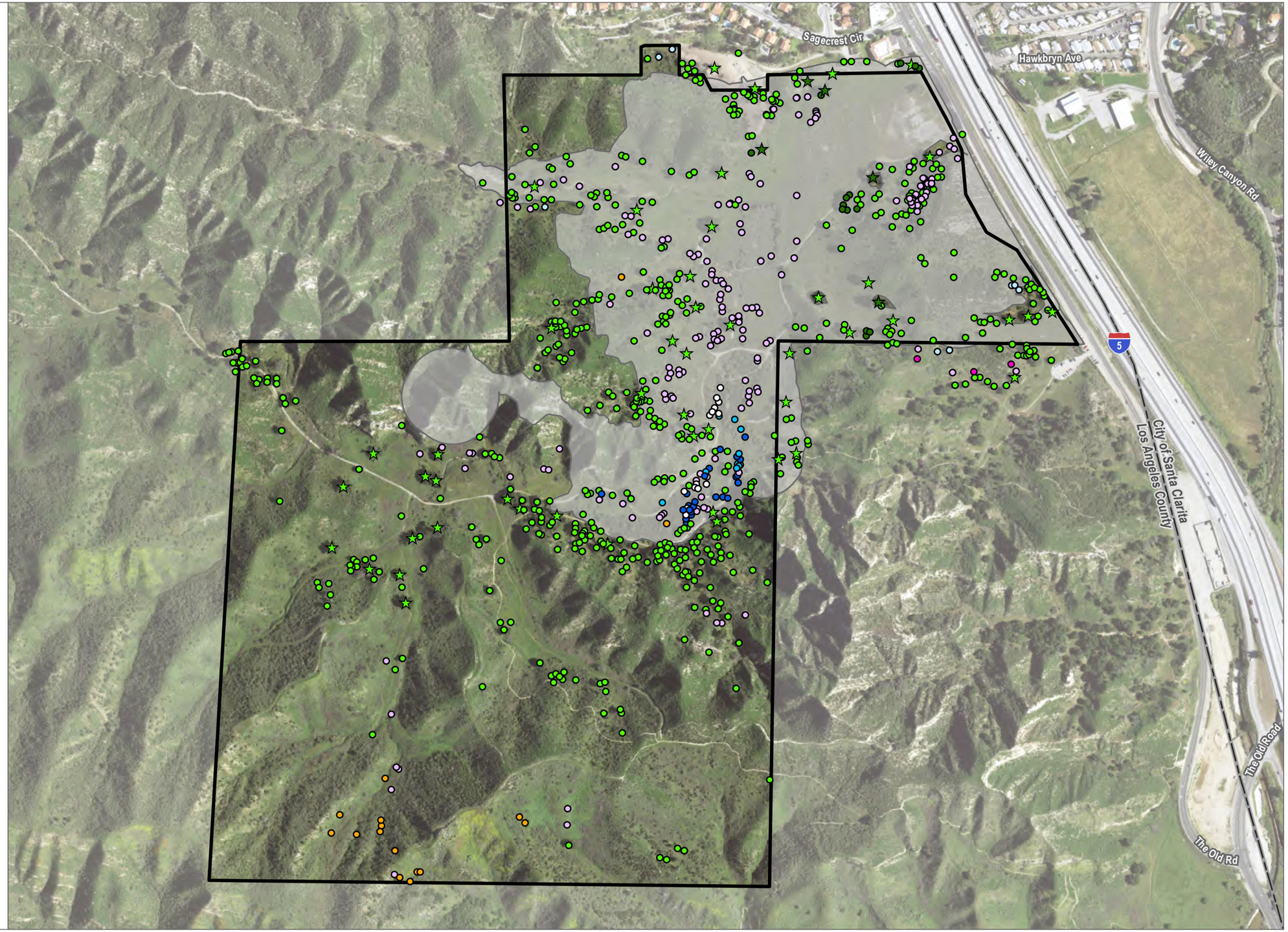
Trails at Lyons Canyon Project

INTENTIONALLY LEFT BLANK

- Project Boundary
- Project Development Footprint
- City Boundary

Tree Species

- Arroyo Willow
- Blue Elderberry
- Fremont Cottonwood
- Red Willow
- Southern California Black Walnut
- Toyon
- Scrub Oak
- Coast Live Oak
- Heritage Coast Live Oak
- Valley Oak
- Heritage Valley Oak



SOURCE: ESRI World Imagery, Open Streets Map 2019, Glen Lukos and Associates 2022

DUDEK

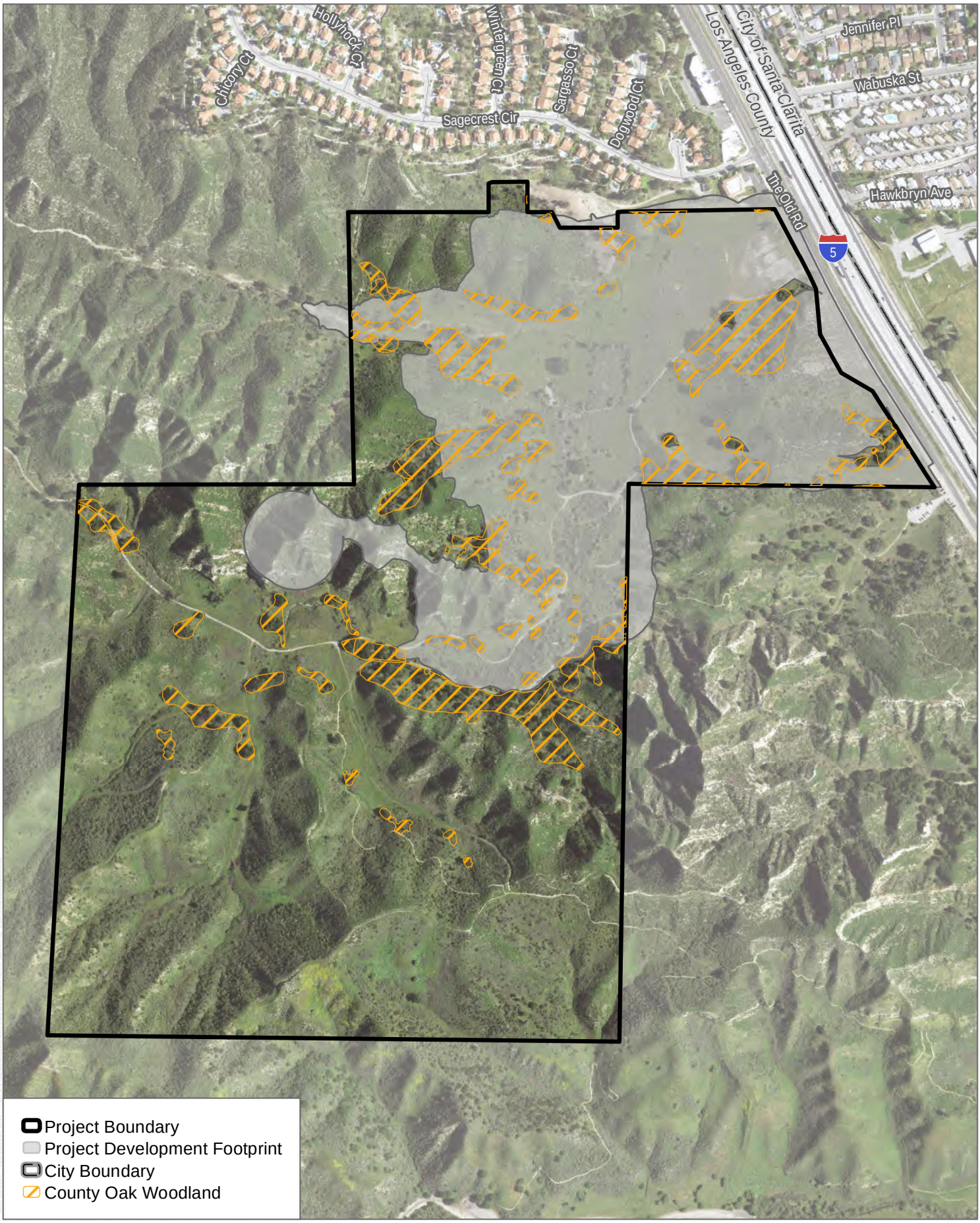
0 250 500 Feet

FIGURE 4.4-10

SEA Protected Trees

Trails at Lyons Canyon Project

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SOURCE: ESRI World Imagery, Open Streets Map 2019, Glen Lukos and Associates 2022

DUDEK

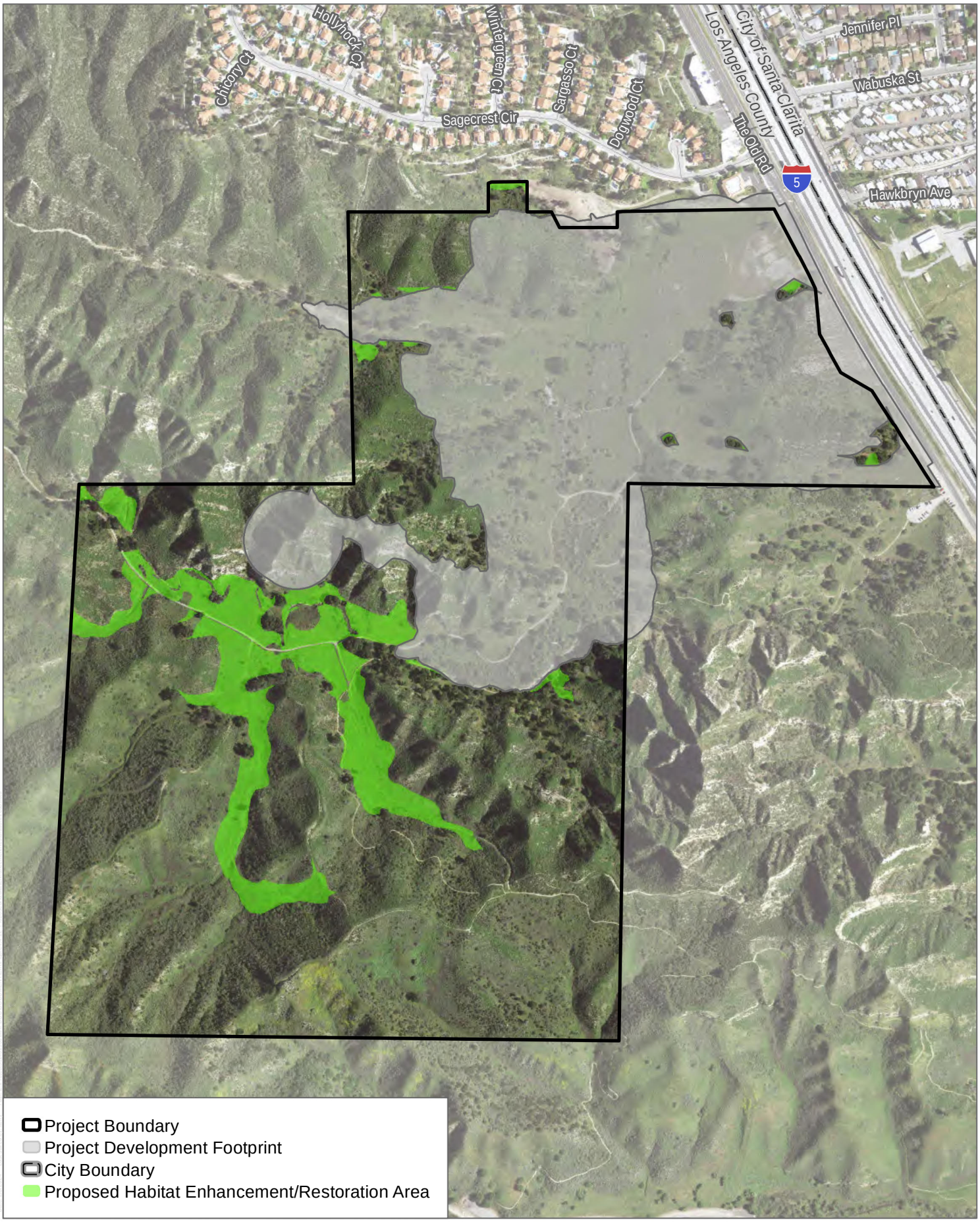
0 250 500 Feet

FIGURE 4.4-11

County Oak Woodlands

Trails at Lyons Canyon Project

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SOURCE: NAIP 2020, Open Streets Map 2019, Glen Lukos & Associates 2022

DUDEK

0 250 500 Feet

FIGURE 4.4-12

Proposed Habitat Enhancement/Restoration Areas

Trails at Lyons Canyon Project

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4.5 Cultural Resources

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to cultural resources (including historic built environment, archaeological), and identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data and reports and confidential records as well as the following:

Appendix D Cultural Resources Technical Report, prepared by Dudek, dated November 2023

Appendix E-1 Revised Geotechnical 100-Scale Plan Review- Lyons Canyon Development, Vesting Tentative Tract Map No. 83301- Los Angeles County, California, For NUWI – Lyons Canyon, LLC. Prepared by R.T. Frankian and Associates, dated September 15, 2023.

Other sources consulted are listed in Section 4.5.9, References.

4.5.1 Existing Conditions

This section describes the existing conditions in the Project area and identifies the cultural resources that could be affected by the Project. Cultural resources include places, objects, and settlements that reflect group or individual religious, archaeological, or architectural activities. Such resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements.

Regional Setting

The Project site is located within the western portion of the Santa Clarita Valley within the U.S. Geological Survey (USGS) 7.5-Minute Series Oat Mountain Quadrangle, Township 3N; Range 16W; Sections 4.9. It is situated within the foothills of the Santa Susanna Mountains, approximately 7 miles south of the Sierra Pelona Mountains, and approximately 4.5 miles west of the San Gabriel Mountains. The Project site includes rugged terrain, steep ridgelines, and dense vegetation surrounding the north, south and west perimeter of a valley floor interlaced by a series of small ephemeral creeks running generally downslope from the foothills into the valley floor. The closest year-round water source is the Santa Clarita River located approximately 3.6 miles north. Elevation within the Project site varies from its highest of 1,654 feet above mean sea level (msl) at the southwest corner to approximately 1,300 feet above msl at the northeast corner. Vegetation within the general area consists of chaparral including sage scrub and nonnative low-lying grasses on the hillsides and ridges with clusters of coast live oaks throughout. With the exception of the nonnative species, vegetation present prior to development in the region was similar to what was present at the time of this analysis (Appendix D).

Local Setting

The Project site is currently undeveloped but retains remnants of previous use including cement pads, fencing, light and electric poles, drainage pipes, water tank, modern refuse, and overgrown paved and dirt roads. Signs of current use include well-traversed non-dedicated trails and modern refuse. General ground surface visibility was variable from none (0 percent) in paved areas and dense vegetation, that accounted for approximately 60 percent of the areas of interest; to fair (30 percent), in areas with moderate vegetation, accounting for approximately 20 percent of the areas of interest; and very good to excellent (80-90 percent), in areas with exposed soils, accounting for

approximately 10 percent of the areas of interest. As shown on Figure 4.7-1, Site Geologic Map in Section 4.7, Geology and Soils, the soils observed on the Project site are consistent with the USDA's characterization of Saugus and Pico formations soils as well as soils derived from undifferentiated alluvium, colluvium and debris flow deposits (Appendix E-1; USDA 2022).

Soils in the Project site are characterized as predominantly Castaic and Saugus soils, Yolo loam, and Castaic-Balcom silty clay loams (USDA 2022). Castaic and Saugus soils and Castaic-Balcom silty clay loams exist at greater than 30 percent slopes within the foothills and along the ridges, whereas Yolo loam exists at 0 to 9 percent slopes within the valleys and alluvial planes. The series profiles are described individually below:

- Castaic and Saugus soils: 0 to 26 inches silty clay loam; 26 to 30 inches weathered bedrock. Typically found in the landform hills with steeper slopes on the backslope or sideslope.
- Yolo loam: 0 to 72 inches of loam. Typically found within alluvial fans.
- Castaic-Balcom silty clay loam: 0 to 26 inches silty clay loam; 26 to 30 inches weathered bedrock. Typically found in the landform hills on the backslope or sideslope.

The site is underlain by sedimentary rock units of the Pliocene age Saugus Formation, Sunshine Ranch Member, and the Pliocene age Pico Formation. The Saugus formation is comprised of interbedded light brown to reddish-brown siltstone and sandstone and characterized as moderately cemented, indurated, and generally poorly exposed (Appendix E-1). The Pico formation is comprised of dark yellowish orange to yellowish gray fine-to-medium grained sandstones, coarse-grained pebbly sandstones, yellowish gray to olive brown siltstones, and some silty claystone interbedded and characterized as thinly bedded, soft, and moderately weathered (Appendix E-1).

Cultural Resources Setting

A comprehensive background context elucidating regional and local cultural settings that have occurred over the last 10,000 years is provided in Appendix D. The cultural setting provides an overview of the information and theoretical underpinnings that informed this analysis by taking into account the peoples that have inhabited the area. Additionally, an ethnohistoric background context has been provided in Section 4.18, Tribal Cultural Resources, of this Draft EIR. Following is an abbreviated compilation of information about the local area, project-specific cultural setting, results of a cultural resources record search, and results of historic map and photographic aerial review.

Project-Specific Cultural Resources Setting

Sanford and Cyrus Lyon. A portion of the Project site was owned by Sanford Lyon for which the Project area is named as well as some local geographical landmarks. Following is a brief history of the Lyon brothers' history in California, how Sanford came to own a portion of the Project and how he used the property. Sanford Lyon, for whom Lyons Canyon is named, bought a portion of the Project site in 1880 from the government. Sanford and his twin brother, Cyrus, were born in Machias, Maine on November 20, 1831. Like many other residents of the East Coast, upon President Polk's announcement of the discovery of gold in California, the brothers sailed together to San Francisco in 1849 on the ship Oxnard. The ship's route took them from Nantucket, Massachusetts, around Chile's Cape Horn and up the Pacific Coast to San Francisco, California (Walker 2022). Soon after reaching San Francisco, the Lyon brothers traveled south to Los Angeles to work for their cousins at their mercantile store. Soon after the Mexican War, the mercantile went out of business; nonetheless, the brothers soon rose to some prominence in the Los Angeles area.

Cyrus was a member of the Los Angeles Rangers formed by the mayor of Los Angeles. The Rangers were memorialized and romanticized in Horace Bell's *Reminiscences of a Ranger* and as a result of the Rangers' notoriety, Cyrus became well-known and respected. Cyrus had eleven children with three women: two children with Nicolasa Triunfo (no marriage record found) who was the daughter of Jose Miguel Triunfo the grantee of Rancho Cahuenga; two with Matilda Ortega (no marriage record found); and seven with Ynez Cota who he married in 1876 (Walker 2022). Cyrus was appointed judge for the precinct of San Fernando in 1855 and then as a judge of the Plain of Rancho Cahuenga in 1856 at the age of 24 years.

In 1855 Sanford and Cyrus bought a ranch located near the present-day intersection of State Highway 14 and Newhall Avenue in present-day Newhall to farm and raise sheep. The original Hart's Station was located on the ranch and the brothers became the proprietors as a result of the ranch purchase. As a combination store, post office, telegraph office, tavern, and stage depot, the station served those traveling the adjacent wagon road connecting Los Angeles and the Sierras. Several early stagecoach lines like the Butterflied line as well as hopeful prospectors during the Kern River gold rush in the early 1850s were served by Lyon's (Hart's) Station. Although the station is now known as Lyon's Station, the name Sanford and Cyrus gave it when they took ownership, it would continue to be referred to it as Hart's Station. The station is commemorated by a plaque as California Historical Landmark No. 688, located in front of the Eternal Valley Memorial Park at 23287 North Sierra Highway in Newhall (OHP 2022).

Sanford Lyon met Annie T. Hanscom during his 1858 visit to his hometown of Machias, Maine; he eventually returned again to marry Annie in 1862. Although Annie and Sanford had their first of six children, Lewis, in 1862, Annie and Lewis would not join Sanford in California until 1868. Sanford and Annie's remaining five children were born and raised in California. Sanford was first appointed to a government seat in 1856, at the age of 24 years, as election judge in the City of San Fernando and would continue to hold various seats in Southern California government. Sanford successfully ran for County Supervisor in 1880, the same year he purchased the property that would eventually bear his name, Lyons Canyon. However, Sanford and his family had been living on the same property since at least 1874 because of his involvement in the Pico Canyon Spring Claim. Sanford spring-poled his own well in 1869 and built a home nearby shortly after (Walker 2022). The 1876 plat map of the area shows the Lyons' family home located just outside of the Project site within the current footprint of Interstate 5 and a survey of the Pico Oil Springs Mine conducted in 1877 places the home near "Lyon's Well" (BLM 2022).

At an early age, Sanford and Cyrus were important and well-known figures in the Southern California region, specifically the Los Angeles area. They were both appointed to various political seats and were also involved in the burgeoning oil industry purchasing land and well properties throughout Southern California as a result (although it appears Cyrus was only involved in name for many of the wells in order to widen Sanford's holdings). Sanford Lyon died on November 30, 1882, at the age of 51 years and was buried at Eternal Valley Memorial Park in Newhall very near the former location of his and Cyrus's Lyon's Station. Cyrus died on May 20, 1892, at the age of 61 years and was buried in Evergreen Cemetery in Los Angeles. Based on Bureau of Land Management (BLM 2022) records, it appears that the Lyon family continued to live on the property until at least 1891 when records show it was registered to Edwin Lyon.

Valencia Oak Ranch Movie Ranch. Lyons Canyon Ranch, historically the "Valencia Oak Ranch" owned by Warner Brothers Studios, was one of the set locations used in the *Dukes of Hazzard* television series (filmed between 1981 and 1985 at Lyons Canyon Ranch) as well as several feature films and other television shows in the 1980s and 1990s.

Santa Clarita Valley has been used as a feature location for films since as early as 1903 when the main street in Newhall was used for on-location shots for silent films. The first full-length feature to be filmed in Santa Clarita Valley was D.W. Griffith's "Ramona" in 1910, shot at Rancho Camulos west of Castaic Junction. When "Ramona" was filmed, the rural valley was developed with a few small villages and railroads that traversed the area. Movie studios did not participate in purchasing movie ranches at this time, choosing instead to rent properties that fit their desired location (HRG 2009; Rock 1994). However, the filming location industry was lucrative and individuals purchased property to lease as sets. Early real-estate transactions for filming in Santa Clarita include the 1914 purchase of storefronts in Newhall by silent film star Tom Mix, who developed a western town set named "Mixville." Another star, William S. Hart purchased the 300-acre Horseshoe Ranch in 1921 to film "The Half Breed." Film companies, including Fox, Goldwyn, Thomas Ince, and Wilson Studios leased Hart's property for its pristine natural landscape. The first studio to develop a movie ranch was Ben Wilson Productions. In 1924, Ben Wilson Productions purchased LaSalle Ranch in Wiley Canyon exclusively to shoot westerns and cowboy films (HRG 2009; Rock 1994).

Though the Santa Clarita Valley has been used for film locations for over a century of film and television, Lyons Canyon was not used for filming until the late 1970s. Aerial imagery of the region indicates that the canyon was used for cattle or stock raising and a modestly sized orchard as early as 1928 (NETR 2022b; UCSB 2022) and that the surrounding canyons and mountains (DeWitt Canyon, Towsley Canyon, Pico Canyon) were the site of several oil wells. The development of Lyons Canyon as a filming location appears to have occurred between 1969 and 1972. Historical Aerial photographs show that an original farmhouse was demolished and replaced with several buildings. By this time, roads that access the canyon were well defined and large, cleared automobile parking pads were visible (NETR 2022b; UCSB 2022). In 1981, Warner Brothers purchased the site, renamed it Valencia Oaks Ranch, and used the location to film several scenes of the "Dukes of Hazzard," "The Fall Guy," and "Hunter" television shows (The Signal 1989). Due to rapid residential expansion, Valencia Oaks Ranch was no longer used as a film/television location by the late 1990s.

The Lyons Canyon Ranch property is a movie ranch filming location established in the late 1960s as Valencia Oaks Ranch. It is located in Lyons Canyon, Los Angeles County, California. Movie ranches were popular in the Santa Clarita Valley, the San Fernando Valley, and the Santa Monica Mountains throughout the twentieth century due to their proximity to Hollywood-based studio lots. In the 1910s, labor unions and professional guilds demanded a limit for the distance that on-set laborers were required to self-transport for work. This led to the creation of "studio zones," and a preference for film sites that were within a prescribed distance of established the studio lots. In 1970, this zone was expanded to the "thirty-mile zone" (called the TMZ) and formed a geographic circle encompassing filming locations considered acceptable travel distance by the unions (NPS 2005; Rock 1994; Roland 2016).

In the 1910s, film studios in Southern California capitalized on the local natural landscape by establishing "movie ranches," separate and independent locations outside the boundaries of a motion picture or television studio lot. This trend grew over the 1920s and 1930s during the "golden age" of Hollywood films. In the 1930s, as production companies invested in movie ranch properties in the Santa Clarita Valley, "B" movies and western black-and-white films began to saturate popular culture, coinciding with the "golden era" of Hollywood film production (c. 1920-1940). Hundreds of film sets were located in Santa Clarita Valley, which created a period of modest economic growth in the region.

Movie ranches in the Santa Clarita Valley grew in popularity as television ownership became more widespread in the 1940s and 1950s. Television serials including "Star Trek," "Tall Tales," "Spin and Marty," "Bonanza," "Roots," and "Little House on the Prairie" were filmed in Santa Clarita Valley in the 1950s, 1960s, and early 1970s. The 1950s saw a sharp increase in western television shows, "including Cheyenne, Gunsmoke, Maverick, Have Gun –

Will Travel, and The Rifleman," which utilized movie ranches for many of the sets and stunts as well as scenic, authentic backgrounds (HRG 2019, p. 19-20).

Santa Clarita Valley remained a popular filming location until the late 1960s when commercial and residential development increased locally. In 1974, the City of Los Angeles eased restrictions related to filming permits within the City, reinvigorating the industry in the City and reducing the use of movie ranches outside the city limits (HRG 2019, p. 26). At the same time, other states and cities throughout the country, including areas of the Southwest, began to aggressively compete with Los Angeles and Southern California for location filming projects and their accompanying revenue (HRG 2019, p. 27). In the 1970s and 1980s larger suburban residential developments were established on previous agricultural properties. The rapid urbanization, and subsequent 1986 incorporation of the City of Santa Clarita, resulted in the sale and closure of many movie ranches (HRG 2009; Kaplan 2018; Los Angeles County Department of Regional Planning 2012; The Signal 1925; Worden 2003). The period of significance for movie ranches extends from 1910 to 1974.

Movie ranches typically feature temporary buildings and structures, film sets and false fronts, cleared pads and/or foundations for trailers, and storage buildings to allow for a continuous cycle of set development (HRG 2019, p. 19). HRG prepared a 2019 context for SurveyLA established that film locations, including movie ranches, may be eligible under Criteria A/1 because they play an influential role in shaping the American public's perception of Southern California and defining the character and identity of Los Angeles (HRG 2019, pp. 30-31).

SurveyLA's 2019 historic context statement identifies the theme of "Filming Locations Associated with the Motion Picture and Television Broadcasting Industries," and describes nine specific character-defining features for buildings, structures, sites, and cultural landscapes, including movie ranches, associated with the theme (HRG 2019, p. 31):

- Retains most of the essential character physical and character-defining features from the period of significance
- May be important as the filming location of an early motion picture
- May be the long-term filming location of a significant television production
- May have served as a location for the filming and/or production of multiple motion pictures and/or television shows over time such that the location has become iconic.
- The location may have okayed an integral role in shaping the narrative of a significant film, with specific influence on the plot and structure.
- May also be a significant example of an architectural style and/or the work of a noted architect/designer.
- May also be a significant cultural landscape
- May be significant for ethnic cultural associations
- For the National Register, properties associated with events that date from the last 50 years must possess exceptional importance

The Old Road Setting

The Project site lies west of a frontage road called "The Old Road," of which the Project proposes to widen from roughly 21 feet wide to roughly 68 feet wide as an off-site improvement. "The Old Road" refers to a series of predecessor highways to Interstate 5. In 1915, the "Ridge Route" extending between San Fernando and the southern San Joaquin valleys was opened and eventually paved in 1919. This was one of several state "highways"

that opened as a result of the State Highway Act (Caltrans 2016, p. 75). The Ridge Route extended northwest through Weldon and Gavin canyons then north through San Francisco Valley (where present-day City of Santa Clarita is located). This paving project was part of a larger national movement to improve roads specifically for automobiles, and the Ridge Route was one of hundreds of beneficiaries of the movement in California. In 1926, the route was re-designated as US Route 99 as part of the U.S. Bureau of Public Roads effort to mark existing interstate roads. The route connected to other highways resulting in US Route 99 extending from Calexico, California to Blaine, Washington (Caltrans 2016, p. 82; Milburn and Scott 1996, pp. 7.1-7.2).

It its early years, US Route 99 passed directly through towns serving as a main street, causing highway traffic to slow through each roadside town as a result. After the Arroyo Seco Parkway, arguably California's first purpose-built unbroken stretch of highway, was constructed in 1940, widening and pavement improvements were proposed for several state highways, including US Route 99. This work was put on brief hold during World War II; however, after the war concluded the Collier-Burns Act of 1947 allocated funds by way of a gasoline tax allowing for an upgrade to US Route 99. This upgrade included widening of US Route 99 from a two-lane road to a four-lane expressway throughout California, (Caltrans 2016, p. 99; Provost 2017, pp. 17-18, 81-82).

The Federal-Aid Highway Act of 1956 enabled legislation for the interstate system providing funding for highway upgrades including US Route 99. In 1965, construction of Interstate 5 near Lyons Canyon began, and the segment of US Route 99 adjacent to Lyons Canyon was completely subsumed under the interstate. Portions of the frontage road were constructed after Interstate 5 was completed in this region in 1967. However, the frontage road did not extend along the proposed Project area until 1989 when the segment between Towsley Canyon and Sagecrest Circle was constructed (Caltrans 2016, p. 109; The Signal 1965, p. 15; The Signal 1967, p. 4; NETR 2022b; UCSB 2022).

Records Search Results

On November 16, 2020, Environmental Science Associates (ESA) performed a California Historical Resources Information System (CHRIS) record search at the South Central Coastal Information Center (SCCIC), located on the campus of California State University, Fullerton. Because ESA was only able to receive partial results due to limitations imposed by the COVID-19 pandemic and the inability for SCCIC staff to access all their files, a supplementary records search was requested by Dudek (ESA 2021). On May 25, 2022, Dudek staff conducted a supplemental record search for the Project site and a 1-mile radius. The CHRIS records search results provided by the SCCIC included their digitized collections mapped prehistoric and historic archaeological resources and historic built-environment resources; Department of Parks and Recreation (DPR) site records; technical reports; archival resources; and ethnographic references. Additional consulted sources included historical maps of the Project site, the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Historic Property Data File, and the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility. SCCIC records were reviewed to determine whether the implementation of the Project, including offsite improvement areas, would have the potential to impact known and unknown cultural resources (Appendix D).

Previous Cultural Resources Studies

Results of the cultural resources record search indicate that 30 previous cultural resource studies have been conducted within 1-mile of the Project site between 1974 and 2015. Of these studies, seven (7) address portions or the entirety of the Project site. Table 4.5-1, Previous Technical Studies Within 1-Mile of the Project Site, below,

summarizes all 30 previous studies followed by a brief summary of the previous investigations that address the Project site (Appendix D).

Table 4.5-1. Previous Technical Studies Within 1-Mile of the Project Site

SCCIC ID	Author	Year	Report Title	Addresses Project Site
LA-00023	Leonard, Nelson N. III	1974	Archaeological Reconnaissance of Tentative Tract # 31399, a Residential Development Near Newhall California	Yes
LA-00103	Singer, Clay A.	1975	Archaeological Resource Survey of Portions of the South Fork, Santa Clara River, Los Angeles County, California	No
LA-00290	Desautels, Roger J.	1976	Archaeological Survey Report on Acre Parcel of Land Located in the Newhall Area of the County of Los Angeles, California.	No
LA-00510	Van Horn, David M.	1979	Preliminary Archaeological Overview: a 3,000+/- Acre Parcel Bordering Portrero Canyon Near Newhall, Ca.	No
LA-00578	Baksh, Michael G.	1979	Archaeological Evaluation of Tentative Tract No.35555, Los Angeles County, California	No
LA-00842	Singer, Clay A.	1977	Archaeological Survey and Cultural Resource Assessment for a Portion of Towsley Canyon, Near Newhall, Los Angeles County, California	No
LA-01062	Schilz, Allen J.	1981	Archaeological Survey of the Sylmar Development Project Site, Los Angeles County, California	Yes
LA-01595	Brown, Robert S. and David M. Van Horn	1984	Archaeological Survey Report: a 400+ Acre Tract Located in the Santa Susana Mountains West of Newhall, California	No
LA-01978	Salls, Roy A.	1990	Report of Archaeological Reconnaissance Survey of Santa Clarita, California-Newhall Carrier Annex Environmental Assessment, ESA Project Number 9094c Newhall California	No
LA-02305	Moratto, Michael J.	1990	Cultural and Paleontological Resources in the Santa Susana and Santa Monica Mountains, Los Angeles County, California	Yes
LA-02721	Weber, Carmen A. and Dave Ferraro	1992	Cultural Resources Survey 82.7 Acre Parcel Near Newhall Tentative Parcel Map No. 8576	No
LA-02848	Peak and Associates, Inc.	1992	Cultural Resource Assessment of the Proposed Newhall Alternate Alignment, Ventura and Los Angeles Counties, California	No
LA-02950	Peak & Associates and Reed	1992	Consolidated Report: Cultural Resource Studies for the Proposed Pacific Pipeline Project	Yes
LA-02951	Gibson, Robert O.	1993	Results of Archaeological Records Review for the Pacific Pipeline Project Emidio Lateral Pipeline Kern and Los Angeles Counties, CA	No
LA-03000	Simon, Joseph M. and David S. Whitley	1993	Phase I Archaeological Survey and Cultural Resources Assessment for the 225 Acres Alternative Site 2 Study Area, Santa Clarita, Los Angeles County, California	Yes

Table 4.5-1. Previous Technical Studies Within 1-Mile of the Project Site

SCCIC ID	Author	Year	Report Title	Addresses Project Site
LA-04008	Unknown	1996	Cultural Resources Investigation Pacific Pipeline Emidio Route	No
LA-05533	Smith, Philomene C.	2000	Negative Archaeological Report: Rock-lined Section and the Addition of an Access to Paved Section of Drainage Channel Near Interstate 5 in Santa Clarita	No
LA-05855	Anonymous	2001	Phase I Archaeological Survey of the 558 Acres Old Road Study Area, Los Angeles County, California	No
LA-08958	Tsunoda, Koji and Moreno, A.	2007	Archaeological Survey Report for Southern California Edison Company Saugus-north Oaks FO Cable Project Los Angeles County, California (wo#8456-0639, Jo#6155)	No
LA-09062	Slawson, Dana N.	2004	Archaeological Investigation for NCWD Peachland Reservoirs: 18 Inch Pipeline and Access Road Improvements Project	No
LA-09063	Schmidt, June A.	2003	Negative Archaeological Survey Report: Church of the Nazarene (C.U.P. No. 03-090) 23857 the Old Road, Santa Clarita, Los Angeles County.	No
LA-09066	Shepard, Richard S.	2004	Phase I Cultural Resource Assessment for Lyons Canyon Ranch Specific Plan, Tentative Tract Map 53653, Santa Clarita, Los Angeles County, California.	Yes
LA-10511	McKenna, Jeanette A.	2005	A Phase I Cultural Resources Investigation of Aidlin Casad Tract No. 52905, Approximately 95 Acres in the Lyon Canyon Area of Los Angeles County, California	No
LA-10578	Fortier, Jana	2009	TEA21 Rural Roadside Inventory: Native American Consultation and Ethnographic Study Caltrans District 7, County of Los Angeles	No
LA-11594	Bonner, Wayne	2011	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate NL0443-01 (Newhall Water Tank), 4750 Fambrough Street, Santa Clarita, Los Angeles County, California	No
LA-11985	McKenna, Jeanette	2012	A Class III/Section 106 and Phase I CEQA Cultural Resources Investigation for the Proposed Storm Drain Improvement Areas in the Newhall and Santa Clarita Areas of Los Angeles County, California	No
LA-12526	Ehringer, Candace, Ramirez, Katherine, and Vader, Michael	2013	Santa Clarita Valley Sanitation District Chloride TMDL Facilities Plan Project, Phase I Cultural Resources Assessment	Yes
LA-12619	Maxon, Patrick O.	2000	Cultural Resources Reconnaissance of the Edson (TT 52905) Parcel, a Portion of the Aidlin Properties, in the City of Santa Clarita, Los Angeles County, California	No
LA-12631	Maxon, Patrick	1999	Cultural Resources Reconnaissance of the Edson (TT 52905) Parcels; Portions of the Aidlin Properties, in the City of Santa Clarita, Los Angeles County, California	No

Table 4.5-1. Previous Technical Studies Within 1-Mile of the Project Site

SCCIC ID	Author	Year	Report Title	Addresses Project Site
LA-13109	McKenna, Jeanette A.	2015	A Class III/Section 106 and Phase I CEQA Cultural Resources Investigation for the Proposed Storm Drain Improvement Areas in the Newhall and Santa Clarita Areas of Los Angeles County, California	No

LA-00023. *Archaeological Reconnaissance of Tentative Tract # 31399, a Residential Development Near Newhall California* (Leonard 1974) documents the results of an archaeological study conducted ahead of proposed development and consisting of archival research, literature review and pedestrian survey. The area of study overlaps approximately 2 percent of the Project site, along the northern boundary. No previously recorded cultural resources were identified within the current Project site as a result of the investigation. The study concluded that no significant direct or indirect impacts upon archaeological resources would result from the project and no further measures were proposed (Appendix D).

LA-1062. *Archaeological Survey of the Sylmar Development Project Site, Los Angeles County, California* (WESTEC Services Inc. 1981) documents the results of an archaeological study consisting of a records search and a pedestrian survey of a 470-acre project site. The area of study overlaps over 90 percent of the current Project site and resulted in the identification of one (1) previously recorded prehistoric-era archaeological site, CA-LAN-802, within the area of study. This resource is not within the current Project site. No further cultural resources were identified as a result of the survey. The report includes a recommendation that CA-LAN-802 be mapped and the artifacts collected prior to any development (Appendix D)

LA-02305. *Cultural and Palaeontologic Resources in the Santa Susana and Santa Monica Mountains, Los Angeles County, California* (Moratto 1990) documents the results of an archaeological and paleontological resources assessment consisting of an archival records search, literature review, pedestrian survey, and analysis of findings. For purposes of this report, only the methods and results pertaining to cultural resources are summarized. The area of study overlaps approximately 15 percent of the Project site within the southeastern corner. The study was conducted to assess potential landfill sites for Integrated Solid Waste Management Systems. No previously recorded cultural resources were identified within the current Project site as a result of the investigation. The archaeological survey identified historic sites as well as prehistoric sites, including rock shelters, south of the Project site in Towsley Canyon, but none within the Project site. The study includes recommendations of avoidance preservation and stabilization of resources and that a mitigation plan be prepared and implemented by archaeologists prior to direct impacts within the culturally sensitive area (Appendix D).

LA-02950. *Consolidated Report: Cultural Resource Studies for the Proposed Pacific Pipeline Project* (Peak & Associates 1992) documents the results of an archaeological resources assessment consisting of an archival records search, literature review, pedestrian survey, and excavation of shovel test pits. The area of study overlaps approximately 1 percent of the Project site. The study was conducted to assess potential routes for a proposed pipeline. No previously recorded cultural resources were identified within the current Project site as a result of the investigation. The study developed a Phase 2 test excavation program and recommended avoiding cultural resources or completing data recovery with all work monitored by archaeologists and Native American consultants (Appendix D).

LA-3000. *Phase I Archaeological Survey and Cultural Resources Assessment for the 225 Acres Alternative Site 2 Study Area, Santa Clarita, California* (Simon and Whitely 1993), documents the results of an archaeological study consisting of an intensive pedestrian archaeological survey, archival records search, and literature review. The study area overlaps over 90 percent of the current Project site. No cultural resources were identified as a result of this study. The report does not include the recommendation of any further actions or measures (Appendix D).

LA-9066. *Phase I Cultural Resources Assessment for Lyons Canyon Ranch Specific Plan Tentative Tract Map 53653, Santa Clarita, Los Angeles County, California* (Shepard 2004) documents the results of a Phase I cultural resources study consisting of cultural and paleontological resources records searches and a field survey. The area of study overlaps over 95 percent of the current Project site. No cultural resources were identified as a result of this study. The report includes the recommendation for archaeological monitoring (Appendix D).

LA-12526. *Santa Clarita Valley Sanitation District Chloride TMDL Facilities Plan Project, Phase I Cultural Resources Assessment* (Ehringer et al. 2013) documents the results of an archaeological resources assessment consisting of an archival records search, literature review and pedestrian survey. The area of study overlaps approximately less than 1 percent of the Project site. The study was conducted to assess potential impacts of proposed improvements to the Saugus and Valencia Water Reclamation Plants. No previously recorded cultural resources were identified within the current Project site as a result of the investigation. The study recommended a cultural resource monitoring and mitigation plan be designed and implemented in areas sensitive for archaeological resources (Appendix D).

Previously Recorded Cultural Resources

The SCCIC records indicate that 13 cultural resources have been previously recorded within 1-mile of the Project site. The identified cultural resources include two (2) prehistoric archaeological sites, four (4) historic archaeological sites, one (1) prehistoric isolate, two (2) historic isolates, and four (4) built environment resources. Of these, three (3) are located within the Project site: one (1) prehistoric isolate (P-19-101350), one (1) historic artifact (P-19-101351), and one (1) built environment resource (P-19-192297). Table 4.5-2, Previously Recorded Archaeological Resources Within 1.0-Mile of the Project Site, summarizes all previously recorded cultural resources identified within the records research radius followed by summaries of each cultural resource located within the Project site and all prehistoric archaeological resources located within the records search radius (Appendix D).

Table 4.5-2. Previously Recorded Archaeological Resources Within 1.0-Mile of the Project Site

Designation	Resource Description	Recorded By	NRHP Eligibility	Proximity to Project
CA-LAN-000802 (P-19-000802)	Prehistoric site containing one core and one chipped stone blade	1977 (Clay Singer)	7: Not Evaluated	166 meters (545 ft.) southeast
CA-LAN-001592H (P-19-001592)	Historic trash deposit	1989 (P. Isaacs, C. Simpson-Smith)	7: Not Evaluated	1,070 meters (3,511 ft.) southwest
CA-LAN-001593H (P-19-001593)	Historic containing a concrete slab and historic trash	1989 (P. Isaacs, C. Simpson-Smith)	7: Not Evaluated	1,165 meters (3,822 ft.) southwest

Table 4.5-2. Previously Recorded Archaeological Resources Within 1.0-Mile of the Project Site

Designation	Resource Description	Recorded By	NRHP Eligibility	Proximity to Project
CA-LAN-003989 (P-19-003989)	Prehistoric sandstone shelter with pictographs	1989 (K. Owens, C. Lebow, F. Riddell, C. Welling); 2010 (Albert Knight)	7: Not Evaluated	665 meters (2,182 ft.) southwest
(P-19-004424)	Historic site containing two concrete pads, iron pipe fragments, a dirt-banked reservoir, and remnants of a water well.	2014 (Michael H. Dice)	7: Not Evaluated	1,425 meters (4,675 ft.) southeast
(P-19-100356)	Historic site containing the possible remains of a wooden bridge, as well as historic and modern trash	1989 (Foster and Greenwood)	7: Not Evaluated	310 meters (1,017 ft.) south
(P-19-100357)	Historic oil tank	1989 (Foster and Greenwood)	7: Not Evaluated	640 meters (2,100 ft.) southeast
(P-19-100358)	Historic well lined with sandstone boulders	1989 (Foster and Greenwood)	7: Not Evaluated	330 meters (1,083 ft.) south
(P-19-101201)	Historic isolate, concrete obelisk marker for a high-pressure gas line meter	2014 (Michael H. Dice)	7: Not Evaluated	975 meters (3,198 ft.) northeast
(P-19-101350)	Prehistoric isolate, granitic hammerstone	2015 (K. Ross Way)	7: Not Evaluated	Within
(P-19-101351)	Historic isolate, glass bottle neck	2015 (K. Ross Way)	7: Not Evaluated	Within
(P-19-120065)	Historic corral	1989 (Foster and Greenwood)	7: Not Evaluated	380 meters (1,247 ft.) south
(P-19-192297)	Historic concrete dam	2015 (K. Ross Way)	6Z: Found ineligible	Within

Note: "7" is the Office of Historic Preservation (OHP) code that denotes that the CHRIS database has no record the resource has been formally evaluated for listing eligibility in the CRHR, NRHP, or local designation; "6Z" is the OHP code that denotes a resource has been formally evaluated for listing eligibility in the CRHR, NRHP or local designation and found ineligible.
Source: Appendix D

P-19-000802 (CA-LAN-802). CA-LAN-802 is a prehistoric site measuring 10 x 10 meters (32 x 32 feet) and is located approximately 144 meters (472 feet) southeast of the Project site. CA-LAN-802 is documented as consisting of one basalt core and one chalcedony blade found among sandstone boulders and was formally recorded in 1977 by Clay Singer, who described the site as a "small hunting station." This site has not been evaluated for listing on the National Register of Historic Places or the California Register of Historical Resources (Appendix D).

P-19-101350. P-19-101350 is a prehistoric isolate located within the northwestern quadrant of the Project site. P-19-101350 is documented as a granitic hammerstone with a flat facet and battering on the opposite end. The isolate was originally formally recorded in 2015 by Ross Way. P-19-101350 has not been evaluated for listing on the National Register of Historic Places or the California Register of Historical Resources (Appendix D).

P-19-003989 (CA-LAN-3989). CA-LAN-3989 is a prehistoric site measuring 4.2 x 3.9 meters (14 x 13 feet) and is located approximately 714 meters (2343 feet) southwest of the Project site. CA-LAN-3989 is documented as consisting of three pictograph panels and was formally recorded in 1989 by K. Owens, C. LeBow, F. Riddell, and C. Welling who described the site as a small rock shelter with pictographs. The site was also formally recorded in 2010 by Albert Knight, who described the pictographs as red and black drawn lines. This site has not been evaluated for listing on the National Register of Historic Places or the California Register of Historical Resources (Appendix D).

P-19-101351. P-19-101351 is a historic isolate located within the center of the northwestern quadrant of the Project site. P-19-101351 is documented as a bottle neck finish with a cork-lined glass stopper. The isolate was observed in a creek bed and was originally formally recorded in 2015 by Ross Way. P-19-101351 has not been evaluated for listing on the National Register of Historic Places or the California Register of Historical Resources (Appendix D).

P-19-192297. P-19-192297 is a historic structure located within the northern section of the western-most corner of the Project site. P-19-192297 is documented as a check dam of concrete construction with rebar protruding from the top. The dam was originally formally recorded in 2015 by Ross Way; however, Ross Way noted on the site record that P-19-120065 was previously recorded in 2004 by Richard Shepard. There is no site record for the 2004 recording event. The 2015 site record states, P-19-192297 was evaluated by Richard Shepard, for a 2006 Environmental Impact Report, and was determined ineligible for the National Register of Historic Places and the California Register of Historical Resources (Appendix D).

Historical Topographical Maps and Aerials

Historic topographic maps and aerial photographs were consulted through the Nationwide Environmental Title Research LLC to better understand the natural or human-made changes to the alternative site locations and surrounding properties over time. Sanborn Fire Insurance Maps (Sanborn Maps) were reviewed, none of which addressed the Project site. Additionally, topographic maps from 1903 to 2018 and aerial photographs from 1929 to 2018 were reviewed as part of the archival research effort (NETR 2022a; Appendix D).

Historical Topographic Maps

A review of available topographic maps was conducted and included the following years: 1903, 1926, 1929, 1941, 1952, 1969, 1984 (NETR 2022a). Topographic maps depict not only elevation of the study area as well as the areas surrounding it, but they also illustrate the location of roads and some buildings. Although topographic maps are not comprehensive, they are another tool in determining whether a study area has been disturbed and sometimes to what approximate depth (Appendix D).

The Project site first appears on the 1903 USGS topographic map and is shown as undeveloped with a creek running generally east to west within the northern half. There is no evidence of roads within or surrounding the Project site. No significant changes are seen until 1929, when Interstate-5 (I-5 Freeway), is depicted just outside and to the east of the Project site, and an unnamed dirt road (likely Lyons Ranch road) is present paralleling the creek. The 1930, 1939, 1948 topographic maps resemble the 1903 map. The topographic map from 1933 resembles the 1929 map, with three small structures along the unnamed dirt road. The 1943 topographic map shows the creek as “Lyon Creek” as well as an increase in development within the surrounding area. The topographic map from 1953 depicts the creek running more north to south, with two western branches running east to west. The area remains undeveloped foothills. The topographic map from 2012 shows The Old Road, located approximately 50 feet east of the Project site’s eastern most boundary. In 2018, the area is labeled as “Lyons Ranch” (Appendix D).

Historical Aerial Photographs

A review of all available historic aerial photographs was conducted and included the following years: 1928, 1929, 1930, 1945, 1947, 1952, 1959, 1969, 1972, 1974, 1977, 1980, 1994, 2003, 2010, 2012, 2014, 2016 (NETR 2022b; UCSB 2022). Through careful comparative review of historic aerials, changes to the landscape of a study area may be revealed. Disturbance to the study area is specifically important as it helps determine if soils within the study area are capable of sustaining intact archaeological deposits. Additionally, historic aerials have the potential to reveal whether a study area was subjected to alluvial deposits by way of alluvial erosion, flooding, debris flows or mudslides, as well as placement of artificial or foreign fill soils that may have buried intact archaeological deposits (Appendix D). Table 4.5-3, Historical Aerial Photographs Depicting the Project Site, provides a summary of aerials of the Project site since 1928.

Table 4.5-3. Historical Aerial Photographs Depicting the Project Site

Year	Description
1928	The Project site is undeveloped within vegetated foothills with a creek bed running generally east-west within the northern half. Bypass road, installed to avoid Newhall Pass via Weldon and Gavin canyons (future route of current Interstate-5 (I-5 Freeway) is located just outside the Project site to east.
1929	No other significant changes to the proposed Project site that suggest ground disturbance.
1930	No other significant changes to the proposed Project site that suggest ground disturbance.
1945	The creek bed appears to be running more north to south.
1947	No other significant changes to the proposed Project site that suggest ground disturbance.
1952	One structure is shown within the northeastern corner.
1959	No other significant changes to the proposed Project site that suggest ground disturbance.
1969	There appears to be a series of trails or dirt roads along the ridgelines of the foothills and throughout the valleys. The structure first seen in 1952 is no longer present.
1972	No other significant changes to the proposed Project site that suggest ground disturbance.
1974	A dirt road running generally east to west bisects the Project site, likely Lyons Ranch Road.
1977	A cluster of structures is depicted within the center of the Project site.
1980	No other significant changes to the proposed Project site that suggest ground disturbance.
1985	No other significant changes to the proposed Project site that suggest ground disturbance.
1992	There are a series of three (3) structures along Lyons Ranch Road, as well as an increase in development within the surrounding areas.
1993	No other significant changes to the proposed Project site that suggest ground disturbance.
1994	The structures along Lyons Ranch Road first seen in 1992 are no longer present.
1996	No other significant changes to the proposed Project site that suggest ground disturbance.
1997	The structures originally seen in 1977 are no longer present.
1998	No other significant changes to the proposed Project site that suggest ground disturbance.
1999	No other significant changes to the proposed Project site that suggest ground disturbance.
2000	No other significant changes to the proposed Project site that suggest ground disturbance.
2003	No other significant changes to the proposed Project site that suggest ground disturbance.
2005	No other significant changes to the proposed Project site that suggest ground disturbance.
2009	No other significant changes to the proposed Project site that suggest ground disturbance.
2010	No other significant changes to the proposed Project site that suggest ground disturbance.
2012	No other significant changes to the proposed Project site that suggest ground disturbance.
2014	No other significant changes to the proposed Project site that suggest ground disturbance.

Table 4.5-3. Historical Aerial Photographs Depicting the Project Site

Year	Description
2016	No other significant changes to the proposed Project site that suggest ground disturbance.
2018	No other significant changes to the proposed Project site that suggest ground disturbance.

Source: Appendix D; NETR 2022b, UCSB 2022.

1938 Kirkman-Harriman Historical Map Review

Dudek also reviewed pertinent academic and ethnographic literature for information pertaining to historic use of the Project area and vicinity, including sources commonly identified through Tribal consultation, notably the 1938 Kirkman-Harriman Historical Map (Kirkman 1938). This map is a valuable representation of post-colonization mission history; however, it is limited to a specific period of Native American history and substantiation of the specific location and uses of the represented individual features should be verified by archaeological records and/or other primary documentation. It should be noted that this map is highly generalized due to scale and age and may be somewhat inaccurate with regards to distance and location of mapped features. Additionally, this map was prepared based on review of historic documents and notes more than 100 years following secularization of the missions (in 1833). Although the map contains no specific primary references, it matches with the details documented by the Gaspar de Portolá expedition (circa 1769–1770). A summary of the Kirkman-Harriman Map review in relation to the Project site is provided below.

Based on the Kirkman-Harriman Map, the Project site is approximately 2.5 miles directly west of the northwest–southeast-trending "Portola Route" that traversed through the area in 1769 and approximately 1 mile south of an offshoot road that connects the local area to the east-west trending "Old Road to Santa Barbara". The nearest mapped source of freshwater is the Santa Clara River approximately 6.5 miles due north. The nearest mapped Native American village is mapped approximately 2.5 miles northeast of the Project site and is named "Saugus". The map also marks "Gold Placer, 1st Discovery of Gold in Calif. Mch 1, 1842" approximately 6.5 miles due east of the Project site and the location of a battle that occurred between Spanish Soldiers and Indians in 1830 due east approximately 4.5 miles. This battle is likely the same battle that occurred in the *Canyon de Los Difuntos* that Friar Mariano Payeras uses to petitioned Spain to establish another mission on the Santa Clara River near Newhall. Nothing in the archaeological record recorded within 1-mile of the Project site or information collected during archival research conducted for this study refutes the mapped locations depicted on this portion of the Kirkman-Herriman Map (Kirkman 1938; Appendix D).

4.5.2 Regulatory Requirements

Federal

National Register of Historic Places

For this Project, the NRHP designation criteria were considered because any property considered eligible for or listed in the National Register is considered a CEQA historical resource. In addition, should future projects consider a federal undertaking, which would initiate Section 106 of the National Historic Preservation Act compliance, then this evaluation could be utilized in such a project.

The NRHP is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Overseen by the National Park Service, under the U.S. Department of the Interior, the NRHP was authorized under

the National Historic Preservation Act, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by the National Park Service.

NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have made significant contributions to the nation's history and heritage. Its criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the NRHP. For a property to be listed in or determined eligible for listing, it must be demonstrated to possess integrity and to meet at least one of the following criteria:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of persons significant in our past; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. That have yielded, or may be likely to yield, information important in prehistory or history.

In addition to these basic evaluation criteria, the NRHP outlines further criteria considerations for significance. Moved properties; birthplaces; cemeteries; reconstructed buildings, structures, or objects; commemorative properties; and properties that have achieved significance within the past 50 years are generally not eligible for the NRHP. The criteria considerations are exceptions to these rules, and they allow for the following types of resources to be NRHP eligible (NPS 1995, p. 25):

A. a religious property deriving primary significance from architectural or artistic distinction or historical importance;
B. a building or structure removed from its original location, but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event;
C. a birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his or her productive life;
D. a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, from association with historic events;
E. a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived;
F. a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or
G. a property achieving significance within the past 50 years if it is of exceptional importance.

Once the significance of a resource has been determined, the resource then must be assessed for integrity. Integrity is 1) the ability of a property to illustrate the history and 2) possession of the physical features necessary to convey

the aspect of history with which it is associated (NPS 1995, p. 44). The integrity evaluation is grounded in understanding a property's physical features and how they relate to the property's significance. Historic properties either retain integrity (that is, convey their significance), or they do not. To maintain integrity, a property will always possess several, and usually most, of the seven aspects of integrity (NPS 1995, pp. 44-45):

Location is where the historic property was constructed or where the historic event occurred.

Design is the combination of elements that create the form, plan, space, structure, and style.

Setting is the physical environment of a historic property.

Materials are the physical elements combined or deposited during a particular period and in a specific pattern or configuration to form a historic property.

Workmanship is the physical evidence of crafts of a particular culture or people during any period in history or prehistory.

Feeling is the property's expression of a particular period's aesthetic or historic sense.

Association is the direct link between an important historic event or person and a historic property.

State

The California Register of Historical Resources (CRHR)

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" (California Public Resources Code (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)). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below. According to PRC Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

(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.
(4) Has yielded, or may be likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 California Code of Regulations (CCR) 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic 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 in 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.

California Environmental Quality Act

As described further, the following CEQA statutes (PRC Section 21000 et seq.) and CEQA Guidelines (14 CCR 15000 et seq.) are of relevance to the analysis of archaeological, historic, and tribal cultural resources (TCRs):

- PRC Section 21083.2(g) defines "unique archaeological resource."
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) define "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource"; it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21074(a) defines "tribal cultural resources."
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b) and 21083.2(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context, and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; CEQA Guidelines Section 15064.5(b)). If a site is listed or eligible for listing in the CRHR, or included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1(q)), it is an "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (PRC Section 21084.1; CEQA Guidelines Section 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; CEQA Guidelines Section 15064.5(a)).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines Section 15064.5(b)(1); PRC Section 5020.1(q)). In turn, the significance of a historical resource is materially impaired when a project does any of the following:

(1) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or

(2) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(3) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA (CEQA Guidelines Section 15064.5(b)(2)).

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2(a)–(c)).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2(g)).

Impacts on non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2(a); CEQA Guidelines Section 15064.5(c)(4)). However, if a non-unique archaeological resource qualifies as a TCR (PRC Sections 21074(c) and 21083.2(h)), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in PRC Section 5097.98.

The California Public Resources and Health and Safety codes consist of the regulatory, penal, and administrative ordinances for the State of California. A summary of the California codes that are applicable to the subject of the discovery of human remains are provided below.

California Health and Safety Code Section 7050.5

This code establishes that human remains are to not be knowingly mutilated or disinterred, wantonly disturbed, or willfully removed from any location other than a dedicated cemetery without authority of law. The code specifically provides exception to any person carrying out an agreement developed pursuant to subdivision (l) of Section 5097.94 of the Public Resources Code or to any person authorized to implement Section 5097.98 of the Public Resources Code. The code also provides protocols to be followed in the case of discovery or recognition of any human remains in any location other than a dedicated cemetery and stipulates the role of the coroner. Finally, the code provides the protocols to follow in the case the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American as well as the role of the Native American Heritage Commission (NAHC). Public Resource Code 5097.94.

This code establishes the powers and duties bestowed on the NAHC. As they relate to those powers and duties that apply to human remains, this code states that the NAHC has the responsibility to: identify and catalog places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands; make recommendations relative to Native American sacred places that are located on private lands; mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials; provide protection to Native American human burials and skeletal remains from vandalism and inadvertent destruction; and assist interested landowners in developing agreements with appropriate Native American groups for treating or disposing, with appropriate dignity, of the human remains and any items associated with Native American burials.

Public Resource Code 5097.98

This code outlines the protocols to be followed in the case of a discovery of Native American human remains including the roles and responsibilities of the coroner, Native American Heritage Commission (NAHC), the individual identified by the NAHC as the most likely descended from the deceased Native American, and the landowner of whose land the discovery was made. The code defines the manner of "conferral" or "discuss and confer" as "the meaningful and timely discussion and careful consideration of the views of each party, in a manner that is cognizant of all parties' cultural values, and where feasible, seeking agreement" and states that all parties involved "shall recognize the other's needs and concerns for confidentiality of information provided to the other". If the either the NAHC is unable to identify a descendant, or the descendants identified fail to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in subdivision (k) of section 5097.94. if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance.

Public Resource Code 5097.99

This code is intended to protect by prohibiting obtaining or possessing Native American artifacts or human remains taken from grave or cairn on or after January 1, 1984 and states that "any person who removes, without authority of law, any Native American artifacts or human remains from a Native American grave or cairn with an intent to sell or dissect or with malice or wantonness is guilty of a felony which is punishable by imprisonment in the state prison".

Public Resource Code 5097.991

This code establishes the policy of the state that Native American remains and associated grave artifacts shall be repatriated.

Regional and Local

Los Angeles County Historic Preservation Ordinance (No. 2015-0033)

On September 1, 2015, the Board of Supervisors recognized the importance of preserving the County's distinctive architectural and cultural history by adopting the Historic Preservation Ordinance ("HPO") that:

- Specifies criteria and procedures for the designation of landmarks and historic districts.
- Specifies criteria and procedures for reviewing proposed work on designated landmarks or on property within historic districts.
- Establishes penalties for unauthorized work, including demolition, on landmarks or historic district contributors.
- Requires maintenance of landmarks and historic district contributors to prevent deterioration.
- Prohibits work, including demolition, on property nominated but not yet designated as a landmark or historic district.
- Encourages adaptive reuse of landmarks and historic district contributors by providing relief from parking requirements.
- Provides for the enhancement of historic districts by the establishment of development guidelines and standards, and by allowing streetscape improvements that are compatible with the areas historic character.

Criteria for Designation of Landmarks and Historic Districts (Title 22, Planning and Zoning [Zoning Code], Section 22.124.070 of the Los Angeles County Code [County Code]):

A. A structure, site, object, tree, landscape, or natural land feature may be designated as a landmark if it is 50 years of age or older and satisfies one or more of the following criteria:
    1. It is associated with events that have made a significant contribution to the broad patterns of the history of the nation, State, County, or community in which it is located;
    2. It is associated with the lives of persons who are significant in the history of the nation, State, County, or community in which it is located;
    3. It embodies the distinctive characteristics of a type, architectural style, period, or method of construction, or represents the work of an architect, designer, engineer, or builder whose work is of significance to the nation, State, County, or community in which it is located; or possesses artistic values of significance to the nation, State, County, or community in which it is located;
    4. It has yielded, or may be likely to yield, significant and important information regarding the prehistory or history of the nation, State, County, or community in which it is located;
    5. It is listed, or has been formally determined eligible by the United States National Park Service for listing, in the National Register of Historic Places, or is listed, or has been

formally determined eligible by the State Historical Resources Commission for listing, on the California Register of Historical Resources;

6. If it is a tree, it is one of the largest or oldest trees of the species located in the County; or
7. If it is a tree, landscape, or other natural land feature, it has historical significance due to an association with a historic event, person, site, street, or structure, or because it is a defining or significant outstanding feature of a neighborhood.

B. Property less than 50 years of age may be designated as a landmark if it meets one or more of the criteria set forth in Subsection A, above, and exhibits exceptional importance.

C. The interior space of a property, or other space held open to the general public, including but not limited to a lobby, may be designated as a landmark or included in the landmark designation of a property if the space qualifies for designation as a landmark under Subsection A or B, above.

D. Historic Districts. A geographic area, including a noncontiguous grouping of related properties, may be designated as a historic district if all of the following requirements are met:

1. More than 50 percent of owners in the proposed district consent to the designation;
2. The proposed district satisfies one or more of the criteria set forth in Subsections A.1 through A.5, above; and
3. The proposed district exhibits either a concentration of historic, scenic, or sites containing common character-defining features, which contribute to each other and are unified aesthetically by plan, physical development, or architectural quality; or significant geographical patterns, associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of parks or community planning.

The County provides for the protection and preservation of Archaeological/Paleontological/Historic Cultural Resources under Zoning Code Section 22.44.1570, Additional Development Standards):

A. Purpose. The intent of these provisions is protect and preserve archaeological, historical, and paleontological resources from destruction, and avoid impacts to such resources where feasible. Where avoidance is not feasible, impacts to resources shall be minimized to the maximum extent feasible.

B. Definitions. The following definitions shall only apply to this section. This portion of the County's approach to the protection and preservation of Archaeological/Paleontological/Historic Cultural Resources under Zoning Code Section 22.44.1570 includes a glossary of applicable terms. Please refer to Zoning Code Section 22.44.1570 for complete language.

C. Applicability. A Cultural Resource Review pursuant to this section shall be required for all projects prior to the issuance of a planning approval, coastal development permit, geological/geotechnical exploratory excavation permit, sewer permit, building permit, grading permit, or prior to the commencement of government-initiated or funded works except those projects necessary for emergency purposes.

D. Cultural Resource Review. This portion of the County's approach to the protection and preservation of Archaeological/Paleontological/Historic Cultural Resources under Zoning Code Section 22.44.1570 includes a comprehensive description of how cultural resource reviews should be conducted. Please refer to Zoning Code Section 22.44.1570 for complete language.

E. Cataloging and Filing of Information. This portion of the County's approach to the protection and preservation of Archaeological/Paleontological/Historic Cultural Resources under Zoning Code Section 22.44.1570 includes a comprehensive protocol for the curation and filing of data and findings. Please refer to Zoning Code Section 22.44.1570 for complete language.

F. Archaeological Discoveries. Any person who discovers important cultural resources during the course of construction for a project shall notify the Director of the discovery. Once important cultural resources are discovered, no further excavation shall be permitted without approval of the Director.

Los Angeles County Register of Landmarks and Historic Districts

The Los Angeles County Register of Landmarks and Historic Districts (County Register) is the County's official list created to maintain an inventory of County designated landmarks and historic districts in the unincorporated area of the County. The County Register is maintained by the Historical Landmarks and Records Commission (Landmarks Commission) pursuant to the County's Historic Preservation Ordinance No. 2015-0033.

Los Angeles County Landmark and Historic District Registration

Nominations for designation of landmarks and historic districts come from private individuals and organizations or may originate with the Board of Supervisors or the Historical Landmarks and Records Commission.

The Landmarks Commission reviews each property (landmark and historic district) proposed for designation and makes a recommendation on its eligibility. The Regional Planning Commission also reviews proposed historic districts for consistency with the General Plan. Ultimately, the Board of Supervisors has authority to designate a listing on the County Register.

Los Angeles County 2035 General Plan

Chapter 9, the Conservation and Natural Resources Element of the Los Angeles County 2035 General Plan, Section VIII. Historic, Cultural, and Paleontological Resources provides the following goals and policies potentially relevant to the Project (County of Los Angeles 2015): The following goals and policies are specific to cultural, historical, and paleontological resources and are relevant to the Project, and the Project's potential to conflict with these policies is discussed in Section 4.11, Land Use and Planning:

Goal C/NR 14. Protected historic, cultural, and paleontological resources.

Policy C/NR 14.1. Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.

Policy C/NR 14.5. Promote public awareness of historic, cultural, and paleontological resources.

Policy C/NR 14.6. Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

4.5.3 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to cultural resources are listed below. A project may have a significant impact if it would:

Threshold 4.5a: Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines § 15064.5.

Threshold 4.5b: Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5.

Threshold 4.5c: Disturb any human remains, including those interred outside of dedicated cemeteries.

4.5.4 Methodology

Fieldwork Methods

Multiple pedestrian surveys of the Project site were conducted in support of this cultural assessment, as included in Appendix D. The intensive survey of the entire Project site was aimed at identifying historic architectural resources and archaeological resources within the Project as well as visiting previously recorded resources located in the Project site. Areas with visible ground surface were subject to systematic pedestrian survey using transect intervals spaced no more than 10 to 15 meters apart. Existing on-site structures, as well as the immediate surroundings, were photographed. Ridges that had slopes exceeding thirty degrees and areas with dense vegetation could not be surveyed due to lack of access and lack of ground visibility. In addition to pedestrian, a windshield survey was conducted of the unsurveyable areas and the drainage along Lyons Ranch Road in order to assess the potential prehistoric or historic sensitivity (ESA 2021; Appendix D).

Focused surveys of areas identified and documented by previous studies consisted of pedestrian surveys conducted in parallel transects, spaced no more than 5 meters apart (approximately 15 feet), traversing north to south when possible, within the areas of interest. Deviations from transects only occurred in areas containing steep slopes (greater than 30 percent slope), dense vegetation, or impassible natural features. The ground surface was inspected for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, groundstone tools, ceramics, fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of structures and/or buildings (e.g., standing exterior walls, post holes, foundations), and historical artifacts (e.g., metal, glass, ceramics, building materials). Ground disturbances such as burrows, cut banks, trails and drainages were also visually inspected for exposed subsurface materials. No artifacts were collected during the survey (Appendix D).

All focused survey fieldwork was documented using field notes and an Apple Generation 7 iPad (iPad) equipped with ESRI Collector and Avenza PDF Maps software with close-scale georeferenced field maps of the Project site, and aerial photographs. Location-specific photographs were taken using the iPad's 12-mega-pixel resolution camera. Cultural resources identified during this inventory within the Project site were recorded on DPR forms, using the *Instructions for Recording Historical Resources* (OHP 1995). All field notes, photographs, and records related to the current study are on file at Dudek's Santa Barbara, California office. All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory and were designed and supervised by an archaeologist meeting the same standards (NPS 2020; Appendix D).

Fieldwork Results

On February 17 and 19, 2021, a pedestrian cultural survey of the northern portions of Lyons Ranch pathway, portions along the Taylor Trail, and the Project's west boundary along Lyons Ranch was conducted (ESA 2021). Lyons Ranch is an unpaved dirt and gravel pathway that traverses through the Project site from the northeastern end, traveling south and eventually west, and continuing off-site. Lyons Ranch is currently used as an emergency access road and non-dedicated trail. Non-dedicated and informal hiking trails are located throughout the Project site's hillsides, generally meandering between Lyons Ranch and Towsley Canyon Road, located off-site and south of the Project site. The north side of Lyons Ranch is comprised of a large wide open plain dominated by a dense buckwheat field, tall grasses and surrounded by steep short ridgelines. Soils were observed as sandy silt with a high sub-rounded to sub-angular pebbles and gravels. A drainage trending west to east for about 500 feet through the middle of the plain allowed for observation of drainage cuts through the plain about 2.5 to 4-feet deep. Visibility ranged from 50 percent in the open plain to 20 to 30 percent near the drainage and at the base of the slopes. Between the short ridgelines are short, broad draws with small drainages and moderate to dense vegetation consisting of ankle high seasonal grasses, sugar bush, coastal and white sage, creosote bush and stands of oak with ground surface visibility of approximately 25 to 50 percent (ESA 2021; Appendix D).

The eastern portion of the Project consisted of a large gravel and asphalt parking lot that reached to the edges of the buckwheat field. This area measured approximately 200-feet (east to west) and about 400 feet (north to south), bordered by a channelized drainage to the north side (outside Project boundary lines), a slope exceeded 30 degrees on the south portion, the Project boundary fence to the east. Modern trash and debris were observed at and around the lot. This general area had low visibility of 10% and highly impacted by road gravels and modern debris. The north and west boundary of the Project site and the southeast portion of Lyons Ranch were comprised of steep, short slopes and ridges covered in moderately dense chaparral vegetation consisting of ankle to knee high seasonal grasses, laurel sumac, and California buckwheat which resulted in 15-20 percent ground surface visibility and slopes greater than 30 degrees. These areas were not surveyed due to topography but the toe of slopes were intensely surveyed opportunistically (ESA 2021; Appendix D).

On February 26, 2021, a pedestrian cultural resources survey of the portion of the Project located south of Lyons Ranch was conducted (ESA 2021). This portion of the Project site is largely comprised of steep slopes, ridges, and canyon bottoms. The slopes and ridges were covered in moderately dense chaparral vegetation consisting of ankle to knee high seasonal grasses, laurel sumac, and California buckwheat which resulted in 15 to 20 percent ground surface visibility. The canyon bottoms were largely comprised of ankle high seasonal grasses and stands of oak with ground surface visibility of approximately 25 to 50 percent. Given the topography of the slopes and ridges, they were subject to an opportunistic survey strategy wherein trails and clearings were subject to intensive inspection. The canyon bottoms were subject to systematic survey using transects spaced at 15-meter (approximately 50-foot) intervals. A systematic survey was also performed at the undeveloped parking lot of Taylor Trail using transects spaced at 15-meter (approximately 50-foot) intervals (ESA 2021; Appendix D).

Focused surveys were conducted on May 31, June 1 and August 17, 2022. Careful attention was given to barren ground included at the base of trees, bushes, within paths/trails and any subsurface soils exposed by burrowing animals. Ground surface visibility within the Project site was variable and as such, in areas of dense ground coverage, surface scrapes were occasionally implemented, when necessary, to enhance detection of archaeological materials that may have been obscured on the surface (Appendix D). Survey results are discussed below.

All cultural resources documented by site records, P-19-101350, P-19-101351, P-19-192297, as well as resources identified during ESA's pedestrian survey were revisited with the exception of P-19-101351 (ESA 2021; Appendix

D), which could not be found. Additionally, one previously unrecorded structure, a segment of The Old Road east of the Project site proposed for widening as part of the Project, was examined. This segment was surveyed on October 6, 2022. Visibility of the two-lane frontage road was excellent. Following is a brief summary of the conditions of each resource as well as an Evaluation of significance. All cultural resources, with the exception of the isolated artifacts, were assessed for their potential eligibility for listing on the CRHR and NRHP as well as their significance pursuant to CEQA criteria. Standard practice in accordance with Instructions for Recording Historical Resources (OHP 1995) and Secretary of Interior's standards and guidelines, dictates that isolated artifacts (such as P-19-101350, P-19-101351) need not be evaluated for significance since their isolated nature already falls below the threshold of significance.

Previously Recorded Resources Documented on DPR 530 Existing within the CHRIS Database:

P-19-101350: The prehistoric isolate, described in the site record as a "granitic hammerstone with a flat facet, and battering on the opposite end" was found during both ESA's and Dudek's surveys (ESA 2021). The resource was found within the same context described in the site record as "along the margin of a narrow arroyo at the foot of a finger ridge approximately 30 meters north of an unnamed creek bed." An area approximately 50 feet in each direction when possible was surveyed to determine if any other artifacts were present. Ground surface visibility was poor to fair (10-30 percent). No additional artifacts or features were observed (ESA 2021; Appendix D).

P-19-101351: The historic isolate, described in the site record as a "single isolated bottle neck finish that included a cork-lined glass stopper" was not found during either ESA's or Dudek's surveys. The location in the site record as "along an unnamed creek bed in what appears to have been an earthen dam" was visited using the UTM coordinates and location description. An area approximately 50 feet in each direction from the UTM coordinates was surveyed when possible. Ground surface visibility was poor to fair (10-30 percent). No artifacts or features were observed including the previously recorded isolate. Both ESA and Dudek observed evidence of erosion and Dudek observed a moderately used trail. It is possible that the isolate was removed from the location documented in the site record by either natural erosion or collected by someone; it is also possible that vegetation obscured the isolate's location. (ESA 2021; Appendix D).

P-19-192297: The historic structural feature, described in the site record as a "concrete construction with rebar protruding from the top" was found during both ESA's and Dudek's surveys. The resource was found within the same context provided in the site record map. An area approximately 50 feet in each direction when possible was surveyed to determine if any other artifacts were present. Ground surface visibility was poor to fair (10-30 percent). No additional artifacts or features were observed (ESA 2021; Appendix D).

Resources Identified During ESA's Investigation:

Dudek-Lyons-CYN-001 - Metal Frame Bridge: The structural feature, described by ESA as a "metal draw-bridge style vehicular bridge crossing a small drainage that trends north to south" including a "hydraulic arms underneath, a pivot point on the east side of the bridge, and an I-beam constructed cross beam entrance" and measuring "10-feet wide and about 12 to 13 feet long" was found during Dudek's surveys. An area approximately 50 feet in each direction when possible was surveyed to determine if any other artifacts were present. Ground surface visibility surrounding the feature was fair to excellent (30-100 percent). No additional artifacts or features were observed (ESA 2021; Appendix D).

Dudek-Lyons-CYN-002 - Refuse Scatter: The refuse scatter, described by ESA as "mostly corroded domestic items in a diffused scatter measuring 9-feet east to west and 17-feet north to south, and including water heater tank, two

steel metal buckets, toaster oven appliance, paint cans, two metal-framed chairs, a steel drum barrel, car seat springs, double-crimped sanitary cans with church key and rotary openings, two barbeques, various square oil containers" was found during Dudek's surveys. An area approximately 50 feet in each direction when possible was surveyed to determine if any other artifacts were present. Ground surface visibility was poor to fair (10-30 percent). Dudek also observed ceramic shards and whiteware as well as a clothes washer. All artifacts appeared to have been placed by opportunistic dumping at approximately the same time period. No evidence of an associated structure was observed (ESA 2021; Appendix D).

Dudek-Lyons-CYN-003 - Metal Drainage Pipe: The structural feature, described by ESA as a "metal drainage pipe is comprised of a poured concrete intake opening and backstop, connected to a corrugated steel metal drainage pipe trending south to north" and measuring "approximately 4 feet tall" and "13-inch-wide and about 60 feet long" was found during Dudek's surveys in the same location described by ESA as "and downhill toward the east end of Lyons Canyon Road" and provided in UTM coordinates. An area approximately 50 feet in each direction when possible was surveyed to determine if any other artifacts were present. Ground surface visibility surrounding the feature was poor to fair (10-30 percent). No additional artifacts or features were observed (ESA 2021; Appendix D).

Dudek-Lyons-CYN-004 - Water Tank: The structural feature, described by ESA as an "abandoned water tank" and measuring "4 feet tall by 6 feet diameter with a short, conical top… measuring 18-inch-wide and the tank was filled with modern aluminum pull-tab beverage cans" was found during Dudek's surveys in the same location described by ESA as "located on the slope of a hill south of Lyons Canyon Road on the northeast portion of the Project" and provided in UTM coordinates. An area approximately 50 feet in each direction when possible was surveyed to determine if any other artifacts were present. Ground surface visibility surrounding the feature was poor to fair (10-30 percent). No additional artifacts or features were observed. The metal drainage pipe and water tank are in close proximity to each other and may be associated (ESA 2021; Appendix D).

4.5.5 Impact Analysis

Threshold 4.5a: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines § 15064.5?

A historical resource is defined by CEQA as "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14, Section 4852) including the following: (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; (B) Is associated with the lives of persons important in our past; (C) 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; or (D) Has yielded, or may be likely to yield, information important in prehistory or history.

All cultural resources, with the exception of the isolated artifacts, were assessed for their potential eligibility for listing on the CRHR and NRHP as well as their significance pursuant to CEQA Guidelines Section 15064.5. Standard practice in accordance with *Instructions for Recording Historical Resources* (OHP 1995) and Secretary of Interior's standards and guidelines, dictates that isolated artifacts (such as P-19-101350, a granitic hammerstone, and P-

19-101351, a glass bottle neck fragment) need not be evaluated for significance since their isolated nature and lack of potential to contribute information important in prehistory or history already falls below the threshold of significance. Following is a brief summary of the significance findings.

P-19-192297: This resource is a historic structure located within the northern section of the western-most corner of the Project site and described as an incomplete check dam of concrete construction with rebar protruding from the top. According to the site record written in 2015 by K. Ross Way, "A 2006 Environmental Impact Report (State Clearinghouse No. 2003031086) states that the dam was evaluated and determined ineligible for the NRHP and CRHR as an incomplete isolated feature". Additionally, the same 2006 EIR Ross references states, "As an incomplete isolated feature that is generic in design and materials [...] the check dam does not have a potential to yield important historical information and is therefore not significant as an historical resource according to CEQA" and "The check dam is not eligible for either the California Register of National Register, [or the National Register of Historic Places]" (County of Los Angeles 2006; ESA 2021; Appendix D). Therefore, the available evidence regarding P-19-192297 does not demonstrate that this resource meets the definition of a historical resource.

Dudek-Lyons-CYN-001 - Metal Frame Bridge: Extensive review of topographic maps and aerial photographs demonstrate that the bridge was constructed sometime between 1980 and 1994. Additionally, the research on the Warner Brothers Valencia Oaks Ranch revealed that the bridge was used in the movie *Nothing But Trouble* starring Dan Aykroyd, John Candy, Chevy Chase and Demi Moore. Since the movie was released in 1991 (Then and Now 2022), it is reasonable to assume that the bridge was built for use in the movie. Due to the bridge being less than 45-years old and that it is not associated with a specific architect or artist and does not possess essential physical character-defining features from the period of significance, it does not meet the thresholds outlined in SurveyLA neither does it meet criterion for significance in accordance with CEQA and is not eligible for listing on the CRHR or NRHP (ESA 2021; Appendix D). Therefore, the available evidence regarding Dudek-Lyons-CYN-001 does not demonstrate that this resource meets the definition of a historical resource.

Dudek-Lyons-CYN-002 - Refuse Scatter: Extensive review of topographic maps and aerial photographs do not demonstrate evidence that the refuse scatter is associated with a structure or early occupation of the area. Evidence in the field and the scatter's close proximity to a road from the top of a foothill to the valley floor suggests that the scatter is present as the result of opportunistic dumping. Although subsurface testing was not conducted, the nature of scatter does not suggest that there is a subsurface component to the resource. Although some of the artifacts within the refuse scatter appear to be likely be older than 45 years, there is no evidence to suggest that they are associated with a significant event and person. Therefore, the refuse scatter does not meet criterion for significance in accordance with CEQA and is not eligible for listing on the CRHR or NRHP (ESA 2021; Appendix D). Therefore, the available evidence regarding Dudek-Lyons-CYN-002 does not demonstrate that this resource meets the definition of a historical resource.

Dudek-Lyons-CYN-003 - Metal Drainage Pipe and Dudek-Lyons-CYN-004 - Water Tank: Extensive review of topographic maps and aerial photographs demonstrate that the water drainage pipe and water tank were likely installed sometime between 1947 and 1952 and associated with a structure no longer present on the Project site. Although, these features are likely older than 45 years, there is no evidence to suggest that they are associated with a significant event and person, nor do they represent a distinctive method of construction or represent the work of a master. Therefore, neither the metal drainage pipe nor the water tank meet criterion for significance in accordance with CEQA and is not eligible for listing on the CRHR or NRHP (ESA 2021; Appendix D). Therefore, the available evidence regarding Dudek-Lyons-CYN-003 does not demonstrate that this resource meets the definition of a historical resource.

Warner Brothers Valencia Oaks Ranch: In 2019, the City of Los Angeles' SurveyLA project established a historical context statement, character-defining features, period of significance, and significance thresholds by which to evaluate filming locations associated with the Motion Picture and Television Broadcasting Industries (Appendix D). While the Project is within the County, and not the City of Los Angeles, based on this rubric, movie ranches may only be eligible under National Register/California Register criteria A/1: associated with events that have made a significant contribution to the broad patterns of our history (HRG 2019, p. 30; Appendix D). In order to be considered a historically significant movie ranch in Santa Clarita Valley, a property must be developed and used between 1910 and 1974, retain requisite integrity, as well as be the film location for an early motion picture, the film location of a culturally important or iconic film, the long-running location of a significant television production, and if less than 50 years in age, must possess exceptional importance (Appendix D). The detailed established significance threshold is provided in Section 3.1.4 of the Cultural Resources Technical Report prepared for the Project. This report utilizes the context and applies it to movie ranches in Santa Clarita Valley as well as to the subject property, Warner Brothers Valencia Oaks Ranch (Lyons Canyon Ranch).

The Warner Brothers Valencia Oaks Ranch, formerly located on the Project site, did not meet the thresholds for eligibility as a significant historical resource under any NRHP or CRHR criteria due to its development outside the established period of significance. The property's use as a movie ranch began in 1981. As the ranch was not associated with this use as a filming/television location until 1981, its association with the filming industry is recent; thus, this is an insufficient length of time that has passed to warrant consideration of the property's association with the film industry under the CRHR (45 years) or consideration under the NRHP (50 years). Further, the Warner Brothers Valencia Oaks Ranch does not warrant consideration as a historical resource because it was not developed during the period of significance for movie ranches (1910-1974) and does not warrant special consideration under NRHP Criterion Consideration G for its age (NETR 2022a; NETR 2022b; The Signal 1989; UCSB 2022). Therefore, the Project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5.

As presented in the Local Setting portion of Section 4.5.1, Existing Conditions, above, Sanford Lyon, for whom Lyons Canyon is named, worked, and then owned a portion of the Project site from at least 1874 until his death in 1892. Sanford and his brother Cyrus were important figures in the local area during the last quarter of the 19th Century. A 1876 plat map of the area shows the Lyons' family home located just outside of the Project site within the current footprint of Interstate 5. Although the extent at which the Lyon family used their property is unknown, there is evidence that the physical components of their former homestead did not exist within the Project site and were likely destroyed as a result of the construction of Interstate 5 and the bypass road that preceded it.

The Old Road segment located east of the Project site is proposed for widening as part of the Project's off-site improvements. Research has revealed that The Old Road segment proposed for alteration as part of this Project is not a part of US Route 99. The segment was constructed in 1989 as a frontage road and does not meet the age threshold for consideration as a historical resource for the purposes of CEQA (45 years) or consideration under the NRHP (50 years). Further, The Old Road segment east of the Project site does not appear to possess significant historical associations to the transportation history of US Route 99, the regional history of Newhall, or the area-specific history of Lyons Canyon and does not warrant further consideration.

As detailed above, no historical resources pursuant to CEQA Guidelines Section 15064.5 (definition provided above) are known to exist with the Project site. However, based on the identification of cultural resources of both a prehistoric and historic nature located within and surrounding the Project, some of which meet the threshold of a historical resource, and the presence of intact native soils, the potential for proposed disturbances to impact unknown resources possessing traits consistent with the definition of a historical resource is possible. If yet

unknown historical resources exist and are inadvertently encountered during implementation of the Project, there is potential for a substantial adverse change in the significance of an historical resource to occur, which would result in a potentially significant impact regarding a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. As such, the following mitigation measures (MMs) are required to ensure that any unknown historical resources that are inadvertently encountered during Project implementation are assessed, evaluated (if necessary) and treated to ensure a less than significant impact. MM-4.5-1 requires that cultural monitoring be conducted during initial ground disturbing activities, guided by a Cultural Resource Monitoring and Inadvertent Discovery Plan, that shall provide a protocol for the identification and proper treatment of historical resources. MM-4.5-2 requires development and implementation of a Workers Environmental Awareness Program Training aimed at instructing construction personnel instructed on the proper procedures to follow in the event that historical resources are encountered during ground-disturbing activities. With implementation of MM-4.5-1 and MM-4.5-2, the impact resulting in a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5 would be less than significant.

Threshold 4.5b: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?

An archaeological literature and records search of the CHRIS database at the SCCIC, California State University, Fullerton, determined that 13 cultural resources have been previously recorded within 1-mile of the Project site and offsite improvement locations, as detailed in Section 4.5.1, Existing Conditions. The identified cultural resources include two (2) prehistoric archaeological sites, four (4) historic archaeological sites, one (1) prehistoric isolate, two (2) historic isolates, and four (4) built environment resources. Of these, three (3) are located within the Project site: one (1) prehistoric isolate (P-19-101350), one (1) historic artifact (P-19-101351), and one (1) built environment resource (P-19-192297). The Project site was intensively surveyed for cultural resources encompassing the entirety of the Project site, with some exceptions in areas greater than 30 percent slope, as well as focused efforts to revisit, assess, and, when appropriate, evaluate previously and newly identified cultural resources. Ground surface visibility, within the Project site, varied from none to excellent and special attention was given to barren ground including at the base of trees, within dirt roads and paths, as well as subsurface soils exposed by burrowing animals. Four cultural resources were newly identified as a result of the surveys.

All resources were assessed with comparative analysis using topographic maps, photographic aerials and archival documents and all resources were determined to not meet criterion for significance in accordance with CEQA and not eligible for listing on the CRHR or NRHP. No known significant archaeological resources, as defined by CEQA Section 15064.5, exist within the Project site. As stated in responses to Threshold 4.5a, above, although Sanford and his brother Cyrus Lyons were important figures in the local area during the last quarter of the 19th Century, there is evidence that the physical components of their former homestead did not exist within the Project site and were likely destroyed as a result of the construction of Interstate 5 and the bypass road that preceded it. Additionally, The Old Road segment proposed for alteration as part of this Project was constructed in 1989 and does not meet the age threshold for consideration as a historical resource for the purposes of CEQA (45 years) or consideration under the NRHP (50 years).

However, based on the identification of archaeological resources of both a prehistoric and historic nature located within and surrounding the Project and the presence of potentially intact native soils, there would be potential for proposed disturbances to impact unknown archaeological resources. If yet unknown archaeological resources, possessing the characteristics outlined in CEQA as significant, exist, and are inadvertently encountered during implementation (i.e., construction) of the Project, there is potential for a substantial adverse change in the significance of an archaeological resource to occur. Therefore, this would result in a potentially significant impact

regarding a substantial adverse change in the significance of an unknown archaeological resource pursuant to CEQA Guidelines Section 15064.5. As such, the following mitigation measures are recommended to ensure that unknown archaeological resources that are inadvertently encountered during Project implementation are assessed, evaluated (if necessary) and treated in accordance with CEQA: MM-4.5-1 and MM-4.5-2. MM-4.5-1 requires that cultural monitoring be conducted during initial ground disturbing activities, guided by a Cultural Resource Monitoring and Inadvertent Discovery Plan, that shall provide a protocol for the identification and proper treatment of archaeological resources. MM-4.5-2 requires development and implementation of a Workers Environmental Awareness Program Training aimed at instructing construction personnel instructed on the proper procedures to follow in the event that archaeological resources are encountered during ground-disturbing activities. These measures are provided in greater detail below, in Section 4.5.7, Mitigation Measures, below. With the implementation of MM-4.5-1 and MM-4.5-2, impacts resulting in a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5 would be less than significant.

Threshold 4.5c: Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

No prehistoric or historic human remains or burial sites were identified within the Project site as a result of the CHRIS records search, NAHC SLF search, or pedestrian survey (Appendix D; ESA 2021). In the event that human remains are inadvertently encountered during construction activities, such resources would be treated in accordance with state and local regulations that provide requirements with regard to the accidental discovery of human remains, including California Health and Safety Code Section 7050.5, California Public Resources Code Section 5097.98, and the California Code of Regulations Section 15064.5(e). Additionally, the following mitigation measures are recommended to ensure that unknown human remains and any associated archaeological resources that are inadvertently encountered during Project implementation are assessed, evaluated (if necessary) and treated in accordance with CEQA: MM-4.5-1 and MM-4.5-2. MM-4.5-1 requires that cultural monitoring be conducted during initial ground disturbing activities, guided by a Cultural Resource Monitoring and Inadvertent Discovery Plan, that shall provide a protocol for the identification and proper treatment of human remains. MM-4.5-2 requires development and implementation of a Workers Environmental Awareness Program Training aimed at instructing construction personnel instructed on the proper procedures to follow in the event that human remains are encountered during ground-disturbing activities. These measures are provided in greater detail in Section 4.5.7. With implementation of MM-4.5-1 and MM-4.5-2, impacts to human remains, including those interred outside of dedicated cemeteries, would be less than significant.

4.5.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts associated with the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The geographic context of the past, present, and reasonably foreseeable future projects (i.e., cumulative projects) used for this analysis are presented in Table 2-2, List of Cumulative Projects, of Section 2.6, Cumulative Impacts, and on Figure 2-8, Cumulative Projects Location Map, in Chapter 2, Environmental Setting, of this Draft EIR. Impacts to cultural resources, if any exist, are generally site-specific.

Threshold 4.5a: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines § 15064.5?

As discussed in Section 4.5.5, Impact Analysis, above, there are no known significant historical resources pursuant to CEQA Guidelines Section 15064.5 present on the Project site. However, there is a potential for impacts to unidentified historic resources, which would require implementation of MM-4.5-1 and MM-4.5-2. With mitigation, Project-specific impacts to historical resources would be reduced to a less than significant level at the Project site. Because all historical resources are unique and nonrenewable resources, cumulative projects that demolish or alter historical resources have the potential to erode a general cultural landscape to which the historical resources belong. Therefore, implementation of cumulative projects could result in a cumulatively considerable impact on historical resources with regard to potential known and/or unknown historical resource at the Project site. However, Cumulative Projects LA1 through LA14 and SC1 through SC26 that would occur in accordance with General Plan growth and buildout are all subject to PRC section 21084.1 and other the regulatory requirements that mandate evaluation and consideration of potential impacts to historical resources prior to approval of any discretionary permit for site development. Further, according to PRC section 21084.1, any project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment, and any significant impact to a historic resource must be evaluated and mitigated accordingly. Therefore, although cumulative development would have the potential to result in a significant impact associated with the loss of historical resources through the physical demolition, destruction, relocation, or alteration of a resource or its immediate surroundings, the Project would not contribute to cumulatively considerable impacts, which are typically site-specific. The Project-specific mitigation, combined with the mandatory evaluation of potential impacts to other nearby cumulative projects, would ensure that there would not be cumulatively considerable impacts to historical resources.

Threshold 4.5b: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?

As discussed above, there are no known significant archaeological resources pursuant to CEQA Guidelines Section 15064.5 present on the Project site. Because all archaeological resources are unique and nonrenewable resources, projects that demolish or alter certain archaeological resources have the potential to erode a general cultural landscape to which the archaeological resources belong. Therefore, implementation of the Project could result in a cumulatively significant effect on archaeological resources when combined with other cumulative development in the area due to the loss of identified or unknown archaeological resources through the physical demolition, destruction, relocation, or alteration of a resource or its immediate surroundings such that the significance of a resource would be materially impaired. However, the Project is required to implement MM-4.5-1 and MM-4.5-2, which would reduce Project-related impacts to a less than significant level at the Project site. Because there are no known archaeological resources at the Project site, the mitigation is for inadvertent discoveries.

Cumulative Projects LA1 through LA14 and SC1 through SC26 that would occur in accordance with General Plan growth and buildout are all subject to PRC section 21083.2 and other the regulatory requirements that mandate evaluation and consideration of potential impacts to archaeological resources prior to approval of any discretionary permit for site development. According to PRC section 21083.2, other cumulative projects would be required to undergo a similar evaluation to determine presence/absence of archaeological resources and mitigate accordingly, if necessary. Based on the degree of protection afforded by MM-4.5-1 and MM-4.5-2 for Project-specific impacts to potential unknown archaeological resources, the Project would not contribute to cumulatively considerable impacts related to substantial adverse changes in the significance of an archaeological resource.

Threshold 4.5c: Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

As discussed above, there are no known human remains, including those interred outside of dedicated cemeteries, present on the Project site. Because human remains are unique and nonrenewable resources, projects that demolish, destroy, alter or move human remains have the potential to erode a general cultural landscape to which the human remains belong. Therefore, cumulative development within the area would have the potential to result in a cumulative impact associated with the loss of yet unidentified human remains through the physical demolition, destruction, relocation, or alteration of a remains or their immediate surroundings. However, human remains are generally site-specific and the Project's potential impacts to disturbance human remains would be reduced to less than significant with implementation of Project-specific MM-4.5-1 and MM-4.5-2. All cumulative projects would similarly be required to comply with State Health and Safety Code Section 7050.5., PRC Sections 5097.94 and 5097.98, and all other applicable laws. Based on the degree of protection afforded by MM-4.5-1 and MM-4.5-2 for potential Project-specific impacts to human remains, the Project would not contribute to cumulatively considerable impacts related to disturb any human remains, including those interred outside of dedicated cemeteries.

4.5.7 Mitigation Measures

MM-4.5-1 Archaeological Monitoring. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Archaeologist, meeting the Secretary of the Interior's Standards, and with experience in California prehistoric and historic resources (experience within Los Angeles County preferred). The Principal Investigator/ Archaeologist shall do the following: (1) compose a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan); (2) manage archaeological monitoring; and (3) address any inadvertent discoveries identified during Project implementation. These actions are described further below.

(1) *Cultural Resource Monitoring and Inadvertent Discovery Plan*. The Principal Investigator/ Archaeologist shall compose the Plan to outline cultural monitoring protocols and a program of treatment and mitigation in the case of an inadvertent discovery of cultural resources during ground-disturbing activities. The Plan would be informed by the data and findings provided in the cultural report prepared for the Project (Appendix D), final grading and site plans in order to provide guidance for the proper identification, evaluation, treatment, and protection of any cultural resources or human remains in accordance with California Environmental Quality Act (CEQA), as well as the depths at which cultural monitoring is required, throughout the duration of the Project. Existence and importance of adherence to this Plan shall be stated on all Project site plans intended for use by those conducting the ground disturbing activities.

(2) *Archaeological Monitoring*. The Principal Investigator/Archaeologist shall manage archaeological monitoring activities conducted by technicians knowledgeable in archaeological resources during initial ground disturbances within native soils. Initial ground disturbance is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to cultural monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by Project-related construction. The retained Principal Investigator/Archaeologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitors shall be responsible for maintaining daily monitoring logs. The requirement for archaeological monitoring shall be noted on all construction plans to ensure implementation. Upon completion

of all ground disturbing activities and prior to release of the grading bond, an archaeological monitoring report shall be prepared within 60 days following completion of ground disturbance and submitted to the County of Los Angeles for review. This report shall document compliance with approved cultural mitigation, all monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the County and the South Central Coastal Information Center (SCCIC).

MM-4.5-2 Workers Environmental Awareness Program (WEAP) Training. Prior to the commencement of ground-disturbing activities for all phases of Project implementation, the Project Applicant shall retain a Principal Investigator/Archaeologist, as detailed in MM-4.5-1, above. The Principal Investigator/ Archaeologist shall prepare a WEAP. The WEAP shall be submitted to the County of Los Angeles for review and approval. All construction personnel and monitors shall be presented the WEAP training prior to the start of ground-disturbing activities. This training shall inform all personnel working on the Project site about the archaeological sensitivity of the area. The purpose of the WEAP training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the Project and explain the importance of and legal basis for the protection of significant archaeological resources. The WEAP shall define "tribal cultural resources" and include appropriate management requirements relating to inadvertent discovery of a potential tribal cultural resource. Each worker should also be instructed on the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the Principal Investigator/Archaeologist, and, if appropriate, Tribal representative as determined by the Principal Investigator/Archaeologist. Necessity of training attendance shall be stated on all Project site plans intended for use by those conducting the ground-disturbing activities.

4.5.8 Level of Significance After Mitigation

No historical resources were identified as a result of the cultural resources investigation conducted for this Project. However, as previously established, there is potential for unknown resources to be encountered during Project implementation that may meet the criteria of a historical resource set forth in CEQA. In order to ensure unknown historical resources that are inadvertently encountered during Project implementation are assessed, evaluated (if necessary) and treated in accordance with CEQA, mitigation measures have been developed and will be required of the Project if approved. As such, the Project would result in less than significant impacts with implementation of MM-4.5-1 and MM-4.5-2 regarding the potential to cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines § 15064.5.

No significant archaeological resources were identified as a result of the cultural resources investigation conducted for this Project. However, as previously established, there is potential for unknown resources to be encountered during Project implementation that may meet the criteria of significant set forth in CEQA. To ensure unknown archaeological resources that are inadvertently encountered during Project implementation are assessed, evaluated (if necessary) and treated in accordance with CEQA, mitigation measures have been developed and will be required of the Project if approved. As such, the Project would result in less than significant impacts with implementation of MM-4.5-1 and MM-4.5-2 regarding the potential to cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5.

No human remains, including those interred outside of dedicated cemeteries, were identified as a result of the cultural resources investigation conducted for this Project. However, as previously established, there is potential

for unknown human remains to be encountered during project implementation that may meet the criteria of significant set forth in CEQA. In order to ensure unknown human remains that are inadvertently encountered during Project implementation are treated in accordance with CEQA, mitigation measures have been developed and will be required of the Project if approved. As such, the Project would result in less than significant impacts with implementation of MM-4.5-1 and MM-4.5-2 for potential Project disturbance of any human remains, including those interred outside of dedicated cemeteries.

4.5.9 References

BLM (Bureau of Land Management). 2022. "The Official Federal Land Records Site." General Land Office Records. https://glorecords.blm.gov/default.aspx#searchTabIndex=0&searchByTypeIndex=0. August 2022.

Caltrans (California Department of Transportation). 2016. *A Historical Context and Methodology for Evaluating Trails, Roads, and Highways in California*. Prepared for Cultural Studies Office, Division of Environmental Analysis, California Department of Transportation, Sacramento. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/ser/caltrans-highways-a11y.pdf.

County of Los Angeles. 2006. *Lyons Canyon Ranch Draft Environmental Impact Report*. SCH No. 2003031086. September 2006. Accessed September 9, 2022.

County of Los Angeles. 2015. *Los Angeles County General Plan*. https://planning.lacounty.gov/wp-content/uploads/2022/11/9.0_gp_final-general-plan-ch9.pdf.

County of Los Angeles. 2019. *Environmental Checklist Form (Initial Study) County of Los Angeles, Department of Regional Planning*. Canyon View Estates/Project No. 2016-002179, Tract Map No. 74650, Conditional Use Permit No. 2016004409, Oak Tree Permit No. RPPL2017009209, and Environmental Assessment No. 20160044100. Last accessed September 5, 2022. https://ceqanet.opr.ca.gov/2019089066/2.

Ehringer, Candace, Katherine Ramierez, and Michael Vader. 2013. *Santa Clarita Valley Sanitation District Chloride TMDL Facilities Plan Project, Phase I Cultural Resources Assessment*. On file at the South Central Coastal Information Center, California State University, Fullerton. Accessed July 2022.

ESA (Environmental Science Associates). 2021. "Field notes from unfinished Phase I cultural report." Dietler, Sara, Matheson Lowe. Prepared for New Urban West.

HRG (Historic Resources Group). 2009. "Historic Preservation Survey and Planning Analysis." Prepared by HRG for City of Santa Clarita August 2009. Accessed August 18, 2022. https://scvhistory.com/scvhistory/citypreservationsurvey2009.pdf

HRG. 2019. Los Angeles Citywide Historic Context Statement. Context: Entertainment Industry, 1908-1980. Theme: Filming Locations Associated with the Motion Picture and Television Broadcasting Industries, 1908-1980. Prepared by HRG for the Department of City Planning, Office of Historic Resources, City of Los Angeles, September 2019. https://planning.lacity.org/odocument/986211ba-6d75-4251-b239-c825dd704c6f/7.5_Entertainment_FilmingLocationsMotionPictureandTelevisionBroadcastingIndustries_1908-1980.pdf

Kaplan, Jonathan. 2018. “From Ramona to the Brady Bunch: Assessing the Historical Significance of Sites Used in Movies and Television Shows.” Master’s thesis, University of Southern California. https://digitallibrary.usc.edu/asset-management/2A3BF164578U?WS=SearchResults&FR_=1&W=1920&H=937

Kirkman, G.W. 1938. *The Kirkman - Harriman pictorial and historical map of Los Angeles County: 1860 A.D. 1937 A.D.* Huntington Digital Library Digital Map Collection.

Leonard, Nelson. 1974. *Archaeological Reconnaissance of Tentative Tract # 31399, a Residential Development Near Newhall California*. On file at the South Central Coast Information Center, located at California State University, Fullerton. Accessed July 2022.

Los Angeles County Department of Regional Planning. 2012. Santa Clarita Valley Area Plan: One Valley One Vision. Prepared for the Los Angeles County Board of Supervisors. Accessed August 22, 2022. https://planning.lacounty.gov/assets/upl/project/ovov_2012-fulldoc.pdf

Milburn, D.H., and H.I. Scott. 1996. “Old Ridge Route.” National Register of Historic Places Inventory/Nomination Form. Angeles National Forest, Arcadia, California, May 1, 1996.

Moratto, Michael. 1990. Cultural and Palaeontologic Resources in the Santa Susana and Santa Monica Mountains, Los Angeles County, California. On file at the South Central Coast Information Center, located at California State University, Fullerton. Accessed July 2022.

NETR (Nationwide Environmental Title Research LLC). 2022a. “Historical Topographic Maps dating from 1903, 1926, 1929, 1941, 1952, 1969, 1984.” Accessed July 2022. https://www.historicaerials.com/viewer.

NETR (Nationwide Environmental Title Research LLC). 2022b. Historical Aerial Photographs dating from 1940, 1941, 1947, 1952, 1959, 1969, 1972, 1974, 1977, 1980, 1994, 2003, 2010, 2012, 2014, 2016 Accessed July 2022. https://www.historicaerials.com/viewer

NPS (National Park Service). 1995. “How to Apply the National Register Criteria for Evaluation.” National Register Bulletin 15. Accessed August 18, 2022. https://www.nps.gov/nr/publications/bulletins/pdfs/nrb15.pdf.

NPS. 2005. Cultural Landscapes Inventory. Paramount Ranch, Santa Monica Mountains National Recreation Area. Accessed August 18, 2022. https://irma.nps.gov/DataStore/Reference/Profile/2185630

NPS. 2020. “Professional Qualifications Standards.” Accessed August 2022. https://www.nps.gov/articles/sec-standards-prof-quals.htm.

OHP (Office of Historic Preservation). 1995. *Instructions for Recording Historical Resources*. Accessed August 2022. http://ohp.parks.ca.gov/?page_id=1069.

OHP. 2022. Lyons Station Stagecoach Stop. Registered July 31, 1959. Accessed online August https://ohp.parks.ca.gov/listedresources/Detail/688

Peak and Associates. 1992. *Consolidated Report: Cultural Resource Studies for the Proposed Pacific Pipeline Project.* On file at the South Central Coastal Information Center, California State University, Fullerton. Accessed July 2022.

Provost, S.T. 2017. *Highway 99: The History of California's Main Street.* Fresno, California: Craven Street Books

Rock, Carol. 1994. "Big Screen, Big Valley First used for filming in 1903, the SCV continues to thrive as a movie-making mecca." Originally prepared for *The Signal* newspaper, 75th Anniversary Edition, Monday, February 7, 1994. Accessed August 18, 2022. https://scvhistory.com/scvhistory/sg020794a.htm

Roland, Zelda. 2016. "Studio Labor and the Origins of Hollywood's Thirty-Mile Zone, or TMZ." KCET.org: Lost LA. Published March 10, 2016, Accessed August 19, 2022. https://www.kcet.org/shows/lost-la/studio-labor-and-the-origins-of-hollywoods-thirty-mile-zone-or-tmz

Shepard, Richard. 2004. *Phase I Cultural Resource Assessment for Lyons Canyon Ranch Specific Plan, Tentative Tract Map 53653, Santa Clarita, Los Angeles County, California.* On file at the South Central Coastal Information Center, California State University, Fullerton. Accessed July 2022.

Simon, Joseph and David Whitley. 1993. *Phase I Archaeological Survey and Cultural Resources Assessment for the 225 Acres Alternative Site 2 Study Area, Santa Clarita, Los Angeles County, California*. On file at the South Central Coastal Information Center, California State University, Fullerton. Accessed July 2022.

The Signal. 1925. "We Should Encourage the Motion Picture People." Newspapers.com: *The Signal* (Santa Clarita, CA). April 2, 1925, p. 2.

The Signal. 1965. "Big Project Planned for Highway 99." Newspapers.com: *The Signal* (Santa Clarita, California). April 1, 1965, p. 15.

The Signal. 1967. "Bear Dedicates New Freeway." Newspapers.com: *The Signal* (Santa Clarita, California). September 15, 1967, p. 4.

The Signal. 1989. "Shooting in the SCV, Take One." Newspapers.com: The Signal (Santa Clarita, California). October 6, 1989, p. 50.

UCSB (University of California, Santa Barbara). 2022. "Historic Aerial Photographs of Lyons Ranch dating from 1928, 1929, 1930, 1945." Map & Imagery Laboratory (MIL) UCSB Library, Electronic Resource. Accessed August 19, 2022. http://mil.library.ucsb.edu/ap_indexes/FrameFinder.

USDA (United States Department of Agriculture). 2022. Web Soil Survey, https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm, Accessed March 2, 2022

Walker, Stan. 2022. "Lyon Brothers." Elsmere Canyon, https://www.elsmerecanyon.com/lyoncanyon/brothers/brothers.htm. August 2022.

Westtec. 1981. Archaeological Survey of the Sylmar Development Project Site, Los Angeles County, California. On file at the South Central Coastal Information Center, California State University, Fullerton. Accessed July 2022.

Worden, Leon. 2003. "Melody Ranch: Movie Magic in Placerita Canyon." Originally Published in The Signal newspaper, Saturday, March 29, 2003. Accessed August 18, 2022. https://scvhistory.com/scvhistory/sg032903.htm

4.6 Energy

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to energy, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts analysis, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data and reports from the California Energy Commission (CEC), California Public Utilities Commission (CPUC), U.S. Energy Information Administration (EIA), as well as the following:

Appendix B-1 Air Quality and Greenhouse Gas Emission Calculations, prepared by Dudek, dated November 2023

Appendix J Transportation Impact Analysis, prepared by Fehr and Peers, dated November 2023

Other sources consulted are listed in Section 4.6.9, References.

4.6.1 Existing Conditions

Electricity

According to the EIA, California used approximately 250,175 gigawatt hours of electricity in 2020 (EIA 2021). Electricity usage in California for different land uses varies substantially by the types of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. In 2021, California was the fourth-largest electricity producer in the nation, but the state was also the nation's second-largest consumer of electricity, and in 2020, it received about 30% of its electricity supply from generating facilities outside of California, including imports from Mexico (EIA 2022a).

Southern California Edison (SCE) provides electricity to the unincorporated areas of Los Angeles County. SCE, a subsidiary of Edison International, serves approximately 180 cities in 11 counties across Central and Southern California. SCE administers various energy efficiency and conservation programs that may be available to residents, businesses, and other organizations in Los Angeles County. According to the CPUC, approximately 84 billion kilowatt-hours (kWh) of electricity were used in SCE's service area in 2017. Demand forecasts anticipate that approximately 75 billion kWh of electricity will be used in SCE's service area in 2020 (CPUC 2020).

SCE receives electric power from a variety of sources. According to the 2020 SCE Power Content Label, eligible renewable energy accounts for 30.9% of SCE's overall energy resources, with geothermal resources at 5.5%, wind power at 9.4%, eligible hydroelectric sources at 0.8%, and solar energy at 15.1% (CEC 2021). Within Los Angeles County, annual non-residential electricity use in 2020 was approximately 43 billion kWh per year, while residential electricity use is approximately 23 billion kWh per year (CEC 2022a).

Natural Gas

According to the EIA, California used approximately 2,074,302 million cubic feet of natural gas in 2020 (EIA 2022b). The majority (by number) of California's natural gas customers are residential and small commercial customers (core customers) (CPUC 2019). These customers account for approximately 35% of the natural gas delivered by California utilities (CPUC 2019). Large consumers, such as electric generators and industrial customers (noncore customers), account for approximately 65% of the natural gas delivered by California utilities (CPUC 2021). CPUC

regulates California natural gas rates and natural gas services, including in-state transportation over transmission and distribution pipeline systems, storage, procurement, metering, and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. California gas utilities may soon also begin receiving biogas into their pipeline systems (CPUC 2021).

The Southern California Gas Company (SoCalGas) provides the County with natural gas service. SoCalGas' service territory encompasses approximately 20,000 square miles and more than 500 communities. In the California Energy Demand mid-energy demand scenario from the 2019 Integrated Energy Policy Report, natural gas demand is projected to have an annual growth rate of 0.03% in SoCalGas's service territory (CEC 2018a). The total capacity of natural gas available to SoCalGas in 2020 is estimated to be 3.8 billion cubic feet per day. In 2024, the total capacity available is also estimated to be 3.8 billion cubic feet per day1 (California Gas and Electric Utilities 2020). This amount is approximately equivalent to 3.88 billion thousand British thermal units (kBTU) per day or 38.8 million therms per day. In 2020, SoCalGas delivered approximately 2,937 million therms (293.7 billion kBTU) to Los Angeles County (CEC 2022b).

Petroleum

According to the EIA, California used approximately 524 million barrels of petroleum in 2020, with the majority (433 million barrels) used for the transportation sector (EIA 2022c). This total annual consumption equates to a daily use of approximately 1.4 million barrels of petroleum. In California, petroleum fuels refined from crude oil are the dominant source of energy for transportation sources. Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. California has implemented policies to improve vehicle efficiency and to support use of alternative transportation, which are described in Section 4.6.2, Regulatory Requirements.

4.6.2 Regulatory Requirements

Federal

Federal Energy Policy and Conservation Act

In 1975, Congress enacted the Federal 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 (NHTSA) is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased corporate average fuel economy (CAFE) standards for motor vehicles, the EISA includes the following other provisions related to energy efficiency:

- Renewable fuel standard (RFS) (Section 202)

[1] One cubic foot of natural gas has approximately 1,020 BTUs of natural gas or 1.02 kBTUs of natural gas.

- Appliance and lighting efficiency standards (Sections 301–325)
- Building energy efficiency (Sections 411–441)

This federal legislation (the RFS) requires ever-increasing levels of renewable fuels to replace petroleum (EPA 2017). The U.S. Environmental Protection Agency (EPA) is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that laid the foundation for achieving significant reductions of greenhouse gas (GHG) emissions through the use of renewable fuels, for reducing imported petroleum, and for encouraging the development and expansion of our nation's renewable fuels sector. The updated program ("RFS2") includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel and set separate volume requirements for each one.
- EISA required the EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs."

State

CEQA

In accordance with the CEQA Guidelines and Appendix F, Energy Conservation, of the CEQA Guidelines, in order to ensure that energy implications are considered in project decisions, EIRs must include a discussion of the potential significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the CEQA Guidelines provides a list of energy-related topics that should be analyzed in an EIR. In addition, while not described as significance thresholds for determining the significance of impacts related to energy, Appendix F provides the following topics that the lead agency may consider in the energy analysis in an EIR, where topics are applicable or relevant to the project:

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project's life cycle including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;
- The effects of the project on local and regional energy supplies and on requirements for additional capacity;
- The effects of the project on peak and base period demands for electricity and other forms of energy;
- The degree to which the project complies with existing energy standards;
- The effects of the project on energy resources; and,

- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Warren-Alquist Act

The California Legislature passed the Warren–Alquist Act in 1974, which created the CEC. The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the CEC to formulate and adopt the nation's first energy conservation standards for both buildings constructed and appliances sold in California.
- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

State of California Energy Action Plan

The CEC and CPUC approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure the provision of adequate, reliable, and reasonably priced electrical power and natural gas supplies; it also identified cost-effective and environmentally sound energy policies, strategies, and actions for California's consumers and taxpayers. In 2005, the CEC and CPUC adopted a second Energy Action Plan to reflect various policy changes and actions of the prior 2 years.

At the beginning of 2008, the CEC and CPUC determined that it was not necessary or productive to prepare a new energy action plan (CPUC 2008). This determination was based, in part, on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed below). Rather than produce a new energy action plan, the CEC and CPUC prepared an "update" that examines the state's ongoing actions in the context of global climate change.

AB 32 and SB 32

In 2006, the State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the Legislature enacted Senate Bill (SB) 32, which extended the horizon year of the state's codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, the California Air Resources Board (CARB) prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focused on increasing energy efficiencies, using renewable resources, and reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources.

California Building Standards

Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Part 6 establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically to incorporate and consider new energy efficiency technologies and methodologies.

The current Title 24, Part 6 standards, referred to as the 2019 Title 24 Building Energy Efficiency Standards, became effective on January 1, 2020. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards will use approximately 53% less energy than those under the 2016 standards (CEC 2018b). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018b).

Title 24 also includes Part 11, the California Green Building Standards (CALGreen). CALGreen establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The 2019 CALGreen standards are the current applicable standards. For nonresidential projects (which the nonresidential portion of the Project is subject to), some of the key mandatory CALGreen 2019 standards involve requirements related to bicycle parking, designated parking for clean air vehicles, electric vehicle (EV) charging stations, shade trees, water conserving plumbing fixtures and fittings, outdoor potable water use in landscaped areas, recycled water supply systems, construction waste management, excavated soil and land clearing debris, and commissioning (24 CCR Part 11).

Senate Bill 1368

On September 29, 2006, Governor Arnold Schwarzenegger signed into law SB 1368 (Perata, Chapter 598, Statutes of 2006). The law limits long-term investments in baseload generation (minimum level of demand on an electrical grid over a span of time) by the state's utilities to those power plants that meet an emissions performance standard jointly established by the CEC and the CPUC.

The CEC has designed regulations that:

- Establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, of 1,100 pounds carbon dioxide (CO_2) per megawatt-hour. This would encourage the development of power plants that meet California's growing energy needs while minimizing their emissions of GHGs;
- Require posting of notices of public deliberations by publicly owned utilities on long-term investments on the CEC website. This would facilitate public awareness of utility efforts to meet customer needs for energy over the long-term while meeting the state's standards for environmental impact; and
- Establish a public process for determining the compliance of proposed investments with the emissions performance standard (EPS) (Perata, Chapter 598, Statutes of 2006).

AB 1493

Adopted in 2002 by the state legislature, AB 1493 ("Pavley" regulations) required that the CARB develop and adopt, no later than January 1, 2005, regulations to achieve the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles.

The first California request to implement GHG standards for passenger vehicles, known as a waiver request, was made in December 2005 and was denied by the EPA in March 2008. That decision was based on a finding that California's request to reduce GHG emissions from passenger vehicles did not meet the Clean Air Act requirement of showing that the waiver was needed to meet "compelling and extraordinary conditions."

The EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles on June 30, 2009. On September 24, 2009, CARB adopted amendments to the Pavley regulations that reduce GHG emissions in new passenger vehicles from 2009 through 2016. These amendments are part of California's commitment to a nationwide program to reduce new passenger vehicle GHGs from 2012 through 2016. CARB's September 2009 amendments will allow for California's enforcement of the Pavley rule while providing vehicle manufacturers with new compliance flexibility. The amendments also prepare California to harmonize its rules with the federal rules for passenger vehicles.

It is expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 22% in 2012 and about 30% in 2016, all while improving fuel efficiency and reducing motorists' costs.

EO S-1-07

Issued on January 18, 2007, Executive Order (EO) S-1-07 sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO_2-equivalent (CO_2e) grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste. In addition, the Low Carbon Fuel Standard would drive the availability of plug-in hybrid, battery electric, and fuel-cell power motor vehicles. The Low Carbon Fuel Standard was anticipated to lead to the replacement of 20% of the fuel used in motor vehicles with alternative fuels by 2020. In 2018, this goal was revised to reduce the carbon intensity of fuels by 20% compared to 2011 by 2030. In 2020, the LCFS met 7.42% of the 7.5% target reduction for the year (CARB 2021a).

SB 375

In August 2008, the legislature passed, and on September 30, 2008, Governor Schwarzenegger signed, SB 375 (Steinberg), which addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. Regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, as determined by CARB, are required to consider the emission reductions associated with vehicle emission standards (see SB 1493), the composition of fuels (see EO S-1-07), and other CARB-approved measures to reduce GHG emissions. Regional metropolitan planning organizations will be responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a development plan for the region, which, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an alternative planning strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining CEQA requirements by substantially reducing the requirements for "transit priority projects," as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the SCS or alternative planning strategy.

In September 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets for the SCAG are an 8% reduction in emissions per capita by 2020 and a 13% reduction by 2035. Achieving these goals through adoption of a SCS is the responsibility of the metropolitan planning organizations. SCAG prepared its RTP/SCS, which was adopted by the SCAG Regional Council on April 4, 2012. The plan quantified a 9%

reduction by 2020 and a 16% reduction by 2035. On June 4, 2012, the CARB executive officer issued an executive order accepting SCAG's quantification of GHG reductions and the determination that the SCS would achieve the GHG emission reduction targets established by CARB. On April 7, 2016, SCAG adopted the 2016–2040 RTP/SCS which looks to build on the success of the 2012–2035 RTP/SCS. Targets for SCAG region in the updated plan includes an 8% per capita reduction in GHG emissions from automobiles and light trucks by 2020, an 19% reduction by 2035, and a 21% reduction by 2040 compared with 2005 levels (SCAG 2020).

SCAG has developed Connect SoCal, the 2020–2045 RTP/SCS, which is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, planning strategies, and the people whose collaboration can improve the quality of life for Southern Californians. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The SCAG 2020–2045 RTP/SCS was adopted on September 3, 2020.

Truck and Bus Regulation, On-Road Heavy-Duty Diesel Vehicles (In-use) Regulation

On December 12, 2008, CARB approved the Truck and Bus Regulation to significantly reduce PM, and NO_x emissions from existing diesel vehicles operating in California. Amendments to this regulation were approved by CARB on April 25, 2014.

The regulation applies to nearly all diesel fueled, dual-fueled, or alternative diesel-fueled trucks and buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds that are privately or federally owned and for privately and publicly owned school buses. The purpose of this regulation is to reduce emissions of diesel PM, NO_x, and other criteria pollutants from in-use diesel-fueled vehicles.

Heavier trucks and buses with a GVWR greater than 26,000 pounds must comply with a schedule by engine model year or owners can report to show compliance with more flexible options. Starting January 1, 2012, heavier trucks were required to meet the engine model year schedule. Fleets that comply with the schedule must install the best available PM filter on 1996 model year and newer engines and replace the vehicle 8 years later. Trucks with 1995 model year and older engines must be replaced starting in 2015. Replacements with a 2010 model year or newer engines meet the final requirements, but owners can also replace with used trucks that have a future compliance date on the schedule. For example, a replacement with a 2007 model year engine complies until 2023. By 2023, all trucks and buses must have 2010 model year engines with few exceptions. No reporting is required if complying with this schedule (CARB 2014).

Advanced Clean Car Program

The Advanced Clean Cars (ACC) I program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle (LEV) regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for zero-emission vehicles (ZEV) that contributes to both types of emission reductions (CARB 2021b). The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75 percent less smog-forming pollution than the average new car sold in

2015. The ZEV program will act as the focused technology of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

The ACC II program is currently in development to establish the next set of LEV and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality standards (CARB 2021b). The main objectives of ACC II are:

1. Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.
2. Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.

An ACC II rulemaking package, which will consider technological feasibility, environmental impacts, equity, economic impacts, and consumer impacts, is anticipated to be presented to CARB for consideration in summer 2022. However, as detailed previously, EPA and NHTSA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, which revokes California's authority to set its own GHG emissions standards and set ZEV mandates in California. Since California and 22 other states, as well as the District of Columbia and four cities, filed suit against the EPA and a petition for reconsideration of the SAFE Rule, the ACC II rulemaking's course may vary depending on the results of this ongoing litigation.

Advanced Clean Trucks Program

The purpose of the ACT Regulation (June 2020) is to accelerate the market for zero-emission vehicles in the medium- and heavy-duty truck sector and to reduce emissions NO_x, fine particulate matter, TACs, GHGs, and other criteria pollutants generated from on-road mobile sources (CARB 2021c). Requiring medium- and heavy-duty vehicles to transition to zero-emissions technology will reduce health risks to people living in and visiting California and is needed to help California meet established near- and long-term air quality and climate mitigation targets. The regulation has two components including (1) a manufacturer sales requirement and (2) a reporting requirement:

1. Zero-emission truck sales: Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales.
2. Company and fleet reporting: Large employers including retailers, manufacturers, brokers and others will be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, will be required to report about their existing fleet operations. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

EO B-16-12

Governor Brown issued EO B-16-12 on March 23, 2012. The EO requires that state entities under the governor's direction and control support and facilitate the rapid commercialization of ZEVs. It orders CARB, the CEC, CPUC, and other relevant agencies work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve the following by 2015:

- The state's major metropolitan areas will be able to accommodate ZEVs, each with infrastructure plans and streamlined permitting

- The state's manufacturing sector will be expanding ZEV and component manufacturing
- The private sector's investment in ZEV infrastructure will be growing
- The state's academic and research institutions will be contributing to ZEV research, innovation and education.

CARB, the CEC, and CPUC, are also directed to establish benchmarks to help achieve the following goals by 2020:

- The state's ZEV infrastructure will be able to support up to one million vehicles
- The costs of ZEV will be competitive with conventional combustion vehicles
- ZEVs will be accessible to mainstream consumers
- There will be widespread use of ZEVs for public transportation and freight transport
- Transportation sector GHG emissions will be falling as a result of the switch to ZEVs
- Electric vehicle charging will be integrated into the electricity grid
- The private sector's role in the supply chain for ZEV component development and manufacturing will be expanding.

Benchmarks are also to be established to help achieve the following goals by 2025:

- Over 1.5 million ZEVs will be on California roads and their market share will be expanding
- Californians will have easy access to ZEV infrastructure
- The ZEV industry will be a strong and sustainable part of California's economy
- California's clean, efficient vehicles will annually displace at least 1.5 billion gallons of petroleum fuels.

On a statewide basis, the EO establishes a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050.

CAP-and-Trade Program

To achieve the goals of AB 32, the *Climate Change Scoping Plan: A Framework for Change* included an early action to develop a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system. The cap-and-trade regulation, which is a key element of California's climate plan, took effect in January 2012 and compliance obligation began in January 2013. The cap-and-trade program sets a statewide limit on sources responsible for 85% of California's GHG emissions and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The program is designed to provide covered entities the flexibility to seek out and implement the lowest-cost options to reduce emissions. The first phase of the cap-and-trade regulation included electricity generated in and imported into California, large combustion sources (i.e., generally those emitting more than 25,000 MT CO_2e per year), and certain industrial sectors. The second phase added providers of transportation fuels and other combustion fuels (e.g., natural gas, propane) to the cap-and-trade program. The regulation requires that emissions generated by these facilities and combustion of fuels be reduced over time under a declining "cap."

Renewable Energy Sources

SB 1078 established the California Renewables Portfolio Standard (RPS) Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. The bill relatedly

required the CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

SB 107 (2006) accelerated the RPS established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 (2011) requires all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1-2 sets a three-stage compliance period: by December 31, 2013, 20% had to come from renewables; by December 31, 2016, 25% had to come from renewables; and by December 31, 2020, 33% will come from renewables.

SB 350 (2015) expanded the RPS because it requires retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027.

SB 100 (2018) accelerated and expanded the standards set forth in SB 350 by establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030 be secured from qualifying renewable energy sources. SB 100 also states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources does not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

Consequently, utility energy generation from non-renewable resources is expected to be reduced based on implementation of the 60% RPS in 2030. Therefore, any project's reliance on non-renewable energy sources would also be reduced.

AB 1007

AB 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the CARB and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Local

Los Angeles County 2035 General Plan

The Los Angeles County 2035 General Plan (General Plan) provides the following energy-related goals and policies potentially relevant to the Project (County of Los Angeles 2015):

> Policy AQ 3.5. Encourage energy conservation in new development and municipal operations.
>
> Policy LU 11.4. Encourage subdivisions to utilize sustainable design practices, such as maximizing energy efficiency through lot configuration; preventing habitat fragmentation; promoting storm water retention; promoting the localized production of energy; promoting water conservation and reuse; maximizing interconnectivity; and utilizing public transit.

Policy M 4.15. Reduce vehicle trips through the use of mobility management practices, such as the reduction of parking requirements, employer/institution based transit passes, regional carpooling programs, and telecommuting.

Policy M 7.3. Encourage the use of sustainable transportation facilities and infrastructure technologies, such as liquid and compressed natural gas, and hydrogen gas stations, ITS, and electric car plug-in ports.

Policy C/NR 12.1. Encourage the production and use of renewable energy resources.

Policy PS/F 2.1. Support water conservation measures.

Policy PS/F 3.2. Support the increased production, distribution and use of recycled water, gray water, and rainwater harvesting to provide for groundwater recharge, seawater intrusion barrier injection, irrigation, industrial processes and other beneficial uses.

The Project's potential to conflict with the above-mentioned policies of the General Plan are analyzed in Section 4.11, Land Use and Planning, of this Draft EIR.

Los Angeles County Code

Title 31, Green Building Standards Code. Section 100 (Adoption by Reference) of Title 31 (Green Building Standards Code) of the County Code establishes that the 2019 California Green Building Standards Code (discussed above), as published by the California Building Standards Commission, is adopted and incorporated by reference into Title 31 of the County Code. Section 101.4.3.6 (Energy) of Title 31 further establishes that provisions set forth within Part 6 of Title 24 of the California Code of Regulations (i.e., California Energy Code) shall apply to the minimum design and construction of buildings for energy efficiency. The provisions of Title 31 apply to the planning, design, operation, construction, use, and occupancy of newly constructed building or structure in the County's unincorporated areas. Pursuant to Section 101.4.1.2 (Conflicts with other codes), when the requirements of Title 31 conflict with the requirements of Titles 26 (Building Code), 27 (Electrical Code), 28 (Plumbing Code), 29 (Mechanical Code) or 30 (Residential Code) of the County Code, the most restrictive requirements shall prevail (County of Los Angeles 2022).

OurCounty Sustainability Plan

OurCounty is a regional sustainability plan for the County, which focuses on enhancing the well-being of every community in the County while reducing damage to the natural environment and adapting to the changing climate. The plan envisions streets and parks that are accessible, safe, and welcoming to everyone; air, water, and soil that are clean and healthy; affordable housing that enables all residents to thrive in place; and an economy that runs on renewable energy instead of fossil fuels. The plan consists of 12 goals with the energy-relevant goals listed below (County of Los Angeles 2019):

Goal 2. Buildings and infrastructure that support human health and resilience. The buildings and infrastructure of both yesterday and tomorrow will utilize more efficient technologies and practices that reduce resource use, improve health, and increase resilience.

Goal 7. A fossil fuel-free LA County. By supporting an efficient transition to a zero-emission energy and transportation system, the County will be a leader in taking action to address the climate crisis.

Los Angeles County Climate Action Plans

The County adopted a Community Climate Action Plan (CCAP) in 2015, as part of the Los Angeles County 2035 General Plan (General Plan), to address the County's local GHG reduction goals for 2020 pursuant to AB 32 for unincorporated Los Angeles County (County). The purpose of the CCAP was to (1) establish a baseline emissions inventory and reduction needed to meet County goals, (2) identify specific actions that would measurably reduce GHG emissions consistent with AB 32, (3) establish a framework for implementing State and local level actions, and (4) provide a mechanism for ongoing tracking and updates to the CCAP. The 2015 CCAP expired in 2020 and will be replaced by the Los Angeles County 2045 Climate Action Plan (2045 CAP).

Through the updated 2045 CAP, the County is targeting carbon neutrality by 2045 in unincorporated areas of the County. The Draft Program EIR for the Draft 2045 CAP and the Draft 2045 CAP was posted for a 45-day public review and comment period, from May 25, 2022 to July 8, 2022 (County of Los Angeles 2022).

The Draft 2045 CAP is the County's path toward meeting the goals of the Paris Agreement and achieving carbon neutrality for unincorporated areas of the County. The Draft 2045 CAP builds on previous climate action work from the Unincorporated Los Angeles CCAP adopted in October 2015. The Draft 2045 CAP identifies strategies, measures, and actions to mitigate emissions from community activities. The Draft 2045 CAP includes the following:

- A GHG emissions inventory from community-wide activities in unincorporated Los Angeles County in 2018 and a baseline inventory for 2015.
- Projections of Future emissions for 2030, 2035, and 2045.
- GHG reduction targets for 2030 and 2035
- A long-term aspirational goal for carbon neutrality by 2045.
- Climate strategies, ensures and actions to reduce GHG emissions from major source
- Implementation and monitoring measures to ensure successful climate action.

4.6.3 Thresholds of Significance

In accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to energy are listed below. A project may have a significant impact if it would:

Threshold 4.6a: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction and operation.

Threshold 4.6b: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

In addition to addressing the County's adopted CEQA Guidelines which incorporates Appendix G thresholds, the energy analysis includes factors and considerations of Appendix F of the CEQA guidelines, as appropriate, to assist in answering the Appendix G questions. The factors to evaluate energy impacts in response to Threshold 4.6a include the Project's energy requirements and effects of the Project on local and regional energy supplies. The factors to evaluate energy impacts in response to Threshold 4.6b include the degree to which the Project complies with existing energy standards, as applicable.

4.6.4 Methodology

Petroleum

Potential impacts were assessed through projected traffic trip generation during construction and operation, as detailed in the California Emissions Estimator Model (CalEEMod) outputs that was prepared for the Project (Appendix B-1). Trip generation was provided by the Transportation Impact Assessment prepared for the Project by Fehr and Peers (Appendix J). Fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon (The Climate Registry 2021). Heavy-duty construction equipment associated with construction activities and haul trucks involved in importing or exporting material to and from the site such as export of demolition material are assumed to use diesel fuel. It is assumed that construction workers would travel in the Project area in gasoline-powered vehicles. Fuel consumption from worker and vendor trips was estimated by converting the total CO_2 emissions from the construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Worker vehicles are assumed to be gasoline fueled, and vendor/hauling vehicles are assumed to be diesel fueled. The fuel consumption resulting from the Project's operational phase would be attributable to vehicle travel within the Project area. Similar to construction worker and vendor trips, fuel consumption for operation was estimated by converting the total CO_2 emissions from the Project to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Per CEQA Guidelines Appendix F, this analysis considers these factors and provides the estimated maximum construction energy consumption for the purposes of evaluating the associated impacts on energy resources and requirements. No adjustments within CalEEMod were made to account for the SAFE rule.

Electricity and Natural Gas

The estimation of operational electricity and natural gas consumption was based on the CalEEMod land use defaults and units or total area (i.e., square footage) of the Project's land uses. The electricity and natural gas use from residential land uses is calculated in CalEEMod based on the Residential Appliance Saturation Study. For nonresidential buildings, CalEEMod energy intensity value (electricity or natural gas usage per square foot per year) assumptions were based on the California Commercial End-Use Survey database. Per CEQA Guidelines Appendix F, this analysis quantifies the Project's energy consumption from operations and evaluates the associated impacts on energy resources and requirements, peak and based period demand, effects on the local and regional energy supplies, and analyses the Project's compliance with existing energy standards.

4.6.5 Impact Analysis

Threshold 4.6a: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Implementation of the Project would increase the demand for electricity, natural gas, gasoline, and diesel consumption in the Project area during construction and operation, which are evaluated below.

Construction Use

Electricity

Temporary electric power for lighting and electronic equipment, such as computers, may be needed inside temporary construction trailers. The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the Project. The *2022 National Construction Estimator* identifies a typical power cost per 1,000 sf of construction land area per month of $2.41, which was used to calculate the Project's total construction power cost (Pray 2022).

Based on information provided in Section 4.3, Air Quality, and specifically, Section 4.3.4, construction activities are anticipated to occur over 54 months. This is conservative as each land use would not take 54 months to construct. As detailed in Table 4.6-1, Construction Power Cost, the total electrical cost of the on-site electricity usage during the construction of the Project is estimated to be approximately $100,248.15 in 2022 dollars.

Table 4.6-1 Construction Power Cost

Land Use	Power Cost (per 1,000 square feet of construction per month)	Size (1,000 square feet)	Construction Duration (months)	Project Construction Power Cost
Recreation Center	$2.41	4.54	54	$590.84
Lots 10 & 11 dwelling units (very low-income senior citizen attached dwelling units)	$2.41	50.88	54	$6,621.52
Lots 2, 3, 7, 8, and 9 (attached dwelling units)	$2.41	221.54	54	$28,831.22
Lots 4, 5, & 6 (detached dwelling units)	$2.41	493.35	54	$64,204.57
			Construction Power Cost in 2022 Dollars	**$100,248.15**

Source: Pray 2022.

SCE's general service rate schedule were used to determine the Project's electrical usage. As of January 1, 2022, SCE's general service rate is $0.13 per kilowatt hours (kWh) of electricity for industrial services (SCE n.d.). By dividing the cost in Table 4.6-1 by the SCE rate, the total electricity usage from on-site Project construction related activities is estimated to be approximately 771,140 kWh.

Table 4.6-2. Construction Electricity Usage

Project Component and Land Use	Cost per kWh	Project Construction Power Cost	Project Construction Electricity Usage (kWh)
Recreation Center	$0.13	$590.84	4,545
Lots 10 & 11 dwelling units (very low-income senior citizen attached dwelling units)	$0.13	$6,621.52	50,935
Lots 2, 3, 7, 8, and 9 (attached dwelling units)	$0.13	$28,831.22	221,779

Table 4.6-2. Construction Electricity Usage

Project Component and Land Use	Cost per kWh	Project Construction Power Cost	Project Construction Electricity Usage (kWh)
Lots 4, 5, & 6 (detached dwelling units)	$0.13	$64,204.57	493,881
		Total Construction Electricity Usage (kWh)	**771,140**

Source: SCE n.d.
Note: kWh: kilowatt-hour.

Natural Gas

Natural gas is not anticipated to be required during Project construction because construction of new buildings and facilities typically do not consume natural gas. Peak energy demand specifically applies to electricity; because natural gas (and petroleum) are liquid, these energy resources do not have the same constraints as electricity supply. Nonetheless, any use of natural gas is anticipated to be sufficiently served by existing supply from SoCalGas and would not require additional local or regional capacity. Any minor amounts of natural gas that may be consumed because of construction would be temporary and negligible and would not have an adverse effect.[2]

Petroleum

Heavy-duty equipment associated with construction during development allowed for by the Project would rely on diesel fuel, as would vendor trucks involved in delivery of materials to the individual parcels within the Project area and haul trucks exporting demolition material or other materials off site or importing material. Construction workers would travel to and from each of the parcels within the Project area throughout the duration of construction. Appendix B-1 lists the assumed equipment usage and vehicle trips.

Fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Construction is estimated to occur in the years 2024–2029 based on the construction phasing schedule. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon (The Climate Registry 2021). The estimated diesel fuel usage from construction equipment, haul trucks, and vendor trucks, as well as estimated gasoline fuel usage from worker vehicles, is shown in Table 4.6-3, Total Project Construction Petroleum Demand. Of note, grading at the Project site would be balanced; and therefore, no haul trucks are required for import or export of soils. The movement of soils onsite would be accomplished with off-road equipment.

Table 4.6-3. Total Project Construction Petroleum Demand (Gallons)

Off-Road Equipment (diesel)	Haul Trucks (diesel)	Vendor Trucks (diesel)	Worker Vehicles (gasoline)
Gallons			
942,906	1,231	197,310	467,226

Source: See Appendix B-1 for outputs.

[2] While no natural gas is anticipated to be used during construction as construction equipment is typically diesel-fueled, the possibility of natural gas use is acknowledged in the event a natural gas-fueled piece of equipment is used or a natural gas-fueled hot water boiler is used for pipe relining. However, as noted previously, all equipment was assumed to be diesel-fueled in CalEEMod.

In summary, construction associated with the potential future development facilitated by the Project over the construction period is conservatively anticipated to consume 467,226 gallons of gasoline from worker vehicles and 1,141,447 gallons of diesel for off-road equipment and vendor trucks. In Los Angeles County, it is estimated that approximately 42 million gallons of petroleum would be consumed in 2025 from offroad equipment (CARB 2022).

The Project would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation that applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the Best Achievable Control Technology requirements. Overall, the Project would not be unusual when compared to overall local and regional demand for energy resources and would not involve characteristics that require equipment that would be less energy-efficient than at comparable construction sites in the region or state. Although not required to reduce energy impacts to less than significant, the Project would include mitigation measure MM-4.8-1 (not quantified) that would reduce petroleum use through use of electric equipment, use of cleaner fueled equipment, and minimizing idling, during construction activities.

Additionally, any future development facilitated by the Project would be required to adhere to all federal, State, and local requirements. Considering these requirements, the Project would not result in the inefficient, wasteful, or unnecessary consumption of construction energy. Therefore, impacts would be less than significant, and no mitigation is required.

Operational Use

Electricity

Project operation would require electricity for multiple purposes including, but not limited to, building heating and cooling, water heating, lighting, appliances, and electronics. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage. CalEEMod was used to estimate Project emissions from electricity uses (see Appendix B-1 for calculations). Default electricity generation rates in CalEEMod were used based on the proposed land use and climate zone and were adjusted to account for the solar required per Title 24 for low-rise residential. Per Title 24, the Project is required to install 1,122 kW of solar on the residential development generating 2,012,815 kWh per year. The increase in electricity demand for the future potential buildout of the Project's proposed dwelling units, recreational center, and other sources, is presented in Table 4.6-4, Project Annual Operational Electricity Demand Summary - Unmitigated.

Table 4.6-4. Project Annual Operational Electricity Demand Summary - Unmitigated

Source	Electricity Demand (kWh/year)
Residential units	875,501
Recreation Center	43,551
Parking Lots/Internal Roadways	80,705
Water/wastewater	837,246
Total Project Electricity Demand	**1,837,003**

Notes: Appendix B-1.
kWh = kilowatt hours.

As shown in Table 4.6-4, the increase in potential development is estimated to have a total electrical demand of approximately 1,837,003 kilowatt-hours per year. In 2020, the electricity demand was 65,649,878,013 kWh (65,650 GWh) for Los Angeles County (CEC 2022a). Title 24 of the California Code of Regulations serves to enhance and regulate California's building standards. The most recent amendments to Title 24, Part 6, referred to as the 2019 standards, became effective on January 1, 2020. The 2022 Title 24 standards will become effective on January 1, 2023, and will apply to the Project. The applicable Title 24 standards would further ensure that the energy demands would not be inefficient, wasteful, or otherwise unnecessary.

For the 2020 fiscal year, SCE had an annual electric sale to customers of approximately 85,399,000 MWh (SCE 2021). The Project represents approximately 0.002% of the SCE network sales for 2020. In addition, the CEC forecasts that SCE's peak demand in the Project buildout year of 2030, would be approximately 27,840 MW (CEC 2018a). Under peak conditions, the Project would consume a net increase of 1,837 MWh on an annual basis which is equivalent to a peak of 0.2 MW. In comparison to the SCE power grid base peak load of 26,533 MW for 2026, the Project would represent approximately 0.001% of the SCE base peak load conditions. Thus, as per CEQA Guidelines Appendix F, the impacts related to electrical supply and infrastructure capacity and the Project's effect on peak and base period demands would be less than significant.

As discussed in Section 4.8.7 of Section 4.8, Greenhouse Gas Emissions, the Project would implement the following mitigation measures that would impact electricity use during operation. MM-4.8-2, Electrify Buildings (quantified), would increase electricity use by replacing natural gas with electricity. MM-4.8-3, Energy Conservation (partly quantified [Energy Star Appliances and Solar PV on the Recreation center]), would reduce energy source emissions by ensuring building energy efficiency and reducing energy consumption. MM-4.8-5, Encourage Electric Vehicles (quantified), would facilitate greater adoption and use of EVs by providing EV chargers in 92 single-family residential garages, which would increase electricity use. MM-4.8-6, Water Use Efficiency and Water Conservation (quantified), would reduce indirect electricity use by reducing water consumption. MM-4.8-8, Landscape Maintenance Equipment Emission Reductions (not quantified), aims to encourage electric landscape equipment and may increase electricity use.

The increase in electricity demand for the future potential buildout of the Project's proposed dwelling units, recreational center, and other sources including the quantified mitigation measures discussed above, is presented in Table 4.6-5, Project Annual Operational Electricity Demand Summary - Mitigated.

Table 4.6-5. Project Annual Operational Electricity Demand Summary - Mitigated

Source	Electricity Demand (kWh/year)
Residential units	851,060
Recreation Center	100,184
Parking Lots/Internal Roadways	80,705
EV Charging Stations	1,913,600
Water/wastewater	711,624
Total Project Electricity Demand	**3,657,173**

Notes: Appendix B-1.
kWh = kilowatt hours.

As shown in Table 4.6-5, the mitigated increase in potential development is estimated to have a total electrical demand of approximately 3,657,173 kilowatt-hours per year. In 2020, the electricity demand was 65,649,878,013

kWh (65,650 GWh) for Los Angeles County (CEC 2022a). Title 24 of the California Code of Regulations serves to enhance and regulate California's building standards. The most recent amendments to Title 24, Part 6, referred to as the 2019 standards, became effective on January 1, 2020. The 2022 Title 24 standards will become effective on January 1, 2023, and will apply to the Project. The applicable Title 24 standards would further ensure that the energy demands would not be inefficient, wasteful, or otherwise unnecessary.

For the 2020 fiscal year, SCE had an annual electric sale to customers of approximately 85,399,000 MWh (SCE 2021). The Project represents approximately 0.004% of the SCE network sales for 2020. In addition, the CEC forecasts that SCE's peak demand in the Project buildout year of 2029, would be approximately 27,840 MW (CEC 2018a). Under peak conditions, the Project would consume a net increase of 3,657 MWh on an annual basis which is equivalent to a peak of 0.4 MW. In comparison to the SCE power grid base peak load of 26,533 MW for 2026, the Project would represent approximately 0.002% of the SCE base peak load conditions. Thus, as per CEQA Guidelines Appendix F, the impacts related to electrical supply and infrastructure capacity and the Project's effect on peak and base period demands would be less than significant.

Natural Gas

Operation of the Project, under the unmitigated scenario, would use natural gas for various purposes, including water heating and natural gas appliances. Natural gas consumption associated with operation is based on the CalEEMod outputs presented in Appendix B-1.

CalEEMod default values for energy consumption for each land use were applied for the Project analysis. The energy use from non-residential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. The program uses data collected during the Residential Appliance Saturation Survey to develop energy intensity values (electricity and natural gas usage per square foot per year) for residential buildings. Energy use in buildings (both natural gas and electricity) is divided by the program into end use categories subject to Title 24 requirements (end uses associated with the building envelope, such as the heating, ventilation, and air conditioning [HVAC] system, water heating system, and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses). Table 4.6-6, Project Annual Operational Natural Gas Demand Summary - Unmitigated, shows the estimated natural gas demand from the Project site.

Table 4.6-6. Project Annual Operational Natural Gas Demand Summary - Unmitigated

Land Use	Natural Gas Demand (kBTU/year)
Residential	15,503,860
Recreation Center	194,321
Total Project Natural Gas Demand	**15,698,181**

Notes: Appendix B-1.
kBTU = thousand British Thermal Units.

As shown in Table 4.6-6, the increase in natural gas demand from the Project is estimated to be 15,698,181 thousand British Thermal Units (kBTUs) per year. In comparison, the natural gas consumption in 2020 was 293,598,608,142 kBTU for the County (CEC 2022b). Title 24 of the California Code of Regulations serves to enhance and regulate California's building standards. The most recent amendments to Title 24, Part 6, referred to as the 2019 standards, became effective on January 1, 2020. The 2022 Title 24 standards become effective on January 1, 2023.

Of note, as detailed in Section 4.8, Greenhouse Gas Emissions, implementation of MM-4.8-2, Electrify Buildings, is required to reduce Project-related GHG emissions during operation of the Project. MM-4.8-2 requires that no natural gas be used at the Project site. As a result, the Project would result in no natural gas consumption. However, implementation of MM-4.8-2 is not required to reduce energy impacts to less than significant. Therefore, Table 4.6-6 does not include implementation of this mitigation. According to SoCalGas data, natural gas demand has been relatively stable over the past three years ranging from 2,519 million cubic feet (MMcf) per day in 2018 to 2,462 MMcf per day in 2020. Based on the Project's estimated natural gas consumption (prior to mitigation required to reduce GHG impacts to less than significant) as shown in Table 4.6-6, the Project would account for approximately 0.002% of SoCalGas' 2020 demand by the Project's buildout year. According to the 2020 California Gas Report, SoCalGas is forecasted to require 767,595 MMcf in the year 2030, the Project's fully-operational year (California Gas and Electric Utilities 2020). The Project, without implementation of MM-4.8-1, would increase natural gas demand by 15.5 MMcf per year, accounting for approximately 0.002% of SoCalGas' projected natural gas demand for the year 2029. With implementation of MM-4.8-1, the natural gas demand would be removed. Therefore, it is anticipated that SoCalGas' existing and planned natural gas supplies would be sufficient to support the Project's demand for natural gas and per CEQA Guidelines Appendix F, would not have a significant effect on local and regional natural gas supplies or require additional capacity. Therefore, impacts related to natural gas would be less than significant.

Petroleum

During operations, the majority of fuel consumption resulting from the Project would involve the use of motor vehicles traveling to and from the Project site, as well as fuels used for alternative modes of transportation that may be used by residents.

Petroleum fuel consumption associated with motor vehicles traveling to and from the Project site is a function of the vehicle miles traveled (VMT) as a result of Project operation. As shown in Appendix B-1 (CalEEMod outputs are discussed in Section 4.3, Air Quality, and Section 4.8, Greenhouse Gas Emissions), the annual VMT attributable to the Project is expected to be 13,431,088 VMT. Countywide, the annual VMT is estimated to be 101,174,849,833 per year in 2026 (CARB 2022). Similar to construction worker and vendor trips, fuel consumption from worker and vendor trips are estimated by converting the total CO_2 emissions from operation of the Project to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Based on the annual fleet mix provided in CalEEMod, 93.3% of the fleet range from light-duty to medium-duty vehicles and motorcycles are assumed to be fueled by gasoline. The remaining 6.6% of vehicles represent medium-heavy duty to heavy-duty vehicles and buses and are assumed to run on diesel. The gasoline consumption also includes fuel used for landscaping equipment. Calculations for annual mobile source fuel consumption are provided in Table 4.6-7, Annual Mobile Source Petroleum Demand – Unmitigated.

Table 4.6-7. Annual Mobile Source Petroleum Demand – Unmitigated

Fuel	Vehicle MT CO_2	kg/CO_2/Gallon	Gallons
Gasoline	3,669.57	8.78	418,956.05
Diesel	896.34	10.21	87,790.00
		Total	**506,746.05**

Source: Trips and vehicle CO_2 (Appendix B-1); kg/CO_2/Gallon (The Climate Registry 2021).
Notes: MT = metric ton; CO_2 = carbon dioxide; kg = kilogram

As shown in Table 4.6-7, the annual petroleum consumption for the Project is estimated to be approximately 506,746 gallons per year. By comparison, California as a whole consumes approximately 28.7 billion gallons of petroleum per year (EIA 2020). Countywide total petroleum use by vehicles is expected to be 3.8 billion gallons per year by 2026 (CARB 2020).

With respect to operational transportation-related fuel usage and in relation to CEQA Guidelines Appendix F, enhanced fuel economies realized pursuant to federal and State regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. The Project would comply with Corporate Average Fuel Economy standards, which would result in more efficient use of transportation fuels (lower consumption). Project-related vehicle trips would also comply with Pavley Standards, which are designed to reduce vehicle GHG emissions by mandating increasingly stringent emissions standards on new vehicles, but would also result in fuel savings from more efficient engines in addition to compliance with Corporate Average Fuel Economy standards. Further, the Project is located within the study area of four local and four express Santa Clarita Transit routes, as detailed in Section 4.17, Transportation. The Project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation, and the impact would be less than significant prior to mitigation. However, the following discussion provides further energy-reduction benefits with references to mitigation measures in Section 4.8, Greenhouse Gas Emissions, and 4.17, Transportation. The mitigation measures are required to reduce impacts for GHG emissions and transportation, but would also result in energy reductions that are disclosed below.

As detailed in Section 4.17, the Project shall implement Transportation Demand Management (TDM) strategies, per implementation of MM-4.17-2. MM-4.17-2 requires that the Project Applicant prepare a TDM Program. The TDM program measures would include requirements for alternative modes of transportation, such as carpooling, taking transit, walking, and biking for residents (Appendix J). Additionally, the Project would construct a private-gated access road that would be located along the outer northern and western edge of the development area to provide for emergency and maintenance vehicular access. This paved access road would also be available for pedestrian/hiking/biking use. The access road would serve as a multi-use trail system and would have a reciprocal access easement to provide access to all residential lots, open spaces, County-maintained facilities, and adjacent properties. A new trailhead would be constructed near the gated connection of the access road to The Old Road at the northeastern corner of the Project site which would connect to on-site trails. These on-site trails would connect to adjacent public open spaces outside of the Project's boundaries, including the City of Santa Clarita's Rivendale Park and Open Space in Towsley Canyon. These multi-use trails would result in energy reduction benefits from reduced reliance on automobiles for travel throughout and around the site. Additionally, MM-4.8-5, Encourage Electric Vehicles (quantified), would facilitate greater adoption and use of electric vehicles (EVs) by providing EV chargers in 92 single-family residential garages (which meets the CALGreen Tier 2 requirements). Similar to building electrification, electrification of the vehicle fleet reduces petroleum use and supports transition to a carbon neutral development by replacing fossil-fueled vehicles with a less GHG-intensive power source that can be generated using clean, renewable energy. For disclosure purposes, calculations for annual mobile source fuel consumption including MM-4.8-5 and MM-4.17-2 are provided in Table 4.6-8, Annual Mobile Source Petroleum Demand – Mitigated. However, as stated above, energy impacts would be less than significant prior to mitigation.

Table 4.6-8. Annual Mobile Source Petroleum Demand – Mitigated

Fuel	Vehicle MT CO_2	kg/CO_2/Gallon	Gallons
Gasoline	2,339.79	8.78	266,490.29
Diesel	569.36	10.21	55,764.48
		Total	322,254.76

Sources: Trips and vehicle CO_2 (Appendix B-1); kg/CO_2/Gallon (The Climate Registry 2021).
Notes: MT = metric ton; CO_2 = carbon dioxide; kg = kilogram

As shown in Table 4.6-8, petroleum consumption would be 322,255 gallons per year after mitigation. The Project would concentrate development of the dwelling units to approximately 41 acres of the total 233.49-acreProject site. In total, the area of land within the Project's on-site impact area, including Project development footprint, debris extents, and fuel modification zones, includes approximately 83 acres that are clustered in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the Project site as open space. The Project's residents and guests would have proximate access to the City of Santa Clarita and City of Los Angeles, the City of Santa Clarita's transit options (bus, rail), and the greater Los Angeles area. Therefore, transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary and impacts would be less than significant.

Renewable Energy Potential

As part of the Project's planning process, the County considered how the Project could potentially increase its reliance on renewable energy sources to meet the Project's anticipated energy demand. Consistent with the CEC's definition of eligible renewables, energy sources that were considered for their potential to power the Project include biomass, geothermal, solar, wind, and small hydroelectric facilities.

Given the Project's location and the nature of the Project, there are anticipated considerable site constraints at a parcel level including incompatibility with onsite and surrounding land uses for large scale power generation facilities, unknown interconnection feasibility, compatibility with utility provider systems, and no known water or geothermal resources to harness, that would eliminate the potential for biomass, geothermal, and hydroelectric renewable energy to be installed within the Project area. Regarding wind power, due to the nature of the Project area parcels and surrounding land uses, wind turbines are generally anticipated to not be feasible as it represents an incompatible use due to the height of the wind turbine blades and the need to avoid nearby obstacles.[3]

Regarding solar power, the future Project is anticipated to include solar power, which at a minimum, will be provided for newly built low-rise residential buildings, and non-residential buildings are anticipated to be solar-ready to comply with Title 24 building energy efficiency standards. The Project would also include a 7-kW solar system (which would generate 12,040 kWh per year (See Appendix B-1) at the recreation center in accordance with MM-4.8-3, which is necessary to reduce GHG emissions. In addition, the potential for installation of battery storage in future developments, if determined to be a feasible and compatible land use of the site, could also be provided, but is unknown at this time of the scale and level of adoption.

Of note, and as detailed above, mitigation measures required in Section 4.8, Greenhouse Gas Emissions, would change the energy demand profile of the Project by eliminating natural gas in all development (MM-4.8-2) and replacing that energy demand with electricity. The swimming pool at the Recreation Center would be heated

[3] A general rule of thumb is to install a wind turbine on a tower with the bottom of the rotor blades at least 30 feet above anything within a 500-foot horizontal radius and to be sited upwind of buildings and trees (APA 2011: NREL 2015).

primarily by a solar thermal system with an electric heater as backup, as required per MM-4.8-2. In addition, Project petroleum consumption is also anticipated to reduce as a result of MM-4.8-5, which requires installation of electric vehicle chargers, which is intended to encourage and facilitate transition from fossil-fueled vehicles to electric-vehicles. Greater use of EVs would result in a greater consumption of electricity; however, electricity will be provided through onsite solar, thereby reducing or negating the use of fossil-fuel for residential or recreational uses on-site. Additionally, through implementation of MM-4.8-4, Utilize 100% Zero-Carbon Electricity, the Project shall use 100% zero-carbon electricity procured through SCE.

For disclosure purposes, under mitigated conditions, natural gas demand would decrease from 15,698,181 to 0 kBTU per year. As a result, electricity demand required to meet the energy demand of natural gas usage and EV chargers, is anticipated to increase from 1,837,003 kWh per year to 3,657,173 kWh per year**.** Petroleum use would be reduced from 506,746 gallons per year to 322,255 gallons per year.

As explained above, the Project would use renewable energy onsite as determined to be feasible and would not result in wasteful, inefficient, or unnecessary consumption of energy resources, including electricity, natural gas, or petroleum during Project construction or operation, and impacts would be less than significant.

Threshold 4.6b: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Construction

The Project would utilize construction contractors who must demonstrate compliance with applicable regulations. Construction equipment would be required to comply with federal, state, and regional requirements where applicable. With respect to truck fleet operators, USEPA and NHSTA have adopted fuel-efficiency standards for medium- and heavy-duty trucks that will be phased in over time. Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018 and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type (EPA 2011). USEPA and NHTSA also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type (EPA 2016). The energy modeling for trucks does not take into account specific fuel reductions from these regulations, since they would apply to fleets as they incorporate newer trucks meeting the regulatory standards; however, these regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards.

In addition, construction equipment and trucks are required to comply with CARB regulations regarding heavy-duty truck idling limits of 5 minutes per occurrence. Off-road emissions standards would increase equipment efficiencies as they are phased-in over time and less-efficient equipment is phased out of construction fleets. These limitations would result in an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines. Although these requirements are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy. Thus, based on the information above, construction and operation of the Project would comply with state or local plans for renewable energy or energy efficiency.

Per CEQA Guidelines Appendix F, the Project's construction equipment used would be consistent with the energy standards applicable to construction equipment including limiting idling fuel consumption and using contractors that comply with applicable CARB regulatory standards that affect energy efficiency. Therefore, the Project would

not conflict with or obstruct a state or local plan for renewable energy or energy efficiency regarding during Project construction, and impacts would be **less than significant**.

Operation

The County's OurCounty Sustainability Plan is a regional sustainability plan for the County and highlights energy reduction and renewable energy goals for the County. As detailed in Section 4.6.2, Regulatory Requirements, Goals 2 and 7 are relevant to energy and the Project. Goal 2 requires that Buildings and infrastructure support human health and resilience by utilizing more efficient technologies and practices that reduce resource use, improve health, and increase resilience. Title 24 of the California Code of Regulations contains energy efficiency standards for residential and non-residential buildings based on a state mandate to reduce California's energy demand. Specifically, Title 24 addresses a number of energy efficiency measures that impact energy used for lighting, water heating, heating, and air conditioning, including the energy impact of the building envelope such as windows, doors, skylights, wall/floor/ceiling assemblies, attics, and roofs. Compliance with the County's Green Building code will also reduce energy use in new operational residential and non-residential buildings at the Project site.

Part 6 of Title 24 specifically establishes energy efficiency standards for residential and non-residential buildings constructed in the State of California in order to reduce energy demand and consumption. The Project would comply with Title 24, Part 6, per state regulations. In accordance with Title 24 Part 6, the Project would have: (a) sensor-based lighting controls—for fixtures located near windows, the lighting would be adjusted by taking advantage of available natural light; and (b) efficient process equipment—improved technology offers significant savings through more efficient processing equipment. Title 24, Part 11, contains voluntary and mandatory energy measures that are applicable to the Project under the CALGreen Code. As discussed under Threshold 1, the Project would result in an increased demand for electricity, natural gas, and petroleum. In accordance with Title 24, Part 11, mandatory compliance, the applicant would have: (b) mandatory inspections of energy systems to ensure optimal working efficiency and (d) a 20% reduction in indoor water use. Compliance with all of these mandatory measures would decrease the consumption of electricity, natural gas, and petroleum.

OurCounty's Goal 7 strives for a fossil-fuel free Los Angeles County in order to achieve a zero-carbon energy system and zero emission transportation system. The example target outlined in the OurCounty Plan for Goal 7 is to achieve carbon neutrality by 2050. Consistent with the 2019 Title 24 Building Energy Efficiency standards and CALGreen Code, the Project will have alternative fueled vehicle spaces available and pre-wiring for electric vehicle charging stations, which will make it easier for residents to adopt electric vehicles. Furthermore, the Project would also include solar, as required per the 2019 Title 24 standards, and expanded upon in MM-4.8-3, which would be required to reduce GHG emissions. Goal 7 is a County-wide long-term goal that is not intended to be achieved by individual projects in the near-term; however, the Project achieves substantial progress toward meeting a zero-carbon energy system and zero emission transportation system by providing solar energy to buildings and facilitating electric vehicles, which can use renewable, zero-emission electric power. As such, the Project does not conflict with OurCounty's Goal 7.

Because the Project would comply with Title 24, Part 6 and Part 11, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

4.6.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA

Guidelines. The past, present, and reasonably foreseeable future projects (i.e., cumulative projects) used for this analysis are presented in Section 2.6, Cumulative Impacts, and on Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR. For purposes of energy, the geographical area of cumulative impacts is state and regional, further detailed below.

Where a lead agency concludes that the cumulative effects of a project, taken together with the impacts of other closely related past, present, and reasonably foreseeable future projects are significant, the lead agency then must determine whether the project's incremental contribution to such significant cumulative impact is "cumulatively considerable" (and thus significant in and of itself).

Threshold 4.6a: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Cumulative projects that could exacerbate the Project's impacts include any projects that could result in wasteful, inefficient, or unnecessary use of energy. However, cumulative projects would be required by the County or City of Santa Clarita, as applicable, to conform to current federal, state, and local energy conservation standards, including the California Energy Code Building Energy Efficiency Standards (24 CCR Part 6), the CALGreen Code (24 CCR Part 11), and SB 743.

As a result, the Project, in combination with other reasonably foreseeable projects, would not cause a wasteful use of energy or other non-renewable natural resources. Therefore, the energy demand and use associated with the Project and cumulative projects would not substantially contribute to a cumulative impact on existing or proposed energy supplies or resources and would not cause a significant cumulative impact on energy resources.

Threshold 4.6b: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Future development would be subject to the Title 24 standards in place at the time of construction. It is speculative whether other projects would conflict with a state or local plan for renewable energy. However, future projects would be subject to CEQA and evaluate whether they would conflict with applicable plans.

The Project would not conflict with applicable plans for renewable energy as it would be required to include solar pursuant to Title 24. Further, the cumulative projects identified in Table 2-2 would also include residential that would be subject to the solar requirements of Title 24. As such, the Project in combination with other reasonably foreseeable projects, would not conflict with a state or local plan for renewable energy or energy efficiency.

4.6.7 Mitigation Measures

No mitigation measures are required to reduce energy impacts to less than significant.

4.6.8 Level of Significance After Mitigation

The Project would result in less than significant impacts regarding the potential to result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation. generate less than significant energy-related impacts without mitigation.

The Project would not conflict or obstruct with a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant without mitigation.

4.6.9 References

APA (American Planning Association). 2011. *Planning for Wind Energy*. https://planning-org-uploaded-media.s3.amazonaws.com/legacy_resources/research/wind/pdf/pas566.pdf.

California Gas and Electric Utilities (Southern California Gas Company, Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southwest Gas Corporation, City of Long Beach Gas & Oil Department, and Southern California Edison Company). 2020. *California Gas Report*. Accessed June 23, 2022. https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf.

CARB. 2014. "Truck and Bus Regulation, On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation." August 29, 2014. Accessed April 19, 2017. https://ww2.arb.ca.gov/sites/default/files/classic/msprog/onrdiesel/documents/tbfinalreg.pdf?_ga=2.221250717.486492391.1706560791-1771948847.1690841000.

CARB. 2020. EMFAC2021. https://arb.ca.gov/emfac/.

CARB. 2021a. "Low Carbon Fuel Standard Data Dashboard." August 30, 2021. https://www.arb.ca.gov/fuels/lcfs/dashboard/dashboard.htm.

CARB. 2021b. "Advanced Clean Cars Program." Accessed December 2021. https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about.

CARB. 2021c. "Advanced Clean Trucks Fact Sheet." August 20, 2021. https://ww2.arb.ca.gov/sites/default/files/2021-08/200625factsheet_ADA.pdf.

CEC (California Energy Commission). 2018a. "The California Energy Demand 2018-2030 Revised Forecast." January 2018. Accessed June 23, 2022. https://www.energy.ca.gov/publications/2018/california-energy-demand-2018-2030-revised-forecast.

CEC. 2018b. "2019 Building Energy Efficiency Standards Fact Sheet." March 2018. https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf.

CEC. 2021. "2020 Power Content Label Southern California Edison." Accessed June 2022. https://www.energy.ca.gov/filebrowser/download/3902.

CEC. 2022a. "Electricity Consumption By County." Accessed June 2022. http://www.ecdms.energy.ca.gov/elecbycounty.aspx.

CEC. 2022b. "Gas Consumption By County." Accessed June 2022. http://www.ecdms.energy.ca.gov/gasbycounty.aspx.

County of Los Angeles. 2015. *Los Angeles County General Plan*. Adopted October 6, 2015. Accessed March 2021. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

County of Los Angeles. 2019. *OurCounty—Los Angeles Countywide Sustainability Plan*. Adopted August 6, 2019. Accessed June 23, 2022. https://ourcountyla.lacounty.gov/wp-content/uploads/2019/07/OurCounty-Final-Plan.pdf.

County of Los Angeles. 2022. *Los Angeles County Code*. Accessed May 16, 2022. https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances.

CPUC (California Public Utilities Commission). 2008. *2008 Update Energy Action Plan*. February. https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_-_electricity_and_natural_gas/2008-energy-action-plan-update.pdf.

CPUC. 2019. *2019 California Renewables Portfolio Standard Annual Report*. November 2019. Accessed October 2020. https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_-_electricity_and_natural_gas/2019-rps-annual-report.pdf.

CPUC. 2020. *2020 California Renewables Portfolio Standard Annual Report*. November 2020. Accessed March 2021. https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_-_electricity_and_natural_gas/2020-rps-annual-report.pdf.

CPUC. 2021. "Natural Gas and California." Accessed March 2021. http://www.cpuc.ca.gov/natural_gas/.

EIA (U.S. Energy Information Administration). 2020. Motor Gasoline Sales. https://www.eia.gov/dnav/pet/pet_cons_refmg_d_SCA_VTR_mgalpd_a.htm.

EIA (U.S. Energy Information Administration). 2021. "State Energy Data System (SEDS): 2020—Table F20: Electricity Consumption Estimates, 2020." December 17, 2021. Accessed June 22, 2022. https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_use_es.pdf.

EIA. 2022a. "Profile Overview--California." Last updated March 17, 2022. Accessed June 22, 2022. https://www.eia.gov/state/?sid=CA#tabs-4.

EIA. 2022b. "Natural Gas Consumption by End Use." May 31, 2022. Accessed June 22, 2022. https://www.eia.gov/dnav/ng/ng_cons_sum_a_EPG0_VC0_mmcf_a.htm.

EIA. 2022c. "Total Petroleum Consumption Estimates, 2021." Accessed March 2021. https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA.

EPA (U.S. Environmental Protection Agency). 2011. Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles. September 15. https://www.govinfo.gov/content/pkg/FR-2011-09-15/pdf/2011-20740.pdf.

EPA. 2016. "Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2." *Federal Register* Vol. 81, No. 206. October 25, 2016. Accessed June 23, 2022. https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf.

EPA. 2017. "Overview for Renewable Fuel Standard." Last updated June 7, 2017. Accessed February 2019. https://www.epa.gov/renewable-fuel-standard-program/overview-renewable-fuel-standard.

EPA. 2021. "Notice of Reconsideration of a Previous Withdrawal of a Waiver for California's Advanced Clean Car Program (Light-Duty Vehicle Greenhouse Gas Emission Standards and Zero Emission Vehicle Requirements)." Accessed May 2021. https://www.epa.gov/regulations-emissions-vehicles-and-engines/notice-reconsideration-previous-withdrawal-waiver.

NREL (National Renewable Energy Laboratory). 2015. *Small Wind Site Assessment Guidelines*. September 2015. https://www.nrel.gov/docs/fy15osti/63696.pdf.

Pray, R. 2022. *2022 National Construction Estimator*. Carlsbad: Craftsman Book Company.

SCAG. 2020. *The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, Connect SoCal*. Adopted September 3, 2020.

SCE (Southern California Edison). n.d. Schedule GS-1 General Service. Regulatory Information – Rates Pricing. https://edisonintl.sharepoint.com/teams/Public/TM2/Shared%20Documents/Forms/AllItems.aspx?id=%2Fteams%2FPublic%2FTM2%2FShared%20Documents%2FPublic%2FRegulatory%2FTariff%2DSCE%20Tariff%20Books%2FElectric%2FSchedules%2FGeneral%20Service%20%26%20Industrial%20Rates&p=true&ga=1.

SCE. 2021. 2020 Annual Report. Accessed June 23, 2021. https://download.edison.com/405/files/202210/2020-eix-sce-annual-report.pdf?Signature=kDhzGCVgg0Gx91SGpemn6WCr%2Fmk%3D&Expires=1706739563&AWSAccessKeyId=AKIAJX7XEOOELCYGIVDQ&versionId=_FUE4emKeXO9qVUL_BZ6igU3r9tNcpKo&response-content-disposition=attachment.

The Climate Registry. 2021. "Default Emission Factors." May 2021. Accessed March 2021. https://theclimateregistry.org/wp-content/uploads/2023/06/2023-Default-Emission-Factors-Final-1.pdf.

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4.7 Geology and Soils

This section describes the existing geological conditions of the Trails at Lyons Canyon Project (Project) site and vicinity, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Paleontological resources are also addressed within this section. Information contained in this section is based on publicly available data and reports from the U.S. Geological Survey, California Geological Survey, as well as the following:

Appendix E-1 *Revised Geotechnical 100-Scale Plan Review, Lyons Canyon Development Vesting Tentative Tract Map No. 83301, Los Angeles County, California for NUWI – Lyons Canyon, LLC* (herein, referred to as the Geotechnical Report or geotechnical investigation), prepared by R. T. Frankian & Associates, Inc. (RTF&A), dated September 2023, with County comments addressed in a letter by R. T. Frankian & Associates dated February 2024

Appendix E-2 Confidential Paleontological Resources Assessment Report, prepared by Environmental Science Associates (ESA), dated November 2021

Other sources consulted are listed in Section 4.7.9, References.

4.7.1 Existing Conditions

Regional Setting

The Project site is located in the eastern Ventura Basin within the Transverse Ranges geomorphic province of California along the northeastern flank of the Santa Susana Mountains (CGS 2002a). The Transverse Ranges are characterized by east-west trending series of steep mountain ranges and valleys. The east-west structure of the Transverse Ranges is in contrast to the normal northwest trend of the mountain ranges and valleys in much of the rest of coastal California. The province extends offshore to include San Miguel, Santa Rosa, and Santa Cruz islands. Its eastern extension, the San Bernardino Mountains, has been displaced to the south along the San Andreas Fault (Appendix E-1).

The Ventura Basin consists of a narrow, elongate sedimentary trough extending from the Santa Barbara Channel on the west to the San Gabriel fault on the east. The axis of the trough trends east-west, reflecting the overall east-west trend of the Transverse Ranges. The Ventura Basin has been an area of subsidence and sediment accumulation since the beginning of the Tertiary period (66 million to 2.6 million years ago), with the present trough-like form developing near the beginning of the Miocene epoch (23 million to 2.6 million years ago) (Appendix E-1). Within the Ventura Basin, the Project site is located in the Santa Clarita Valley.

The structure of the Ventura Basin has been formed by north-south compressional forces and contains a maximum of approximately 50,000 feet of marine and nonmarine age sediments. The flanks of the Ventura Basin are broken by a series of large reverse/thrust faults including the Santa Susana and Oak Ridge faults on the southern flank, and the Red Mountain and San Cayetano faults on the northern flank. The San Gabriel Fault, the dominant geologic feature in the Santa Clarita Valley, forms the eastern Ventura Basin boundary, and separates the Ventura Basin from the structurally similar Soledad Basin.

Sedimentary rock units comprising the eastern Ventura Basin include approximately 2,000 feet of undifferentiated bedrock units, approximately 1,000 feet of the Topanga Formation, approximately 5,000 feet of the Modelo

Formation, approximately 4,000 feet of the Towsley Formation, approximately 5,000 feet of the Pico Formation, and approximately 7,000 feet of the Saugus Formation. The undifferentiated units and the Topanga, Modelo, Towlsey, and Pico Formations are composed of marine sediments; the Saugus Formation is composed of shallow-water marine, brackish water, and nonmarine units. These units rest unconformably on much older metamorphic and igneous basement rocks of the San Gabriel Mountains (Appendix E-1).

Paleontological resources include the fossilized remains of ancient life (generally greater than middle Holocene or 5,000 years old) and can be body fossils (teeth, bones, shell, and plant material) fossils or trace fossils (tracks and trackways, imprints, burrows, and coprolites) (Appendix E-2).

Local Setting

Geologic Units

The Project site has been the subject of previous subsurface geotechnical evaluations in 2006 and 2015 as well as the more recent investigations that occurred over the period from late 2020 to 2022 (Appendix E-1). The geologic units within the Project site consist of bedrock of the Pico and Saugus formations, alluvium (material deposited by rivers) and colluvial (slope wash) deposits, and man-made fill. The geologic units identified within the Project site are described below and shown in Figure 4.7-1, Site Geologic Map.

Pico Formation (Tp)

Marine sedimentary rock units of the Pliocene-age (5.4 to 2.4 million years ago) Pico Formation (map unit “Tp” on Figure 4.7-1) are exposed in the southwest corner of the Project site. The formation is composed primarily of fine- to medium-grained sandstones, coarse-grained pebbly sandstones, siltstones, and some silty claystone interbeds. Fine-grained sandstone is the dominant lithology of the formation and is typically very thinly or thinly bedded, soft, and moderately weathered, with alternating bands of iron oxide staining. Siltstone and silty claystone beds are moderately to well indurated (hardened) and massive. Sandstone beds are typically dark yellowish orange to yellowish gray. Siltstone beds are typically yellowish gray to olive brown (Appendix E-1).

Saugus Formation, Sunshine Ranch Member (TQss)

The Sunshine Ranch Member of the Saugus Formation (designated map unit “TQss” on Figure 4.7-1) underlies the majority of the Project site and consists of shallow-water marine, brackish water, and nonmarine sedimentary units of Plio-Pleistocene age (5 million to 11,700 years ago). Within the Project site, the Sunshine Ranch Member is comprised of fine- to coarse-grained sandstone and conglomeratic/pebbly sandstone, with some siltstone interbeds. Medium to coarse sandstone and conglomeratic sandstone are the dominant units of the formation and are typically soft, dry, and thickly bedded to massive thicknesses. Some of the finer-grained sandstone beds are very thinly bedded, moderately weathered, and have some iron oxide staining. Siltstone beds within the formation are typically 2 feet thick or less, moderately to well hardened, and thickly bedded to massive thicknesses. Sandstone beds are dark yellowish orange to grayish orange, while siltstones are yellowish gray (Appendix E-1).

Undifferentiated Alluvium and Colluvium (Qac)

Undifferentiated Holocene age (up to 11,700 years ago) alluvium and colluvium (map unit “Qac” on Figure 4.7-1) overlie the bedrock units onsite, with the alluvium mantling the floor of Lyons Canyon and the colluvium generally occurring in drainage swales and side canyons, and along the lower elevations of the natural slopes. These materials consist of loose to moderately dense mixtures of sand, silt, gravel, cobbles, and to a lesser extent, boulders.

Man-made Deposits (af)

Man-made deposits (map unit "af" on Figure 4.7-1), also known as artificial fill, associated with past grading activities for development of The Old Road, are located along the east boundary of the Project site. The fill deposits are composed of sand and silt mixtures derived primarily from the local bedrock materials.

Groundwater

During the 2006 geotechnical investigation, groundwater at the Project site within the lower elevations of the main valley floor, was encountered at depths ranging from 53 to 69 feet below ground surface (Appendix E-1). However, seepage was encountered in the northerly drainage canyon at depths of between 20 and 25 feet below ground surface. A consistent groundwater depth was not observed during the 2021 geotechnical field investigation; however, based on a review of available reports a historic high water depth of 30 feet below ground surface was assumed in the Geotechnical Report (Appendix E-1).

Geologic Hazards

Surface Fault Rupture

Surface fault rupture is the displacement of ground surface that occurs along a fault line during an earthquake event. Based on criteria established by the California Geological Survey (CGS), faults are classified as either Holocene-active, pre-Holocene, or age-undetermined. Faults are considered active when they have shown evidence of movement within the past 11,700 years (i.e., Holocene epoch). Pre-Holocene faults are those that have shown evidence of movement more than 11,700 years ago and generally before 1.6 million years (Quaternary age). Faults whose age of most recent movement is not known or is unconstrained by dating methods or by limitations in stratigraphic resolution are considered age-undetermined and inactive (CGS 2018).

Blind thrust faults are defined as faults that are deeper and do not exhibit surface expression or displacement but that nonetheless can become a potential substantial source of seismic activity. Since they are essentially buried, their precise location is usually not well known until they produce an earthquake.

The Alquist-Priolo Earthquake Fault Zoning Act (formerly known as the Alquist-Priolo Special Studies Zones Act) established state policy to identify active faults and determine a boundary zone on either side of a known fault trace, called the Alquist-Priolo Earthquake Fault Zone. The delineated width of an Alquist-Priolo Earthquake Fault is based on the location precision, complexity, or regional importance of the fault and can be between 200 and 500 feet in width on either side of the fault trace. If a site lies within a designated Alquist-Priolo Earthquake Fault Zone, a geologic fault rupture investigation must be performed to demonstrate that a proposed building site is not threatened by surface displacement from the fault before development permits may be issued (CGS 2018).

No Holocene-active or pre-Holocene faults are known to exist within the Project site, and the Project site is not located within an Alquist-Priolo Earthquake Fault Zone. The nearest Alquist-Priolo Earthquake Fault Zone to the Project site is an unnamed fault located approximately 1.5 miles northwest of the Project site which was established due to surface rupture features identified following the 1994 Northridge Earthquake (Appendix E-1). Otherwise, the closest named Holocene-active fault and associated Alquist-Priolo Earthquake Fault Zone is associated with the Gabriel fault located approximately 4 miles northeast of the Project site (CGS 2022).

Ground Shaking

The Project site is located in a seismically active region of Southern California where there are numerous Holocene-active faults that are capable of producing substantive seismic events (i.e., earthquakes). The level of ground shaking at a given location depends on many factors, including the size and type of earthquake, distance from the earthquake, and subsurface geologic conditions. The type of construction also affects how particular structures and improvements perform during ground shaking. A common measure of ground motion is the peak ground acceleration (PGA). It is not a measure of total energy of an earthquake, such as the Richter and moment magnitude scales, but rather of how hard the ground shakes in a given geographic area (CGS 2002b). PGA is expressed as the percentage of the acceleration due to gravity, or ground motion (G), which is approximately 980 centimeters per second squared. The seismic parameters determined for the Project site resulted in an estimated PGA value for the Maximum Considered Earthquake to be 1.062g and with site modifications it would be 1.17g from a magnitude 6.85 earthquake on the Santa Susana fault located approximately 4.5 miles from the Project site (Appendix E-1). For comparison purposes, the 1994 Northridge earthquake had recorded PGA values that exceeded 1.0g at several sites with the largest value of 1.8g and resulted in substantial damages and loss of life (USGS 2022).

Liquefaction and Lateral Spreading

Liquefaction involves a sudden loss in strength of saturated, cohesionless soils that are subject to ground shaking during an earthquake and results in temporary transformation of the soil to behave more like a fluid mass. The densification results in increased pore water pressures if the soils are not sufficiently permeable to dissipate these pressures during, and immediately following, an earthquake. When the pore water pressure is equal to or exceeds the overburden pressure, liquefaction of the affected soil layer occurs. For liquefaction to occur, three conditions are required: (1) ground shaking of sufficient magnitude and duration; (2) a groundwater level at or above the level of susceptible soils during the ground shaking; and (3) soils that are susceptible to liquefaction.

For a site to be considered susceptible to liquefaction using the criteria and methodology initially developed by Seed and Idriss (1982), liquefaction of underlying soil layers must result in an observed surface effect such as sand boils mud-spouts, surface water seepage, ground cracking, or quicksand-like conditions (Appendix E-1). Similarly, lateral spreading is ground cracking and may occur when a site is sloped or near a free-face and there is a sufficiently continuous liquefiable layer on which the overlying soils can move laterally. Ground settlement, the lowering of the ground surface, may occur during seismic shaking of an area. The settlement can be caused by liquefaction of loose granular soils and by compaction of loose, but not necessarily liquefiable, soils.

As indicated on the State of California seismic hazards zones, the alluvial areas of the Project site are located within areas mapped as being potentially susceptible to liquefaction (CGS 2022). Based on the results of the geotechnical investigation, the alluvial portions are subject to up to 1.25 inches of liquefaction settlement and 0.5 inches of dry sand settlement, for a total seismic settlement of approximately 1.75 inches (Appendix E-1). Some alluvial soils beneath the Project site are within a saturated zone and have the potential to liquefy in the event of a large earthquake on a nearby fault. In addition, soils above the groundwater level may also experience dry settlement, which would result in seismically induced ground settlement (Appendix E-1). However, the potential for liquefaction induced lateral spreading at the Project site was found to be low (Appendix E-1).

Landslides/Slope Stability

The State of California Earthquake Zones of Required Investigation Seismic Hazards Zones for the Project region indicate that the Project site is not located within areas that are considered susceptible to earthquake induced

landslides (CGS 2022). According to the Geotechnical Report, the natural slopes within the Project site are underlain by bedrock of the Plio-Pleistocene Saugus Formation, composed of bedded sedimentary rock units (Appendix E-1). Bedding planes within the Saugus Formation are poorly to moderately well developed. These bedding planes can constitute potential planes of weakness that can result in slope instability and landslides under static or earthquake induced conditions. Where bedding is adversely oriented, or "daylighted" with respect to natural or cut slopes, potential for "block-glide" failure exists (Appendix E-1). In addition, there are areas of the site, mostly on the western parts of the site, that have been mapped as landslide debris deposits (labeled Ql on Figure 4.7-1) as well as surficial slumps (shallow areas of slumping surficial soils labeled as SS1, e.g., on Figure 1 (R) of Appendix E-1) in the area of the proposed water tank.

Erosion/Debris Flow

The potential for erosion or debris flow exists anywhere that a moderate to thick accumulation of residual soil, slope wash, or weathered bedrock materials occur on moderate to steep slopes. Erosion can also occur in flatter terrains but typically, the erosion potential increases with steeper topography. In general, building lots most susceptible to potential debris flow conditions are those lots that would be located directly below and adjacent to natural slopes without sufficient separation either vertically or horizontally. As discussed in the Geotechnical Report for the Project, remnant debris flow deposits were identified during the field investigation which were estimated at thicknesses of up to 16 feet and shown in Figure 4.7-1 (Appendix E-1).

Subsidence

Subsidence is the sinking or settling of the ground surface that may result from the settlement of native low-density soils, or the caving in of natural or man-made underground voids. Subsidence may occur gradually over many years as sags or depressions that form on the ground surface due to placement of new loadings (e.g., newly constructed structures). According to the Geotechnical Report, existing surface soils include artificial fills, debris flow materials, and loose to moderately dense alluvial materials that could be susceptible to subsidence (Appendix E-1). In general, subsidence can also occur in areas located in transition zones between cut and fill graded areas and can be susceptible cracking and movement of footings or foundation slabs due to differing compressibility of fill, as compared to bedrock material, if not designed appropriately.

Subsidence can also occur as a result of the presence of collapsible soils. Collapsible soils are defined as any unsaturated soil that can go through a radical rearrangement of particles with exposure to moisture which results in a substantive change in volume. Collapse can also occur as the result of load application (e.g., placement of a new structure). Soils most susceptible to collapse include loose fills, windblown sands, alluvial fans of low unit weight, and decomposed granite or other acidic igneous rocks.

Expansive Soils

Expansive soils are soils that experience volumetric changes (i.e., expanding and shrinking) during cyclic changes in wetting and drying periods. Over time, this continuous change in soil volume can cause foundations to move unevenly and crack. According to the Geotechnical Report, bedrock materials exposed at pad grade may contain expansive claystone beds that could cause differential expansion. Samples of on-site soils were obtained in the previous 2015 investigation of the site indicated a "very low" expansion potential (Appendix E-1).

Corrosive Soils

Soil corrosion is a geologic hazard that affects buried metals and concrete materials that are in direct contact with soil or bedrock. Depending on the chemical constituents of the soil or bedrock, electrochemical corrosion processes can degrade the structural integrity of the buried metal or concrete. Soil corrosion is a complex phenomenon, with a multitude of variables involved. Pitting corrosion and stress-corrosion cracking are a result of soil corrosion, which can eventually lead to substantive damage. Corrosion testing was previously performed for site soils during the 2015 geotechnical investigation and indicated that the on-site potential for corrosive soils was negligible (Appendix E-1).

Paleontological Resources

According to surficial geological mapping by Dibblee and Ehrenspeck (1992) at a 1:24,000 scale and the Confidential Paleontological Resources Assessment Report (Appendix E-2), the Project site is underlain by modern artificial fill (map unit Af), younger Quaternary alluvium (<11,700 years ago [Cohen et al. 2023]), alluvial deposits (map unit Qa), the Pliocene (approximately 2.6 – 5.33 million years ago [Cohen et al. 2023]) Sunshine Ranch Member of the Saugus Formation (map unit Tsr), and Pico Formation (map unit Tp) (Appendices E1 and E2).

According to the records search conducted by the Natural History Museum of Los Angeles County (LACM) (2020; see Appendix E-2), a single fossil locality, LACM IP (Invertebrate Paleontology) 21087 yielded fossil invertebrates within the Project site.

Past excavation activities within the Los Angeles Basin have encountered paleontological resources in Pliocene age geological units, yielding significant invertebrate and vertebrate paleontological resources throughout the Los Angeles Basin (Appendix E-2).

4.7.2 Regulatory Requirements

Federal

Earthquake Hazards Reduction Act

The United States Congress passed the Earthquake Hazards Reduction Act in 1977 to reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. To accomplish this goal, the act established the National Earthquake Hazards Reduction Program. This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act, which refined the description of agency responsibilities, program goals, and objectives.

Occupational Safety and Health Administration Regulations

Excavation and trenching are among the most hazardous construction operations. Occupational Safety and Health Administration (OSHA) Regulations OSHA Excavation and Trenching Standard, Title 29 of the Code of Federal Regulations, Part 1926, Subpart P, covers requirements for excavation and trenching operations. OSHA requires that all excavations in which employees could potentially be exposed to cave-ins be protected by sloping or benching the sides of the excavation, supporting the sides of the excavation, or placing a shield between the side of the excavation and the work area.

State

California Building Code

The State's 2019 California Building Code (CBC), Title 24 of the California Code of Regulations, is a compilation of building standards, including seismic safety standards, for new buildings. CBC standards are based on building standards that have been adopted by State agencies without change from a national model code; building standards based on a national model code that have been changed to address particular California conditions; and building standards authorized by the California legislature but not covered by the national model code. The CBC applies to all occupancies in California, except where stricter standards have been adopted by local agencies. Specific CBC building and seismic safety regulations have been incorporated by reference into the current Inglewood Municipal Code, with local amendments.

Chapters 16 and 16A of the 2019 CBC include structural design requirements governing seismically resistant construction, including (but not limited to) factors and coefficients used to establish seismic site class and seismic occupancy category for the soil/rock at the building location and the proposed building design. Chapters 18 and 18A include the requirements for foundation and soil investigations (Sections 1803 and 1803A); excavation, grading, and fill (Sections 1804 and 1804A); damp-proofing and water-proofing (Sections 1805 and 1805A); allowable load-bearing values of soils (Sections 1806 and 1806A); the design of foundation walls, retaining walls, embedded posts and poles (Sections 1807 and 1807A), and foundations (Sections 1808 and 1808A); and design of shallow foundations (Sections 1809 and 1809A) and deep foundations (Sections 1810 and 1810A). Chapter 33 of the 2019 CBC includes requirements for safeguards at work sites to ensure stable excavations and cut or fill slopes (Section 3304).

Construction activities are subject to occupational safety standards for excavation and trenching, as specified in the California Safety and Health Administration regulations (Title 8 of the California Code of Regulations) and in Chapter 33 of the CBC. These regulations specify the measures to be used for excavation and trench work where workers could be exposed to unstable soil conditions. The Project would be required to employ these safety measures during excavation and trenching.

The CBC is published on a triennial basis, and supplements and errata can be issued throughout the cycle. The 2022 edition of the CBC became effective on January 1, 2023, and incorporates by adoption the 2021 edition of the International Building Code of the International Code Council, with California amendments. The 2022 CBC incorporates the latest seismic design standards for structural loads and materials as well as provisions from the National Earthquake Hazards Reduction Program to mitigate losses from an earthquake and provide for the latest in earthquake safety. The current CBC has been adopted by the County with local amendments (see below).

California Occupational Safety and Health Administration Regulations

In California, California OSHA (Cal/OSHA) has responsibility for implementing federal rules relevant to worker safety, including slope protection during construction excavations. Cal/OSHA's requirements are more restrictive and protective than federal OSHA standards. Title 8 of the California Code of Regulations, Chapter 4, Division of Industrial Safety, covers requirements for excavation and trenching operations, as well as safety standards whenever employment exists in connection with the construction, alteration, painting, repairing, construction maintenance, renovation, removal, or wrecking of any fixed structure or its part.

California Environmental Quality Act

The CEQA Guidelines require that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to paleontological resources. Paleontological resources, which are limited, nonrenewable resources of scientific, cultural, and educational value, are recognized as part of the environment under these state guidelines. This study satisfies project requirements in accordance with CEQA (13 PRC [Public Resources Code], 21000 et seq.).

Paleontological resources are explicitly afforded protection by CEQA, specifically in Section VII(f) of CEQA Guidelines Appendix G, the "Environmental Checklist Form," which addresses the potential for adverse impacts to "unique paleontological resource[s] or site[s] or … unique geological feature[s]." This provision covers fossils of signal importance – remains of species or genera new to science, for example, or fossils exhibiting features not previously recognized for a given animal group – as well as localities that yield fossils significant in their abundance, diversity, preservation, and so forth.

In addition to CEQA, the California Public Resources Code Section 5097.5 (Stats 1965, c 1136, p. 2792) regulates removal of paleontological resources from state lands, defines unauthorized removal of fossil resources as a misdemeanor, and requires mitigation of disturbed sites.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. In accordance with this act, the State Geologist established regulatory zones, called "earthquake fault zones," around the surface traces of active faults and has published maps showing these zones. Earthquake fault zones are designated by the CGS and are delineated along traces of faults where mapping demonstrates surface fault rupture has occurred within the past 11,700 years. Construction within these zones cannot be permitted until a geologic investigation has been conducted to prove that a building planned for human occupancy would not be constructed across an active fault. These types of site evaluations address the precise location and recency of rupture along traces of the faults and are typically based on observations made in trenches excavated across fault traces. The project is not located on a site designated to be an active earthquake fault zone.

Seismic Hazards Mapping Act

In order to address the effects of strong ground shaking, liquefaction, landslides, and other ground failures due to seismic events, the State of California passed the Seismic Hazards Mapping Act of 1990 (Public Resources Code Section 2690-2699). Under the Seismic Hazards Mapping Act, the State Geologist is required to delineate "seismic hazard zones." Cities and counties must regulate certain development projects within these zones until the geologic and soil conditions of their project sites have been investigated and appropriate mitigation measures, if any, have been incorporated into development plans. The State Mining and Geology Board provides additional regulations and policies to assist municipalities in preparing the Safety Element of their General Plan and encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety. Under Public Resources Code Section 2697, cities and counties must require, prior to the approval of a project located in a seismic hazard zone, submission of a *Preliminary Geotechnical Report* defining and delineating any seismic hazard. Each city or county must submit one copy of each *Preliminary Geotechnical Report*, including mitigation measures, to the State Geologist within 30 days of its approval. Under Public Resources Code Section 2698, cities and counties may establish policies and criteria which are stricter than those established by the Mining and Geology Board.

State publications supporting the requirements of the Seismic Hazards Mapping Act include the CGS SP 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California,[1] discussed above, and SP 118, Recommended Criteria for Delineating Seismic Hazard Zones in California (2004).[2] SP 117A provides guidelines to assist in the evaluation and mitigation of earthquake-related hazards for projects within designated zones requiring investigations and to promote uniform and effective Statewide implementation of the evaluation and mitigation elements of the Seismic Hazards Mapping Act.[3] SP 118 provides recommendations to assist the CGS in carrying out the requirements of the Seismic Hazards Mapping Act to produce the Probabilistic Seismic Hazard Maps for the State.

Regional and Local

Los Angeles County 2035 General Plan

The Los Angeles County General Plan guides policy for land use across unincorporated Los Angeles County. The Project site is located within the Santa Clarita Valley Planning Area, which is one of 11 Planning Areas identified in the General Plan. The following provides a summary of the most applicable goals and policies focused on geology and soils across applicable General Plan Elements that pertain to the Project (County of Los Angeles 2015). Table 4.11-1, Potential to Conflict with General Plan, of Section 4.11, Land Use and Planning, details the Project's potential to conflict with the following goals and policies.

Safety Element

Policy S 1.1. Discourage development in Seismic Hazard and Alquist-Priolo Earthquake Fault Zones.

Policy S 1.2. Prohibit construction of structures for human occupancy adjacent to active faults unless a comprehensive fault study that addresses seismic hazard risks and proposes appropriate actions to minimize the risk is approved.

Policy S 1.3. Require developments to mitigate geotechnical hazards, such as soil instability and landslides, in Hillside Management Areas through siting and development standards.

Conservation and Natural Resources Element

Chapter 9, the Conservation and Natural Resources Element of the Los Angeles County 2035 General Plan, Section VIII. Historic, Cultural, and Paleontological Resources provides the following goals and policies potentially relevant to the Project (County of Los Angeles 2015): The following goals and policies are specific to cultural, historical, and paleontological resources and are relevant to the Project, and the Project's potential to conflict with these policies is discussed in Section 4.11, Land Use and Planning:

Goal C/NR 14. Protected historic, cultural, and paleontological resources.

[1] Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California, prepared by California Geologic Survey, 2008, http://www.conservation.ca.gov/cgs/shzp/webdocs/Documents/sp117.pdf.

[2] Special Publication 118, Recommended Criteria for Delineating Seismic Hazard Zones in California, dated May 1992, Revised April 2004, http://www.conservation.ca.gov/cgs/shzp/webdocs/Documents/sp118_revised.pdf.

[3] Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California, prepared by California Geologic Survey, 2008, http://www.conservation.ca.gov/cgs/shzp/webdocs/Documents/sp117.pdf.

Policy C/NR 14.1. Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.

Policy C/NR 14.5. Promote public awareness of historic, cultural, and paleontological resources.

Policy C/NR 14.6. Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

Santa Clarita Valley Area Valley Plan, One Valley One Vision

Section 4.11, Land Use and Planning, of this Draft EIR, provides an analysis of the Santa Clarita Valley Area Plan, One Valley One Vision (OVOV) policies that pertain to geotechnical hazards. Refer to Table 4.11-2, Potential to Conflict with OVOV, in Section 4.11, Land Use and Planning, for a list of the policies included in the OVOV Plan that pertain to geotechnical hazards and an analysis for the Project's potential to conflict with each policy.

Policy S-1.2.2. Restrict the land use type and intensity of development in areas subject to fault rupture, landslides, or liquefaction, in order to limit exposure of people to seismic hazards.

Policy S-1.2.3. Require soils and geotechnical reports for new construction in areas with potential hazards from faulting, landslides, liquefaction, or subsidence, and incorporate recommendations from these studies into the site design as appropriate.

Policy S-1.2.4. Enforce seismic design and building techniques in the County Building Code.

Los Angeles County Code (County Code)

Title 21, Subdivisions. Section 21.48.050.8 requires that an engineering geological report and/or soils engineering report stating whether the property to be divided is subject to an existing or potential geological and/or soils hazard and how such hazard, if any, will affect the proposed division. The report shall be prepared by an engineering geologist certified by the State Board of Registration for Geologists and/or a registered civil engineer, as appropriate. According to the County's Manual for Preparation of Geotechnical Reports, Tentative subdivision maps and grading and building plan submittals that are required to have engineering geology and/or soils engineering reports shall include the relevant report recommendations on the maps and plans. Any map or plan that does not conform to the recommendations of the supporting report(s) will not be recommended for approval until the discrepancies are resolved (Public Works 2013).

Title 22, Planning and Zoning. Title 22, Division 5, Chapter 22.104 of the County Code includes the Hillside Management Area (HMA) Ordinance. The Project site is within an HMA[4] due to the presence of mountainous or foothill terrain with a natural slope of 25% or greater at the Project site. The purpose of the HMA ordinance is to ensure that development preserves and enhances the physical integrity and scenic value of HMAs, to provide open space, and to be compatible with and enhance community character. These goals are accomplished by locating development outside of HMAs to the extent feasible or in portions of the HMAs with the fewest hillside constraints

[4] Special Management Areas (SMAs) are defined by the County as areas that require additional development regulations due to the presence of natural resources, scenic resources, or identified hazards (County of Los Angeles 2015). The Project site is located within the following SMAs: a Hillside Management Area (HMA), Significant Ecological Area (SEA), and Very High Fire Hazard Severity Zone (VHFHSZ).

as defined in Chapter 22.104. According to Chapter 22.104.060, projects in HMAs shall be approved by the Review Authority if the Authority finds that the application substantiates the following findings:

- The project preserves the physical integrity of HMAs by locating development outside the HMAs, to the greatest extent feasible, locating development in the portions of the HMAs with fewer hillside constraints, and using sensitive hillside design techniques tailored to the site requirements;
- The project development preserves the scenic value of the HMAs resulting in lesser impacts to on-site and off-site scenic views of slopes and ridgelines as well as other unique, site-specific aesthetic or significant natural features of the hillside;
- The project development is compatible with or enhances community character, and provides required open space; and
- The proposed development is in substantial compliance with the Hillside Design Guidelines.
- Natural or Open Area Standards: A minimum of twenty-five percent (25%) of a project site net area shall be provided as required open space.

Refer to response to Threshold 4.11c of Section 4.11, Land Use and Planning, for an analysis of the Project's potential to conflict with the goals and policies of the General Plan related to HMAs.

Title 26, Building Code. Title 26, Building Code, of the Los Angeles County Code of Ordinances (LACBC) contains provisions for structural safety, including the adoption by reference of the CBC. Chapter 16, Structural Design, of the County Code provides additional standards for earthquake loads that apply to all construction within the County.

Society for Vertebrate Paleontology

Potential paleontological mitigation measures have their basis in the Society of Vertebrate Paleontology ([SVP] 2010) guidelines for mitigating impacts to paleontological resources. These standards outline mitigation measures to lessen significant impacts to paleontological resources, which include (but are not limited to) the following:

1. "An intensive field survey and surface salvage prior to earth moving, if applicable;
2. Monitoring by a qualified paleontological resource monitor (see "definitions" section in this document [SVP, 2010]) of excavations in previously undisturbed rock units;
3. Salvage of unearthed fossil remains and/or traces (e. g., tracks, trails, burrows, etc.);
4. Screen washing to recover small specimens, if applicable;
5. Preparation of salvaged fossils to a point of being ready for curation (i. e., removal of enclosing matrix, stabilization and repair of specimens, and construction of reinforced support cradles where appropriate);
6. Identification, cataloging, curation, and provision for repository storage of prepared fossil specimens; and
7. A final report of the finds and their significance." (SVP 2010)

4.7.3 Thresholds of Significance

In accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to geology and soils are listed below. A project may have a significant impact if it would:

Threshold 4.7a: 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 based on other substantial evidence of as known fault. Refer to Division of Mines and Geology Special Publication 42.***
>
> ***ii. Strong seismic ground shaking.***
>
> ***iii. Seismic-related ground failure, including liquefaction.***
>
> ***iv. Landslides.***

Threshold 4.7b: Result in substantial soil erosion or the loss of topsoil.

Threshold 4.7c: 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 4.7d: 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 4.7e: 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 4.7f: Conflict with the Hillside Management Area Ordinance (Los Angeles County Code, Title 22, Chapter 22.104).

Threshold 4.7g: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

4.7.4 Methodology

The following analysis of impacts related to geology, seismicity and soils is largely based on the Revised Geotechnical 100-Scale Plan Review, Lyons Canyon Development Vesting Tentative Tract Map No. 83301, Los Angeles County, California for NUWI – Lyons Canyon, LLC. prepared by RTF&A (Geotechnical Report) included as Appendix E-1 of this Draft EIR. This revised report was an update to a March 2021 report to reflect changes to the proposed improvements, which is also included in Appendix E-1. Previous geotechnical studies conducted on the Project site were performed by Pacific Soils Engineering, Inc. (Pacific Soils) in 2006 and Gold Coast Geoservices, Inc. (Gold Coast) in 2015. Subsurface data were available for the Project site and adjacent areas from prior investigations conducted by Pacific Soils in 2006 and Gold Coast in 2015, which assisted in the preparation of the most recent geotechnical report. The data from the previous investigations were supplemented by the excavation of an additional five hollow-stem auger borings excavated on November 10, 2020 and five Cone Penetrometer

Tests (CPT) by Gregg Drilling for RTF&A in January 2021. In addition, a total of 18 test pits were excavated in April 2022 as part of the tank site investigation, for modification of proposed slopes and basins along the western property boundary, and to confirm the geotechnical conditions along the southern portion of the site.

The collection of site-specific soil samples was used for laboratory analysis to assist in evaluating the geotechnical engineering properties of the underlying materials, as described further in the Geotechnical Report (Appendix E-1).

While the Geotechnical Report provides sufficient detail to determine whether the Project site is suitable for the intended use and identifies design considerations to be incorporated in the design of the Project, the report acknowledges that a final design level geotechnical report based on final building plans would be necessary prior to commencement of construction, as commonly practiced for all development and required by building code standards, to address site-specific geotechnical issues, such as ground shaking, liquefaction, landslides, and any other geotechnical hazards found to be present. The final design level geotechnical report would include and be based on the findings of the completed Geotechnical Report but could include further design level details. As such, a final design level geotechnical report based on the finished construction and building plans would also be prepared and reviewed by the County prior to issuance of building permits in accordance with building code requirements.

In December 2015, the California Supreme Court found that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents." In *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 392, the Supreme Court explained that except under a limited number of circumstances specifically identified in CEQA, an agency is only required to analyze the potential impact of such hazards on future residents if the project would worsen those existing environmental hazards or conditions. CEQA analysis is, therefore, concerned with a project's impact on the environment, rather than the environment's impact on a project, including its users or residents. Thus, with respect to geologic and seismic hazards, the City is not required to consider the effects of bringing people or structures into an area where such hazards exist, because the project itself would not worsen or otherwise affect the geologic conditions that create those risks. Nonetheless, in order to provide a complete picture of the proposed Project, these impacts are discussed below.

4.7.5 Impact Analysis

Threshold 4.7a: Would the project 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 based on other substantial evidence of as known fault? Refer to Division of Mines and Geology Special Publication 42.***

As discussed above in Section 4.7.1, Existing Setting, there are no Holocene-active faults that intersect or are within close proximity to the Project site, and the Project site is not located within an Alquist-Priolo Earthquake Fault Zone as defined by the CGS (CGS 2022). CGS considers a fault seismically active when evidence suggests seismic activity within roughly the last 11,700 years. The nearest Holocene-active fault is an unnamed fault located approximately 1.5 miles northwest of the Project site. Based on CGS mapping of Holocene-active faults, the Geotechnical Report determined that there is little probability of surface fault rupture at the Project site (Appendix E-1). Therefore, the potential impact related to rupture of a known earthquake fault would be less than significant, and no mitigation measures are required.

ii. Strong seismic ground shaking?

The Project site is located in a seismically active area with numerous regional Holocene-active faults that are capable of causing a substantive seismic event (i.e., earthquake) which could adversely affect proposed development associated with the Project. However, development associated with the Project would not cause or exacerbate seismic conditions. The amount of ground shaking at any one site is based on numerous factors including magnitude of the earthquake, distance to the causative fault, duration of shaking, and the underlying geotechnical properties of the site and vicinity.

Based on the Geotechnical Report prepared for the Project site, the PGA for the Maximum Considered Earthquake was determined to be 1.062g and with site modifications it would be 1.17g from a magnitude 6.85 earthquake on the Santa Susana fault located approximately 4.5 miles from the Project site (Appendix E-1). PGA values in this range could cause substantive damage to buildings and other improvements if not designed appropriately. However, the proposed improvements would be required to adhere to the seismic design requirements of the most current CBC with any applicable LACBC amendments. Incorporation of the seismic design standards and requirements in accordance with the most current version of the CBC would ensure that the proposed improvements do not result in catastrophic failure even from the higher PGA value of 1.17g that is estimated for the conditions of the Project site. While conformance with seismic design criteria does not constitute a guarantee or assurance that no structural damage would occur in the event of a large earthquake, adherence to seismic design criteria ensures that the potential for catastrophic failure is minimized.

Prior to issuance of a building or grading permit, the Applicant would be required to submit a final design level geotechnical report that includes all seismic design specifications for site preparations and foundation design. The report would be submitted to the Los Angeles County Department of Public Works (Public Works) for review and approval. Prior to filing the Final Land Division Map, the Applicant would be required to comply with any conditions contained within Public Works' issuance of a Geology and Soils Report Approval Letter for the Project, made in response to the final design level geotechnical report, and as it may be subsequently amended or modified by Public Works *Geotechnical Materials Engineering Division (*GMED). The final geotechnical report, which is also required by the CBC, would be based on the final Project design and would require final approval by the GMED prior to issuance of a grading permit to assure that all seismic requirements have been appropriately incorporated into project designs. Therefore, with compliance and implementation of seismic design standards as required by the latest Standard Specifications for Public Works Construction (Greenbook) and the LACBC and CBC would minimize potential structural failures caused by ground shaking and the Project would have a less than significant impact.

iii. Seismic-related ground failure, including liquefaction?

Liquefaction occurs when loose, cohesionless, and water-saturated soils (generally coarse-grained sands and silt) are subjected to strong seismic ground motion that exceeds the frictional static forces of the grains within the soil. With such conditions, soils essentially behave more like a fluid than a solid, with a temporary reduction or loss of shear strength between grains. Improvements constructed on these soils may buckle, tilt, or settle when the soils liquefy. Liquefaction more often occurs in earthquake-prone areas underlain by young, sandy alluvium where the groundwater table is less than 50 feet below the ground surface. If not designed appropriately, liquefaction can cause substantive damage; however, development associated with the Project would not cause or exacerbate the potential for liquefaction to occur.

As discussed within response to Threshold 4.7a.ii above, the Project site is located within a seismically active area. Based upon stability analyses, liquefaction analysis, shear strength tests, and consolidation test results provided

within the Geotechnical Report, the alluvial soils beneath the Project site and below the groundwater level may liquefy in the event of a large earthquake on a nearby fault that produces the design-level ground motions. Additionally, alluvial soils potentially susceptible to liquefaction are located within the valley floors of the canyon areas of the Project site (Appendix E-1).

As indicated in the Geotechnical Report (Appendix E-1), the potential for liquefaction is present within the alluvial portions of the Project site, and that liquefaction-induced ground settlement of up to 1.75 inches (following the recommended removals of upper soils in the proposed building areas) could occur if the site soils were to liquefy. However, implementation of the proposed Project would not exacerbate any liquefaction hazards that may be present. Liquefaction hazards are dependent on the underlying characteristics of the subsurface materials such as depth to groundwater and grain size and composition of cohesionless soils. Recommendations identified in the Project's Geotechnical Report include measures such as ground improvements (i.e., removal of site soils and recompacted to building code standards) and structural (i.e., foundation and floor slab construction design) measures, which would be required as part of the Project design consistent with current geotechnical engineering practices and LACBC and CBC requirements. Implementation of these recommended measures would reduce the potential for liquefaction and associated liquefaction-induced ground failures for all proposed improvements. According to GMED, structural measures alone constitute an acceptable approach for up to 4 inches of total seismic induced settlement (Appendix E-1). Therefore, adherence to LACBC and CBC requirements, as detailed in the Project plans, identified in the final design level geotechnical report, as approved by the Public Works, would ensure that the potential for adverse impacts related to the proposed Project from liquefaction and other secondary seismic effects would be low, would not exacerbate existing seismic-related ground failure threats, and potential impacts associated with liquefaction would be less than significant.

iv. Landslides?

The Project site includes existing landslides and remnant debris flow deposits, as shown on Figure 4.7-1. The existing landslides consist of near surface features impacting weathered rock on steep slopes, and no large deep-seated landslides were identified in the geotechnical investigation at the site (Appendix E-1). Where observed, the debris flow deposits were estimated to be up to 16 feet, though test pit excavations revealed that much of the surficial materials on the slopes at the Project site up to a depth of 8 feet have been or may be creep-impacted, and susceptible to sloughing and/or sliding (Appendix E-1). The Project would include substantive earthwork activities that would include large volumes of cut and fill, which if not done appropriately could subject the proposed development to landslide hazards. However, based on a review of the existing conditions and proposed grading plans, the proposed building lots were determined by the licensed geotechnical engineers to have acceptable separation, either vertical or horizontal, from natural slopes and potential debris flow source areas (Appendix E-1). As a result, the potential for adverse effects from existing debris flow was judged to be minimal but would need to be verified by Public Works at the rough grading plan review stage as required as part of the building permit review process (Appendix E-1).

According to the proposed grading plans, the proposed earthwork activities would include alterations of a total of 12 cut slopes. As described in the Geotechnical Report, a cut slope is defined as a slope of 10 feet or more in height. The proposed cut slopes on the Project site are designated as CS-1 through CS-12 as shown in Figure 4.7-1, Site Geologic Map, and Figures 4.7-2 and 4.7-3, Geologic Cross Sections. The details of these cut slopes including slope height, gradient, and underlying geologic conditions are provided in the Geotechnical Report (Appendix E-1).

Proposed gradients for all cut slopes would be at a 2:1 (horizontal:vertical). The maximum cut slope height for the Project would be approximately 210 feet at CS-10. As described within the Slope Stability Analysis (Appendix D of

the Geotechnical Report, Appendix E-1), bedding planes within the Saugus Formation are poorly to moderately well developed, which can constitute planes of weakness. Where the geologic bedding is adversely oriented or "daylighted" with respect to natural or cut slopes the potential for "block-glide" failure exists. It can also be favorably oriented in terms of the relationship of the bedding orientation compared with the cut slope where the exposed cut is more stable, as is the case for CS-2, CS-3, CS-8, and CS-9 (Appendix E-1).

The proposed cut slopes CS-1, CS-4, CS-6, CS-10, CS-11, and CS-12 would expose alluvium and colluvium deposits in a way that could create conditions for erosion and surficial failures. In order to meet County static and seismic factor of safety requirements, the alluvium and colluvium deposits would be removed and the cut slope reconfigured with stability fills and constructed with backdrains, a common geotechnical design measure to ensure appropriate drainage and long term stability of slopes. Placement of these stability fills and backdrains, as recommended in the Geotechnical Report and consistent with Appendix J Grading of the LACBC and CBC, would ensure that these cut slopes can meet County static and seismic factor of safety requirements.

The remaining cut slopes (CS-5 and CS-7) would expose Saugus Formation deposits and stability is in part dependent on additional geotechnical design measures including construction of retaining walls and appropriate pile or soil nail support that would be consistent with Appendix J - Grading of the LACBC and CBC (Appendix E-1). With construction of these retaining walls and pile or soil nail supports, the engineered cut slopes would meet or exceed County static and seismic minimum factor of safety requirements.

In addition, the proposed water tank access road makes a 180-degree turn at an approximate elevation of 1,445 feet where there is only a narrow strip of bedrock and a gradient that dips steeply to the north (Appendix E-1). As noted in the Geotechnical Report, with the grading involved for the construction of this road there is potential for creating conditions of soil creep and surficial slope erosion by alteration of the topography and drainage conditions that could eventually progress to the south leading to instability and adversely affecting the proposed access road. The Geotechnical Report already identifies areas of surficial slopes in the vicinity of the proposed water tank. However, as stated in the Geotechnical Report, with implementation of the five cast-in-drilled-hole soldier piles (concrete reinforcements), installed to depths of about 30 feet, or as an alternative, a stability fill with backdrains, constructed north of this turn in the proposed access road, would ensure that slope stability consistent with building code requirements (Appendix J Grading) would occur in this location. The proposed grading would also improve soil stability of the identified surficial slumps (Appendix E-1). Recommendations from the Geotechnical Report (Appendix E-1) would be included as part of the Final Geotechnical Engineering Investigation Report and the geotechnical slope stability design measures (e.g., slope inclinations, fill compaction, and drainage improvements) implemented in accordance with LACBC and CBC requirements as approved by the Public Works GMED. As discussed above in response to Threshold 4.7a.ii, prior to filing the Final Land Division Map, the Applicant would be required to comply with the conditions contained within the Geology and Soils Report Approval Letter for the Project, and as it may be subsequently amended or modified by Public Works GMED. The Final Geotechnical Engineering Investigation report, which is required by the CBC, would be based on the completed Geotechnical Report as well as the final Project design and would require approval by the GMED prior to issuance of a grading permit to assure that all slope stability design measures have been appropriately incorporated into project designs and meet the minimum thresholds for factor of safety under static and seismic conditions. Therefore, with compliance and implementation of slope stability standards as required by the latest Standard Specifications for Public Works Construction (Greenbook) and the LACBC and CBC (including Appendix J – Grading) would minimize potential for the Project to exacerbate seismically-induced landslides to a less than significant level.

Threshold 4.7b: Would the project result in substantial soil erosion or the loss of topsoil?

Construction

Construction activities associated with the Project would include substantive earthwork activities that could potentially expose soils to increased erosion or loss of topsoil especially during storm events. As described more thoroughly in Section 4.10, Hydrology and Water Quality, of this Draft EIR, as part of the plan checking process, the County would require submittal of a Storm Water Pollution Prevention Plan (SWPPP) that is required to be submitted to the Los Angeles Regional Water Quality Control Board (LARWQCB) prior to construction, in adherence to the conditions set forth under the National Pollutant Discharge Elimination System (NPDES) General Construction permit. The SWPPP would incorporate best management practices (BMPs) that include erosion control measures during construction that would reduce the potential for erosion and loss of topsoil to occur to less than significant during construction. Typical BMPs would ensure grading is conducted during dry-weather conditions, water is used for moisture control of exposed soils to prevent wind erosion when temporarily disturbed, coverings for temporary stockpiles, temporary catch basins, and sandbagging, as appropriate and consistent with LARWQCB requirements. If excavations are made during the rainy season (normally from November through April), BMPs would be implemented to protect slopes against erosion. Measures to help minimize erosion could include the installation of berms, plastic sheeting, or other devices to protect exposed soils from the effects of precipitation. Surface water would be prevented from flowing over or ponding at the top of excavations. Construction activities would also be required to comply with the County's grading requirements to eliminate or reduce erosion or sedimentation which are targeted for protection of water quality but would also be effective in minimizing erosion or loss of topsoil. Once land disturbance is complete, landscaping, nonerosive drainage features such as private storm drains and debris/infiltration basins and associated infrastructure, as well as the maintenance of these structures would be immediately enacted as required by the SWPPP. Disturbed areas would be protected until sustainable vegetated growth is established. Typically, protection can be provided by the use of sprayed polymers, straw waddles, jute mesh, or by other measures in accordance with County and statewide general construction stormwater permit requirements. In addition, the Project would be required to comply with all applicable County grading permit regulations, plans, and inspections to reduce sedimentation and erosion.

Thus, through compliance with the County's construction requirements, implementation of BMPs, compliance with applicable County grading permit regulations, and requirements of the statewide NPDES general construction stormwater permit, the Project construction activities would not result in substantial erosion or loss of topsoil. Therefore, the impact associated with erosion or loss of topsoil during construction would be less than significant.

Operation

Once constructed, operation of the Project would have a more limited degree of erosion potential because the proposed improvements would reduce the amount of soils that are exposed and susceptible to erosion. However, the change in drainage patterns that would occur as a result of development could cause the remaining undeveloped areas to be susceptible to erosion and/or loss of topsoil if stormwater is not managed appropriately. As discussed in more detail in Section 4.10 Hydrology and Water Quality of this Draft EIR, development would include the construction of drainage control features which would be designed to minimize erosion consistent with drainage control regulatory requirements. The Project would be required to have a Standard Urban Storm Water Mitigation Plan (SUSMP) in place during the operational life of the Project in accordance with Municipal NPDES permit provisions that would include operational BMPs, developed consistent with the County's Low Impact Design (LID) Ordinance, that would control stormwater runoff and is protective of landscaped areas. In addition, as noted above in response to Threshold 4.7a.iii, the Project would implement design measures (i.e., stability fills and

backdrains), as appropriate, to reduce erosion on constructed slopes, as detailed in the Geotechnical Report (Appendix E-1), consistent with and required by the LACBC and CBC.

The LACBC, specifically Appendix J, includes requirements for vegetation and irrigation of cut slopes that must be provided by both a California licensed Geotechnical Engineer and a Landscape Architect. Irrigation systems must be able to sustain proposed plantings and provide a "permanent and effective method of erosion control". Building Codes J110.5 and J110.7 includes requirements for planting and irrigation plans for slopes. Building Codes J110.6 and J110.7 also include requirements for preventative rodent control programs to ensure that rodent burrowing does not occur which can lead to erosion. Therefore, with adherence to drainage control requirements and building code requirements, as well as planting, irrigation and rodent control requirements, the potential for erosion and loss of topsoil would be reduced to a less than significant level during operation of the Project.

Threshold 4.7c: 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?

The bedrock and soil units found on the Project site consist of bedrock of the Pico and Saugus formations, alluvium and colluvial (slope wash) deposits, and artificial fill. The proposed grading would include substantive earthwork activities with large quantities of cut and fill operations to provide suitable building lot locations for the proposed improvements. As discussed in response to Threshold 4.7a.iv, some of the proposed cuts would expose alluvial and colluvium soils that were determined in the Geotechnical Report to be susceptible to erosion and surficial slope failures, which could result in a potentially significant impact with regard to potential on- and off-site landslides if not designed appropriately (Appendix E-1). However, removal of exposed alluvium and colluvium and implementation of geotechnical recommendations consistent with LACBC and CBC requirements would ensure that the proposed grading results in stable conditions, reducing the potential occurrence of on- or off-site landslide to a less than significant impact.

As determined in the Geotechnical Report and discussed within response to Threshold 4.7a.iii above, the potential for liquefaction-induced lateral spreading at the Project site was found to be low (Appendix E-1). Subsidence to a degree that causes substantive damage could only occur if the underlying materials are insufficient to withstand the new loadings (i.e., weight of new structures) of the proposed improvements and no geotechnical engineering measures are incorporated into site preparations. However, as discussed within response to Threshold 4.7a.ii above, the recommendations from the Project's Geotechnical Report would be incorporated into the final Project design, such as the removal of potential debris material, removal of artificial fill, use of engineered fill, and adherence to compaction standards consistent with building code requirements would be implemented to minimize risks associated with subsidence or collapse.

Collapsible soils tend to be any unsaturated soil that goes through a radical rearrangement of particles and great decrease in volume upon wetting, additional loading, or both. The soils onsite generally consist of loose to moderately dense mixtures of sand, silt, gravel, cobbles, and to a lesser extent, boulders. Moderately dense soils are less susceptible to collapse, and any loose soils would be addressed through site preparations in accordance with building code requirements that would ensure the potential for collapse is minimized during grading through either removal or recompaction.

In addition, although a soil corrosion study was not performed as part of the recent Geotechnical Report, corrosion testing was previously performed for site soils during the 2015 geotechnical investigation and indicated that the on-site potential for corrosive soils was negligible (Appendix E-1). Regardless, testing of near surface soils for

corrosive properties to concrete or underground utilities would be performed in accordance with building code requirements to ensure that all subsurface materials meet corrosion standards contained within the LACBC and CBC.

For these reasons, with adherence to LABC and CBC requirements, which contain universal standards for site preparation (e.g., fill compaction standards) and grading practices, foundations design, and guidelines for the appropriate foundation design to ensure that improvements are located on stable materials and do not cause underlying materials to become unstable, the Project would not be located on a geologic unit or soil that is unstable or would become unstable. This impact is considered less than significant.

Threshold 4.7d: Would the project 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?

As discussed above, samples of on-site soils obtained in 2015 during the investigation of the Project site for laboratory expansion index testing indicated a "very low" expansion potential (Appendix E-1). However, finer grained layers of the Saugus Formation that would be excavated and reused as compacted fill would be considered to have a "low" to "medium" expansion potential (Appendix E-1). While the proposed Project would not exacerbate the potential for expansion, if not addressed, these soils could result in damage of foundations and improvements over time. Recommendations within the Geotechnical Report include measures to ensure that reuse of excavated materials and any import fill materials meet building code requirements for expansion to ensure that the soils are appropriately compacted and would not be susceptible to expansion. For proposed building areas where expansive soil units are exposed at pad grade, they would either be treated onsite (mixed with non-expansive soils or treated with lime) or given an appropriate foundation design (e.g., mat foundation as opposed to floor slab support) that can withstand anticipated expansion, in accordance with building code requirements. These site preparations or design measures would be included in the Final Geotechnical Engineering Investigation report, which is required by the LACBC and CBC. For these reasons, the potential impact related to adverse effects from expansive soils is considered less than significant.

Threshold 4.7e: 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?

The Project would not involve the use of septic tanks or alternative wastewater disposal; therefore, no impact related to soils incapable of supporting these uses would occur.

Threshold 4.7f: Would the project conflict with the Hillside Management Area Ordinance (Los Angeles County Code, Title 22, Chapter 22.104)?

As discussed in Section 4.11, Land Use and Planning, the Project site is located within a Hillside Management Area (HMA) and is subject to the HMA Ordinance. The HMA Ordinance requires that projects "substantially comply" with the different categories of the guidelines (i.e., Site Planning, Grading and Facilities, Road Circulation, Building Design, and Landscaping). In addition, all projects must comply with applicable Plans, County policies, the Zoning Code and Subdivision Ordinance, Healthy design standards. Pursuant to Chapter 22.104.070 (Development by County of Special District), the County is required to review projects proposed within HMAs and prepare a written report that documents substantial compliance with the Hillside Design Guidelines. The reports are subsequently included in a Project's publicly available documents. In addition to compliance with the Hillside Design Guidelines, pursuant to Chapter 22.104.030, a CUP is required for any development located wholly or partially in an HMA, and as such, the Project would be required to obtain a CUP for development within an HMA. The CUP imposes required

conditions of approval (COAs) (Chapter 22.104.150), including COAs pertaining to required preservation of open space (County of Los Angeles 2022). Chapter 22.104.050.A.2 requires that: (a) at least 25% of the net area of the Project site be provided as required open space; and (b) that up to 50% of the required open space may be improved open space (subject to County review). In terms of use and configuration (Chapter 22.104.050.B) at least 51% of required natural open space must be configured into one contiguous area. In addition, pursuant to Chapter 22.104.050.B.6(a), improved open space may include: (i) parks, playgrounds, golf courses, and other recreational facilities; (ii) equine riding, hiking, and mountain biking trails; (iii) pedestrian paseos; and (iv) community gardens (County of Los Angeles 2022).

Examples of the Project's compliance with these design measures are included in Thresholds 4.11b and 4.11c of Section 4.11, Land Use and Planning, of this Draft EIR (pages 4.11-4 through 4.11-70). Overall, the Project includes density-controlled development, preservation of open contiguous space, location of development on the flattest areas of the site, landscape design, and construction of connecting trails and pedestrian paseos (see also detailed examples of consistency with HMA ordinance and Hillside Design Guidelines in impact analysis of Thresholds 4.11b and 4.11c of Section 4.11, Land Use and Planning, of this Draft EIR) (pages 4.11-4 through 4.11-70). The Project Applicant is requesting approval of a density-controlled development CUP to cluster dwelling unit development on approximately 41 acres in the northeastern portion of the Project site. In total, the area of land within the Project's grading limits, as well as a surrounding construction buffer area, includes 72.55 acres that are in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space. As a result, the Project would preserve approximately 150 acres of natural open space (approximately 64% of Project site) and approximately 24 acres of improved open space[5], thus fulfilling the requirement that at least that 25% of the net area of the development site be provided as required open space (Chapter 22.104.050.A.2 of Zoning Code). Furthermore, all of the approximately 150 acres of natural open space would be contiguous, thus fulfilling the requirement that at least 51 percent of required natural open space must be configured into one contiguous area (Section 22.104.050.B.2 of the Zoning Code).

In addition, as mentioned above, the Project would adhere to all applicable County and State building code requirements and County policies. As such, the various design measures listed above, that are consistent with the Hillside Design Guidelines (Chapter 22.104 Appendix I of the Zoning Code) would ensure that the Project would not conflict with the HMA Ordinance, and the impact would be less than significant.

Threshold 4.7g: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As described above in 4.7.1 Existing Conditions, the geology of the site is characterized by bedrock of the Pico and Saugus formations, alluvium and colluvial (slope wash) deposits, and man-made fill (Appendix E-1). The Geotechnical Report for the Project did not identify any unique geologic features on-site, meaning that the onsite deposits and features do not represent the best example of its type locally or regionally; do not embody distinctive characteristics of a geologic principle that is exclusive to the regional context; do not provide a key piece of geologic information important to geologic history; nor used as a teaching tool. As such, the Project would not result in direct or indirect impacts to a unique geologic feature.

Regarding unique paleontological resources or sites, shallow excavations within mapped areas of low paleontological resources sensitivity (e.g., younger, Holocene-age Quaternary alluvium) are unlikely to uncover any

[5] As described in Section 3.2.3, Open Space and Recreation of Chapter 3.0, Project Description, of this Draft EIR, including HOA open space lots and active and passive open space areas, the total improved open space at the Project site would be 24.31 acres.

significant paleontological resources. As stated in Section 4.5.1, Existing Conditions, according to the records search conducted by the Natural History Museum of Los Angeles County (LACM) (2020; see Confidential Appendix E-2), a single fossil locality, LACM IP (Invertebrate Paleontology) 21087 yielded fossil invertebrates within the Project site. However, as stated in the ESA (2021) paleontological resources assessment (Appendix E-2), these fossils came from the Repetto Formation, and are not anticipated to be impacted by the Project. Moreover, the Repetto Formation was not encountered during geotechnical investigations for the Project site (Appendix E-1 and Appendix E-2). However, sedimentary deposits with high paleontological resources sensitivity (e.g., the Saugus and Pico Formations) would be impacted below native topsoil, artificial fill, or younger Quaternary alluvium, and therefore excavation within these areas may encounter important and unique paleontological resources. These areas are shown in Figure 4.7-1, Site Geologic Map, and Figures 4.7-2 and 4.7-3, Geologic Cross Sections.

Therefore, prior to implementation of mitigation measures, the Project would result in a potentially significant impact regarding directly or indirectly destroying a unique paleontological resource or site. However, implementation of MM-4.7-1 requires that a qualified paleontologist be retained to develop a Cultural and Paleontological Resource Monitoring and Inadvertent Discovery Plan (Plan), which would ensure that such excavations would be monitored, and significant resources that are uncovered (if any) would be recovered and protected, thus ensuring that such resources are not destroyed or lost (thereby preventing potentially significant impacts to paleontological resources). MM-4.7-2 requires that a Worker Environmental Awareness Plan (WEAP) be developed, and training be implemented based on the WEAP. These measures are provided in greater detail below in Section 4.7.7, Mitigation Measures, below. With the implementation of MM-4.7-1 and MM-4.7-2, the impact resulting in a potential to directly or indirectly destroy a unique paleontological resource or site would be less than significant.

4.7.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts associated with the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The geographic context of the past, present, and reasonably foreseeable future projects (i.e., cumulative projects) used for this analysis are presented in Table 2-2, List of Cumulative Projects and Figure 2-8, Cumulative Projects Location Map, in Chapter 2, Environmental Setting, of this Draft EIR. The geographic area of impacts is detailed under each threshold, below.

Threshold 4.7a: Would the project 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 based on other substantial evidence of as known fault. Refer to Division of Mines and Geology Special Publication 42?***
>
> ***ii. Strong seismic ground shaking?***
>
> ***iii. Seismic-related ground failure, including liquefaction?***
>
> ***iv. Landslides?***

The geographic context of seismic hazards is a 50-mile radius of the Project site where there is a general risk of experiencing a substantive earthquake on any of the regional Holocene-active faults in the area. However, seismic

risks tend to be site-specific rather than cumulative in nature because the effects are so dependent on site-specific conditions and do not combine from site to site. For current and future projects, any development occurring within the County or City of Santa Clarita, including the cumulative projects detailed in Table 2-2 of Chapter 2, Environmental Setting, would be subject to site development and seismic construction standards and code requirements to ensure protection from substantive damage or injury in the event of a seismic event. As with the Project, cumulative projects would be subject to the same local, regional, and State regulations pertaining to seismic safety, including CBC and LACBC or City of Santa Clarita requirements. Adherence to these existing seismic building code requirements would ensure that adverse effects related to fault rupture, ground shaking, liquefaction, and landslides is minimized and would not become cumulatively considerable. Additionally, as stated in the Geotechnical Report prepared for the Project, the proposed site grading would not adversely affect the geotechnical conditions on adjacent properties (Appendix E-1). Therefore, the cumulative impact related to fault rupture, ground shaking, liquefaction, and landslides would be less than significant and not considered cumulatively considerable.

Threshold 4.7b: Would the project result in substantial soil erosion or the loss of topsoil?

The geographic context considered in the cumulative analysis of soil erosion and loss of topsoil is the Santa Clara River watershed, which includes all Cumulative Projects, including LA1 through LA13 and SC1 through SC23, and any activities in the watershed that have the potential to result in soil erosion or loss of topsoil. Similar to the Project, all cumulative projects would be subject to existing regulations, policies, and plans established by the County of Los Angeles or City of Santa Clarita and RWCQB that relate to erosion control. While these regulations are primarily designed to protect water quality of receiving waters, they are also effective in minimizing soil erosion or loss of topsoil. Regulations and plans that the cumulative projects would likely be subject to include NPDES permitting and associated SWPPPs, BMPs, SUSMP; Water Quality Objectives for Inland Surface Waters; the County Code and LACBC; and applicable General Plan goals and policies. Additionally, as stated in the Geotechnical Report prepared for the Project, the proposed site grading would not adversely affect the geotechnical conditions on adjacent properties (Appendix E-1). Therefore, the Project, in combination with identified cumulative projects, would result in less-than-significant impacts related to soil erosion and loss of topsoil (see also discussion in Section 4.10, Hydrology and Water Quality). Impacts would not be considered cumulatively considerable.

Threshold 4.7c: 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?

The geographic context considered for cumulative impacts related to unstable soils is the Project site and nearby cumulative projects, including Cumulative Projects LA1, LA2, LA3, LA13, and SC1. Geotechnical hazards tend to be site-specific because conditions can change over relatively short distances and they tend not to combine to become cumulatively considerable. The Public Works GMED reviews applications for building permits for compliance with the CBC, local amendments to the CBC, and LACBC requirements and projects within the City of Santa Clarita are reviewed by the Building and Safety Division, and these requirements would be applicable to the Project and Cumulative Projects LA1, LA2, LA3, LA13, and SC1. Grading plans would also be reviewed for compliance with state and local standards. Cumulative projects would be designed in accordance with the requirements of the LACBC or City of Santa Clarita Building code requirements based on the CBC, which contains universal standards for site preparation (e.g., fill compaction standards) and grading practices, foundations design, and guidelines for the appropriate foundation design to ensure that improvements are located on stable materials and do not cause underlying materials to become unstable. Additionally, as stated in the Geotechnical Report prepared for the Project, the proposed site grading would not adversely affect the geotechnical conditions on adjacent properties (Appendix E-1), and as such, would not adversely affect Cumulative Projects LA1 through LA14 and SC1 through

SC26. In accordance with the local building code requirements and CBC, each cumulative project would be required to prepare and implement recommendations from a comprehensive Final Geotechnical Engineering Investigation report that would be conducted by a California licensed geotechnical engineer or engineering geologist that further evaluates the soils underlying each site to evaluate the potential for landslides, lateral spreading, subsidence, liquefaction or collapse and provide geotechnical engineering improvements in site preparations and/or foundation design consistent with building code requirements that ensure stability. Therefore, the cumulative impact related to unstable soils would be less than significant and not considered cumulatively considerable.

Threshold 4.7d: Would the project 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?

The geographic context for the cumulative analysis of expansive soils includes nearby cumulative projects, including Cumulative Projects LA1, LA2, LA3, LA13, and SC1. Impacts related to expansive soils tend to be site-specific rather than cumulative in nature, because hazards associated with expansive soils is solely dependent on the expansive properties of project specific underlying materials which can vary significantly over relatively short distances. Regardless, Cumulative Projects LA1, LA2, LA3, LA13, and SC1, occurring within the County or City of Santa Clarita, would be subject to, at a minimum, building code requirements which include minimum standards for expansive properties. As with the Project site, all of the cumulative projects would be subject to the same local, regional, and State regulations pertaining to expansive soil hazards, including CBC and LACBC requirements, which contain universal standards for site preparation (e.g., fill compaction standards) and grading practices, foundations design, and guidelines for the appropriate foundation design to ensure that improvements are not located on expansive soils. With conformance to such regulations and implementation of Project-specific design features required in their respective geotechnical reports, cumulative impacts related to expansive soils would be less than significant and not considered cumulatively considerable.

Threshold 4.7e: 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?

The Project would not include the use of septic or alternative wastewater disposal systems and as a result cannot contribute to a cumulative impact. There would be no cumulative impact related to this criterion.

Threshold 4.7f: Would the project conflict with the Hillside Management Area Ordinance (Los Angeles County Code, Title 22, Chapter 22.104)?

The geographic context for the cumulative analysis of the HMA Ordinance is Los Angeles County. As mentioned above, the HMA Ordinance requires that projects "substantially comply" with the different categories of the guidelines (i.e., Site Planning, Grading and Facilities, Road Circulation, Building Design, and Landscaping). In addition, all projects must comply with "applicable Plans, County policies, the Zoning Code and Subdivision Ordinance, Healthy design standards". In general, projects do not combine with one another to become cumulatively considerable since each project must "substantially comply" with the ordinance and compliance is dependent upon site specific conditions. Cumulative Projects within the County (i.e., Cumulative Projects LA1 through LA14) would be subject to the County's HMA ordinance established within the Zoning Code and would be required to demonstrate that these projects would not conflict the HMA-related goals and policies of the General Plan. Cumulative projects within the City of Santa Clarita (i.e., Cumulative Projects SC1 through SC26) are not within an HMA as designated by the County. As such, the Project in combination with the cumulative projects would not conflict with the HMA Ordinance and the impact would be less than significant and not considered cumulatively considerable.

Threshold 4.7g: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Potential cumulative impacts to paleontological resources would result from projects that combine to create an environment where fossils, exposed on the surface, are vulnerable to destruction by earthmoving equipment, looting by the public, and natural causes such as weathering and erosion. Most impacts to paleontological resources are site-specific and are therefore generally mitigated on a project-by-project basis. Cumulative projects would be required to assess impacts to paleontological resources. Additionally, as needed, projects would incorporate individual mitigation for site-specific geological units present on each individual project site. Furthermore, the Project does not propose construction (including grading/excavation) or design features that could directly or indirectly contribute to an increase in a cumulative impact to paleontological resources, as the mitigation measure provided in this analysis ensures any significant paleontological resources uncovered during Project excavations would be properly analyzed and salvaged by a qualified paleontologist. Therefore, the Project, in combination with the past, present, and reasonably foreseeable future projects in the Project vicinity, would result in less-than-significant cumulative impacts to paleontological resources, and no further mitigation measures are required. Moreover, impacts to paleontological resources would be avoided and/or mitigated with implementation of a paleontological mitigation program during excavations into paleontologically sensitive geological units. Therefore, the Project's incremental contribution to impacts related to paleontological resources would not be cumulatively considerable.

4.7.7 Mitigation Measures

MM-4.7-1 Paleontological Monitoring. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Qualified Paleontologist that meets the standards of the Society for Vertebrate Paleontology (2010). The Principal Investigator/Qualified Paleontologist shall do the following: (1) compose a Paleontological Resource Monitoring and Inadvertent Discovery Plan (Plan); (2) manage paleontological monitoring; and (3) address any inadvertent discoveries identified during Project implementation. These actions are described further below.

1. ***Paleontological Resource Monitoring and Inadvertent Discovery Plan.*** The Principal Investigator/Qualified Paleontologist would compose the Plan to outline paleontological monitoring protocols and a program of treatment and mitigation in the case of an inadvertent discovery of paleontological resources during ground-disturbing activities. The Plan would be informed by the data and findings provided in the paleontological report prepared for the Project (Confidential Paleontological Resources Assessment Report, prepared by Environmental Science Associates, dated November 2021, as included as Appendix E-2 of this Draft Environmental Impact Report), final grading and site plans in order to provide guidance for the proper identification, evaluation, treatment, and protection of any paleontological resources in accordance with California Environmental Quality Act (CEQA) throughout the duration of the Project. Existence and importance of adherence to this Plan shall be stated on all Project site plans intended for use by those conducting the ground disturbing activities.
2. ***Paleontological Monitoring.*** The Principal Investigator/Qualified Paleontologist shall manage paleontological monitoring activities conducted by technicians knowledgeable in paleontological resources during initial ground disturbances within native soils. Initial ground disturbance is defined as initial construction-related earth moving of sediments from their

place of deposition. As it pertains to paleontological monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by Project-related construction. The retained Principal Investigator/Qualified Paleontologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter paleontological resources. The paleontological monitors shall be responsible for maintaining daily monitoring logs. The requirement for paleontological monitoring shall be noted on all construction plans to ensure implementation. Upon completion of all ground disturbing activities, a paleontological monitoring report shall be prepared within 60 days following completion of ground disturbance and submitted to the County of Los Angeles for review. This report shall document compliance with approved paleontological mitigation, all monitoring efforts, and include an appendix with daily monitoring logs.

MM-4.7-2 Workers Environmental Awareness Program (WEAP) Training. Prior to the commencement of ground-disturbing activities for all phases of Project implementation, the Project Applicant shall retain a Principal Investigator/Qualified Paleontologist. The Principal Investigator/Qualified Paleontologist shall prepare a WEAP. The WEAP shall be submitted to the County of Los Angeles for review and approval. All construction personnel and monitors shall be presented the WEAP training prior to the start of ground-disturbing activities. This training shall inform all personnel working on the Project site about the paleontological sensitivity of the area. The purpose of the WEAP training is to provide specific details on the kinds of paleontological materials that may be identified during construction of the Project and explain the importance of and legal basis for the protection of significant paleontological resources. Each worker should also be instructed on the proper procedures to follow in the event that paleontological resources are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the Principal Investigator/Qualified Paleontologist, if appropriate. Necessity of training attendance shall be stated on all Project site plans intended for use by those conducting the ground-disturbing activities.

4.7.8 Level of Significance After Mitigation

The Project would have a less than significant impact regarding directly or indirectly causing potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides.

The Project would have a less than significant impact regarding substantial soil erosion or the loss of topsoil.

There would be less than significant impacts with regard to potential for on-or off-site landslide, lateral spreading, subsidence, liquefaction, regarding the Project's location on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project.

The Project would result in less than significant impact impacts regarding expansive soils and the potential to create substantial direct or indirect risks to life or property.

There would be no impact regarding Project 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.

The Project would result in less than significant impacts regarding potential to conflict with the HMA ordinance.

Project implementation would result in less than significant impacts with mitigation regarding the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

4.7.9 References

CGS (California Geologic Survey). 2002a. "California Geomorphic Provinces." CGS Note 36.

CGS. 2002b. "How Earthquakes Are Measured." CGS Note 32.

CGS. 2018. "Earthquake Fault Zones." Special Publication 42. Revised 2018.

CGS. 2022. "Earthquake Zones of Required Investigation." Accessed April 22, 2022. https://maps.conservation.ca.gov/cgs/EQZApp/app/.

Cohen, K.M., S.C. Finney, P.L. Gibbard, and J.-X. Fan. 2023. "The ICS International Chronostratigraphic Chart." *Episodes* 36: 199–204. Updated 2013. https://stratigraphy.org/ICSchart/ChronostratChart2022-02.pdf.

County of Los Angeles. 2015. *Los Angeles County General Plan 2035*. Department of Regional Planning. Adopted October 6, 2015. Accessed August 2022. https://planning.lacounty.gov/generalplan/generalplan.

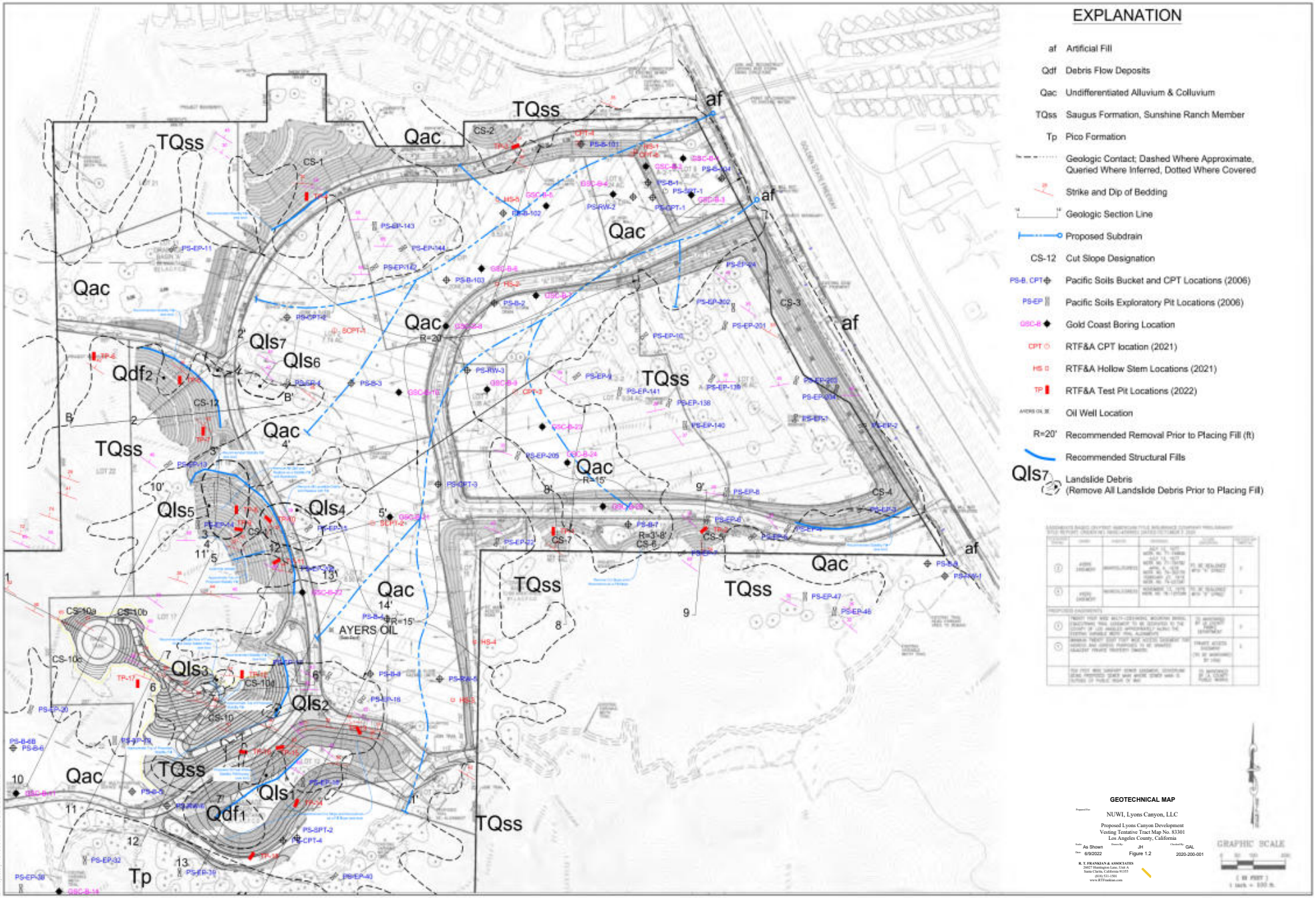
County of Los Angeles. 2022. *Los Angeles County Code*. Last accessed August 26, 2022. https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances?nodeId=LOS_ANGELES_CO_CODE.

Dibblee, T.W., and H. E. Ehrenspeck, ed. 1992. "Geologic map of the Oat Mountain and Canoga Park (north 1/2) quadrangles, Los Angeles County, California." Dibblee Geological Foundation Map DF-36, scale 1:24,000.

Public Works. (Los Angeles County Department of Public Works). 2013. *County of Los Angeles Department of Public Works—Manual for Preparation of Geotechnical Reports*. Revised July 1, 2013. Last accessed August 26, 2022. https://dpw.lacounty.gov/gmed/Manual.pdf.

SVP (Society of Vertebrate Paleontology). 2010. "Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources." 11 p. https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf.

USGS (United States Geological Survey). 2022. "Earthquake Hazards Program, Northridge Earthquake, M 6.7 - 1km NNW of Reseda, CA." Accessed September 8, 2022. https://earthquake.usgs.gov/earthquakes/eventpage/ci3144585/impact.



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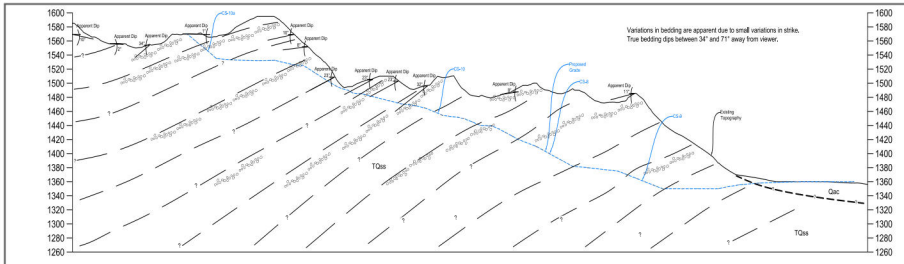
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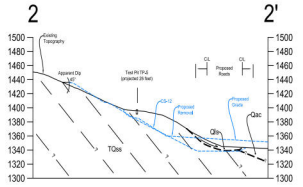
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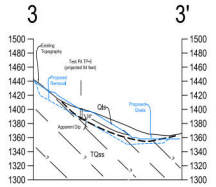
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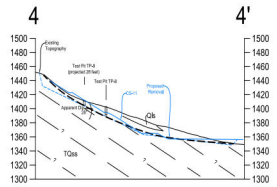
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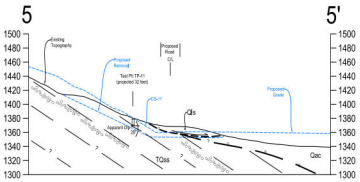
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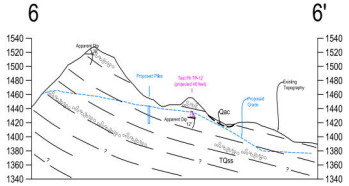


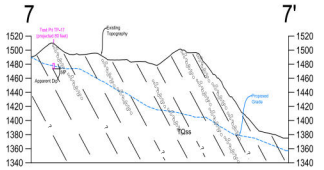


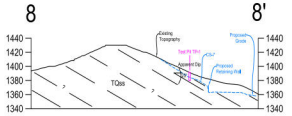


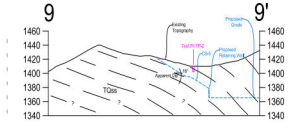


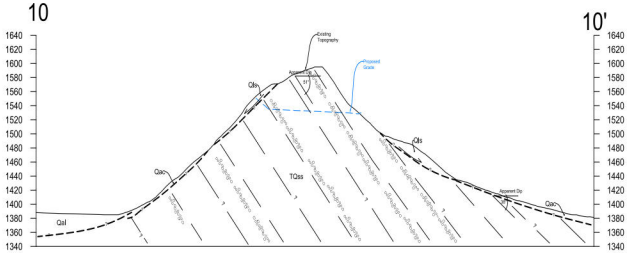


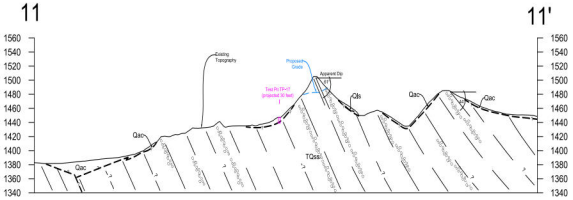


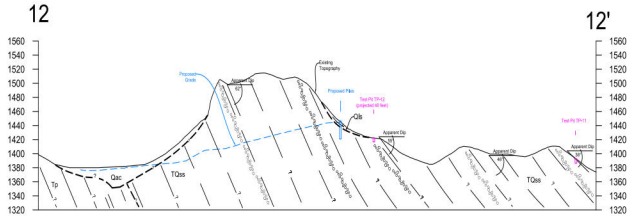


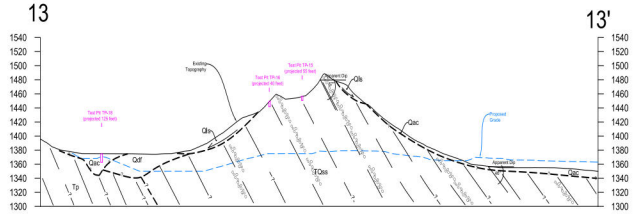


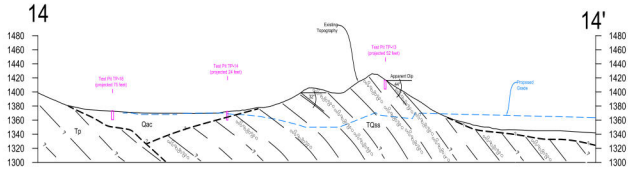


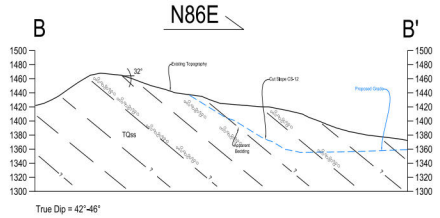












EXPLANATION

af	Artificial Fill
Qls	Landslide Debris
Qdf	Debris Flow Deposit
Qac	Undifferentiated Alluvium & Colluvium
TQss	Saugus Formation, Sunshine Ranch Member
TP	Pico Formation



Geologic Contacts
Dashed where Approximate
Queried where Inferred
Dotted where Covered

Proposed Grades

Conglomerate and Debris Flow

Source: RTF&A 2022

DUDEK

GEOLOGIC SECTIONS

Prepared For: NUWI, Lyons Canyon, LLC

Proposed Lyons Canyon Development
Vesting Tentative Tract Map No. 82394
Los Angeles County, California

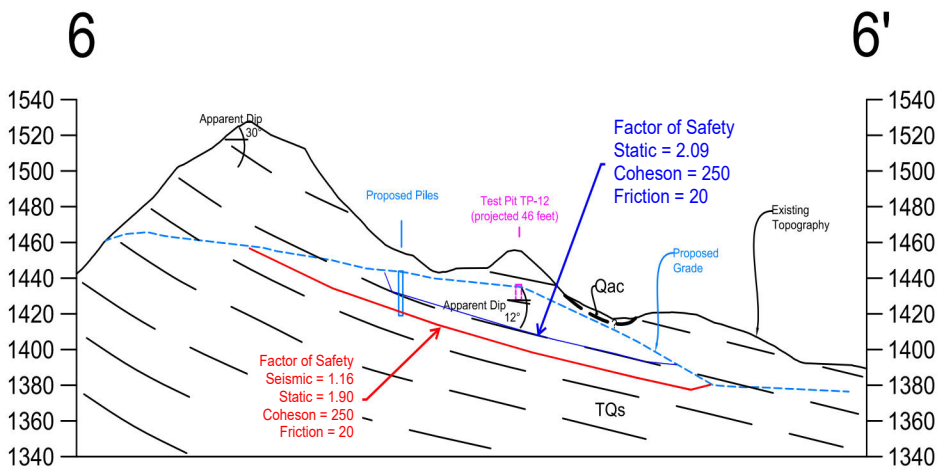
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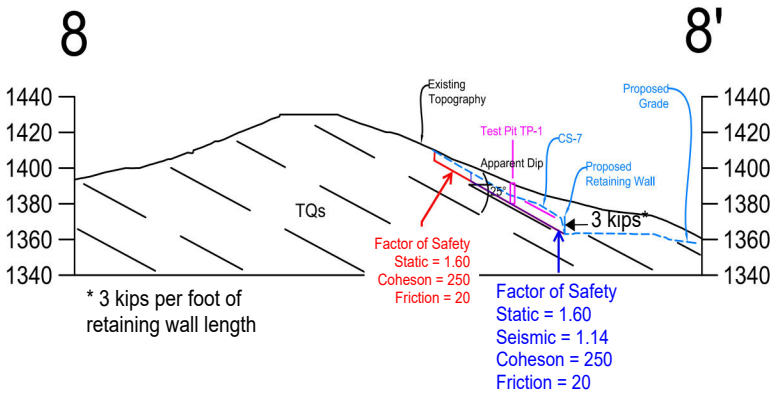
R. T. FRANKIAN & ASSOCIATES
26027 Huntington Lane, Unit A
Santa Clarita, California 91355
(818) 551-1501
www.RTFrankian.com

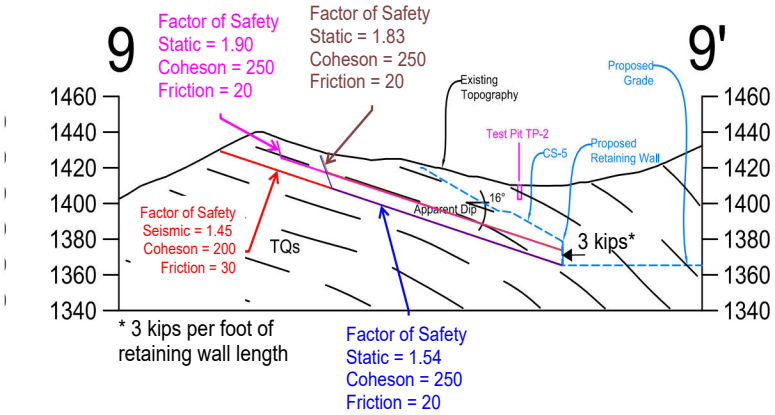
FIGURE 4.7-2
Geologic Cross Sections
Trails at Lyons Canyon Project

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Prepared For:

NUWI, Lyons Ca

Proposed Lyons Canyo
Vesting Tentative Tract
Los Angeles Count

Scale: 1"=100'

Drawn By: JH

Date: 6/9/2022

Figure 3

R. T. FRANKIAN & ASSOCIATES
26027 Huntington Lane, Unit A
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Source: RTF&A 2022

FIGURE 4.7-3

Geologic Cross Sections

Trails at Lyons Canyon Project

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4.8 Greenhouse Gas Emissions

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to greenhouse gas (GHG) emissions, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts analysis, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data and reports from the California Air Resources Board (CARB), U.S. Environmental Protection Agency (EPA), Intergovernmental Panel on Climate Change (IPCC), South Coast Air Quality Management District (SCAQMD), as well as the following:

Appendix B-1 Air Quality and Greenhouse Gas Emission Calculations, prepared by Dudek, dated November 2023

Appendix B-3 Trails at Lyons Canyon Greenhouse Gas Emissions Mitigation Comparison to CAPCOA GHG Reduction Measures Memorandum, prepared by Dudek, dated November 2023

Appendix J Draft Transportation Impact Analysis prepared for the Lyons Canyon Residential Project, prepared by Fehr and Peers, dated November 2023

Other sources consulted are listed in Section 4.8.9, References.

4.8.1 Existing Conditions

This section discusses the existing environmental setting relative to GHG emissions. For purposes of existing conditions for GHG emissions, it considers the scientific basis of GHG emissions and climate change with a global consideration.

Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017a).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations.

Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-twentieth century and are the most significant driver of observed climate change (IPCC 2014; EPA 2017a). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2014). The global atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2014). Continued emissions of GHGs will cause further warming and changes in all components of the climate system on a global level, which is discussed further in the subsequent section titled "Potential Effects of Climate Change."

Greenhouse Gases

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g), for purposes of administering many of the State's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (see also 14 CCR 15364.5).[1] Some GHGs, such as CO_2, CH_4, and N_2O, are emitted into the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs have a much greater heat-absorption potential than CO_2 and include fluorinated gases, such as HFCs, PFCs, and SF_6, which are associated with certain industrial products and processes. The following paragraphs provide a summary of the most common GHGs and their sources.[2]

Carbon Dioxide. CO_2 is a naturally occurring gas and a by-product of human activities; it is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungi; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 are the combustion of fuels such as coal, oil, natural gas, and wood, and changes in land use.

Methane. CH_4 is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using N_2O as a propellant (such as in rockets, racecars, and aerosol sprays).

1 Climate-forcing substances include GHGs and other substances, such as black carbon and aerosols. This discussion focuses on the seven GHGs identified in California Health and Safety Code Section 38505.

2 The descriptions of GHGs are summarized from the IPCC Fourth Assessment Report (2007), CARB's "Glossary of Terms Used in GHG Inventories" (2018a), and EPA's "Climate Change" (2016).

Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2016). The IPCC developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons of CO_2 equivalent (MT CO_2e).

The current version of California Emissions Estimator Model (CalEEMod) (version 2020.4.0) assumes that the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2) (CAPCOA 2023), and the GWP for N_2O is 298, based on the IPCC Fourth Assessment Report (CAPCOA 2023; IPCC 2007). The GWP values identified in CalEEMod were applied to the Project.

Sources of Greenhouse Gas Emissions

Per the EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2019 (EPA 2021), total United States GHG emissions were approximately 6,558.3 million metric tons (MMT) CO_2e in 2019 (EPA 2021). The primary GHG emitted by human activities in the United States was CO_2, which represented approximately 80.1% of total GHG emissions (5,255.8 MMT CO_2e). The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 92.4% of CO_2 emissions in 2019 (4,856.7 MMT CO_2e). Relative to 1990, gross United States GHG emissions in 2019 were 1.8% higher; however, the gross emissions were down from a high of 15.6% above 1990 levels in 2007. GHG emissions decreased from 2018 to 2019 by 1.7% (113.1 MMT CO_2e) and overall, net emissions in 2019 were 13% below 2005 levels (EPA 2021).

According to California's 2000–2019 GHG emissions inventory (2021 edition), California emitted 418 MMT CO_2e in 2019, including emissions resulting from out-of-state electrical generation (CARB 2021a). The 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 California GHG emission source categories and their relative contributions in 2019 are presented in Table 4.8-1, Greenhouse Gas Emissions Sources in California.

Table 4.8-1. Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total[a]
Transportation	166.1	39.7%
Industrial	88.2	21.1%
Electric power	58.8	14.1%
Commercial and Residential	43.8	10.5%
Agriculture	31.8	7.6%
High global-warming potential substances	20.6	4.9%
Recycling and waste	8.9	2.1%

Table 4.8-1. Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total[a]
Total	**418.2**	**100%**

Source: CARB 2021a.
Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent.
Emissions reflect the 2018 California GHG inventory.
[a] Percentage of total has been rounded, and total may not sum due to rounding.

Between 2000 and 2019, per-capita GHG emissions in California have dropped from a peak of 14.0 MT CO_2e per person in 2001 to 10.5 MT CO_2e per person in 2019, representing an approximate 25% decrease. In addition, total GHG emissions in 2019 were approximately 7 MMT CO_2e lower than 2018 emissions (CARB 2021a).

Local Inventory

Table 4.8-2, Existing Unincorporated Areas GHG Emissions Inventory (2015 and 2018), identifies the existing GHG emissions inventory of the unincorporated areas of Los Angeles County for 2015 and 2018 as evaluated in the County's 2045 Climate Action Plan (CAP), discussed further in Section 4.8.2, Regulatory Requirements, below. The inventory is based on existing land uses in the unincorporated areas of the County. GHG emissions generated within the unincorporated areas were estimated using CARB's EMission FACtor (EMFAC) 2021 for on-road transportation emissions and data compiled for the County's 2045 CAP for all other sectors (County of Los Angeles 2024).

Table 4.8-2. Existing Unincorporated Areas GHG Emissions Inventory (2015 and 2018)

Source Category	2015 Annual GHG Emissions (MT CO_2e)	Percent of Total	2018 Annual GHG Emissions (MT CO_2e)	Percent of Total
Transportation	2,838,133	51%	2,704,685	53%
Stationary Energy	1,908,637	35%	1,698,809	33%
Waste	469,997	9%	469,382	9%
Industrial Processes	253,529	5%	239,505	5%
Agriculture and Forestry	60,860	1%	60,860	1%
Total	**5,531,155**	**100%**	**5,137,240**	**100%**

Source: County of Los Angeles 2024.

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 *Intergovernmental Panel on Climate Change Synthesis Report* indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, rising sea levels, and ocean acidification (IPCC 2014).

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, frequency of severe weather events, and electricity demand and supply.

The primary effect of global climate change has been a rise in average global tropospheric temperature. Reflecting the long-term warming trend since pre-industrial times, observed global mean surface temperature for the decade 2006–2015 was 0.87°C (likely between 0.75°C and 0.99°C) higher than the average over the 1850–1900 period (IPCC 2018). Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. Human activities are estimated to have caused approximately 1.0°C (1.8 degrees Fahrenheit (°F)) of global warming above pre-industrial levels, with a likely range of 0.8°C to 1.2°C (1.4°F to 2.2°F) (IPCC 2018). Global warming is likely to reach 1.5°C (2.7°F) between 2030 and 2052 if it continues to increase at the current rate (IPCC 2018).

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The Office of Environmental Health Hazard Assessment identified various indicators of climate change in California, which are scientifically-based measurements that track trends in various aspects of climate change. Many indicators reveal discernable evidence that climate change is occurring in California and is having significant, measurable impacts in the State. Changes in the State's climate have been observed including an increase in annual average air temperature with record warmth from 2012 to 2016, more frequent extreme heat events, more extreme drought, a decline in winter chill, an increase in cooling degree days and a decrease in heating degree days, and an increase in variability of Statewide precipitation (OEHHA 2018).

Warming temperatures and changing precipitation patterns have altered California's physical systems – the ocean, lakes, rivers and snowpack – upon which the State depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the State's annual water supply. Impacts of climate on physical systems have been observed such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in snowmelt runoff, glacier change (loss in area), rise in sea levels, increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters (OEHHA 2018).

Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed including climate change impacts on terrestrial, marine, and freshwater ecosystems. As with global observations, species responses include those consistent with warming: elevational or latitudinal shifts in range, changes in the timing of key plant and animal life cycle events, and changes in the abundance of species and in community composition. Humans are better able to adapt to a changing climate than plants and animals in natural ecosystems. Nevertheless, climate change poses a threat to public health as warming temperatures and changes in precipitation can affect vector-borne pathogen transmission and disease patterns in California as well as the variability of heat-related deaths and illnesses. In addition, since 1950, the area burned by wildfires each year has been increasing.

The California Natural Resources Agency (CNRA) has released four California Climate Change Assessments (2006, 2009, 2012, and 2018), which have addressed the following: acceleration of warming across the State, more intense and frequent heat waves, greater riverine flows, accelerating sea level rise, more intense and frequent drought, more severe and frequent wildfires, more severe storms and extreme weather events, shrinking snowpack and less overall precipitation, and ocean acidification, hypoxia, and warming. To address local and regional governments need for information to support action in their communities, the Fourth Assessment (2018) includes

reports for nine regions of the State, including the Los Angeles Region, where the Project is located. Key projected climate changes for the Los Angeles Region include the following (CNRA 2018):

- Continued future warming over the Los Angeles region. Across the region, average maximum temperatures are projected to increase around 4°F to 5°F by the mid-century, and 5°F to 8°F by the late century.
- Extreme temperatures are also expected to increase. The hottest day of the year may be up to 10°F warmer for many locations across the Los Angeles region by the late century under certain model scenarios. The number of extremely hot days is also expected to increase across the region.
- Despite small changes in average precipitation, dry and wet extremes are both expected to increase. By the late 21st century, the wettest day of the year is expected to increase across most of the Los Angeles region, with some locations experiencing 25% to 30% increases under certain model scenarios. Increased frequency and severity of atmospheric river events are also projected to occur for this region.
- Sea levels are projected to continue to rise in the future, but there is a large range based on emissions scenario and uncertainty in feedbacks in the climate system. Roughly one feet to two feet of sea level rise is projected by the midcentury, and the most extreme projections lead to eight feet to 10 feet of sea level rise by the end of the century.
- Projections indicate that wildfire may increase over southern California, but there remains uncertainty in quantifying future changes of burned area over the Los Angeles region.

4.8.2 Regulatory Requirements

Federal

West Virginia et al v. U.S. Environmental Protection Agency

On June 30, 2022, the Supreme Court issued its opinion in West Virginia v. U.S. Environmental Protection Agency, invalidating the 2015 Obama-era Clean Power Plan (CPP). *The ruling held that Section 111(d) of the Clean Air Act does not authorize EPA to devise emissions caps based on "generation shifting"—the approach EPA took in the CPP wherein power plants would be required to transition from higher-emitting (e.g., coal) to lower-emitting (e.g., natural-gas) to then even lower-emitting (e.g., wind and solar) electricity production.* The Obama administration promulgated the CPP to establish limits on CO_2 emissions from power plants, creating a scheme geared toward shifting the generation of electricity from steam-generating units to natural gas-fired units, and from fossil-fuel fired units to renewable energy sources. The Supreme Court's ruling will constrain EPA's ability to regulate carbon emissions from the power sector by agency rulemaking, and the Court's assertion of the major questions doctrine will have a lasting impact on the administrative state.

Massachusetts v. U.S. Environmental Protection Agency

On April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency*, the U.S. Supreme Court ruled that CO_2 was a pollutant and directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA administrator

is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The elevated concentrations of GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The combined emissions of GHGs—CO_2, CH_4, N_2O, and hydrofluorocarbons—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act

On December 19, 2007, President George W. Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the act would do the following to aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel by 2022.
2. Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

EPA and National Highway Traffic Safety Administration Joint Final Rule for Vehicle standards

In response to the U.S. Supreme Court ruling discussed above, the Bush Administration issued Executive Order (EO) 13432 in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016 (75 FR 25324–25728).

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021 (77 FR 62624–63200). On January 12, 2017, EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks (EPA 2017b).

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

In August 2018, EPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards now in place, the 2018 proposal would increase U.S. fuel consumption by about half a million barrels per day (2%–3% of total daily consumption, according to the Energy Information Administration) and would impact the global climate by 3/1000th of one degree Celsius by 2100 (EPA and NHTSA 2018). California and other states have challenged the federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives. Thus, the timing and consequences of the 2018 federal proposal are speculative at this time.

In 2019, the EPA and NHTSA published the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program (SAFE-1) (84 Fed. Reg. 51310), which revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle (ZEV) mandates in California. In March 2020, Part Two was issued which set CO_2 emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. In March 2022, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and ZEV sales mandate. EPA's action concludes its reconsideration of the 2019 SAFE-1 rule by finding that the actions taken under the previous administration as a part of SAFE-1 were decided in error and are now entirely rescinded. No adjustments in CalEEMod were made related to the SAFE rule.

The Inflation Reduction Act of 2022

The Inflation Reduction Act was signed into law by President Biden in August 2022. The bill includes specific investment in energy and climate reform and is projected to reduce GHG emissions within the U.S. by 40 percent as compared to 2005 levels by 2030. The bill allocates funds to boost renewable energy infrastructure (e.g., solar panels and wind turbines), includes tax credits for the purchase of electric vehicles, and includes measures that will make homes more energy efficient.

State

The Statewide GHG emissions regulatory framework is summarized as follows by category: State climate change targets, building energy, renewable energy and energy procurement, mobile sources, solid waste, water, and other State regulations and goals. The following text describes EOs, assembly bills (ABs), senate bills (SBs), and other regulations and plans that would directly or indirectly reduce GHG emissions. The State's adoption and implementation of various legislation demonstrates California's leadership in addressing the critical challenge of addressing climate change. Of importance, the Project and/or users of the Project would be required to comply with the various regulatory measures that would reduce GHG emissions, which would reduce the Project's contribution to cumulative GHG emissions and associated climate change impacts.

State Climate Change Targets

The State has taken a number of actions to address climate change. These include EOs, legislation, and CARB plans and requirements. These are summarized as follows.

EO S-3-05

EO S-3-05 (June 2005) established California's GHG emissions reduction targets and laid out responsibilities among the State agencies for implementing the EO and for reporting on progress toward the targets. This EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80% below 1990 levels

AB 32

In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32 (Núñez and Pavley). The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the State's long-range climate objectives.

SB 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that Statewide GHG emissions are reduced to 40% below 1990 levels by 2030.

CARB's Climate Change Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a "scoping plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health and Safety Code, Section 38561(a)), and to update the plan at least once every 5 years. In 2008, CARB approved the first scoping plan. The *Climate Change Scoping Plan: A Framework for Change* (*Scoping Plan*) included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 Statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives.

In 2014, CARB approved the first update to the Scoping Plan. The *First Update to the Climate Change Scoping Plan: Building on the Framework* (*First Update)* defined the State's GHG emission reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EOs S-3-05 and B-16-2012 (discussed below). The *First Update* concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuum of action to reduce emissions (CARB 2014).

In 2015, as directed by EO B-30-15, CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050 as set forth in S-3-05.

In December 2017, CARB adopted the *2017 Climate Change Scoping Plan Update (2030 Scoping Plan)* (CARB 2017). The 2030 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target and define the State's climate change priorities to 2030 and beyond.

The 2030 Scoping Plan recommends strategies for implementation at the Statewide level to meet the goals of AB 32, SB 32, and the Eos and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. A project is considered consistent with the statutes and Eos if it meets the general policies in reducing GHG emissions to facilitate the achievement of the State's goals and does not impede attainment of those goals. As discussed in several cases, a given project need not be in perfect conformity with each and every planning policy or goals to be consistent. A project would be consistent, if it will further the objectives and not obstruct their attainment.

CARB's 2022 Scoping Plan Update.

The Proposed Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) was issued on November 16, 2022 (CARB 2022a). The 2022 Scoping Plan lays out a path not just to carbon neutrality by 2045 but also to the 2030 GHG emissions reduction target. The modeling indicates that, if the plan described in the Proposed Scenario is fully implemented, and done so on schedule, the State would cut GHG emissions by 85% below 1990 levels, result in a 71% reduction in smog-forming air pollution, reduce fossil fuel consumption by 94%, create 4 million new jobs, among other benefits (CARB 2022a).

The 2022 Scoping Plan details "Local Actions" in Appendix D. The 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 CEQA. The recommendations provided in Appendix D are non-binding and should not be interpreted as a directive to local governments, but rather as evidence-based analytical tools to assist local governments with their role as essential partners in achieving California's climate goals.[3] Appendix D recognizes consistency with a CEQA-qualified GHG reduction plan such as a Climate Action Plan as a preferred option for evaluating potential GHG emission impacts under CEQA. Absent a qualified GHG reduction plan, Appendix D provides recommendations for key attributes that residential and mixed-use projects should achieve that would align with the State's climate goals including EV charging infrastructure, infill location, no loss or conversion of natural and working lands, transit-supportive densities or proximity to transit stops, reducing parking requirements, provision of affordable housing (20% of units), and all-electric appliances with no natural gas connection (CARB 2022b). Projects that achieve all key attributes are considered clearly consistent with the State's climate and housing goals and would have a less-than-significant GHG impact under CEQA (CARB 2022b). However, projects that do not achieve all attributes are not considered to result in a potentially significant GHG emission impact. Additional potential threshold options identified when a CEQA-qualified GHG reduction plan is not available included a net-zero threshold and use of air district recommended thresholds of significance. However, per the CARB Scoping Plan, although net zero targets can often be valuable and achievable,

[3] The threshold approaches outlined in the 2022 Scoping Plan, Appendix D, are recommendations only and are not requirements; they do not supplant lead agencies' discretion to develop their own evidence-based approaches for determining whether a project would have a potentially significant impact on GHG emissions (CARB 2022b).

targets should be considered in the larger context of these goals, and any GHG targets on a local scale should take into consideration the actions and outcomes included in this Scoping Plan (CARB 2022a). The CARB Scoping Plan states that jurisdictions considering "net zero" targets should carefully consider the implications such targets may have on emissions in neighboring communities and the ability of the state to meet collective targets (CARB 2022a).

EO B-55-18

EO B-55-18 (September 2018) establishes a Statewide policy for California to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing Statewide targets of reducing the State's GHG emissions. CARB will work with relevant State agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Assembly Bill 1279

The Legislature enacted AB 1279, the California Climate Crisis Act, in September 2022. The bill declares the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter. Additionally, the bill requires that by 2045, statewide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels.

Assembly Bill 1757

AB 1757 (September 2022) requires the CNRA to determine a range of targets for natural carbon sequestration, and for nature-based climate solutions that reduce GHG emissions for future years 2030, 2038, and 2045. These targets are to be determined by no later than January 1, 2024, and are established to support the state's goals to achieve carbon neutrality and foster climate adaptation and resilience.

Senate Bill 1020

SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers come from eligible renewable energy resources and zero-carbon resources: 90% by December 31, 2035; 95% by December 31, 2040; and 100% by December 31, 2045

Building Energy

Title 24, Part 6

Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code, Section 25402(d)) and cost effectiveness (California Public Resources Code, Sections 25402(b)(2) and (b)(3)). As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The Title 24 standards that CalEEMod incorporates are the 2019 Title 24 Building Energy Efficiency Standards, which became effective January 1, 2020. In general, single-family residences built to the 2019 standards are

anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards will use approximately 53% less energy than those under the 2016 standards (CEC 2018a). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018a).

On August 11, 2021, the CEC adopted the 2022 Building Energy Efficiency Standards (Energy Code). In December 2021, the 2022 Energy Code was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code. Under the 2022 amendments, California buildings would consume approximately 198,600 GWh of electricity and 6.14 billion therms of fossil fuel natural gas in 2023 compared to approximately 199,500 GWh and 6.17 billion therms of electricity and fossil fuel natural gas, respectively, under the 2019 Energy Code (CEC 2021). On a statewide basis throughout 2023, all measures for newly constructed buildings and altered components of existing buildings collectively would save approximately 33 million therms of fossil fuel natural gas and 1.3 billion kWh of electricity (CEC 2021).

Title 24, Part 11

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The 2019 CALGreen standards are the current applicable standards. For nonresidential projects (which the nonresidential portion of the Project is subject to), some of the key mandatory CALGreen 2019 standards involve requirements related to bicycle parking, designated parking for clean air vehicles, electric vehicle (EV) charging stations, shade trees, water conserving plumbing fixtures and fittings, outdoor potable water use in landscaped areas, recycled water supply systems, construction waste management, excavated soil and land clearing debris, and commissioning (24 CCR Part 11).

Title 20

Title 20 of the California Code of Regulations requires manufacturers of appliances to meet State and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards.

Renewable Energy and Energy Procurement

SB 1078, EO-14-08, SBX1-2, SB 350, and SB 100

SB 1078 (Sher) (September 2002) established the Renewable Portfolio Standard (RPS) program, which required an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. EO S-14-08 (November 2008) required that all retail suppliers of electricity in California serve 33% of their load with renewable energy by 2020. SB X1 2 expanded the RPS by establishing a renewable energy target of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. SB 350 (October 2015) further expanded the RPS by establishing

a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. SB 100 (2018) increased the standards set forth in SB 350 establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the State that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. On April 30, 2022 California supplied 100% of its statewide demand with renewables at 2:45 pm (Electrek 2022).

Mobile Sources

State Vehicle Standards (AB 1493 and EO B-16-12)

AB 1493 (July 2002) was enacted in a response to the transportation sector accounting for more than half of California's CO_2 emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the State board to be vehicles that are primarily used for noncommercial personal transportation in the State. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. EO B-16-12 (March 2012) required that State entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. It ordered CARB, CEC, California Public Utilities Commission, and other relevant agencies to work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve benchmark goals by 2015, 2020, and 2025. On a Statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050. This directive did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

Heavy Duty Diesel (Title 13, Division 3, Chapter 1, Section 2025)

CARB adopted the final Heavy Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025, on December 31, 2014, to reduce particulate matter and NO_x emissions from heavy-duty diesel vehicles. The rule requires particulate matter filters be applied to newer heavier trucks and buses by January 1, 2012, with older vehicles required to comply by January 1, 2015. The rule will require nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an Airborne Toxic Control Measure to limit idling of diesel-fueled commercial vehicles on December 12, 2013. This rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than 5 minutes at any location (13 CCR 2485).

ES S-1-07

EO S-1-07 (January 2007, implementing regulation adopted in April 2009) sets a declining low carbon fuel standard (LCFS) for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The initial target of the LCFS was to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020 (17 CCR 95480 et seq.). In September 2018, CARB approved amendments for the LCFS that require a 20% reduction in carbon intensity by year 2030.

SB 375

SB 375 (Steinberg) (September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035 and to update those targets every 8 years. SB 375 requires the State's 18 regional metropolitan planning organizations (MPOs) to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP) that will achieve the GHG reduction targets set by CARB.

Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars (ACC) I program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle (LEV) regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for zero-emission vehicles (ZEV) that contributes to both types of emission reductions (CARB 2021b). The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75 percent less smog-forming pollution than the average new car sold in 2015 (CARB 2021b). The ZEV program will act as the focused technology of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

The ACC II program is currently in development to establish the next set of LEV and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality standards (CARB 2021b). The main objectives of ACC II are:

1. Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.
2. Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.

An ACC II rulemaking package, which will consider technological feasibility, environmental impacts, equity, economic impacts, and consumer impacts, was adopted by CARB for on November 30, 2022.

AB 1236

AB 1236 (October 2015) required a city, county, or city and county to approve an application for the installation of EV charging stations, as defined, through the issuance of specified permits, unless the city or county makes specified written findings based upon substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The bill provided for appeal of that decision to the planning commission, as specified. The bill provided that the implementation of consistent Statewide standards to achieve the timely and cost-effective installation of EV charging stations is a matter of Statewide concern. The bill required EV charging stations to meet specified standards.

EO-79-20

EO N-79-20 (September 2020) requires CARB to develop regulations as follows: (1) Passenger vehicle and truck regulations requiring increasing volumes of new ZEVs sold in the State towards the target of 100% of in-State sales

by 2035; (2) medium- and heavy-duty vehicle regulations requiring increasing volumes of new zero-emission trucks and buses sold and operated in the State towards the target of 100% of the fleet transitioning to zero-emission vehicles by 2045 everywhere feasible and for all drayage trucks to be zero emission by 2035; and (3) strategies, in coordination with other State agencies, the EPA and local air districts, to achieve 100% zero-emissions from off-road vehicles and equipment operations in the State by 2035. EO N-79-20 called for the development of a Zero-Emissions Vehicle Market Development Strategy, which was released February 2021, to be updated every 3 years, that ensures coordination and implementation of the EO and outlines actions to support new and used ZEV markets. In addition, the EO specifies identification of near-term actions, and investment strategies, to improve clean transportation, sustainable freight, and transit options; and calls for development of strategies, recommendations, and actions by July 15, 2021, to manage and expedite the responsible closure and remediation of former oil extraction sites as the State transitions to a carbon-neutral economy.

Advanced Clean Trucks (ACT) Regulation

The purpose of the ACT Regulation (June 2020) is to accelerate the market for zero-emission vehicles in the medium- and heavy-duty truck sector and to reduce emissions NO_x, fine particulate matter, TACs, GHGs, and other criteria pollutants generated from on-road mobile sources (CARB 2021c). Requiring medium- and heavy-duty vehicles to transition to zero-emissions technology will help California meet established near- and long-term air quality and climate mitigation targets.

Water

EO B-29-15

In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a Statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the State.

EO B-37-16

Issued May 2016, EO B-37-16 directed the State Water Resources Control Board (SWRCB) to adjust emergency water conservation regulations through the end of January 2017 to reflect differing water supply conditions across the State. The SWRCB also developed a proposal to achieve a mandatory reduction of potable urban water usage that builds off the mandatory 25% reduction called for in EO B-29-15. The SWRCB and Department of Water Resources will develop new, permanent water use targets that build upon the existing State law requirements that the State achieve 20% reduction in urban water usage by 2020. EO B-37-16 also specifies that the SWRCB permanently prohibit water-wasting practices such as hosing off sidewalks, driveways, and other hardscapes; washing automobiles with hoses not equipped with a shut-off nozzle; using non-recirculated water in a fountain or other decorative water feature; watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and irrigating ornamental turf on public street medians.

EO N-10-21

In response to a state of emergency due to severe drought conditions, EO N-10-21 (July 2021) called on all Californians to voluntarily reduce their water use by 15% from their 2020 levels. Actions suggested in EO N-10-21 include reducing landscape irrigation, running dishwashers and washing machines only when full, finding and fixing

leaks, installing water-efficient showerheads, taking shorter showers, using a shut-off nozzle on hoses, and taking cars to commercial car washes that use recycled water.

EO N-7-22

On March 28, 2022, Governor Newsom directed the State Water Board to consider adopting emergency regulations focused on urban water suppliers under EO N-7-22. If adopted, the potential regulations would require the vast majority of urban water suppliers to enact Level 2 of their water shortage contingency plans. Those plans are developed by the suppliers and provide actions they will take if their water supplies are cut to certain levels. Here, Level 2 would represent the suppliers acting as if their water supply had been reduced by 20%. The executive order also directs the State Water Board to consider adopting emergency regulations defining "non-functional turf" by May 25, 2022. Both the executive order and corresponding press release confirm that the definition should only apply to ornamental turf that is not functional, excluding turf such as school fields, sports fields and parks from the definition. If the definition is adopted, the State Water Board must then consider banning irrigation of the non-functional turf in the commercial, industrial and institutional sectors (with limited exceptions). The proposed ban is anticipated to save several hundred thousand acre-feet of water per year.

Solid Waste

AB 939, AB 341, AB 1826, and SB 1383

In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code, Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000. AB 341 (Chapter 476, Statutes of 2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the State that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. AB 1826 (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. SB 1383 (Chapter 395, Statutes of 2016) establishes targets to achieve a 50% reduction in the level of the Statewide disposal of organic waste from the 2014 level by 2020 and a 75% reduction by 2025. CalRecycle was granted the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20% of currently disposed edible food is recovered for human consumption by 2025 (CalRecycle 2019).

Local

South Coast Air Quality Management District

The Project site is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Air districts typically act in an advisory capacity to local governments in establishing the framework for environmental review of air pollution impacts under CEQA. This may include recommendations regarding significance thresholds, analytical tools to estimate emissions and assess impacts, and mitigations for potentially significant impacts. Although air districts will also address some of these issues on a project-specific basis as responsible agencies, they may provide general guidance to local governments on these issues (SCAQMD 2008). As discussed in Section 4.8.4, Methodology, below, the SCAQMD has recommended numeric CEQA significance thresholds for GHG emissions for

lead agencies to use in assessing GHG impacts of residential and commercial development projects; however, these thresholds have not been adopted by the SCAQMD Board of Directors.

Southern California Association of Governments

As noted above, California's 18 MPOs have been tasked with creating SCSs in an effort to reduce the region's vehicle miles traveled (VMT) in order to help meet AB 32 targets through integrated transportation, land use, housing, and environmental planning. Pursuant to SB 375, CARB set per-capita GHG emissions reduction targets from passenger vehicles for each of the State's 18 MPOs. For the Southern California Association of Governments (SCAG), the State's initial mandated reductions were set at 8% by 2020 and 13% by 2035. In March 2018, CARB updated the SB 375 targets for SCAG to require 8% reduction by 2020 and a 19% reduction by 2035 in per-capita passenger vehicle GHG emissions (CARB 2018b).

Pursuant to Government Code Section 65080(b)(2)(B), the SCS must "set forth forecasted development pattern for the region which when integrated with the transportation network, and other transportation measures and policies, will reduce the GHG emissions from automobiles and light trucks to achieve the GHG reduction targets." To that end, SCAG has developed Connect SoCal, the 2020–2045 RTP/SCS, which complies with CARB's updated emissions reduction targets and meets the requirements of SB 375 by achieving per-capita GHG emissions reductions relative to 2005 of 8% by 2020 and 19% by 2035 (SCAG 2020a). In addition, the plan anticipates a 25.7% decrease in time spent in traffic delay per capita and a 5% decrease in daily miles driven per capita from 2016 to 2045. The 2020–2045 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals, and charts a path toward a more mobile, sustainable and prosperous region by making connections between transportation networks, between planning strategies, and between the people whose collaboration can improve the quality of life for southern Californians. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The following are the 2020-2045 RTP/SCS goals (SCAG 2020a):

1. Encourage regional economic prosperity and global competitiveness;
2. Improve mobility, accessibility, reliability, and travel safety for people and goods;
3. Enhance the preservation, security, and resilience of the regional transportation system;
4. Increase person and goods movement and travel choices within the transportation system;
5. Reduce GHG emissions and improve air quality;
6. Support healthy and equitable communities;
7. Adapt to a changing climate and support an integrated regional development pattern and transportation network;
8. Leverage new transportation technologies and data-driven solutions that result in more efficient travel;
9. Encourage development of diverse housing types in areas that are supported by multiple transportation options;
10. Promote conservation of natural and agricultural lands and restoration of habitats.

On September 3, 2020, the Regional Council approved the 2020–2045 RTP/SCS in its entirety (SCAG 2020a).

OurCounty Sustainability Plan

OurCounty is a regional sustainability plan for the County, which focuses on enhancing the well-being of every community in the County while reducing damage to the natural environment and adapting to the changing climate. The plan envisions streets and parks that are accessible, safe, and welcoming to everyone; air, water, and soil that are clean and

healthy; affordable housing that enables all residents to thrive in place; and an economy that runs on renewable energy instead of fossil fuels. The plan consists of 12 goals with the GHG-relevant goals listed below (County of Los Angeles 2019):

Goal 1. Resilient and healthy community environments where residents thrive in place. The County will protect low-income communities and communities of color from pollution, reduce health and economic inequalities and support more resilient and inclusive communities.

Goal 2. Buildings and infrastructure that support human health and resilience. The buildings and infrastructure of both yesterday and tomorrow will utilize more efficient technologies and practices that reduce resource use, improve health, and increase resilience.

Goal 3. Equitable and sustainable land use and development without displacement. With policy tools such as anti-displacement measures, existing community members can remain in and strengthen their neighborhoods and networks while accepting new residents through more compact, mixed-use development.

Goal 4. A prosperous Los Angeles County that provides opportunities for all residents and businesses and supports the transition to a green economy. We will support the growth of green economy sectors through our procurement practices, land use authority, and various economic and workforce development incentives.

Goal 5. Thriving ecosystems, habitats, and biodiversity. The region's ecosystems, habitats, and biodiversity are under stress from urbanization and climate change. Careful planning will ensure that our ecosystems, including urban habitats, thrive even as our region becomes increasingly urbanized.

Goal 6. Accessible parks, beaches, recreational waters, public lands, and public spaces that create opportunities for respite, recreation, ecological discovery, and cultural activities. The County will help make parks and public lands more accessible and inclusive and will manage them carefully so that all residents may enjoy their benefits.

Goal 7. A fossil fuel-free LA County. By supporting an efficient transition to a zero-emission energy and transportation system, the County will be a leader in taking action to address the climate crisis.

Los Angeles County Climate Action Plans

The County adopted a Community Climate Action Plan (CCAP) in 2015, as part of the Los Angeles County 2035 General Plan (General Plan), to address the County's local GHG reduction goals for 2020 pursuant to AB 32 for unincorporated Los Angeles County (County). The purpose of the CCAP was to (1) establish a baseline emissions inventory and reduction needed to meet County goals, (2) identify specific actions that would measurably reduce GHG emissions consistent with AB 32, (3) establish a framework for implementing State and local level actions, and (4) provide a mechanism for ongoing tracking and updates to the CCAP. The 2015 CCAP expired in 2020.

The Los Angeles County Board of Supervisors approved the 2045 CAP on June 25, 2024. The 2045 CAP replaces the 2015 CCAP. The 2045 CAP is Los Angeles County's path toward meeting the goals of AB 1279 and achieving carbon neutrality for unincorporated areas of the County. The 2045 CAP is not a regulatory document. Rather, the 2045 CAP provides a policy framework to guide future County actions, so that the County can reach its emissions

reduction targets. The County recognizes that its GHG reduction goals cannot be achieved by individual projects alone, but instead requires a comprehensive Countywide approach that would include the enactment of future plans, changes to existing ordinances, and an integrated and sustainable approach. The goals in the 2045 CAP are Countywide, not requirements or mandates for individual, private development projects, unless and until they are implemented through appropriate legal processes.

The 2045 CAP is designed to be consistent with the GHG reduction measures and recommendations contained in CARB's 2022 Scoping Plan. The Pavley Program, RPS, LCFS, SB 375 land use and transportation strategies, energy efficiency measures, solar PV measures, vehicle and fuel efficiency measures, landfill methane capture, and urban forestry practices are all measures in the 2022 Scoping Plan that are also included in the 2045 CAP emission forecasts or as CAP measures. Consistent with AB 1279, the 2045 CAP sets a GHG emissions target for 2030 equal to 40 percent below 2015 levels, for 2035 equal to 50 percent below 2015 levels, and for 2045 equal to 83 percent below 2015 levels and sets a long-term aspirational goal for carbon neutrality by 2045.

Through the updated 2045 CAP, the County is targeting carbon neutrality by 2045 in unincorporated areas of the County. The 2045 CAP is the County's path toward meeting the goals of the Paris Agreement and achieving carbon neutrality for unincorporated areas of the County. The 2045 CAP identifies strategies, measures, and actions to mitigate emissions from community activities. The 2045 CAP includes the following:

- A GHG emissions inventory from community-wide activities in unincorporated Los Angeles County in 2018 and a baseline inventory for 2015.
- Projections of Future emissions for 2030, 2035, and 2045.
- GHG reduction targets for 2030 and 2035
- A long-term aspirational goal for carbon neutrality by 2045.
- Climate strategies, measures, and actions to reduce GHG emissions from major sectors.
- Implementation and monitoring measures to ensure successful climate action.

Los Angeles County 2035 General Plan

The following goals and policies from the Los Angeles County 2035 General Plan are applicable to the Project regarding GHG emissions, but is not a comprehensive list of goals and policies (County of Los Angeles 2015). The Project's potential to conflict with these policies is detailed in Section 4.11, Land Use and Planning.

Land Use Element

Policy LU 3.3. Discourage development in undeveloped areas where infrastructure and public services do not exist, or where no or where no major infrastructure projects are planned, such as state and/or federal highways.

Policy LU 4.1. Encourage infill development in urban and suburban areas on vacant, underutilized, and/or brownfield sites.

Policy LU 5.3. Support a mix of land uses that promote bicycling and walking, and reduce VMTs.

Policy LU 5.10. Encourage employment opportunities and housing to be developed in proximity to one another.

Policy LU 7.1. Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.

Policy LU 10.4. Promote environmentally-sensitive and sustainable design.

Policy LU 10.6. Encourage pedestrian activity through the following:

- Designing the main entrance of buildings to front the street;
- Incorporating landscaping features;
- Limiting masonry walls and parking lots along commercial corridors and other public spaces;
- Incorporating street furniture, signage, and public events and activities; and
- Using wayfinding strategies to highlight community points of interest.

Policy LU 11.1. Encourage new development to employ sustainable energy practices, such as utilizing passive solar techniques and/or active solar technologies.

Policy LU 11.2. Support the design of developments that provide substantial tree canopy cover, and utilize light colored paving materials and energy-efficient roofing materials to reduce the urban heat island effect.

Policy LU 11.3. Encourage development to optimize the solar orientation of buildings to maximize passive and active solar design techniques.

Policy LU 11.4. Encourage subdivisions to utilize sustainable design practices, such as maximizing energy efficiency through lot configuration; preventing habitat fragmentation; promoting storm water retention; promoting the localized production of energy; promoting water conservation and reuse; maximizing interconnectivity; and utilizing public transit.

Mobility Element

Policy M 2.5. Ensure a comfortable bicycling environment by implementing the following, whenever appropriate and feasible:

- Bicycle signal heads at intersections.
- Bicycle signal detection at all signalized intersections.
- Wayfinding signage.
- Road diet techniques, such as lane narrowing, lane removal, and parking removal/restriction.
- Appropriate lighting on all bikeways, including those in rural areas.
- Designs, or other similar features, such as: shoulder bikeways, cycle tracks, contra flow bike lanes, shared use paths, buffered bike lanes, raised bike lanes, and bicycle boulevards.

Policy M 2.7. Require sidewalks, trails and bikeways to accommodate the existing and projected volume of pedestrian, equestrian and bicycle activity, considering both the paved width and the unobstructed width available for walking.

Policy M 2.8. Connect trails and pedestrian and bicycle paths to schools, public transportation, major employment centers, shopping centers, government buildings, residential neighborhoods, and other destinations.

Policy M 4.4. Ensure expanded mobility and increase transit access for underserved transit users, such as seniors, students, low income households, and persons with disabilities.

Policy M 4.15. Reduce vehicle trips through the use of mobility management practices, such as the reduction of parking requirements, employer/institution based transit passes, regional carpooling programs, and telecommuting.

Policy M 5.4. Support and pursue funding for the construction, maintenance and improvement of roadway, public transit, and equestrian, pedestrian and bicycle transportation systems.

Economic Development Element

Policy ED 1.2. Encourage and foster the development of the renewable energy economic sectors.

Policy ED 2.2. Utilize adequate buffering and other land use practices to facilitate the compatibility between industrial and non-industrial uses.

Policy ED 2.3. Ensure environmental justice in economic development activities.

Policy ED 2.4. Ensure high standards of development and encourage environmentally sustainable practices in economic development activities.

Policy ED 2.5. Encourage employment opportunities to be located in proximity to housing.

Policy ED 2.6. Encourage community-serving uses, such as child care centers and personal services, to be located in proximity to employment centers.

Policy ED 4.7. Support expedited permitting for green building retrofits.

Revised Housing Element

Policy 2.1. Support the development of housing for extremely low, very low, lower and moderate income households and those with special needs near employment, transit, services, and other community amenities and facilities such as parks.

Policy 2.2. Encourage multi-family residential and mixed use developments along major commercial and transportation corridors.

Goal 11. Alignment of housing production with state and local sustainability goals in order to protect natural resources, reduce greenhouse gas emissions, and foster climate resilience.

Policy 11.1. Ensure consistency with the OurCounty Sustainability Plan through equitable and sustainable land use policy.

Policy 11:2. Ensure consistency with the County's Green Building Standards (Title 31) to enhance building design and construction and encourage sustainable construction practices.

Policy 11.3. Support policies and programs that aim to reduce resource consumption, such as solar panel installation, cool roof installation, back-up battery power, and incentivization of housing near transit.

County of Los Angeles Green Building Standards

The County's Green Building Standards Code is codified in Title 31 of the Los Angeles County Code. The purpose of this Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact, or positive environmental impact, and encouraging sustainable construction practices in the following categories: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental air quality. Mandatory measures for residential include EV charger preparation, low-impact development requirements, cool roofs, and construction waste reduction. For nonresidential development, mandatory measures include low-impact development requirements, cool roofs, and construction waste reduction. Additional residential and non-residential voluntary measures are included that reflect the State's CALGreen voluntary measures.

Santa Clarita Valley Area Plan (OVOV)

The General Plan provides goals and policies to achieve County-wide planning objectives for the unincorporated areas and is the foundational document for all community-based plans that serve the unincorporated areas, such as Area Plans, community or neighborhood plans, and Transit Oriented District specific plans. The General Plan identifies 11 Planning Areas, which make up the Planning Areas Framework. The purpose of the Planning Areas Framework is to provide a mechanism for local communities to work with the County to develop plans that respond to their unique and diverse character. Area plans focus on land use and policy issues that are specific to the Planning Area. Community or neighborhood plans cover smaller geographic areas within the Planning Area, and address neighborhood and/or community-level policy issues. An Area Plan must be prepared or updated for each of the 11 Planning Areas, which provides opportunities to update community-based plans, as well as implementation tools of the General Plan, such as specific plans and community standards districts. As detailed further below, the Project site is located within the Santa Clarita Valley Area Plan, also known as "One Valley, One Vision" (OVOV).

The OVOV is a component of the Los Angeles County General Plan and is intended to provide focused goals, policies, and maps to guide the regulation of development within the unincorporated portions of the Santa Clarita Valley, and it would not conflict with both the County's comprehensive General Plan and with the City of Santa Clarita's General Plan. The Santa Clarita Valley Area Plan Update was adopted by the County Board of Supervisors on November 27, 2012. It was created as a joint planning effort with the City of Santa Clarita. The other component is the City of Santa Clarita General Plan, which was adopted by the City of Santa Clarita City Council on June 14, 2011. Together, the County's Area Plan and the City's General Plan provide a unified vision for development and conservation for the entire Santa Clarita Valley (County of Los Angeles 2012).

4.8.3 Thresholds of Significance

In accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to greenhouse gas emissions are listed below. A project may have a significant impact if it would:

Threshold 4.8a: Generate GHG emissions, either directly or indirectly, that may have a significant effect on the environment.

Threshold 4.8b: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Further details on specific approach to thresholds of significance in response to Threshold 4.8a and 4.8b are detailed below, in Section 4.8.4, Methodology.

4.8.4 Methodology

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established thresholds for assessing whether the GHG emissions of a project, such as the Project, would be considered a cumulatively considerable contribution to global climate change; however, the state is working to achieve net zero GHG emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. Thus, all reasonable efforts should be made to minimize a project's contribution to global climate change. In addition, while GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008), GHG emissions impacts must also be evaluated at a project level under CEQA.

Threshold 4.8a

The State CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the State CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009a). The State of California has not adopted emission-based thresholds for GHG emissions under CEQA. The Governor's Office of Planning and Research's Technical Advisory titled "CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act Review" states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2008). Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice." Section 15064.7(c) of the State CEQA Guidelines specifies that "when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

For purposes of GHG significance Threshold A from Appendix G, the Project's GHG emissions are assessed by evaluating the Project's potential to exceed an efficiency metric threshold (i.e., service population threshold) for 2029. The efficiency metric threshold developed for the purposes of this GHG emissions analysis is discussed below in detail.

Efficiency Metric

The significance criteria used in this GHG emissions analysis are those set forth above from Appendix G of the CEQA Guidelines and the County's Environmental Checklist Form (Initial Study); and, the application of those criteria is informed by CEQA Guidelines Sections 15064, 15064.4, and 15126.4. An efficiency metric is calculated by dividing the allowable GHG emissions inventory in a selected calendar year by the service population (residents plus employees), which then leads to the identification of a quantity of emissions that can be permitted on a per service population basis without significantly impacting the environment. This approach is appropriate for the Project because it measures the Project's emissions on a per-service population basis to determine its overall GHG efficiency relative to regulatory GHG reduction goals, as opposed to applying a relatively arbitrary "bright-line" threshold limit that may not be well substantiated. Under the efficiency metric, the Project's GHG emissions are evaluated herein relative to the emissions level in the Project's build-out year and the build-out year's associated efficiency metric. To that end, an efficiency metric was calculated based on the 2029 emissions level (year of Project build-out) and the Project's service population (sum of number of employees and the number of residents provided by the Project). It should be noted that the approach detailed herein is consistent with the intent and methodology of Tier 4 of the tiered approaches detailed in a proposal, issued in September 2010, by the SCAQMD (SCAQMD 2010). The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until Statewide significance thresholds or guidelines are established. From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, uses a 5-tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010). Tier 4, which is based on an efficiency-based metric, is included here for reference:

Tier 4 Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce Statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO_2e per service population (SP) per year (MT CO_2e/SP/year) for project level analyses and 6.6 MT CO_2e/SP/year for plan level analyses. The 2035 efficiency targets are 3.0 MT CO_2e/SP/year for project level analyses and 4.1 MT CO_2e/SP/year for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5 which considers mitigation to reduce emissions below these targets (SCAQMD 2010).

The methodology used in this analysis uses the same concept as the SCAQMD's proposed Tier 4 efficiency-based metric, as detailed above. However, the SCAQMD's proposed Tier 4 efficiency-based metric does not consider the increased stringency of SB 32 goals, as SB 32 was adopted after recommendation of the Tier 4 efficiency-based metric. The proposed efficiency metric considers the State's goals, including AB 32 and SB 32, and the goals of the County, through its 2045 CAP. The 2045 CAP has emission inventories prepared for the unincorporated areas of Los Angeles County. The 2045 CAP efficiency metric will be used to evaluate the Project's potential to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

2045 CAP Efficiency Metric Threshold

An efficiency metric threshold was generated for year 2029 by interpolating the County-based emission targets for years 2015 and 2030. The 2045 CAP has set a goal to reduce emissions 40% by 2030 and 50% by 2035 compared to 2015 levels (County of Los Angeles 2024). The 2045 CAP's 2030 target is consistent with the SB 32 target of a 40% reduction below 1990 levels. Total unincorporated Los Angeles County emissions in 1990 are estimated to be 6.4 million MT CO_2e. Because the 2015 emissions of 5.5 million MT CO_2e are 15% lower than the 1990 emissions, the 2030 target of a 40% reduction below 2015 levels is equivalent to a 48% reduction below 1990 levels. The 48% reduction below 1990 levels is consistent with the 2022 Scoping Plan Scenario to achieve the AB 1279 target of 85% below 1990 levels by 2045 (CARB 2022a). This exceeds the State target of 40% below 1990 levels by 2030 (SB 32). As such, the 2045 CAP's 2030 target is in line with, and more stringent than, the SB 32 target for the State. In addition, the 2035 target of 50% below 2015 levels (equivalent to 57% below 1990 levels) puts the County on the trajectory to achieve carbon neutrality by 2045, consistent with State targets.

To develop the 2030 efficiency metric threshold, the emissions target from SB 32 was used for year 2030 to reduce GHG emissions to 40% below 1990 levels by 2030. Therefore, the 2030 emissions target for the Project would be 40% below the 2010 inventory of 7,663,411 MT CO_2e (or 4,598,047 MT CO_2e). To develop the service population for that year, the SCAG's Connect SoCal Regional Growth Forecast was relied upon for the forecasted population and employment for the County.

To develop the 2029 efficiency metric threshold, it is necessary to interpolate the emissions target between the 2010 and 2030 emissions. The interpolation and resulting service population is shown in Table 4.8-3, County of Los Angeles 2029 Interpolated Service Population.

Table 4.8-3. Unincorporated County of Los Angeles 2029 Interpolated Service Population

Service Population	2016	2029[1]	2045
Population	1,044,500	1,140,207	1,258,000
Employment	269,100	291,962	320,100
Total	**1,313,600**	**1,432,169**	**1,578,100**

Notes:

[1] The 2029 service population was calculated as follows: (((2045 service population – 2016 service population) ÷ (2045 – 2016)) × (2029 – 2016)) + (2016 service population).

To develop the service population for 2029, the SCAG Connect SoCal Regional Growth Forecast was relied upon for the forecasted population and employment for the County as shown in Table 4.8-3 (SCAG 2020b). To develop the 2029 efficiency metric threshold, it is necessary to interpolate the emissions target between the 2015 and 2030 emissions. The interpolation and resulting emission target is shown in Table 4.8-4, County of Los Angeles 2029 Emissions Target – 2045 CAP.

Table 4.8-4. Unincorporated County of Los Angeles 2029 Emissions Target – 2045 CAP

	2015	2029	2030
Emissions (MT CO_2e)	5,531,155	3,466,190	3,318,693

Source: Emissions are based on the 2015 GHG emission inventory for the County of Los Angeles from the 2045 CAP (County of Los Angeles 2024).

Notes: The 2029 and 2030 County-wide emissions targets were based on exceeding the Statewide reduction goals of SB 32.
CO_2e = carbon dioxide equivalent; MT = metric ton; SP = service population; yr = year; CAP: Climate Action Plan.

The efficiency metric threshold for 2029 is illustrated below in Table 4.8-5, County of Los Angeles 2029 Efficiency Metric Threshold – 2045 CAP. If the Project achieves the 2029 efficiency metric threshold, the Project would not interfere with the State's ability to achieve GHG reduction targets per SB 32 and AB 1279 and would demonstrate progress toward attaining 2050 targets per EO S-3-05.

Table 4.8-5. Unincorporated County of Los Angeles 2029 Efficiency Metric Threshold – 2045 CAP

Year	Service Population[1] (Population + Employment)	Emissions Target (MT CO_2e)	Efficiency Metric Threshold (MT/SP/yr)
2029[2]	1,432,169	3,466,190	2.42

Sources:
1 Connect SoCal Demographics and Growth Forecast Technical Report, Table 14, Jurisdiction-Level Growth Forecast, projections for Unincorporated Los Angeles County for population and employment, interpolated between years 2016 and 2045 of plan for year 2029 (operational year) (SCAG 2020b).
2 Emissions for 2029 are based on the State's 2022 Scoping Plan's downward trajectory to meet the SB 32 target in 2030.
Notes: CO_2e = carbon dioxide equivalent; MT = metric ton; SP = service population; yr = year; CAP: Climate Action Plan.

As shown in Table 4.8-5, the calculated efficiency metric threshold for 2029 based on the County's 2045 CAP and the statewide emissions reduction trajectory is 2.42 MT/SP/yr. As the 2045 CAP efficiency metric threshold of 2.42 MT/SP/yr is more stringent than the SB 32 target, the 2045 CAP efficiency metric will be used to determine Project significance with respect to GHG significance criterion A from Appendix G of the County's 2045 CAP.

Again, this 2029 efficiency metric threshold reflects the trajectory planned for in the State's 2022 Scoping Plan and AB 1279. If the Project achieves the 2029 efficiency metric threshold, it would not interfere with attainment of the 2030, 2045, and 2050 statewide emission reduction targets, and therefore not interfere with the State's and the County's ability to achieve the mid-term and long-term GHG reduction targets. Thus, if the Project achieves the 2029 efficiency metric threshold, it would not generate GHG emissions, either directly, or indirectly, that may have a significant impact on the environment, pursuant to Threshold 4.8a, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG, pursuant to Threshold 4.8b.

Service Population

As detailed in Section 4.15, Population and Housing, based on a residential density of 3.5 persons per household found within the County's Housing Element, the Project would have a residential population of 1,785 (3.5 persons per household X 510 units) (County of Los Angeles 2022). The Project is estimated to have 10 employees at the recreation center, as discussed in Section 4.15, Population and Housing. Therefore, the Project would have a service population of 1,795 (1,785 residents + 10 employees).

Construction Emissions

CalEEMod Version 2022 was used to estimate potential Project-generated GHG emissions during construction. Construction of the Project would result in GHG emissions primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details for construction criteria air pollutants discussed in Section 4.3.4 of Section 4.3, Air Quality, are also applicable for the estimation of construction-related GHG emissions. As such, see Section 4.3.4 for a discussion of construction emissions

calculation methodology and assumptions. This analysis includes construction impacts from on-site and off-site construction activities.

Energy Use

Temporary electric power for lighting and electronic equipment, such as computers, may be needed inside temporary construction trailers. The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the Project. The *2022 National Construction Estimator* identifies a typical power cost per 1,000 sf of construction per month of $2.41, which was used to calculate the Project's total construction power cost (Pray 2022). SCE's general service rate schedule were used to determine the Project's electrical usage. As of January 1, 2022, SCE's general service rate is $0.13 per kilowatt hours (kWh) of electricity for industrial services (SCE n.d.). Based off the construction schedule in Section 4.3.4 and the assumptions above, the Project is estimated to use 771,140 kWh during construction, as stated in Section 4.5, Energy, of this Draft EIR.

Carbon Sequestration (Loss)

This GHG analysis estimates the loss of sequestered carbon that would result from removal of trees on site during construction. The calculation methodology and default values provided in i-Tree Planting were used to estimate the one-time carbon-stock change from planting new trees based on the trees provided in the landscaping plan for the Project (i-Tree 2022). Trees sequester CO_2 while they are actively growing and the amount of CO_2 sequestered depends on the type of tree. Thereafter, the accumulation of carbon in biomass slows with age, and is assumed to be offset by losses from clipping, pruning, and occasional death. Active growing periods are subject to, among other things, species, climate regime, and planting density; however, for modeling purposes, it was assumed an active growing period of 30 years consistent with the Project lifetime.

Operation

Emissions from the operational phase of the Project were estimated using CalEEMod Version 2022. Operational year 2027 was assumed consistent with completion of Project construction of the very-low-income senior housing development on Lots 10 and 11, which is the first of the residential uses that is estimated to be constructed and operational. The Project-generated operational GHG emissions for the unmitigated scenario are from area sources (landscape maintenance and hearths [natural gas fireplaces]), energy sources (natural gas and electricity), mobile sources, solid waste, and water supply and wastewater treatment were evaluated. Emissions from each category are discussed in the following text with respect to the Project. For additional details, see Section 4.3.4, Operational Emissions, of Section 4.3, Air Quality, of this Draft EIR, for a discussion of operational emission calculation methodology and assumptions, specifically for area, energy (natural gas), and mobile sources. The removal and sequestration of carbon was also evaluated as it pertains to the Project.

Area Sources

CalEEMod was used to estimate GHG emissions from the Project's area sources, which include operation of gasoline-powered landscape maintenance equipment, which produce minimal GHG emissions, and natural gas fireplaces. See Section 4.3.4, for a discussion of landscaping equipment emissions calculations.

Energy Sources

The estimation of operational energy emissions was based on CalEEMod land use defaults and total area (i.e., square footage) of the Project's land uses. At a minimum, the Project will comply with Title 24 2019 standards, and the Project is assumed to install solar photovoltaics in accordance with the requirements on its residential portion of the Project. It should be noted that the Title 24 2022 standards are applicable for projects being constructed after January 1, 2023 and are more stringent that the 2019 standards, and therefore, overall emissions under Title 24 2022 standards would be lower than 2019 standards. As such, the quantification of GHG emissions from energy sources contained in this section are conservative.

CalEEMod default energy intensity factors (CO_2, CH_4, and N_2O mass emissions per kilowatt hour) for SCE is based on the value for SCE's energy mix in 2019. SB-100 calls for further development of renewable energy, with a target of 44% by 2024, 52% by 2027, and 60% by 2030. Because SCE is striving to meet the 60% RPS by December 31, 2030, the CO_2 emissions intensity factor is anticipated to be less than assumed in CalEEMod at full buildout from implementation of the Project (2027, first year of Project operations), which would reflect the increase in percentage of renewable energy in SCE's energy portfolio.

Mobile Sources

All details for criteria air pollutants discussed in Section 4.3.4 are also applicable for the estimation of operational mobile source GHG emissions.

Regulatory measures related to mobile sources include AB 1493 (Pavley) and related federal standards. AB 1493 required that CARB establish GHG emission standards for automobiles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the State. In addition, the NHTSA and EPA have established corporate fuel economy standards and GHG emission standards, respectively, for automobiles and light-, medium-, and heavy-duty vehicles. Implementation of these standards and fleet turnover (replacement of older vehicles with newer ones) will gradually reduce emissions from the Project's motor vehicles. The effectiveness of fuel economy improvements was evaluated by using the CalEEMod emission factors for motor vehicles in 2027 to the extent it was captured in EMFAC 2021. The Low Carbon Fuel Standard calls for a 10% reduction in the "carbon intensity" of motor vehicle fuels by 2021, which would further reduce GHG emissions.

Refrigerants

CalEEMod was utilized to estimate fugitive GHG emissions from refrigerants used for air conditioning and refrigeration equipment. Different types of refrigeration equipment are utilized for different types of land uses and CalEEMod generates default refrigerant values based on land use subtype and industry data from the EPA. CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate but does not quantify emissions from the disposal of refrigeration and air conditioning equipment at the end of its lifetime.

Most of the refrigerants used today are HFCs or blends thereof, which can have high GWP values. However, California is required to reduce HFC emissions 40% below 2013 levels by 2030 under SB1383, and regulations have been adopted to place GWP limits on HFCs, such as SB 120. While CalEEMod default refrigerant values were assumed for the land use surrogate of commercial research and development land use, it is anticipated to be conservative.

Solid Waste

The Project would generate solid waste, and therefore, result in CO_2e emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were used to estimate GHG emissions associated with solid waste. Project compliance with Statewide solid waste diversion goals, including the 75% diversion rate by 2020 consistent with AB 341 (25% increase from the solid waste diversion requirements of AB 939, Integrated Waste Management Act), would reduce Project-generated GHG emissions associated with solid waste disposal. No diversion above the CalEEMod default assumptions was assumed.

Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the Project require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the Project requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. Water consumption estimates for both indoor and outdoor water use and associated electricity consumption from water use and wastewater generation were estimated using CalEEMod default values.

Carbon Sequestration (Gain)

This GHG analysis estimates the gain of sequestered carbon that would result from planting and growth of trees on site. The calculation methodology and default values provided in i-Tree Planting were used to estimate the one-time carbon-stock change from planting new trees based on the trees provided in the landscaping plan for the Project (i-Tree 2022). Trees sequester CO_2 while they are actively growing, and the amount of CO_2 sequestered depends on the type of tree. Thereafter, the accumulation of carbon in biomass slows with age, and is assumed to be offset by losses from clipping, pruning, and occasional death. Active growing periods are subject to, among other things, species, climate regime, and planting density; however, for modeling purposes, it was assumed an active growing period of 30 years consistent with the Project lifetime. The model also assumes a tree mortality of 70% over a project's lifetime.

The sequestered carbon from new trees modeling does not include CO_2 emissions estimates associated with planting, care, and maintenance activities (e.g., tree planting and care vehicle travel and maintenance equipment operation). Landscape maintenance equipment emissions were included in the area source emission estimates included in the operational GHG emissions calculations. In addition, operational GHG emissions associated with these maintenance activities are anticipated to be minimal.

Threshold 4.8b

For Threshold 4.8b, the Project is evaluated for its potential to conflict with various GHG emission reduction plans including the County's 2045 CAP, the County's Green Building Standards, the County's General Plan and Santa Clarita Valley Area Plan One Valley One Vision (OVOV), the County's OurCounty Sustainability Plan, SCAG's RTP/SCS (Connect SoCal), CARB's 2022 Scoping Plan and statewide 2030, 2045, and 2050 GHG reduction targets identified in SB 32, EO S-3-05, and AB 1279, and statewide strategies that reduce GHG emissions.

4.8.5 Impact Analysis

Threshold 4.8a: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction Emissions

Construction of the Project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road haul trucks, on-road vendor trucks, and worker vehicles. The SCAQMD has not proposed or adopted relevant quantitative GHG thresholds for construction-generated emissions, as detailed in Section 4.8.4, Methodology.

CalEEMod was used to calculate the annual GHG emissions based on the construction scenario discussed in the Construction Emissions subsection in Section 4.8.4, Methodology. Table 4.8-6, Estimated Annual Construction GHG Emissions, presents the estimated GHG emissions generated during construction of the Project. Details of the emission calculations are provided in Appendix B-1 of this Draft EIR.

Table 4.8-6. Estimated Annual Construction GHG Emissions

Year of Construction	CO_2	CH_4	N_2O	CO_2e
	Metric Tons			
2025	2,265.35	0.09	0.02	2,274.44
2026	1,494.35	0.06	0.04	1,509.46
2027	4,359.64	0.15	0.14	4,406.05
2028	3,932.52	0.13	0.13	3,977.25
2029	2,448.97	0.08	0.08	2,477.11
			Total	14,644.31
			Amortized Emissions	488.14

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Appendix B-1 for complete results.
Amortized construction GHG emissions represent total construction GHG emissions (in MT of CO_2e) divided by 30 years, which is the assumed Project operational lifetime consistent with SCAQMD guidance (SCAQMD 2008).
Totals may not add due to rounding.

As shown in Table 4.8-6, the estimated total GHG emissions during construction of the Project would be approximately 14,603 MT CO_2e over the construction period. Estimated Project-generated construction emissions amortized over 30 years would be approximately 487 MT CO_2e per year.

The loss of sequestered carbon from removal of 485 trees is estimated based on the carbon content estimate for each tree over the growth period (MT CO_2 per tree). The loss of sequestered carbon is presented in Table 4.8-7, Released Carbon from Trees Removed.

Table 4.8-7. Released Carbon from Trees Removed

Tree Species	Growing Period (years)	Quantity of Trees Removed (trees)	Sequestered Carbon (MT CO_2)
Willow	30	10	16.24
Elderberry	30	125	92.23
Coastal live oak	30	204	996.96
Fremont cottonwood	30	9	31.39
Red willow	30	11	33.56
Scrub oak	30	3	3.50
Black walnut	30	2	5.87
California white oak	30	13	56.98
	Total	**377**	**1,236.73**
	Total (when amortized over 30 years)		**41.22**

Source: i-Tree Planting Calculator version 2.2.0; trees removed as detailed in the Project's landscape plan.
Notes: MT CO_2 = metric tons carbon dioxide.
See Appendix B-1 for calculations and sources.

As presented in Table 4.8-7, the removal of 377 trees would result in the release of approximately 1,236.73 MT CO_2 from the release of sequestered carbon accumulated over a 30-year growing period, or 41.22 MT CO_2 when amortized over 30 years. Including the construction emissions in Table 4.8-6, the total estimated GHG emissions from the construction of the Project would be 15,881 MT CO_2e. Estimated Project-generated construction emissions amortized over 30 years would be approximately 529.37 MT CO_2e per year. As with Project-generated construction air quality pollutant emissions, GHG emissions generated during construction of the Project would be short-term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. Because there is no separate GHG threshold for construction, the evaluation of significance is determined by adding the amortized construction emissions to the operational emissions and comparing them to the operational threshold.

Operational Emissions

Operation of the Project (prior to mitigation) would generate GHG emissions through motor vehicle trips; landscape maintenance equipment operation and hearths (area sources); energy use (natural gas and electricity); solid waste disposal; and water supply, treatment, and distribution and wastewater treatment. CalEEMod was used to calculate the annual GHG emissions based on the operational assumptions described in Section 4.8.4, Methodology.

The gain of sequestered carbon resulting from planting and growth of approximately 1,510 trees on and off-site is estimated based on the carbon sequestration rate for the tree species, the number of new trees, and the growing period. It is assumed that all 1,510 trees will grow for a minimum of 30 years.[4] Table 4.8-8, Planted Trees Sequestered Carbon, presents the estimated one-time carbon-stock change resulting from proposed planting of new trees.

[4] MM-4.4-15, SEA Protected Trees Replacement/Compensation, requires any planted mitigation trees shall be monitored for a period of seven years and replanted if the tree has died within seven years of initial planting.

Table 4.8-8. Planted Trees Sequestered Carbon

Tree Species	Growing Period (years)	Quantity of Trees Planted (trees)	Sequestered Carbon (MT CO_2)
Common crape myrtle	30	465	544.35
Ginkgo	30	70	86.33
Walnut	30	4	20.87
Fremont cottonwood	30	18	141.92
Coastal live oak	30	410	2,469.02
Scrub oak	30	8	9.58
California white oak	30	26	56.90
Red willow	30	22	85.01
Willow	30	20	48.76
European black elderberry	30	252	144.61
Loquat	30	215	327.43
	Total	**1,510**	**3,934.78**
		Total (when amortized over 30 years)	**131.16**

Source: i-Tree Planting Calculator version 2.2.0.
Notes: MT CO_2 = metric tons carbon dioxide.
See Appendix B-1 for calculations and sources.

As presented in Table 4.8-8, the gain in sequestered carbon resulting from planting 1,510 trees would be approximately 3,935 MT CO_2, or 131 MT CO_2 per year when amortized over 30 years.

The estimated operational Project-generated unmitigated GHG emissions from area sources, energy usage, motor vehicles, solid waste generation, water usage and wastewater generation, and off-road equipment are shown in Table 4.8-9, Project Operational GHG Emissions.

Table 4.8-9. Project Operational GHG Emissions - Unmitigated

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	130.64	0.00	0.00	130.79
Energy	989.94	0.09	0.00	993.16
Mobile	4,565.91	0.23	0.19	4,635.30
Refrigerants	0.00	0.00	0.00	0.92
Solid waste	43.86	4.38	0.00	153.44
Water supply and wastewater	76.76	1.12	0.03	112.75
			Total	**6,026.36**
			Amortized construction emissions (Table 4.8-6)	*488.14*
			Amortized Carbon Released (Table 4.8-7)	*41.22*
			Total operational + amortized construction emissions	*6,555.72*
			Amortized Sequestered Carbon (Table 4.8-8)	*131.16*
			Total operational + amortized construction emissions – sequestered carbon	**6,424.56**
			Service Population	**1,795**
			GHG Efficiency (MT CO_2e/SP/year)	**3.58**

Table 4.8-9. Project Operational GHG Emissions - Unmitigated

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Efficiency Metric Threshold (MT CO_2e/SP/year)				2.42
Exceeds Threshold?				Yes

Notes: GHG = greenhouse gas; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent; SCAQMD: South Coast Air Quality Management District.
See Appendix B-1 for complete results.

As shown in Table 4.8-9, estimated Project-generated operational emissions, with amortized construction emissions and sequestered carbon from planting trees, would be approximately 6,425 MT CO_2e per year. As discussed in Section 4.8.4, the service population is 1,795 persons. Therefore, the Project would result in an efficiency metric of 3.58 MT/SP/yr. This would exceed the significance threshold of 2.42 MT/SP/yr. Therefore, GHG emissions generated by the Project would have a potentially significant impact on the environment and mitigation is required.

Overview of GHG Reductions with Mitigation Measures

The following is a summary of the mitigation measures required to reduce GHG emissions to levels of less than significant. These mitigation measures are described in detail below in Section 4.8.7 (Mitigation Measures).

MM-4.8-1, Construction Emission Reductions (not quantified), would reduce GHG emissions through use of electric equipment, use of cleaner fueled equipment, and minimizing idling.

MM-4.8-2, Electrify Buildings (quantified), would reduce energy-related operational GHG emissions by replacing natural gas with electricity as electricity is a less GHG-intensive power source that also has the potential to be provided by renewable, zero-emission sources. With implementation of MM-4.8-2, the Project shall not include natural gas fuel lines to the site. MM-4.8-3, Energy Conservation (partly quantified [Energy Star appliances and solar PV on the recreation center]), would also reduce energy source emissions by ensuring building energy efficiency and reducing energy consumption. MM-4.8-4, Utilize 100% Zero-Carbon Electricity (quantified assuming a 50% compliance rate), would reduce the GHG emissions associated with electricity use by ensuring that electricity consumed by the Project is 100% carbon-free.

Regarding mobile source emissions, MM-4.8-5, Encourage Electric Vehicles (quantified), would facilitate greater adoption and use of EVs by providing EV chargers in all single-family garage units, and no-less-than 92 of the market-rate units shall have one Level 2 (fast charger with 40-amp circuit) electric vehicle charging stations in the garage. Similar to building electrification, electrification of the vehicle fleet reduces GHG emissions and supports transition to a carbon neutral development by replacing fossil-fueled vehicles with a less GHG-intensive power source that can be generated using clean, renewable energy.

Additionally, MM-4.17-2, Transportation Demand Management Program (not quantified), would reduce mobile source GHG emissions by reducing VMT through discouraging single occupancy vehicle trips and encouraging alternative modes of transportation. MM-4.8-5 and MM-4.17-2 together address the two pathways to reducing mobile source emissions: technological improvements to clean energy and VMT reductions.

MM-4.8-6, Water Use Efficiency and Water Conservation (quantified), would reduce indirect GHG emissions by reducing water consumption, and MM-4.8-7, Solid Waste (not quantified), would reduce GHG emissions associated with disposal of waste to a landfill. MM-4.8-8, Landscape Maintenance Equipment Emission Reductions (not

quantified), aims to encourage electric landscape equipment to reduce area-source emissions. When conventional gasoline-powered yard equipment (e.g., lawn mowers, leaf blowers and vacuums, shredders, trimmers, and chain saw) are exchanged for electric and rechargeable battery-powered yard equipment, direct GHG emissions from fossil-fuel combustion are displaced by indirect GHG emissions associated with the generation of electricity used to power the equipment.

Table 4.8-10, GHG Mitigation Measure Summary, shows the summary of GHG mitigation measures and whether they were quantified or not.

Table 4.8-10. GHG Mitigation Measures Summary

Mitigation Measure #	Mitigation Description	Quantified (Yes/No)?
MM-4.8-1	Construction Emission Reductions	No
MM-4.8-2	All Electric Buildings	Yes
MM-4.8-3	Energy Conservation	Yes
MM-4.8-4	Utilize 100% Zero-Carbon Electricity	Yes
MM-4.8-5	Encourage Electric Vehicles	Yes
MM-4.8-6	Water Use Efficiency and Water Conservation	Yes
MM-4.8-7	Solid Waste	No
MM-4.8-8	Landscape Maintenance Equipment Emission Reductions	No
MM-4.17-2	Transportation Demand Management Program	No

Note: MM: mitigation measure

The estimated operational Project-generated GHG emissions from area sources, energy usage, motor vehicles, solid waste generation, water usage and wastewater generation, and off-road equipment with implementation of mitigation measures MM-4.8-1 through MM-4.8-8 and MM-4.17-2, as quantifiable, are shown in Table 4.8-11, Project Operational GHG Emissions - Mitigated. Additionally, Table 4.8-11 includes the percent reduction of GHG mitigation measures per category of emissions.

Table 4.8-11. Project Operational GHG Emissions – Mitigated

Emission Source	CO_2	CH_4	N_2O	CO_2e	% Reduced
	Metric Tons per Year				
Area	8.86	0.00	0.00	8.90	2.02
Energy	462.55	0.04	0.01	465.24	8.76
Mobile	2,900.28	0.22	0.18	2,966.05	27.70
Refrigerants	0.00	0.00	0.00	0.92	0.00
Solid waste	43.86	4.38	0.00	153.44	0.00
Water supply and wastewater	64.68	0.90	0.02	93.82	0.31
			Total	**3,688.37**	**38.79**
				Amortized construction emissions (Table 4.8-6)	*488.14*
				Amortized carbon released (Table 4.8-7)	*41.22*
				Total operational + amortized construction emissions + carbon released	*4,217.73*
				Amortized sequestered carbon (Table 4.8-8)	*131.16*
				Total operational + amortized construction emissions – sequestered carbon	**4,086.57**

Table 4.8-11. Project Operational GHG Emissions – Mitigated

Emission Source	CO_2	CH_4	N_2O	CO_2e	% Reduced
	Metric Tons per Year				
Service Population[1]					1,795
GHG Efficiency (MT CO_2e/SP/year)					2.28
Efficiency Metric Threshold (MT CO_2e/SP/year) (Table 4.8-5)					2.42
Exceeds Threshold?					No

Notes: GHG = greenhouse gas; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; MT = metric tons; SP = service population; CO_2e = carbon dioxide equivalent.

1 The service population includes the Project's proposed 1,785 residents and 10 employees, as detailed in Section 4.14, Population and Housing, and detailed under Section 4.8.4, Methodology, above.

Source: See Appendix B-1 for complete results.

Mitigation measures quantified include MM-4.8-2 (residential and recreational building electrification), MM-4.8-3 (partly quantified) (energy conservation), MM-4.8-4 (100% zero-carbon electricity), MM-4.8-5 (EV Chargers), and MM-4.8-6 (water use efficiency and water conservation).

As shown in Table 4.8-11, the mitigated Project emissions, including implementation of MM-4.8-1 through MM-4.8-8 and MM-4.17-2, as quantifiable, would be approximately 4,087 MT CO_2e per year. With a service population of 1,795 persons, this would result in an efficiency metric of 2.28 MT/SP/yr which would be less than the 2.42 MT/SP/yr significance threshold established by the County. Again, this 2029 efficiency metric threshold reflects the trajectory planned for in the State's Scoping Plan, 2017 Scoping Plan Update, and 2022 Scoping Plan (i.e., AB 32, SB 32, and AB 1279). Since the Project's efficiency would be below the 2029 efficiency metric threshold, it would not interfere with attainment of the 2030, 2045, and 2050 statewide emission reduction targets, and therefore, would not interfere with the State's and the County's ability to achieve the mid-term and long-term GHG reduction targets. Therefore, direct and indirect GHG emissions generated by the Project would have a less than significant impact on the environment with mitigation.

Threshold 4.8b: Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions include the County's 2045 CAP (for informational purposes only), the County's General Plan and OVOV, the County's Green Building Standards, OurCounty Sustainability Plan, SCAG's RTP/SCS (Connect SoCal), CARB's Scoping Plan and statewide 2030, 2045, and 2050 GHG reduction targets identified in SB 32, EO S-3-05, and AB 1279 and statewide strategies that reduce GHG emissions. The Project's potential to conflict with these plans, policies, and regulations is discussed below.

Climate Action Plan 2045

Although the proposed Project does not need to comply with the specific goals, strategies, measures, or actions included in the 2045 CAP, the proposed Project supports the goals of the 2045 CAP by helping the County reduce GHG emissions. Specifically, the 2045 CAP includes 10 strategies and 25 measures that, when combined, achieve all three of the GHG emissions reduction targets for 2030, 2035, and 2045. These strategies, measures, and actions also put unincorporated Los Angeles County on an aggressive path toward carbon neutrality and are estimated to reduce annual emissions by more than 1.5 million MT CO_2e in 2030, more than 2 million MT CO_2e in 2035, and nearly 3 million MT CO_2e in 2045. All strategies require that the County employ climate leadership and lead by example, recognizing the County's important role as a convener and leader in the region. Reaching the

targets and goals of the 2045 CAP requires regional collaboration and partnerships with various stakeholders, including communities, local governments, and the State of California.

1. **Energy Supply.** This sector includes a range of measures aimed at decarbonizing the energy used in buildings and energy industries. The approach combines decarbonizing the energy supply, generating energy on-site through renewables, and utilizing load management and peak reductions. The County's participation in the Clean Power Alliance, and its commitment to sourcing 100 percent renewable energy for its electricity supply by 2025, will enable this shift and ensure a low-carbon energy future. The Project would include solar on the residential units in accordance with Title 24 and a 7-kW solar system on the recreation center in accordance with MM-4.8-3. The Project would also require the use of 100% zero-carbon electricity in accordance with MM-4.8-4. As such, the Project would not conflict with the strategies of this sector.
2. **Transportation.** Transportation strategies emphasize and promote alternatives to single-occupancy trips, including public transit, active transportation such as biking and walking, and land use planning that better connects housing to jobs and services. Transportation strategies also include the transition to zero-emission vehicles throughout unincorporated Los Angeles County. The Project would include EV charging stations in accordance with the County's Green Building Code as well as MM-4.8-5. The Project would also include a TDM Program in accordance with MM-4.17-2, which would reduce VMT by 7.45 percent through a combination of GHG reduction strategies to encourage walking, biking, carpooling, alternative fueled vehicle use, and transit use. As such, the Project would not conflict with the strategies of this sector.
3. **Building Energy and Water.** Within the building energy and water sector, strategies include decarbonizing buildings, improving efficiency of existing building energy use, and conservation of water. Efforts to decarbonize building energy use will require a mix of energy efficiency programs and a shift to electric alternatives for natural gas appliances. The Project would be all-electric in accordance with MM-4.8-2. No natural gas would be used onsite. The Project would not contain existing buildings, and as such, the strategy to improve efficiency of existing building energy use is not applicable. The Project would reduce water use through application of measures required through implementation of MM-4.8-6. The Project would not conflict with the strategies of this sector.
4. **Waste.** Strategies in the 2045 CAP expand efforts to reduce and reuse waste at the source and divert waste from landfills through participation in recycling programs, and by converting organic waste, which is responsible for the majority of the waste sector's emissions, to compost and fertilizers. The Project would provide storage areas for recyclables and organic waste in new construction, and food waste storage, if a pick-up service is available as required per MM-4.8-7. The Project would not conflict with the strategies of this sector.
5. **Agriculture, Forestry, and Other Land Use.** The agriculture, forestry, and other land use sector's strategies focus on conservation and restoration of existing forest lands and urban forests to sequester carbon and support local ecosystems. The strategies include conservation and connection of wildlands and working lands, and sequestering carbon and implementing sustainable agriculture. As detailed in Section 4.2, Agriculture/Forest, the Project site supports at least 10-percent native tree cover (predominantly oak forest and woodland alliance), and as this tree cover provides public benefits related to aesthetics, fish and wildlife, biodiversity, water quality, and recreation, the Project site contains forest land pursuant to PRC Section 12220(g). The Project site would utilize density-controlled development to avoid impacts to the majority of the site (approximately 150 acres of unimpacted natural open space on-site of 233.49 acres) and would allow for preservation of wildlands proximate to other wildlands around the Project site. Additionally, the Project would plant trees on-site, as detailed in Table 4.8-8, which would further sequester carbon. As such, the Project would not conflict with the strategies of this sector.

Because the proposed Project supports the goals of the 2045 CAP, it would not conflict with the 2045 CAP.

Los Angeles County General Plan and OVOV

The Los Angeles County General Plan 2035 provides the fundamental basis for the County's land use and development policy, and represents the basic community values, ideals, and aspirations to govern a shared environment through 2035. As discussed previously, the County has identified goals and policies in the Los Angeles County General Plan Air Quality Element that address both air quality and GHG emissions reductions as well as the OVOV. Tables 4.11-1 and 4.11-2 of Section 4.11, Land Use and Planning, detail the Project's potential to conflict with GHG-related goals, policies, and objectives of the General Plan and OVOV. As detailed in these tables, the Project would not conflict with the applicable GHG-related goals, policies, and objectives of the County's General Plan or OVOV.

OurCounty: The Los Angeles Countywide Sustainability Plan

OurCounty's Goal 7 strives for a fossil-fuel free Los Angeles County in order to achieve a zero-carbon energy system and zero emission transportation system. The example target outlined in the OurCounty Plan for Goal 7 is to achieve carbon neutrality by 2050. Consistent with the 2019 Title 24 Building Energy Efficiency standards and CALGreen Code, the Project will have alternative fueled vehicle spaces available and pre-wiring for electric vehicle charging stations, which will make it easier for residents to adopt electric vehicles. The Project also includes solar, as required per the 2019 Title 24 standards, as well as additional solar on the recreation center in accordance with implementation of MM-4.8-3. Goal 7 is a County-wide long-term goal that is not intended to be achieved by individual projects in the near-term; however, the Project achieves substantial progress towards meeting a zero-carbon energy system and zero emission transportation system by providing solar energy to buildings and facilitating electric vehicles, which can use renewable, zero-emission electric power. MM-4.8-2 and MM-4.8-4 requires the electrification of all buildings as well as the use of zero-carbon electricity. As such, the Project does not conflict with OurCounty's Goal 7.

Los Angeles County Green Building Standards

Title 31 of the County's Municipal Code outlines the County's Green Building Standards. The County adopted the 2019 California Green Building Standards through Ordinance 2019-0061. Any modifications not specified in Title 31 are included as specified in the 2019 California Green Building Standards. The County's Green Building Code provides standards for both residential and non-residential. For residential (Title 31 Chapter 4) and non-residential (Title 31 Chapter 5) projects, there are mandatory measures for EV charging spaces, low-impact development, cool roofs, and construction waste management. The Project would not conflict with the mandatory residential measures for EV charging spaces (see MM-4.8-5), low-impact development (see MM-4.8-6), cool roofs (see MM-4.8-3), and construction waste management (see MM-4.8-7). As the project would be built to all of the County's Green Building Standards, it would not conflict with the County's Green Building Standards.

SCAG's 2020-2045 RTP/SCS, Connect SoCal

The SCAG 2020–2045 RTP/SCS is a regional growth management strategy that targets per-capita GHG reduction from passenger vehicles and light trucks in the southern California region pursuant to SB 375. In addition to demonstrating the region's ability to attain the GHG emission-reduction targets set forth by CARB, the 2020–2045 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation

demands. Thus, successful implementation of the 2020–2045 RTP/SCS would result in more complete communities with a variety of transportation and housing choices, while reducing automobile use.

The following strategies are intended to be supportive of implementing the 2020–2045 RTP/SCS and reducing GHGs: focus growth near destinations and mobility options; promote diverse housing choices; leverage technology innovations; support implementation of sustainability policies; and promote a green region. The strategies that pertain to SCAG's support of local jurisdiction sustainability efforts would not apply to the Project because those are strategies that are taken by SCAG to work with local jurisdictions to implement SCAG's goals and policies (SCAG 2020a). Compliance with the remaining applicable strategies is presented below.

- **Focus Growth Near Destinations and Mobility Options.** The Project would facilitate the potential development of 510 residential units. The Project would promote sustainability in land use design by developing adjacent to a transportation corridor and by encouraging walking, bicycling, and transit ridership to reduce VMT, and improve pedestrian infrastructure through sidewalk continuity and street connectivity, as required by MM-4.17-2 (Appendix J). As discussed in Section 4.17.5, the Project would ensure that safety, street design, and circulation is maintained for the duration of the Project. For example, the Project would improve The Old Road at the Project site consistent with the circulation planning for streets and highways to ensure adequate access for motorists, pedestrians, cyclists, and other users. Sidewalks meeting ADA standards would be constructed within all the subdivision's local street rights- of-way. Trail improvements on the Project site would include an accessible park loop path that connects to the onsite trail system leading to nature trails that connect to the County trails system.
- **Promote Diverse Housing Choices.** The Project would comply with this strategy of the 2020–2045 RTP/SCS since it would result in the development of diverse housing types as well as new market-rate and affordable residential units to increase a mix of housing supply options. The Project includes the development of dwelling units with a mix of attached and detached dwelling units, deed-restricted affordable units for moderate- or middle-income households and affordable senior housing, as well as a recreational center and natural and improved open space.
- **Leverage Technology Innovations.** The Project would comply with this strategy of the 2020-2045 RTP/SCS since it would not conflict with the County's General Plan Policies and would be required to comply with the 2022 Title 24 Standards and 2022 CALGreen at a minimum, through energy-efficient design and support low emission technologies for transportation, such as alternative fuel vehicles to reduce per capita GHG emissions. As required by 2022 CALGreen and the County's Green Building Code Title 31 Section 4.106.4.3.1, the Project residential units would be required 10% of all parking spaces to be electric vehicle capable. Additionally, implementation of MM-4.8-5 would require that 92 of the market-rate units have one Level 2 EV charging station in private garages. Furthermore, the Project would be required to include solar photovoltaic energy systems onsite in accordance with Title 24 standards, and, through implementation of MM-4.8-3, to install a 7-kWh solar PV electric generating system at the recreation center (among other technological innovations for purposes of reducing GHG emissions required through MM-4.8-3).
- **Promote a Green Region.** Another applicable strategy within the 2020–2045 RTP/SCS to the Project involves promoting a green region through efforts such as supporting local policies for renewable energy production and promoting more resource efficient development (e.g., reducing energy consumption) to reduce GHG emissions. The clustered development of residences allowed for by the Project, which would preserve the vast majority of the Project site as open space, would be required to comply with 2022 Title 24 building code (at a minimum), which would require installation solar photovoltaic systems. Implementation of MM-4.8-2 through MM4.8-5 support these GHG reduction measures through onsite

renewable energy, energy conservation, use of zero-carbon electricity, and EV charging stations, respectively.

In addition to the above applicable SCAG 2020 RTP/SCS strategy analysis, Table 4.8-12, Project Potential to Conflict with Applicable Policies of SCAG's 2020 RTP/SCS, provides a detailed analysis of applicable RTP/SCS policies.

Table 4.8-12. Project's Potential to Conflict with Applicable Goals of SCAG's 2020 RTP/SCS

Goal	Would the Project conflict?
Improve mobility, accessibility, reliability, and travel safety for people and goods.	**No Conflict.** As described in Section 4.17, Transportation, the Project would implement a TDM program and site design elements to reduce residential VMT impacts, through MM-4.17-2. Sidewalks would connect to the surrounding pedestrian system and include street and pedestrian lighting for safety. Pedestrian access to the Project site will be provided along The Old Road and to the nearby trail system. The Project shall include a Class III bicycle route at the Project site (MM-4.17-2), on "A" Street, "B" Street, and the private gated access road on-site. Bicycle facilities include an existing Class II bike lane on The Old Road, north of Sagecrest Circle. The County Bicycle Master Plan indicates that a Class II bike lane is planned in the Project Site vicinity along The Old Road, south of Sagecrest Circle and along Pico Canyon Road, west of The Old Road. Bicycle parking and alternative fueled vehicle spaces would be provided at the Project site consistent with the 2019 Title 24 Building Energy Efficiency Standards and CALGreen Code. The Project site, located adjacent to a transportation corridor, is located within the study area of four local and four express Santa Clarita Transit routes. The Project's residents and guests would be located near the I-5, a high-quality transportation corridor, and have easy access to the City of Santa Clarita, the City of Santa Clarita's transit options (bus, rail), and the greater Los Angeles area. The TDM program would reduce VMT by 7.45 percent through a combination of GHG reduction strategies to encourage walking, biking, carpooling, alternative fueled vehicle use, and transit use (MM-4.17-2) (Fehr & Peers 2023). The TDM program includes a Class III bicycle lanes on-site; ; E-bikeshare program; carpool/vanpool incentives; school pool program; and subsidized transit passes. The provision of pedestrian and bicycle amenities and proximity to the I-5 would serve to improve mobility, accessibility, reliability, and travel safety for people and goods in support of this goal.
Enhance the preservation, security, and resilience of the regional transportation system.	**No Conflict.** See discussion above regarding the Project's location near I-5, a high-quality transportation corridor, and the provision of pedestrian and bicycle amenities near the Project's residential uses. The proximity of the Project site to various transportation modes would support the region's transportation investment and the sustainability of the regional transportation system in support of this goal.
Increase person and goods movement and travel choices within the transportation system.	**No Conflict.** See discussion above regarding the Project's location near the I-5, a high-quality transportation corridor, and the provision of pedestrian and bicycle amenities near the Project's residential uses. These Project characteristics would not conflict with the goal to increase the person and goods movement and travel choices within the transportation system.
Reduce greenhouse gas emissions and improve air quality.	**No Conflict.** The Project would meet or exceed the applicable requirements of the Title 24 Building Energy Efficiency Standards and CALGreen Code or applicable version at the time of building permit issuance. In addition, the

Table 4.8-12. Project's Potential to Conflict with Applicable Goals of SCAG's 2020 RTP/SCS

Goal	Would the Project conflict?
	Project design provides for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations for all dwelling units. As described above, the Project would include a TDM program that would reduce VMT through a combination of GHG reduction strategies to encourage walking, biking, carpooling, alternative fueled vehicle use, and transit use (MM-4.17-2) (Fehr & Peers 2023). In accordance with Title 24 2019, the Project would install solar photovoltaic systems on the residential dwelling units' rooftops as well as the recreation center. Based on the above, the Project's design and characteristics would serve to reduce GHG emissions and improve air quality, in support of this goal.
Support healthy and equitable communities.	**No Conflict.** As noted above, the Project includes mitigation measures to reduce GHG emissions impacts, including compliance with the Title 24 Building Energy Efficiency Standards and CALGreen Code. The provision of pedestrian and bicycle amenities, provision of onsite very low-income senior citizens and moderate/middle-income households, and proximity to existing open space with trail connections would support this goal to support healthy and equitable communities.
Adapt to changing climate and support an integrated regional development pattern and transportation network.	**No Conflict.** See discussion above regarding the Project's location near I-5 and the provision of pedestrian and bicycle amenities. The Project's development would support an integrated regional development pattern and transportation network which would in turn serve to reduce GHG emissions in support of this goal.
Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	**No Conflict**. This goal pertains to SCAG leveraging new transportation technologies and data-driven solutions that result in more efficient travel. The Project would not adversely affect SCAG's ability to develop more efficient travel and would not conflict with this goal.
Encourage development of diverse housing types in areas that are supported by multiple transportation options.	**No Conflict**. See discussion above regarding the Project's location near I-5 and the provision of pedestrian and bicycle amenities. The Project includes the development of residential units, of which 24 units will be dedicated to middle/moderate-income households and 47 units will be dedicated to very low-income senior citizen units. As such, the Project would support this goal to encourage development of diverse housing types in areas that is support by multiple transportation options.
Promote conservation of natural and agricultural lands and restoration of habitats.	**No Conflict.** The Project would include approximately 144 acres of natural open space (approximately 62% of Project site) within a conservation easement and approximately 24 acres of improved open space[5], thus fulfilling the requirement that at least that 25% of the net area of the development site be provided as required open space (Chapter 22.104.050.A.2 of Zoning Code). Furthermore, all of the natural open space would be contiguous, thus fulfilling the requirement that at least 51 percent of required natural open space must be configured into one contiguous area (Section 22.104.050.B.2 of the Zoning Code). Through implementation of MM-4.4-2, as detailed in Section 4.4, Biological Resources, the Project would also establish on-site restoration within the

[5] As described in Section 3.2.3, Open Space and Recreation of this Draft EIR, including HOA open space lots and active and passive open space areas, the total improved open space at the Project site would be 24.31 acres.

Table 4.8-12. Project's Potential to Conflict with Applicable Goals of SCAG's 2020 RTP/SCS

Goal	Would the Project conflict?
	preserved conservation area on-site, if adequate habitat cannot be preserved off-site. The Project is pursuing a Density Controlled Development Conditional Use Permit to cluster development so that greater portions of the Project site will be conserved. The Project site's zoning, including the agricultural zone may provide the land necessary to permit low-density single-family residential development, outdoor recreational uses, and public and institutional facilities. As such, the development of the Project would not conflict with this goal to promote conservation of natural agricultural lands and restoration of habitats.

Source: SCAG 2020a.

As discussed in Table 4.8-12, the Project would not conflict with the 2020 RTP/SCS goals and benefits intended to improve mobility and access to diverse destinations and reduce vehicular demand and associated emissions.

Because the Project would comply with the applicable GHG reduction strategies and policies outlined in the 2020-2045 RTP/SCS impacts related to potential to conflict with an applicable GHG reduction plan would be less than significant with mitigation.

CARB Scoping Plan, SB 32, AB 1279, and EO S-3-05

The Scoping Plan, approved by CARB in 2008 and updated in 2014, 2017, and 2022 provides a framework for actions to reduce California's GHG emissions and requires CARB and other State agencies to adopt regulations and other initiatives to reduce GHGs. As such, the Scoping Plan is not directly applicable to specific projects. Relatedly, in the Final Statement of Reasons for the Amendments to the CEQA Guidelines, the CNRA observed that "[t]he [Scoping Plan] may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009a). Under the Scoping Plan, however, there are several State regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other State agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., LCFS), among others. The Project would comply with all applicable regulations adopted in furtherance of the Scoping Plan to the extent required by law.

As discussed in Section 4.8.2, EO S-3-05 established a goal to reduce Statewide GHG emissions to the 1990 level by 2020, and to reduce Statewide GHG emissions to 80% below the 1990 level by 2050. AB 1279 requires the state to achieve net zero GHG emissions no later than 2045 as well as reduce GHG emissions 85% below 1990 levels by 2045. SB 32 establishes a Statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that Statewide GHG emissions are reduced to at least 40% below 1990 levels by 2030. While there are no established protocols or thresholds of significance for that future year analysis, CARB forecasts that compliance with the current Scoping Plan puts the State on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

The 2008 and 2017 Scoping Plans recommend strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's

GHG emissions. Table 4.8-13 highlights measures that have been developed under the 2008, 2017, and 2022 Scoping Plans and the Project's potential to conflict with those measures. To the extent that these regulations are applicable to the Project, its inhabitants, or uses, the Project would comply with all applicable regulations adopted in furtherance of the Scoping Plan.

Table 4.8-13. Project's Potential to Conflict with Scoping Plan GHG Emission-Reduction Strategies

Scoping Plan Measure	Measure Number	Project Potential to Conflict
Transportation Sector		
Advanced Clean Cars	T-1	**No Conflict.** The Project's residents and visitors would purchase or lease vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase or lease. The Project would include 92 EV charging stations and pre-wiring for EV chargers in accordance with CALGreen standards.
1.5 million zero-emission and plug-in hybrid light-duty electric vehicles by 2025 (4.2 million Zero-Emissions Vehicles by 2030)	NA	**No Conflict.** Implementation of MM-4.8-5 would require that 92 of the market-rate units have one Level 2 EV charging station in private garages, which would be required in addition to CALGreen conduit/charging requirements. This would encourage the adoption and use of EVs onsite.
Low Carbon Fuel Standard	T-2	**No Conflict.** Motor vehicles driven by the Project's residents and visitors would use compliant fuels.
Low Carbon Fuel Standard (18 percent reduction in carbon intensity by 2030)	NA	**No Conflict.** Motor vehicles driven by the Project's residents and visitors would use compliant fuels.
Regional Transportation-Related GHG Targets	T-3	**No Conflict.** The Project would encourage use of alternative forms of transportation, including bicycling, walking, and use of mass transit in accordance with implementation of MM-4.17-2.
Advanced Clean Transit	NA	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Last Mile Delivery	NA	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Reduction in Vehicle Miles Traveled	NA	**No Conflict.** The Project would prepare a TDM Program, aimed at discouraging single-occupancy vehicle trips and encouraging alternative modes of transportation, such as carpooling, taking transit, walking, and biking for residents, which would result in a 7.45% reduction in VMT.
Vehicle Efficiency Measures 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low-Friction Oil 4. Solar-Reflective Automotive Paint and Window Glazing	T-4	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.

Table 4.8-13. Project's Potential to Conflict with Scoping Plan GHG Emission-Reduction Strategies

Scoping Plan Measure	Measure Number	Project Potential to Conflict
Ship Electrification at Ports (Shore Power)	T-5	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Goods Movement Efficiency Measures 1. Port Drayage Trucks 2. Transport Refrigeration Units Cold Storage Prohibition 3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification 4. Goods Movement Systemwide Efficiency Improvements 5. Commercial Harbor Craft Maintenance and Design Efficiency 6. Clean Ships 7. Vessel Speed Reduction	T-6	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
California Sustainable Freight Action Plan	NA	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Heavy-Duty Vehicle GHG Emission Reduction 1. Tractor-Trailer GHG Regulation 2. Heavy-Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I)	T-7	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Project	T-8	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Medium and Heavy-Duty GHG Phase 2	NA	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
High-Speed Rail	T-9	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Electricity and Natural Gas Sector		
Energy Efficiency Measures (Electricity)	E-1	**No Conflict.** The Project will comply with current Title 24, Part 6, of the California Code of Regulations energy efficiency standards for electrical appliances and other devices at the time of building construction.
Energy Efficiency (Natural Gas)	CR-1	**No Conflict.** The Project would not have natural gas use onsite in accordance with implementation of MM-4.8-2.
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	**No Conflict.** Through implementation of MM-4.8-3, the Project would install a 7-kW solar photovoltaic electricity generating system at the recreation center

Table 4.8-13. Project's Potential to Conflict with Scoping Plan GHG Emission-Reduction Strategies

Scoping Plan Measure	Measure Number	Project Potential to Conflict
		which would be used to heat the pool at the recreation center.
Combined Heat and Power	E-2	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Renewable Portfolios Standard (33 percent by 2020)	E-3	**No Conflict.** The Project would use energy supplied by SCE, which is in compliance with the Renewable Portfolio Standard.
Renewable Portfolios Standard (50 percent by 2050)	NA	**No Conflict.** The Project would use energy supplied by SCE, which is in compliance with the Renewable Portfolio Standard.
Senate Bill 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs	E-4	**No Conflict.** The Project would include solar roofs installations in accordance with 2019 Title 24 requirements. Additionally, implementation of MM-4.8-3 requires a 7-kW solar PV electric generating system at recreation center building.
Water Sector		
Water Use Efficiency	W-1	**No Conflict.** The Project is going to utilize water saving features including low-flow fixtures.
Water Recycling	W-2	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Water System Energy Efficiency	W-3	**No Conflict.** This is applicable for the transmission and treatment of water, but it is not applicable for the Project.
Reuse Urban Runoff	W-4	**No Conflict.** All stormwater flows from on-site areas within the Project's developed footprint would be treated through proprietary biofiltration systems that would be placed throughout the development to treat stormwater flows, and then convey the flows into the on-site storm drainage system to the outfall in the existing RBC culvert at The Old Road.
Renewable Energy Production	W-5	**No Conflict.** Applicable for wastewater treatment systems. This measure is not applicable for the Project.
Green Buildings		
State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	**No Conflict.** The Project would be required to be constructed in compliance with state or local green building standards in effect at the time of building construction.
Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-2	**No Conflict.** The Project's buildings would meet green building standards that are in effect at the time of construction.
Beyond Code: Voluntary Programs at the Local Level (Greening New Public	GB-3	**No Conflict.** The Project would be required to be constructed in compliance with local green building standards in effect at the time of building construction.

Table 4.8-13. Project's Potential to Conflict with Scoping Plan GHG Emission-Reduction Strategies

Scoping Plan Measure	Measure Number	Project Potential to Conflict
Schools, Residential and Commercial Buildings)		
Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-4	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Industry Sector		
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Oil and Gas Extraction GHG Emission Reduction	I-2	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Reduce GHG Emissions by 20 percent in Oil Refinery Sector	NA	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Refinery Flare Recovery Process Improvements	I-4	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Work with the local air districts to evaluate amendments to their existing leak detection and repair rules for industrial facilities to include methane leaks	I-5	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Recycling and Waste Management Sector		
Landfill Methane Control Measure	RW-1	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Increasing the Efficiency of Landfill Methane Capture	RW-2	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Mandatory Commercial Recycling	RW-3	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Increase Production and Markets for Compost and Other Organics	RW-4	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Anaerobic/Aerobic Digestion	RW-5	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Extended Producer Responsibility	RW-6	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.

Table 4.8-13. Project's Potential to Conflict with Scoping Plan GHG Emission-Reduction Strategies

Scoping Plan Measure	Measure Number	Project Potential to Conflict
Environmentally Preferable Purchasing	RW-7	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Forests Sector		
Sustainable Forest Target	F-1	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
High Global Warming Potential Gases Sector		
Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-Professional Servicing	H-1	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
SF_6 Limits in Non-Utility and Non-Semiconductor Applications	H-2	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Reduction of Perfluorocarbons in Semiconductor Manufacturing	H-3	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Limit High Global Warming Potential Use in Consumer Products	H-4	**No Conflict.** The Project's residents, employees, and visitors would use consumer products that would comply with the regulations that are in effect at the time of manufacture.
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
SF_6 Leak Reduction Gas Insulated Switchgear	H-6	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
40 percent reduction in methane and hydrofluorocarbon emissions	NA	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
50 percent reduction in black carbon emissions	NA	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.
Agriculture Sector		
Methane Capture at Large Dairies	A-1	**No Conflict.** This measure does not apply to the Project. The Project would not inhibit CARB from implementing this Scoping Plan Measure.

Table 4.8-13. Project's Potential to Conflict with Scoping Plan GHG Emission-Reduction Strategies

Scoping Plan Measure	Measure Number	Project Potential to Conflict
2022 Scoping Plan		
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	2022 Appendix D	**No Conflict.** The Project would include EV charging infrastructure (see MM-4.8-5).
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)	2022 Appendix D	**No Conflict.** The Project is surrounded by existing urban uses (north and east of the Project site), including Stevenson Ranch, The Old Road, and immediately east of The Old Road, I-5. A park immediately abuts the Project site immediately to the south. The Project site is also located on lands that have been previously developed. The Project site is located next to existing utilities located within The Old Road. The site is currently underutilized. As discussed in Section 4.17, there are four local and four express Santa Clarita Transit routes within the study area as well as Class II bike lanes on The Old Road. Further, MM-4.71-2 requires the Project to include onsite bike network connecting to the existing offsite Class II lanes and subsidized transit passes.
Does not result in the loss or conversion of natural and working lands	2022 Appendix D	**No Conflict.** The Project site would conserve a majority of the Project site in its natural condition per mitigation measure MM-4.4.-1. Approximately 175 acres would be preserved and improved open space with implementation of the Project. The Project is pursuing a Density Controlled Development Conditional Use Permit to cluster development so that greater portions of the Project site will be conserved. The Project site's zoning, including the agricultural and commercial zones provide the land necessary to permit low-density residential development, outdoor recreational uses, and public and institutional facilities. As such, the development of the Project would not conflict with this goal to promote conservation of natural agricultural lands and restoration of habitats.
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.	2022 Appendix D	**Partially Conflict.** Due to permitted clustering, the development footprint would consist of 510 dwelling units on 72.55 acres which would create higher density in limited portions of the Project site (see Table 3-1 of Chapter 3, Project Description for dwelling unit densities/acre for Lots 2 through 10), while preserving much of the remainder of the Project site in perpetuity. See discussion above (Table 4.8-11) regarding the

Table 4.8-13. Project's Potential to Conflict with Scoping Plan GHG Emission-Reduction Strategies

Scoping Plan Measure	Measure Number	Project Potential to Conflict
		Project's location near I-5 and the provision of pedestrian and bicycle amenities. The Project includes the development of 510 residential units, of which 24 units will be dedicated to middle/moderate-income households and 47 units will be dedicated to very low-income senior citizen units. As such, the Project would support this goal to encourage development of diverse housing types in areas that is support by multiple transportation options but not meet the measure criteria. Although the Project would not entirely meet the criteria of this measure, the Project would implement MM-4.8-1 through MM-4.8-8, which would reduce GHG impacts to less than significant.
Reduces parking requirements by: Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.	2022 Appendix D	**No Conflict.** The County does not currently have a parking maximum ratio, and the Project would not impede the County from implementing a parking maximum in the future. Parking has been provided onsite to meet the County's minimum allowed parking ratios consistent with County zoning requirements and Green Building codes.
At least 20 percent of units included are affordable to lower-income residents	2022 Appendix D	**Partially Conflict.** The Project would include 71 (13.9%) deed-restricted affordable housing units onsite, including 47 for very-low-income seniors. The Project includes a deeper affordability level for the senior housing. The Project is consistent with State Density Bonus Law requirements that allow for a density bonus associated with the provision of income-restricted housing, as proposed by the Project. Although the Project would not entirely meet the criteria of this measure, the Project would implement MM-4.8-1 through MM-4.8-8, which would reduce GHG impacts to less than significant.
Results in no net loss of existing affordable units	2022 Appendix D	**No Conflict.** The Project would include 71 deed-restricted affordable housing units onsite, including 47 for very-low-income seniors. The Project would not remove any existing affordable units.
Building Decarbonization		
Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for	2022 Appendix D	**No Conflict.** In accordance with MM-4.8-2, the Project would electrify all residential and non-residential buildings. No natural gas connections would be available on-site.

Table 4.8-13. Project's Potential to Conflict with Scoping Plan GHG Emission-Reduction Strategies

Scoping Plan Measure	Measure Number	Project Potential to Conflict
space heating, water heating, or indoor cooking		

Source: CARB 2008, 2017, 2022b.
Notes: GHG = greenhouse gas; Project = Trails at Lyons Canyon; CARB = California Air Resources Board; EV = electric vehicle; SF_6 = sulfur hexafluoride.

Based on the analysis in Table 4.8-13, the Project would not conflict with a majority of the applicable strategies and measures in the Scoping Plan, but may partially conflict with a couple of the recommended strategies of the Scoping Plan. The Project would support achievement of the SB 32 and EO S-3-05 goals through compliance with the County's CAP and other GHG reducing plans and potential to conflict with the strategies identified in SCAG's 2020-2045 RTP/SCS to reduce per capita GHG emissions. As shown in Table 4.8-11, the mitigated Project emissions including implementation of MM-4.8-1 through MM-4.8-8 and MM-4.17-2, as quantifiable, would result in a GHG emissions efficiency less than the significance threshold established by the County. Again, this 2029 efficiency metric threshold reflects the trajectory planned for in the State's Scoping Plan and 2022 Scoping Plan Update (i.e., AB 32, SB 32, and AB 1279). Since the Project's efficiency would be below the 2029 efficiency metric threshold, it would not interfere with attainment of the 2030, 2045, and 2050 statewide emission reduction targets, and therefore, would not interfere with the State's and the County's ability to achieve the mid-term and long-term GHG reduction targets. Therefore, direct and indirect GHG emissions generated by the Project would have a less than significant impact on the environment with mitigation.

Potential to Conflict with Statewide Greenhouse Gas Reduction Strategies

The Project's potential to conflict with statewide GHG reduction strategies is summarized in detail in Table 4.8-14, Relevant Greenhouse Gas-Related Laws and Regulations. Consideration of the Project's various construction and operational components and their relationship to specified laws and regulations designed to reduce GHG emissions from such components is provided below.

Table 4.8-14. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
Building Components/Facility Operations		
Roofs/Ceilings/Insulation	CALGreen Code (Title 24, Part 11) California Energy Code (Title 24, Part 6)	The Project must comply with efficiency standards regarding roofing, ceilings, and insulation. For example: Roofs/Ceilings: New construction must reduce roof heat island effects per CALGreen Code Section 106.11.2, which requires use of roofing materials having a minimum aged solar reflectance, thermal emittance complying with Section A5.106.11.2.2 and A5.106.11.2.3 or a minimum aged Solar Reflectance Index as specified in Tables A5.106.11.2.2, or A5.106.11.2.3. Roofing materials must also meet solar reflectance and thermal

Table 4.8-14. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		emittance standards contained in Title 20 Standards. Roof/Ceiling Insulation: There are also requirements for the installation of roofing and ceiling insulation. (See Title 24, Part 6 Compliance Manual at Section 3.2.2.)
Flooring	CALGreen Code	The Project must comply with efficiency standards regarding flooring materials. For example, for 80% of floor area receiving "resilient flooring," the flooring must meet applicable installation and material requirements contained in CALGreen Code Section 5.504.4.6.
Window and Doors (Fenestration)	California Energy Code	The Project must comply with fenestration efficiency requirements. For example, the choice of windows, glazed doors, and any skylights for the Project must conform to energy consumption requirements affecting size, orientation, and types of fenestration products used. (See Title 24, Part 6 Compliance Manual, Section 3.3.)
Building Walls/Insulation	CALGreen Code California Energy Code	The Project must comply with efficiency requirements for building walls and insulation. Exterior Walls: Must meet requirements in current edition of California Energy Code, and comply with Sections A5.106.7.1 or A5.106.7.2 of CALGreen Code for wall surfaces, as well as Section 5.407.1, which required weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1403.2. Construction must also meet requirements contained in Title 24, Part 6, which vary by material of the exterior walls. (See Title 24, Part 6 Compliance Manual, Part 3.2.3.) Demising (Interior) Walls: Mandatory insulation requirements for demising walls (which separate conditioned from non-conditions space) differ by the type of wall material used. (*Id*. at 3.2.4.) Door Insulation: There are mandatory requirements for air infiltration rates to improve insulation efficiency; they differ according to the type of door. (*Id*. at 3.2.5.) Flooring Insulation: There are mandatory requirements for insulation that depend on the material and location of the flooring. (*Id*. at 3.2.6.)
Finish Materials	CALGreen Code	The Project must comply with pollutant control requirements for finish materials. For example, materials including adhesives, sealants, caulks, paints and coatings, carpet systems, and composite wood products must meet requirements in CALGreen Code to

Table 4.8-14. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		ensure pollutant control. (CALGreen Code Section 5.504.4.)
Wet Appliances (Toilets/Faucets/Urinals, Dishwasher/Clothes Washer, Spa and Pool/Water Heater)	CALGreen Code California Energy Code Appliance Efficiency Regulations (Title 20 Standards)	Wet appliances associated with the Project must meet various efficiency requirements. For example: Spa and Pool: Use associated with the Project is subject to appliance efficiency requirements for service water heating systems and equipment, spa and pool heating systems and equipment. (Title 24, Part 6, Sections 110.3, 110.4, 110.5; Title 20 Standards, Sections 1605.1(g), 1605.3(g); see also California Energy Code.) Toilets/Faucets/Urinals: Use associated with the Project is subject to new maximum rates for toilets, urinals, and faucets effective January 1, 2016: ▪ Showerheads maximum flow rate 2.5 gpm at 80 psi ▪ Wash fountains 2.2 x (rim space in inches/20) gpm at 60 psi ▪ Metering faucets 0.25 gallons/cycle ▪ Lavatory faucets and aerators 1.2 gpm at 60 psi ▪ Kitchen faucets and aerators 1.8 gpm with optional temporary flow of 2.2 gpm at 60 psi ▪ Public lavatory faucets 0.5 gpm at 60 psi ▪ Trough-type urinals 16 inches length ▪ Wall mounted urinals 0.125 gallons per flush ▪ Other urinals 0.5 gallons per flush (Title 20 Standards, Sections 1605.1(h),(i) 1065.3(h),(i).) Water Heaters: Use associated with the Project is subject to appliance efficiency requirements for water heaters. (Title 20 Standards, Sections 1605.1(f), 1605.3(f).) Dishwasher/Clothes Washer: Use associated with the Project is subject to appliance efficiency requirements for dishwashers and clothes washers. (Title 20 Standards, Sections 1605.1(o),(p),(q), 1605.3(o),(p),(q).) In addition, through implementation of MM-4.8-3, Energy Conservation, the Project would install energy Star-rated heating, cooling, lighting, and appliances.
Dry Appliances (Refrigerator/Freezer, Heater/	Title 20 Standards CALGreen Code	Dry appliances associated with the Project must meet various efficiency requirements. For example: Refrigerator/Freezer: Use associated with the Project is subject to appliance efficiency requirements for

Table 4.8-14. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
Air Conditioner, Clothes Dryer)		refrigerators and freezers. (Title 20 Standards, Sections 1605.1(a), 1605.3(a).) Heater/Air Conditioner: Use associated with the Project is subject to appliance efficiency requirements for heaters and air conditioners. (Title 20 Standards, Sections 1605.1(b),(c),(d),(e), 1605.3(b),(c),(d),(e) as applicable.) Clothes Dryer: Use associated with the Project is subject to appliance efficiency requirements for clothes dryers. (Title 20 Standards, Section 1605.1(q).) In addition, through implementation of MM-4.8-3, Energy Conservation, the Project would install energy Star-rated heating, cooling, lighting, and appliances.
	CALGreen Code	Installations of HVAC, refrigeration and fire suppression equipment must comply with CALGreen Code Sections 5.508.1.1 and 508.1.2, which prohibits CFCs, halons, and certain HCFCs and HFCs.
Lighting	Title 20 Standards	Lighting associated with the Project will be subject to energy efficiency requirements contained in Title 20 Standards. General Lighting: Indoor and outdoor lighting associated with the Project must comply with applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1(j),(k),(n), 1605.3(j),(k),(n).) Emergency lighting and self-contained lighting: the Project must also comply with applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1(l), 1605.3(l).) In addition, through implementation of MM-4.8-3, Energy Conservation, the Project would use light-emitting diodes (LEDs) or other high efficiency lightbulbs for outdoor lighting, and would provide information on energy efficiency, energy efficient lighting and lighting control systems, energy management, and existing energy incentive programs to future residents of the Project.
	California Energy Code	Lighting associated with a use implementing the Project will also be subject to energy efficiency requirements contained in Title 24, Part 6, which contains energy standards for non-residential indoor lighting and outdoor lighting. (See Title 24 Part 6 Compliance Manual, at Sections 5, 6.) Mandatory lighting controls for indoor lighting include, for example, regulations for automatic shut-off,

Table 4.8-14. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		automatic daytime controls, demand responsive controls, and certificates of installation. (Id. at Section 5.) Regulations for outdoor lighting include, for example, creation of lighting zones, lighting power requirements, a hardscape lighting power allowance, requirements for outdoor incandescent and luminaire lighting, and lighting control functionality. (Id. at Section 6.) In addition, through implementation of MM-4.8-3, Energy Conservation, the Project would use LEDs or other high efficiency lightbulbs for outdoor lighting, and would provide information on energy efficiency, energy efficient lighting and lighting control systems, energy management, and existing energy incentive programs to future residents of the Project.
	AB 1109	Lighting associated with implementing the Project will be subject to energy efficiency requirements adopted pursuant to AB 1109. Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general purpose lighting, to reduce electricity consumption 50% for indoor residential lighting and 25% for indoor commercial lighting. In addition, through implementation of MM-4.8-3, Energy Conservation, the Project would use LEDs or other high efficiency lightbulbs for outdoor lighting, and would provide information on energy efficiency, energy efficient lighting and lighting control systems, energy management, and existing energy incentive programs to future residents of the Project.
Bicycle and Vehicle Parking	CALGreen Code	A use implementing the Project will be required to provide compliant bicycle parking, fuel-efficient vehicle parking, and electric vehicle charging spaces (CALGreen Code Sections 5.106.4, 5.106.5.1, 5.106.5.3). Additionally, through implementation of MM-4.8-5, Encourage Electric Vehicles, the Project would install a dedicated 208/240 branch circuit in every single-family garage unit, and no less than 92 of the market-rate units would have one Level 2 EV charging station in the garage.
	California Energy Code	The Project is also subject to parking requirements contained in Title 24, Part 6. For example, parking capacity is to meet but not exceed minimum local zoning requirements, and the Project should employ approved strategies to reduce parking capacity (Title 24, Part 6, section 106.6)
Landscaping	CALGreen Code	Through implementation of MM-4.8-6, Water Use Efficiency and Water Conservation, the Project would require water efficiency measures such as high-

Table 4.8-14. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		efficiency appliances/fixtures to reduce water use and or include water-efficient landscape design, low-flow or high efficiency water fixtures, c) Water-efficient landscapes with lower water demands than required by the California Department of Water Resources (DWR) 2015 Model Water Efficient Landscape Ordinance (MWELO), planting of drought-tolerant plant species, among others.
	Model Water Efficient Landscaping Ordinance	The MWELO ordinance promotes efficient landscaping in new developments and establishes an outdoor water budget for new and renovated landscaped areas that are 500 square feet or larger. (CCR, Title 23, Division 2, Chapter 2.7.) Through implementation of MM-4.8-6, the Project would result in water use efficiency and water conservation measures, including planting of drought-tolerant plant species.
Refrigerants	CARB Management of High GWP Refrigerants for Stationary Sources	Any refrigerants associated with the Project will be subject to CARB standards. CARB's Regulation for the Management of High GWP Refrigerants for Stationary Sources 1) reduces emissions of high-GWP refrigerants from leaky stationary, non-residential refrigeration equipment; 2) reduces emissions resulting from the installation and servicing of stationary refrigeration and air conditioning appliances using high-GWP refrigerants; and 3) requires verification GHG emission reductions. (CCR, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5.1, Section 95380 et seq.)
Consumer Products	CARB High GWP GHGs in Consumer Products	All consumer products associated with the Project will be subject to CARB standards. CARB's consumer products regulations set VOC limits for numerous categories of consumer products, and limits the reactivity of the ingredients used in numerous categories of aerosol coating products (CCR, Title 17, Division 3, Chapter 1, Subchapter 8.5.)
Construction		
Use of Off-Road Diesel Engines, Vehicles, and Equipment	CARB In-Use Off-Road Diesel Vehicle Regulation	Any relevant vehicle or machine use associated with the Project will be subject to CARB standards. The CARB In-Use-Off-Road Diesel Vehicle Regulation applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation: 1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; 2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; 3) restricts the adding of older vehicles into fleets starting on

Table 4.8-14. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		January 1, 2014; and 4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The requirements and compliance dates of the Off-Road regulation vary by fleet size, as defined by the regulation.
Greening New Construction	CALGreen Code	All new construction must comply with CALGreen Code, as discussed in more detail throughout this table. Adoption of the mandatory CALGreen Code standards for construction has been essential for improving the overall environmental performance of new buildings; it also sets voluntary targets for builders to exceed the mandatory requirements.
Construction Waste	CALGreen Code	The Project will be subject to CALGreen Code requirements for construction waste reduction, disposal, and recycling, such as a requirement to recycle and/or salvage for reuse a minimum of 50% of the non-hazardous construction waste in accordance with Section 5.408.1.1, 5.408.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent.
Solid Waste		
Solid Waste Management	Landfill Methane Control Measure	Waste associated with implementing the Project will be disposed per State requirements for landfills, material recovery facilities, and transfer stations. Per the statewide GHG emissions inventory, the largest emissions from waste management sectors come from landfills, and are in the form of CH_4. In 2010, CARB adopted a regulation that reduces emissions from methane in landfills, primarily by requiring owners and operators of certain uncontrolled municipal solid waste landfills to install gas collection and control systems, and requires existing and newly installed gas and control systems to operate in an optimal manner. The regulation allows local air districts to voluntarily enter into a memorandum of understanding with CARB to implement and enforce the regulation and to assess fees to cover costs of implementation.
	Mandatory Commercial Recycling (AB 341)	AB 341 will require a use implementing the Project, if it generates four cubic yards or more of commercial solid waste per week, to arrange for recycling services, using one of the following: self-haul; subscribe to a hauler(s); arranging for pickup of recyclable materials;

Table 4.8-14. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		subscribing to a recycling service that may include mixed waste processing that yields diversion results comparable to source separation. The Project will also be subject to local commercial solid waste recycling program required to be implemented by each jurisdiction under AB 341.
	CALGreen Code	The Project will be subject to CALGreen Code requirement to provide areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling (CALGreen Code Section 5.410.1)
Energy Use		
Renewable Energy	California RPS (SB X1-2, SB 350, and SB 100)	Energy providers to the Project will be required to comply with RPS set by SB X1 2, SB 350, and SB 100. SB X1 2 requires investor-owned utilities, publicly-owned utilities, and electric service providers to increase purchases of renewable energy such that at least 33% of retail sales are procured from renewable energy resources by December 31, 2020. In the interim, each entity was required to procure an average of 20% of renewable energy for the period of January 1, 2011 through December 31, 2013; and will be required to procure an average of 25% by December 31, 2016, and 33% by 2020. SB 350 requires retail sellers and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030. SB 100 increased the standards set forth in SB 350 establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California by 2045.
	Million Solar Roofs Program (SB 1)	The Project will participate in California's energy market by installing solar, which is affected by implementation of the Million Solar Roofs Program. This is consistent with the 2019 Title 24 building code requirements. The Project would also install solar on the recreation center building, per implementation of MM-4.8-3. As part of Governor Schwarzenegger's Million Solar Roofs Program, California has set a goal to install

Table 4.8-14. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		3,000 megawatts of new, solar capacity through 2016. The Million Solar Roofs Program is a ratepayer-financed incentive program aimed at transforming the market for rooftop solar systems by driving down costs over time.
	California Solar Initiative-Thermal Program	The Project will derive energy from California's energy market, which is affected by implementation of the California Solar Initiative -Thermal Program. The program offers cash rebates of up to $4,366 on solar water heating systems for single-family residential customers. Multifamily and Commercial properties qualify for rebates of up to $800,000 on solar water heating systems and eligible solar pool heating systems qualify for rebates of up to $500,000. Funding for the California Solar Initiative-Thermal program comes from ratepayers of Pacific Gas & Electric, SCE, Southern California Gas Company, and San Diego Gas & Electric. The rebate program is overseen by the CPUC as part of the California Solar Initiative.
	Waste Heat and Carbon Emissions Reduction Act (AB 1613, AB 2791)	The Project will indirectly derive energy from California's energy market, which is affected by implementation of the Waste Heat and Carbon Emissions Reduction Act. Originally enacted in 2007 and amended in 2008, this act directed the CEC, CPUC, and CARB to implement a program that would encourage the development of new combined heat and power systems in California with a generating capacity of not more than 20 megawatts, to increase combined heat and power use by 30,000 gigawatt-hour. The CPUC publicly owned electric utilities, and CEC duly established policies and procedures for the purchase of electricity from eligible combined heat and power systems. CEC guidelines require combined heat and power systems to be designed to reduce waste energy; have a minimum efficiency of 60%; have NO_x emissions of no more than 0.07 pounds per megawatt-hour; be sized to meet eligible customer generation thermal load; operate continuously in a manner that meets expected thermal load and optimizes efficient use of waste heat; and be cost effective, technologically feasible, and environmentally beneficial.
Vehicular/Mobile Sources		
Fuel	Low Carbon Fuel Standard (LCFS)/ EO S-01-07	Auto trips associated with the Project will be subject to LCFS (EO S-01-07), which requires a 20% or

Table 4.8-14. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		greater reduction in the average fuel carbon intensity by 2030 with a 2010 baseline for transportation fuels in California regulated by CARB. The program establishes a strong framework to promote the low carbon fuel adoption necessary to achieve statewide GHG reduction goals.
Light-Duty Vehicles	AB 1493 (or the Pavley Standard)	Cars that drive to and from the Project will be subject to AB 1493, which directed CARB to adopt a regulation requiring the maximum feasible and cost-effective reduction of GHG emissions from new passenger vehicles. Pursuant to AB 1493, CARB adopted regulations that establish a declining fleet average standard for CO_2, CH_4, N_2O, and HFCs (air conditioner refrigerants) in new passenger vehicles and light-duty trucks beginning with the 2009 model year and phased-in through the 2016 model year. These standards are divided into those applicable to lighter and those applicable to heavier portions of the passenger vehicle fleet. The regulations will reduce "upstream" smog-forming emissions from refining, marketing, and distribution of fuel.
	Advanced Clean Car and ZEV Programs	Cars that drive to and from the Project will be subject to the Advanced Clean Car and ZEV Programs. In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards called Advanced Clean Cars. By 2025, new automobiles will emit 34% fewer global warming gases and 75% fewer smog-forming emissions. The ZEV program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in the 2018-2025 model years.
	Tire Inflation Regulation	Cars that drive to and from the Project will be subject to the CARB Tire Inflation Regulation, which took effect on September 1, 2010, and applies to vehicles with a gross vehicle weight rating of 10,000 pounds or less.

Table 4.8-14. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		Under this regulation, automotive service providers must, inter alia, check and inflate each vehicle's tires to the recommended tire pressure rating, with air or nitrogen, as appropriate, at the time of performing any automotive maintenance or repair service, and to keep a copy of the service invoice for a minimum of three years, and make the vehicle service invoice available to the CARB, or its authorized representative upon request.
	EPA and NHTSA GHG and CAFE Standards	Mobile sources that travel to and from the Project would be subject to EPA and NHTSA GHG and CAFE standards for passenger cars, light-duty trucks, and medium-duty passenger vehicles. (75 FR 25324–25728 and 77 FR 62624–63200.)
Water Use		
Water Use Efficiency	Emergency State Water Board Regulations	Water use associated with the Project will be subject to emergency regulations to the extent applicable. On May 18, 2016, partially in response to EO B-27-16, the State Water Board adopted emergency water use regulations (CCR, title 23, Section 864.5 and amended and re-adopted Sections 863, 864, 865, and 866). The regulation directs the State Water Board, Department of Water Resources, and CPUC to implement rates and pricing structures to incentivize water conservation, and calls upon water suppliers, homeowners' associations, California businesses, landlords and tenants, and wholesale water agencies to take stronger conservation measures.
	EO B-37-16	Water use associated with the Project will be subject to Emergency EO B-37-16, issued May 9, 2016, which directs the State Water Resources Control Board to adjust emergency water conservation regulations through the end of January 2017 to reflect differing water supply conditions across the state. The Water Board must also develop a proposal to achieve a mandatory reduction of potable urban water usage that builds off the mandatory 25% reduction called for in EO B-29-15. The Water Board and Department of Water Resources will develop new, permanent water use targets to which the Project will be subject. The Water Board will permanently prohibit water-wasting practices such as hosing off sidewalks, driveways, and other hardscapes; washing automobiles with hoses not equipped with a shut-off nozzle; using non-recirculated water in a fountain or

Table 4.8-14. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		other decorative water feature; watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and irrigating ornamental turf on public street medians.
	EO B-40-17	EO B-40-17 lifted the drought emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne. It also rescinds EO B-29-15, but expressly states that EO B-37-16 remains in effect and directs the State Water Resources Control Board to continue development of permanent prohibitions on wasteful water use to which the Project will be subject.
	SB X7-7	Water provided to the Project will be affected by SB X7-7's requirements for water suppliers. SB X7-7, or the Water Conservation Act of 2009, requires all water suppliers to increase water use efficiency. It also requires, among other things, that the Department of Water Resources, in consultation with other state agencies, develop a single standardized water use reporting form, which would be used by both urban and agricultural water agencies.
	CALGreen Code	The Project is subject to CALGreen Code's water efficiency standards, including a required 20% mandatory reduction in indoor water use. (CALGreen Code, Division 4.3.). Also, the Project would result in water reductions through implementation of MM-4.8-6, Water Use Efficiency and Water Conservation.
	California Water Code, Division 6, Part 2.10, Sections 10910–10915.	Development and approval of the Project would require the development of a Project-specific Water Supply Assessment assessing the Project's water demand (Appendix L-1).
	California RPS (SB X1-2, SB 350, SB 100)	Electricity usage associated with water and wastewater supply, treatment and distribution associated with the Project will be required to comply with RPS set by SB X1-2, SB 350, and SB 100.

Notes: AB = Assembly Bill; CARB = California Air Resources Board; CEC = California Energy Commission; CFC = chlorofluorocarbon; CH_4 = methane; CO_2 = carbon dioxide; CO_2e = carbon dioxide equivalent; CPUC = California Public Utilities Commission; EO = Executive Order; EPA = Environmental Protection Agency; GHG = greenhouse gas; GWP = global warming potential; HCFC = hydrochlorofluorocarbon; HFC = hydrofluorocarbon; gpm = gallons per minute; MT = metric tons; N_2O = nitrous oxide; NHTSA = National Highway Traffic Safety Administration; PM = particulate matter; RPS = Renewable Portfolio Standard; RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy; SB = Senate Bill; SANDAG = San Diego Association of Governments; VOC = volatile organic compound; ZEV = zero emission vehicle

As shown in Table 4.8-14, the Project would not conflict with the applicable GHG-reducing strategies of the State that apply to the construction and operational components.

CAPCOA GHG Reduction Measures

The California Air Pollution Control Officers Association (CAPCOA) prepared the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity: Designed for Local Governments, Communities, and Project Developers (hereafter referred to as the "Handbook") (CAPCOA 2021). The Handbook provides methods to quantify GHG emission reductions from a specified list of measures, primarily focused on project-level actions. The Handbook also includes a method to assess potential benefits of different climate vulnerability reduction measures, as well as measures that can be implemented to improve health and equity, again at the project level. The GHG emission mitigation measures (see Section 4.8.7) implemented for the Project were analyzed against applicable GHG reduction strategies in the Handbook (see Appendix B-3) (CAPCOA 2021). The table, included in Appendix B-3, details GHG measures in the emission sectors included in the Handbook: Construction, Energy, Lawn and Landscaping, Natural and Working Lands, Refrigerants, Solid Waste, Water, and Miscellaneous. It should be noted that an evaluation of the Transportation sector measures is included in the Project's Transportation Impact Analysis (Appendix J). As shown in Appendix B-3, the Project implemented or partially implemented most applicable GHG reduction strategies in the Handbook.

Summary

The Project would support achievement of the SB 32, EO S-3-05, and AB 1279 goals through compliance with the County's 2045 CAP and with support of the strategies identified in SCAG's 2020-2045 RTP/SCS to reduce per capita GHG emissions. The Project would also not conflict with the County's General Plan, OVOV, County's Green Building Standards, and OurCounty Sustainability Plan. Nonetheless, without mitigation, the Project could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Therefore, impacts related to potential to conflict with an applicable GHG reduction plan would be potentially significant.

As discussed under Threshold 4.8a, implementation of MM-4.8-1 through MM-4.8-8 and MM-4.17-2 would reduce potentially significant GHG emissions impacts to less than significant. As such, the Project's potential to conflict with an applicable plan, policy, or regulation would be a less-than-significant impact with mitigation.

4.8.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., cumulative projects) used for this analysis are presented in Section 2.6, Cumulative Impacts, and on Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR. For purposes of GHG emissions, the geographical area of cumulative impacts is global, further detailed below.

Where a lead agency concludes that the cumulative effects of a project, taken together with the impacts of other closely related past, present, and reasonably foreseeable future projects are significant, the lead agency then must determine whether the project's incremental contribution to such significant cumulative impact is "cumulatively considerable" (and thus significant in and of itself).

Threshold 4.8a: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. As previously discussed in Section 4.8.1, Existing Environmental Conditions, GHG emissions inherently contribute to cumulative impacts, and thus, any additional GHG emissions would result in a cumulative impact. The General Plan EIR determined that cumulative GHG emissions impacts would remain significant and unavoidable. As shown in Table 4.8-4, the Project would exceed the GHG threshold established in Section 4.8.3, Thresholds of Significance, and cumulative impacts related to GHG emissions would be potentially significant. However, as shown in Section 4.8.8, with mitigation, the Project's emissions would be less than the County's significance threshold. Therefore, with mitigation, the Project would not make a cumulatively considerable contribution to a cumulative impact with regard to generation of GHG emissions and the cumulative impact would be less than significant.

Threshold 4.8b: Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The General Plan EIR determined that cumulative GHG emissions impacts would remain significant and unavoidable. As discussed in response to Threshold 4.8b, the Project would not conflict with any applicable GHG reduction plans, including the County's CAP, County's General Plan, County's Green Building Code, the 2020-2045 RTP/SCS, and CARB's Scoping Plan. Therefore, with mitigation, the Project would not make a cumulatively considerable contribution to a cumulative impact, and the cumulative impact would be less than significant.

4.8.7 Mitigation Measures

To reduce potentially significant impacts under Thresholds 4.8a and 4.8b, MM-4.8-1 through MM-4.8-8 are identified to reduce Project-generated construction and operational GHG emissions from various Project emission sources. Implementation of MM-4.17-2 would also reduce GHG emissions through implementation of a TDM program. Mitigation measures herein are consistent with the County's 2045 CAP Tier 1 and 2 requirements as detailed in Appendix F of the 2045 CAP (County of Los Angeles 2024).

MM-4.8-1 Construction Emission Reductions. Prior to the issuance of grading permits, the Project Applicant or its designee shall implement the following strategies during construction activities and provide evidence to the County that the Construction Contractor's contract specifications include the following strategies:

a) Use electric or hybrid powered equipment for generators and other small pieces of equipment (e.g., forklifts and saws), as commercially available.

b) Use cleaner-fuel equipment such as replacing diesel fuel with compressed natural gas (CNG) or renewable diesel, as commercially available.

c) Reduce idling time of heavy-duty trucks either by shutting them off when not in use or reducing the time of idling to no more than 3 minutes (5-minute limit is required by the state airborne toxics control measure 13 CCR § 2485).

Commercially available equipment is herein defined as equipment sourced within 50 vehicle miles of the Project site and within 10 percent of the cost of the diesel-fueled-equivalent equipment. The Project Applicant must contact at least 3 contractors or vendors within Los Angeles County and submit to the County justification if the specified equipment is not commercially available. Compliance with this measure shall be documented and made available to the County upon request.

MM-4.8-2 Electrify Buildings. All the Project's buildings shall be powered fully by electricity, with no natural gas infrastructure or appliances, including no fireplaces. Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the building design plans include no natural gas infrastructure.

MM-4.8-3 Energy Conservation. Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the residential and recreational building design plans include the following energy conservation measures:

a) Install Energy Star-rated heating, cooling, lighting, and appliances.

b) Install a 7-kilowatt (kW) solar photovoltaic electric generating system at the recreation center.

c) Outdoor lighting shall be light emitting diodes (LED) or other high-efficiency lightbulbs.

d) Install Cool Pavement. Prior to the issuance of building permits, the Project applicant or its designee shall submit building plans illustrating installation of cool pavements in place of dark pavements. Outdoor pavements, such as walkways and patios, shall use paving materials with three-year solar reflectance index (SRI) of 0.28 or initial SRI of 0.33.

e) Provide information on energy efficiency, energy efficient lighting and lighting control systems, energy management, and existing energy incentive programs to future residents of the Project.

MM-4.8-4 Utilize 100% Zero-Carbon Electricity. The Project shall require, through the Covenants, Conditions and Restrictions (CC&Rs), enforced by the homeowners' association, the use of 100% zero-carbon electricity procured through Southern California Edison (SCE) (SCE Green Rate) or other electricity provider for residences and the recreational center. This requirement shall be enforced until which time the electricity provided is 100% carbon-free for all accounts by default.

MM-4.8-5 Encourage Electric Vehicles. Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the single-family residential building design plans incorporate the following:

a) The installation of a dedicated 208/240 branch circuit shall be included in every single-family garage unit, and no-less-than 92 of the market-rate units shall have one Level 2 (fast charger with 40-amp circuit) electric vehicle (EV) charging station in the garage.

MM-4.8-6 Water Use Efficiency and Water Conservation. Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the residential and recreational building design plans include the following water use efficiency and conservation measures, including:

a) High-efficiency appliances/fixtures to reduce water use, and/or include water-efficient landscape design

b) Low-flow or high-efficiency water fixtures

c) Water-efficient landscapes with lower water demands than required by the California Department of Water Resources (DWR) 2015 Model Water Efficient Landscape Ordinance (MWELO)

d) Planting of native and drought-tolerant plant species only

e) Provide educational materials to future tenants and building occupants about water saving behaviors and water-conserving landscaping.

MM-4.8-7 Solid Waste Reduction. Prior to the issuance of building permits for the Project, the Project Applicant shall provide building plans that include the following solid waste reduction measure:

a) Provide storage areas for recyclables and organic waste in new construction, and food waste storage, if a pick-up service is available.

MM-4.8-8 Landscape Maintenance Equipment Emission Reduction. The Project Applicant shall implement the following landscape maintenance equipment reduction measures:

a) **Outdoor Electrical Outlets.** Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the design plans include electrical outlets on the exterior of the structure to facilitate use of electrical lawn and garden equipment.

b) **Encourage Utilization of Existing Yard Equipment Exchange and Rebate Programs.** The Project's future homeowners' association shall educate future residents about the South Coast Air Quality Management District (SCAQMD) Electric Lawn Mower Rebate Program and the Commercial Electric Lawn and Garden Equipment Exchange Program. When conventional gasoline-powered yard equipment (e.g., lawn mowers, leaf blowers and vacuums, shredders, trimmers, and chain saw) are exchanged for electric and rechargeable battery-powered yard equipment, direct GHG emissions from fossil-fuel combustion are displaced by indirect GHG emissions associated with the generation of electricity used to power the equipment.

4.8.8 Level of Significance After Mitigation

Emissions during construction and operation of the Project with mitigation would result in an efficiency metric less than the 2045 CAP of 2.42 MT CO_2e per person per year. This 2029 efficiency metric threshold reflects the trajectory planned for in the State's Scoping Plan, 2017 Scoping Plan Update, and 2022 Scoping Plan (i.e., AB 32, SB 32, and AB 1279). Since the Project's efficiency would be below the 2029 efficiency metric threshold, it would not interfere with attainment of the 2030, 2045, and 2050 statewide emission reduction targets, and therefore, would not interfere with the State's and the County's ability to achieve the mid-term and long-term GHG reduction targets. Therefore, direct and indirect GHG emissions generated by the Project would have a less than significant impact on the environment with mitigation. The impact related to the potential for the Project to generate GHG emissions, either directly or indirectly, that may have a significant effect on the environment would be less than significant with implementation of MM-4.8-1 through MM 4.8-8 and MM-4.17-2.

Similarly, the impact related to the Project potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs would be less than significant with implementation of MM-4.8-1 through MM 4.8-8 and MM-4.17-2.

4.8.9 References

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

75 FR 25324–25728. Final Rule: "Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards." July 6, 2010.

77 FR 62624–63200. Final Rule: "2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards." October 15, 2012.

CalRecycle (California Department of Resources Recycling and Recovery). 2019. *Short-Lived Climate Pollutants (SLCP): Organic Waste Methane Emissions Reductions*. Last Updated April 16, 2019. Accessed January 2022. https://www.calrecycle.ca.gov/Climate/SLCP/.

CAPCOA (California Air Pollution Control Officers Association). 2008. *CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. January 2008.

CAPCOA. 2021. *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*. Final Draft. December 2021. Accessed April 28, 2023. https://www.caleemod.com/documents/handbook/full_handbook.pdf.

CAPCOA. 2023. *California Emissions Estimator Model (CalEEMod) User's Guide Version 2022*. Prepared by Trinity Consultants and the California Air Districts. http://www.caleemod.com/.

CARB (California Air Resources Board). 2008. *Climate Change Scoping Plan: A Framework for Change*. October, approved December 12, 2008. Accessed June 20, 2018. https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf.

CARB. 2014. *First Update to the Climate Change Scoping Plan Building on the Framework Pursuant to AB 32 – The California Global Warming Solutions Act of 2006*. May 2014. Accessed February 17, 2016. http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.

CARB. 2017. *2017 Climate Change Scoping Plan Update*. November 2017. Accessed December 2017. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

CARB. 2018a. "Glossary of Terms Used in Greenhouse Gas Inventories." Last reviewed June 22, 2018. http://www.arb.ca.gov/cc/inventory/faq/ghg_inventory_glossary.htm.

CARB. 2018b. "Proposed Update to Senate Bill 375 Greenhouse Gas Emissions Reduction Targets." March 22, 2018. https://ww2.arb.ca.gov/sites/default/files/2020-06/SB375_Final_Target_Staff_Report_%202018_Resolution_18-12.pdf.

CARB. 2021a. "Current California GHG Emission Inventory Data: 2000-2019 GHG Inventory (2021 Edition)." Accessed July 2021. https://ww2.arb.ca.gov/ghg-inventory-data?utm_medium=email&utm_source=govdelivery.

CARB. 2021b. "Advanced Clean Cars Program." Accessed December 2021. https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about.

CARB. 2021c. "Advanced Clean Trucks Fact Sheet." August 20, 2021. https://ww2.arb.ca.gov/sites/default/files/2021-08/200625factsheet_ADA.pdf.

CARB. 2022a. *2022 Scoping Plan for Achieving Carbon Neutrality*. November 16, 2022. https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf.

CARB. 2022b. "California Air Resources Board 2022 Scoping Plan—Appendix D, Local Actions." November 2022. Accessed May 15, 2023. https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf.

CEC (California Energy Commission). 2018a. "2019 Building Energy Efficiency Standards Fact Sheet." March 2018. https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf.

CEC. 2021. *Draft Environmental Impact Report Amendments to the Building Energy Efficiency Standards*. May 19. Accessed July 2022. https://efiling.energy.ca.gov/GetDocument.aspx?tn=237853&DocumentContentId=71096.

CNRA (California Natural Resources Agency). 2009a. *2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008.* Accessed March 10, 2017. http://resources.ca.gov/docs/climate/Statewide_Adaptation_Strategy.pdf.

CNRA. 2018. *California's Fourth Climate Change Assessment – Los Angeles Regional Report*. https://www.energy.ca.gov/sites/default/files/2019-11/Reg%20Report-%20SUM-CCCA4-2018-007%20LosAngeles_ADA.pdf.

County of Los Angeles. 2012. *Santa Clarita Valley Area Plan, One Valley One Vision.* https://planning.lacounty.gov/wp-content/uploads/2022/10/Santa-Clarita-Valley-Area-Plan.pdf.

County of Los Angeles. 2015. *2035 General Plan*. Adopted October 6, 2015. Accessed November 2022. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

County of Los Angeles. 2019. *OurCounty—Los Angeles Countywide Sustainability Plan*. Adopted August 6, 2019. Accessed June 23, 2022. https://ourcountyla.lacounty.gov/wp-content/uploads/2019/07/OurCounty-Final-Plan.pdf.

County of Los Angeles. 2022. *Revised County of Los Angeles Housing Element (2021-2029)*. May 17, 2022. Accessed July 2022. https://planning.lacounty.gov/wp-content/uploads/2022/11/housing-element-20220517.pdf.

County of Los Angeles. 2024. Los Angeles County - 2045 Climate Action Plan. June 2024. Accessed August 2024. https://planning.lacounty.gov/wp-content/uploads/2024/07/gp_2045_Climate_Action_Plan_June-2024.pdf.

Electrek. 2022. "California Runs on 100% Clean Energy for the First Time, with Solar Dominating." May 2, 2022. https://electrek.co/2022/05/02/california-runs-on-100-clean-energy-for-the-first-time-with-solar-dominating/#:~:text=May%202-,California%20runs%20on%20100%25%20clean%20energy%20for,first%20time%2C%20with%20solar%20dominating&text=For%20the%20first%20time%20ever,driven%20largely%20by%20solar%20power.

EPA. 2016. "Glossary of Climate Change Terms." August 9, 2016. Accessed November 2020. https://www3.epa.gov/climatechange/glossary.html.

EPA. 2017a. "Causes of Climate Change." Accessed June 20, 2018. https://19january2017snapshot.epa.gov/climate-change-science/causes-climate-change_.html.

EPA. 2017b. *Carbon Pollution Standards for Cars and Light Trucks to Remain Unchanged Through 2025*. January 13, 2017. https://www.epa.gov/archive/epa/newsreleases/carbon-pollution-standards-cars-and-light-trucks-remain-unchanged-through-2025.html.

EPA. 2021. *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990–2019*. EPA 430-R-21-005. April 2021. Accessed July 2021. https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-main-text.pdf.

EPA and NHTSA (U.S. Environmental Protection Agency and National Highway Transportation Safety Administration). 2016. "EPA and NHTSA Adopt Standards to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles for Model Year 2018 and Beyond." EPA-420-F-16-044. Regulatory Announcement. EPA, Office of Transportation and Air Quality. August 2016.

EPA and NHTSA. 2018. *The Safer Affordable Fuel-Efficient 'SAFE' Vehicles Rule for Model Years 2021-2026 Passenger Vehicles and Light Trucks*. Proposed Rule August 2018. Accessed May 2019. https://www.govinfo.gov/content/pkg/FR-2018-08-24/pdf/2018-16820.pdf.

IPCC (Intergovernmental Panel on Climate Change). 2007. *IPCC Fourth Assessment Synthesis of Scientific-Technical Information Relevant to Interpreting Article 2 of the U.N. Framework Convention on Climate Change*.

IPCC. 2014. "Summary for Policymakers." In *Climate Change 2014 Synthesis Report.* A Report of the Intergovernmental Panel on Climate Change. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Accessed March 10, 2017. http://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf.

IPCC. 2018. "Summary for Policymakers." In *Global Warming of 1.5 °C. An IPCC Special Report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. Accessed July 2019. https://www.ipcc.ch/site/assets/uploads/sites/2/2022/06/SPM_version_report_LR.pdf.

i-Tree. 2022. i-Tree Planting Calculator v 2.2.0. Accessed June 2022. https://planting.itreetools.org/.

OEHHA (Office of Environmental Health Hazard Assessment). 2018. *Indicators of Climate Change in California*. May 9, 2018. https://oehha.ca.gov/media/downloads/climate-change/report/2018caindicatorsreportmay2018.pdf.

OPR (Governor's Office of Planning and Research). 2008. *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review.* Technical Advisory. Sacramento, California: OPR. June 19, 2008. http://opr.ca.gov/docs/june08-ceqa.pdf.

Pray, Richard. 2022. 2022 National Construction Estimator. Carlsbad: Craftsman Book Company.

SCAG. 2020a. *The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, Connect SoCal*. Adopted September 3, 2020. Last Accessed November 2022. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.

SCAG. 2020b. *The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, Connect SoCal—Current Context, Demographics and Growth Forecast, Technical Report*. Adopted September 3, 2020. Last Accessed November 2022. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579.

SCAQMD (South Coast Air Quality Management District). 2008. *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*. October 2008. Accessed June 2023. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf.

SCAQMD. 2010. "Agenda for Meeting 15. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group." September 28, 2010. https://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf .

SCE (Southern California Edison). N.d. Schedule GS-1 General Service. Regulatory Information – Rates Pricing. https://edisonintl.sharepoint.com/teams/Public/TM2/Shared%20Documents/Forms/AllItems.aspx?ga=1&id=%2Fteams%2FPublic%2FTM2%2FShared%20Documents%2FPublic%2FRegulatory%2FTariff%2DSCE%20Tariff%20Books%2FElectric%2FSchedules%2FGeneral%20Service%20%26%20Industrial%20Rates%2FELECTRIC%5FSCHEDULES%5FGS%2D1%2Epdf&parent=%2Fteams%2FPublic%2FTM2%2FShared%20Documents%2FPublic%2FRegulatory%2FTariff%2DSCE%20Tariff%20Books%2FElectric%2FSchedules%2FGeneral%20Service%20%26%20Industrial%20Rates.

4.9 Hazards and Hazardous Materials

This section describes the existing conditions of the proposed Trails at Lyons Canyon Project (Project) site and vicinity related to hazards and hazardous materials, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data and the following report prepared for the Project:

Appendix F Revised Phase I Environmental Site Assessment (Phase I ESA), prepared by Stantec, April 2023

Appendix M-2 Wildfire Evacuation Plan (WEP), prepared by Dudek, dated October 2023

Other sources consulted are listed in Section 4.9.9, References.

4.9.1 Existing Conditions

Historic Land Uses

Based on a review of aerial photographs done for the Phase I ESA, the Project site and surrounding area were primarily vacant land in 1928, although a major roadway is present adjacent to the site in 1928 which eventually becomes Interstate 5 (I-5). At that time, only a dirt roadway appears in the northeastern portion of the Project site. The center of the site appears to be cleared. From 1938 through 1969, the Project site and surrounding area appear similar to conditions shown in 1928; however, the dirt roads in the northern eastern portion of the site appear to extend through to the center of the site, and small structures also appear in that general area but do not appear to represent agricultural land uses. By 1970, another residential structure and additional dirt roads appear (Appendix F).

The Project site is bisected by numerous dirt roads that were created for various television and film productions that have used the site over the years. Specifically, Warner Brothers Studio purchased a portion of the site in 1984 for use as the principal Hazzard County location for the “Dukes of Hazzard” television show. The Project site had one small single-family home at the time of that purchase. Warner Brothers Studio made some improvements, including a new ranch house and bunkhouse as well as several sets for production uses. A number of subsequent television and film productions operated on the Project site over the years. In 1996, a permit to demolish a 2,000 square foot residence at the site was filed with the City (Appendix F). By 2002, the site was largely vacant land with structures removed from the site (Appendix F).

Current Site Uses and Special Management Areas

The Project site is currently undeveloped, and as noted above, there are no habitable structures onsite; however, some remaining structures include fencing, footings and other minor features associated with a former water tank, water wells, irrigation lines, and Southern California Edison (SCE) electrical distribution lines. Additionally, there is one plugged and abandoned subsurface oil well (Ayers 1 – API 03706017) previously constructed by the Sun Drilling Company, located in the center of the Project site. The approximate location of this plugged well is shown on Figure 2-5, Special Management Areas, of Chapter 2, Environmental Setting, of this Draft EIR. A California Division of Oil, Gas, and Geothermal Resources (DOGGR) Well Summary Report prepared in 1961 obtained by

California Geologic Energy Management (CalGEM) indicated that drilling of the well commenced on February 2, 1961 and was completed on March 10, 1961. The total well depth reached 9,785 feet below grounds surface (bgs) and was plugged and formally abandoned one day later, on March 11, 1961 (CALGEM 2022).

The topography of the Project site is characterized by hillside and valley terrain with moderate to steep slopes. Elevations in the Project site range from approximately 1,654 feet above mean sea level (msl) at the southwest corner to approximately 1,300 feet at the northeast corner. Lyons Canyon, located in the central portion of the Project site, drains eastward into the South Fork of the Santa Clara River, which flows to the Santa Clara River approximately 3.75 miles northeast of the Project site. Both the Project site and Project vicinity have experienced recent and historical wildfires.

The Project site is located within a designated Very High Fire Hazard Severity Zone (VHFHSZ), a Significant Ecological Area (SEA), and in a Hillside Management Area (HMA), as depicted on Figure 2-5, Special Management Areas in Chapter 2, Environmental Setting, of this Draft EIR. The Project site and vicinity have been substantially affected by historical and recent wildfires. Wildfires have been reported on portions of the Project site most recently in 2016, 2020, and 2021 (CAL FIRE 2016, 2020, 2021). The Sage Fire, located approximately 1 mile south of the Project site, burned approximately 1,110 total acres just off of Calgrove Boulevard within a 6-day period in July 2016 (CAL FIRE 2016). More recently, the Elsmere Fire, which occurred in 2020, was located at Elsmere Grapevine Road and Santa Clarita Truck Trail in Newhall. The Elsmere Fire burned approximately 200 acres and was located approximately 2.5 miles southeast of the Project site (CAL FIRE 2020). The most recent wildfire in the vicinity of the Project site was the Towsley Fire, which burned approximately 100 acres near Towsley Canyon Road and I-5, in 2021, and was located approximately 0.70-mile from the Project site (CAL FIRE 2021).

Valley Fever

Coccidioidomycosis, more commonly known as “Valley Fever,” is an infection caused by inhalation of the spores of the *Coccidioides immitis* fungus, which grows in the soils of the southwestern United States. The fungus is very prevalent in the soils of California’s San Joaquin Valley, particularly in Kern County. The ecologic factors that appear to be most conducive to survival and replication of the spores are high summer temperatures, mild winters, sparse rainfall, and alkaline, sandy soils. Los Angeles County is not considered a highly endemic county for Valley Fever (i.e., highly endemic meaning more than 20 cases annually of Valley Fever per 100,000 people) based on the incidence rates reported through 2022 (CDPH 2024). The latest report from the California Department of Public Health indicates that Los Angeles County had 1,536 cases in 2022, or 15.7 cases per 100,000 people in California (CDPH 2024). While there is currently no evidence of Valley Fever spores on-site currently, it is possible that Valley Fever spores could be located within on-site soils.

Surrounding Land Uses

Sensitive land uses[1] within 0.25-mile of the Project site include the residences along Sagecrest Circle in the Stevenson Ranch community that are within 300 feet of the northern boundary of the Project site, residences across I-5 in the City of Santa Clarita approximately 375 feet east of the Project site. There is a daycare center (Happy Feet Child Care) located approximately 890 feet (0.17-mile) to northeast of the Project site across I-5. The nearest school to the Project site is the Wiley Canyon Elementary School, located approximately 0.28-mile to the north-northeast.

[1] For the purposes of this analysis, “sensitive land uses” includes the South Coast Air Quality Management District’s definition for sensitive sites, which includes schools, playgrounds, and childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, hospitals, retirement homes, and residences (SCAQMD 2005).

The closest public airport to the Project site is the Whiteman Airport, located approximately 11.5 miles southeast, in the San Fernando Valley. The Van Nuys Airport, located approximately 11.6 miles south of the Project site, is the second closest public airport.

4.9.2 Regulatory Requirements

Federal

Comprehensive Environmental Response, Compensation, and Liability Act and Superfund Amendments and Reauthorization Act

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, on December 11, 1980. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified. The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA on October 17, 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites; required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations; provided new enforcement authorities and settlement tools; increased state involvement in every phase of the Superfund program; increased the focus on human health problems posed by hazardous waste sites; encouraged greater citizen participation in making decisions on how sites should be cleaned up; and increased the size of the trust fund to $8.5 billion.

Resources Conservation and Recovery Act (42 USC 6901 et seq.)

Resources Conservation and Recovery Act (RCRA) is the principal law governing the management and disposal of hazardous materials. RCRA is considered a “cradle to grave” statute for hazardous wastes in that it addresses all aspects of hazardous materials from creation to disposal. RCRA is used to define hazardous materials, regulate off-site disposal facilities, and the wastes each may accept during construction and/or operation of a project.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that: (1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; (2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and (3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a presidential declaration of a major disaster or emergency (OJP 1999).

U.S. Environmental Protection Agency Regulations

The U.S. Environmental Protection Agency’s (USEPA’s) mission is to protect human health and the environment. The USEPA takes action to reduce risks associated with exposure to chemicals in commerce, indoor and outdoor environments, and products and food. The USEPA continues to oversee the introduction and use of pesticides, improve their Integrated Risk Information System (IRIS) program, reduce radon risks, identify and address children's

health risks in schools and homes, and improve chemical management practices. Oversight of chemical storage and manufacturing in coordination with their interagency partners remains a key focus of the USEPA, as well as efforts to reduce urban air toxics.

U.S. DOT Hazardous Materials Transportation Act of 1975 (49 USC 5101)

The U.S. Department of Transportation (USDOT), in conjunction with the USEPA, is responsible for enforcement and implementation of federal laws and regulations pertaining to safe storage and transportation of hazardous materials. The Code of Federal Regulations (CFR) 49, 171–180, regulates the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials.

The Federal Motor Carrier Safety Administration (49 CFR Part 383-397)

The Federal Motor Carrier Safety Administration, a part of the USDOT, issues regulations (49 CFR Part 383-397) concerning highway transportation of hazardous materials, the hazardous materials endorsement for a commercial driver's license, highway hazardous material safety permits, and financial responsibility requirements for motor carriers of hazardous materials.

Occupational Safety and Health Act

Congress passed the Occupational and Safety Health Act to ensure worker and workplace safety. Its goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. In order to establish standards for workplace health and safety, the Occupational and Safety Health Act also created the National Institute for Occupational Safety and Health as the research institution for the Occupational Safety and Health Administration (OSHA). OSHA is a division of the U.S. Department of Labor (DOL) that oversees the administration of the Occupational and Safety Health Act and enforces standards in all 50 states. Because California has an approved State Plan, only California Occupational Safety and Health Administration (Cal/OSHA) standards apply for projects within the state.

State

California Emergency Services Act

The California Emergency Services Act was adopted to establish the state's role and responsibilities during human-made or natural emergencies that result in conditions of disaster and/or extreme peril to life, property, or the resources of the state. The California Emergency Services Act is intended to protect health and safety by preserving the lives and property of the people of the state. The Office of Emergency Services coordinates the responses of other agencies, including the EPA, California Highway Patrol (CHP), Regional Water Quality Control Boards (RWQCBs), air quality management districts, and county disaster response offices.

California Natural Disaster Assistance Act

The California Natural Disaster Assistance Act provides financial aid to local agencies to assist in the permanent restoration of public real property, other than facilities used solely for recreational purposes, when such real property has been damaged or destroyed by a natural disaster. The California Natural Disaster Assistance Act is activated after a local declaration of emergency, after the California Emergency Management Agency gives

concurrence with the local declaration, or after the Governor issues a proclamation of a state emergency. Once the California Natural Disaster Assistance Act is activated, local government is eligible for certain types of assistance, depending upon the specific declaration or proclamation issued.

Resources Conservation and Recovery Act

Authority for the State-wide administration and enforcement of Resources Conservation and Recovery Act (RCRA) rests with the California Environmental Protection Agency (CalEPA) of the Department of Toxic Substances Control (DTSC). While the DTSC has primary State responsibility in regulating the generation, storage, and disposal of hazardous materials, DTSC may further delegate enforcement authority to local jurisdictions. In addition, the DTSC is responsible and/or provides oversight for contamination cleanup, and administers State-wide hazardous waste reduction programs. DTSC operates programs to accomplish the following: (1) deal with the aftermath of improper hazardous waste management by overseeing site cleanups; (2) prevent releases of hazardous waste by ensuring that those who generate, handle, transport, store, and dispose of wastes do so properly; and (3) evaluate soil, water, and air samples taken at sites.

Cortese List

The Hazardous Waste and Substance Sites Cortese List (Cortese List) was originally intended to be a planning document used by the State, local agencies, and developers to provide information about the location of hazardous materials release sites. Government Code Section 65962.5(a) required CalEPA to develop at least annually an updated Cortese List, however individual agencies make their own databases available and a comprehensive Cortese List is no longer maintained. The Project site is not on a hazardous list compiled in accordance with Government Code Section 65962.5(a).

Hazardous Waste Control Act (California Health and Safety Code, Section 25100 et seq.)

The Hazardous Waste Control Act (HWCA) is the State equivalent of RCRA and regulates the generation, treatment, storage, and disposal of hazardous waste. This act implements the RCRA “cradle-to-grave” waste management system in California but is more stringent in its regulation of non-RCRA wastes, spent lubricating oil, small-quantity generators, transportation and permitting requirements, as well as in its penalties for violations.

Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act)

The Business Plan Act requires the preparation of Hazardous Materials Business Plans (HMBPs) and disclosure of hazardous materials inventories, including an inventory of hazardous materials handled, plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures (California Health and Safety Code Division 20, Chapter 6.95, Article 1). The HMBP identifies the hazards, storage locations, and storage quantities for each hazardous chemical stored on-site. The HMBP is submitted to the certified unified program agency (CUPA) for emergency planning purposes. Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the state. Local agencies are responsible for administering these regulations.

Several State agencies regulate the transportation and use of hazardous materials to minimize potential risks to public health and safety, including the CalEPA and the California Emergency Management Agency. The CHP and the

California Department of Transportation (Caltrans) enforce regulations specifically related to the transport of hazardous materials. Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roadways.

Senate Bill 1082 – Unified Program

In 1993, the State Legislature passed Senate Bill (SB) 1082 to streamline the permitting process for those businesses that use, store, or manufacture hazardous materials. The passage of SB 1082 provided for the designation of a CUPA that would be responsible for the permitting process and collection of fees. The CUPA is responsible for implementing at the local level the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program), which serves to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities for the following environmental and emergency management programs:

- Hazardous Waste;
- Hazardous Materials Business Plan;
- California Accidental Release Prevention Program;
- Underground Hazardous Materials Storage Tanks;
- Aboveground Petroleum Storage Tanks/Spill Prevention Control and Countermeasure Plans; and
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs.

In the County, the designated CUPA responsible for implementing the above-listed program elements is the Health Hazardous Materials Division of the Los Angeles County Fire Department (LACoFD). The laws and regulations that established these programs require businesses that use or store certain quantities of hazardous materials to submit a HMBP that describes the hazardous materials usage, storage, and disposal to the local CUPA.

Senate Bill 1889 – Accidental Release Prevention Law/California Accidental Release Prevention Program

SB 1889 required California to implement a new federally mandated program governing the accidental airborne release of chemicals promulgated under Clean Air Act Section 112. Effective January 1, 1997, the Accidental Release Prevention Law, via the California Accidental Release Prevention (CalARP) program, replaced the previous California Risk Management and Prevention Program and incorporated the mandatory federal requirements. CalARP addresses facilities that contain specified hazardous materials (known as regulated substances) that if involved in an accidental release, could result in adverse off-site consequences. CalARP defines regulated substances as chemicals that pose a threat to public health and safety or the environment because they are highly toxic, flammable, or explosive.

California Hazardous Material Incident Contingency Plan

In order to protect the public health and safety and the environment, the California Office of Emergency Services (Cal OES) is responsible for establishing and managing Statewide standards for business and area plans relating to the handling and release or threatened release of hazardous materials. Cal OES coordinates the responses of other agencies, including the CalEPA, CHP, RWQCBs, air quality management districts, and county disaster response offices. Basic information on hazardous materials handled, used, stored, or disposed of (including location, type, quantity, and the health risks) needs to be available to firefighters and public safety officers.

Regulatory agencies are included in business plans to prevent or mitigate damage to the health and safety of persons and the environment from the release or threatened release of these materials into the workplace and environment. The Cal OES prepared the California Hazardous Material Incident Contingency Plan (HMCIP), originally in 1982, and updated in 1991, as a reference document to incorporate multi-hazard planning concepts in a single hazard contingency plan (Cal OES 1991).

California Occupational Safety and Health Administration

Cal/OSHA is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are required to be "as effective as" federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR 330 et seq.). The regulations specify requirements for employee training, availability of safety equipment, accident prevention programs, fire prevention plan preparation, and hazardous substance exposure warnings. CalOSHA also enforces hazard communication program regulations, which contain training and information requirements, including procedures for identifying and labeling hazardous substances. The hazard communication program also requires that Material Safety Data Sheets be available to employees and that employee information and training programs be documented. The employer is also required, among other things, to have an Illness and Injury Prevention Program.

California Geologic Energy Management

The California Geologic Energy Management (CalGEM), formerly referred to as the Division of Oil, Gas, and Geothermal Resources (DOGGR), is the State agency responsible for the oversight of drilling, operation, maintenance, plugging and abandonment of gas, oil and geothermal wells. CalGEM established a regulatory program for the management of these resources, emphasizing their responsible development through sound engineering practices that protect the environment, prevent pollution and ensure public safety.

Title 14 California Code of Regulations—Requirements for Well Testing and Management

The primary legislative text for abandoned wells and plugging requirements are found in Division 3, Chapter 1 of California's Public Resources Code (PRC), and Title 14 of the California Code of Regulations (14 PRC Article 3, Section 3862[a]). It requires eligible jurisdictions with known methane hazards to implement zoning ordinances, illustrate methane gas hazard areas and establish mitigative policies within respective general plans, and prepare a methane gas hazard mitigation plan, which provides strategies and mitigations for reducing existing methane gas hazards and for avoiding further hazards due to new construction. Gas hazard mitigation policies and standards have been included within Title 26 of the Los Angeles County Code (LACC) and are enforced by the Los Angeles County Department of Public Works (Public Works) (Ordinance No. 2019-0056).

In compliance with California PRC Section 3229, before commencing any work to abandon any oil well, the owner or operator shall file with the CalGEM, a written notice of intention to abandon the well (California State Division of Oil, Gas and Geothermal Resources form OG108). The State Oil and Gas Supervisor can require and prioritize the re-abandonment of previously plugged or abandoned wells, when construction will be taking place over or in the vicinity of a well that is considered to result in a hazard.

California Fire Code

The California Fire Code (CFC) is provided in California Code of Regulations Title 24, Chapter 9. It was created by the California Building Standards Commission and is based on the IFC. The CFC is the primary means for authorizing

and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separation from project site lines, and specialized equipment which are required as part of the building permit process. The CFC is updated every three years.

California State Fire Plan

The 2010 California State Fire Plan is the first statewide fire plan developed in concert between the California Board of Forestry and Fire Protection and the California Department of Forestry and Fire Protection (CAL FIRE). The central goals of the California State Fire Plan include (1) improved availability and use of information on hazard and risk assessment; (2) land use planning, including general plans, new development, and existing developments; (3) shared vision among communities and the multiple fire protection jurisdictions, including county-based plans and community-based plans such as community wildfire protection plans; (4) establishing fire resistance in assets at risk, such as homes and neighborhoods; (5) shared vision among multiple fire protection jurisdictions and agencies; (6) levels of fire suppression and related services; and (7) post-fire recovery.

Title 14 Division 1.5 of the California Code of Regulations

California Code of Regulations Title 14, Division 1.5, establishes the regulations for CAL FIRE and is applicable in all State Responsibility Area areas where CAL FIRE is responsible for wildfire protection. As discussed within Chapter 3, Project Description the Project site is located within Fire Zone 4, which is a VHFHSZ that falls within the State Responsibility Area (SRA). Development within SRAs must comply with these regulations. Among other things, Title 14 establishes minimum standards for emergency access, fuel modification, project site line setbacks, signage, and water supply.

Regional and Local

Spills, Leaks, Investigation and Cleanup Program

The Los Angeles Regional Water Quality Control Board (LARWQCB) is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. LARWQCB regulations are contained in Title 27 of the California Code of Regulations (CCR). Additional State regulations applicable to hazardous materials are contained in Title 22 of the CCR. Title 26 of the CCR is a compilation of those sections or titles of the CCR that are applicable to hazardous materials.

The Spills, Leaks, Investigation and Cleanup (SLIC) Program was established by the State Water Resources Control Board (SWRCB) to allow each of its nine Regional Boards, including the LARWQCB, to oversee the cleanup of illegal discharges, contaminated properties, and other unregulated releases adversely impacting the state's waters. Sites managed within the SLIC Program include sites polluted as a result of recent or historic spills, subsurface releases (e.g., pipelines, sumps), complaint investigations, and all other unauthorized discharges that pollute or threaten to pollute surface and/or ground waters. The SLIC Section of the LARWQCB oversees activities at non-underground storage tank (UST) sites where soil or groundwater contamination have occurred due to former industrial facilities and dry cleaners, and where chlorinated solvents were spilled or have leaked into the soil or groundwater.

County Office of Emergency Management, All-Hazards Mitigation Plan

To meet the requirements of the federal law known as the Disaster Mitigation Act 2000, the Los Angeles County Office of Emergency Management (OEM) prepared an All Hazards Mitigation Plan (AHMP) to assess risks posed by natural hazards and to develop a mitigation action plan for reducing the risks in unincorporated Los Angeles County. The AHMP describes local hazards and includes risk assessment for the unincorporated County, vulnerable populations, and critical facilities. The AHMP includes the mitigation strategy for how the County will reduce its risks and identifies critical facilities for addressing the risks. The OEM ensures that the hazard profiles for the unincorporated areas are included in the Los Angeles County Threat and Hazard Identification Risk Assessment and the Los Angeles County Operational Area Emergency Response Plans and Annexes.

Los Angeles County Operational Area Emergency Response Plan

The Los Angeles County Emergency Ordinance 2.68.220 provides the County with the authority to develop an emergency response plan. The OEM is responsible for keeping the plan up to date and develop revised drafts in coordination with responsible agencies/jurisdictions. The Operational Area's Emergency Response Plan (OAERP) addresses the County's coordinated response to emergency situations associated with natural, man-made, and technological incidents. An Operational Area is defined as a single county and all political subdivisions. The OAERP does not address normal day-to-day emergencies; the operational concepts reflected in this plan focus on potential large-scale disasters which can generate unique situations requiring an unusual or extraordinary emergency response. The County's OAERP was approved in June of 2012.

Los Angeles County Fire Department, Health Hazardous Materials Division

The LACoFD monitors the storage of hazardous materials in the County for compliance with local requirements. Specifically, businesses and facilities which store more than threshold quantities of hazardous materials as defined in Chapter 6.95 of the California Health and Safety Code are required to file an Accidental Risk Prevention Program with the LACoFD. This program includes information such as emergency contacts, phone numbers, facility information, chemical inventory, and hazardous materials handling and storage locations.

The CUPA, which has the responsibility for implementing federal and State laws and regulations pertaining to hazardous materials management as part of the Unified Program (discussed above), is the Health Hazardous Materials Division of the LACoFD.

The CUPA maintains the records regarding location and status of hazardous materials sites in the county and administers programs that regulate and enforce the transport, use, storage, manufacturing, and remediation of hazardous materials. By designating a CUPA, the County has accurate and adequate information to plan for emergencies and/or disasters and to plan for public and firefighter safety.

Los Angeles County Building Code

Title 26 of the Los Angeles County Code (County Code) contains the Los Angeles County Building Code (LACBC). Section 110.4 (Methane Gas Hazards) of the LACBC states that any new habitable development on, adjacent to, or within 300 feet (91.44 meters) of an active, abandoned or idle oil or gas well(s) is prohibited, unless designed according to recommendations contained in a report prepared by a registered design professional to evaluate whether such wells are being properly operated or maintained, or are abandoned. No permits shall be issued until

documentation of proper operation, maintenance, abandonment, or re-abandonment is submitted to and approved by the County Building Official.

Section 110.5 (Contaminated Soil Hazards) of the LACBC states that development on contaminated soil is also not permitted, unless designed according to recommendations contained within a report prepared by a licensed professional, which must be approved by the Building Official at final inspection. Public Works is the Building Official for the unincorporated areas of the County and 19 contract cities, and is therefore responsible for ensuring the safety of the Project's buildings and their occupants.

Gas Hazard Mitigation Policy and Standards. As discussed above, the LACBC sections applying to gas hazards prevent the construction, addition, or conversion of a building or structure, unless it is designed with an approved natural or artificial protective system in accordance with recommendations contained in a report prepared by a registered design professional, such as a licensed civil engineer or a licensed petroleum engineer. Public Works, as the Building Official, has adopted the Gas Hazard Mitigation Policy and Standards (GHMPS) for the protection of buildings and enclosed structures from methane and other gas hazards in compliance with the LACBC (Public Works 2020). The GHMPS provides a guide to the requirements, processes, and standards for the mitigation of potential hazards arising from the presence of methane gas and other volatile compounds. Should a soil survey sampling result and/or determination be made that potential gas generation/migration exists at a site, a gas protection system is required. The following measures of a gas protection system shall be taken to protect buildings, enclosed structures, and occupants from methane and other gas hazards:

- Gas mitigation and control system, which prevent the intrusion of gases, including methane and other volatile compounds from entering a building or enclosed structure.
- Gas monitoring system, which monitors the presence or absence of gases in the subsurface soil or air.
- Gas monitoring program to ensure the safety of the structure throughout the life of the structure.
- Contingency plan to be implemented in the event of a failure in the gas control and/or monitoring system.
- Covenant and agreement to alert future owners and occupants of potential gas hazards and the owner's responsibility to maintain the integrity of the gas mitigation monitoring system.

Per Title 26, Section 110.4, Methane Gas Hazards, of the County Code, permits shall not be issued for new buildings or enclosed structures, additions, or conversions of a building or structure to habitable or occupiable space regulated by this Code on, adjacent to, or within 300 feet of active, abandoned, or idle oil or gas well(s) unless designed according to recommendations contained in a report prepared by a registered design professional, such as a licensed civil engineer and/or licensed petroleum engineer, to evaluate whether such wells are being properly operated or maintained, or are abandoned. No permits shall be issued until documentation of proper operation, maintenance, abandonment, or reabandonment is submitted to and approved by the Building Official.

Los Angeles County Fire Department, Fuel Modification Unit

The LACoFD Fuel Modification Unit provides guidelines for VHFHSZs, to create a defensible space for effective fire protection in newly constructed and/or remodeled homes. The Project site is located within Fire Zone 4, which is a VHFHSZ within the SRA.

Fuel modification zones are strategically placed strips of land where combustible native or ornamental vegetation has been modified or replaced with drought-tolerant, low-fuel-volume plants, creating a buffer to areas of natural vegetation surrounding the perimeter of residential units. A fuel modification plan is required by the LACoFD's in its

Fuel Modification Guidelines and Best Practices Plan, which identifies specific zones within a property which are subject to a fuel modification plan. Plans vary in complexity and fuel modification distances are estimated based on the fire history, the amount and type of vegetation, the arrangement of the fuels, topography, local weather patterns, and construction, design and placement of structures. The plan must also include an irrigation plan, a landscape plan, zone delineation for setbacks, irrigation, and thinning, and the identification of responsible parties for the plan's installation and maintenance.

The Compliance Guideline for Hazardous Wastes and Materials is a publication created by the Health Hazardous Materials Division (HHMD) of the LACoFD. Its purpose is to assist the Industry and the general public in understanding hazardous wastes and hazardous materials, and to assist the reader in complying with the law (LACoFD 2009).

Los Angeles County General Plan 2035

The Los Angeles County General Plan 2035 (General Plan) was adopted on October 6, 2015, and contains ten elements, including the Safety Element. The purpose of the Safety Element is to reduce the potential risk of death, injuries, and economic damage resulting from natural and man-made hazards (County of Los Angeles 2015). The California Government Code requires the General Plan to address "the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction, and other seismic hazards…; flooding; and wildland and urban fires." The Safety Element addresses only limited aspects of man-made disasters, such as hazardous waste and materials management, in particular, those aspects related to seismic events, fires, and floods. In general, hazardous materials management is addressed in the Los Angeles County Integrated Waste Management Plan (California Code of Regulations [CCR] Section 18755.5). The Safety Element works in conjunction with the Operational Area Emergency Response Plan (OAERP), which is prepared by County's Chief Executive Office - Office of Emergency Management (CEO OEM). The OAERP strengthens short and long-term emergency response and recovery capability and identifies emergency procedures and emergency management routes in the County. The Safety Element addresses only limited aspects of man-made disasters, such as hazardous waste and materials management, in particular, those aspects related to seismic events, fires, and floods. The following goals and policies for hazards and hazardous materials are relevant to the Project:

Goal S 3. An effective regulatory system that prevents or minimizes personal injury, loss of life, and property damage due to fire hazards.

Policy S 3.1. Discourage high density and intensity development in VHFHSZs.

Policy S 3.3. Ensure that the mitigation of fire related property damage and loss in FHSZs limits impacts to biological and other resources.

Policy S 3.4. Reduce the risk of wildland fire hazards through the use of regulations and performance standards, such as fire-resistant building materials, vegetation management, fuel modification and other fire hazard reduction programs.

Policy S 3.5. Encourage the use of low-volume and well-maintained vegetation that is compatible with the area's natural vegetative habitats.

Policy S 3.6. Ensure adequate infrastructure, including ingress, egress, and peak load water supply availability for all projects located in FHSZs.

Policy S 3.7. Site and design developments located within FHSZs, such as in areas located near ridgelines and on hilltops, in a sensitive manner to reduce the wildlife risk.

4.9.3 Thresholds of Significance

In accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to hazards and hazardous materials are listed below. A project may have a significant impact if it would:

Threshold 4.9a: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Threshold 4.9b: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment.

Threshold 4.9c: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of sensitive land uses.

Threshold 4.9d: Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

Threshold 4.9e: 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 result in a safety hazard for people residing or working in the Project area.

Threshold 4.9f: Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

Threshold 4.9g: Expose people or structures to a significant risk of loss, injury, or death involving fires, because the project is located:

- ***i. Within a high fire hazard area with inadequate access.***
- ***ii. Within an area with inadequate water and pressure to meet fire flow standards.***
- ***iii. Within proximity to land uses that have the potential for dangerous fire hazard.***

Threshold 4.9h: Does the proposed use constitute a potentially dangerous fire hazard?

4.9.4 Methodology

Definitions and Background

Hazardous Materials

A hazardous material is defined as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment (California Health and Safety Code Chapter 6.95, section 25501(o)). The term "hazardous materials" refers to both hazardous substances and hazardous wastes. Under federal and state laws, any material, including wastes, may be considered hazardous if it is specifically listed by statute as such or if it is toxic (causes adverse human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gases).

Hazardous wastes are hazardous substances that no longer have practical use, such as materials that have been spent, discarded, discharged, spilled, contaminated, or are being stored until they can be disposed of properly (Title 22 CCR section 66261.10). Soil that is excavated from a site containing hazardous materials is a hazardous waste if it exceeds specific criteria established in sections 66261.20 through 66261.24 of the CCR Title 22. Hazardous substances are regulated by multiple agencies, as described in the Regulatory Setting below, and cleanup requirements of hazardous releases are determined on a case-by-case basis according to the overseeing agency (e.g., DTSC or RWQCB).

Potential Receptors/Exposure

The sensitivity of potential receptors to hazardous materials is dependent on several factors, the primary factor being the potential pathway for human exposure. Exposure pathways include external exposure, inhalation, and ingestion of contaminated soil, air, water, or food. The magnitude, frequency, and duration of human exposure can cause a variety of health effects, from short-term acute symptoms to long-term chronic effects. Potential health effects from exposure can be evaluated in a health risk assessment. The principal elements of health risk assessments typically include:

- Evaluation of the fate and transport processes for hazardous materials at a given site;
- Identification of potential exposure pathways;
- Identification of potential exposure scenarios;
- Calculation of representative chemical concentrations; and
- Estimation of potential chemical uptake.

The following analysis considers the site history and potential for the presence of legacy contaminants as documented in the Phase I ESA that was prepared for the Project site, which can be found in Appendix F of this Draft EIR (Stantec 2023). Section 4.3 of the Phase I ESA included a search of available environmental records by a third-party firm, Environmental Database Resources (EDR) (pp. 4–7 within Appendix D of the Phase I ESA report). The Phase I ESA meets the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), and the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14).

The record search results and conclusions in the Phase I ESA were used to evaluate potential impacts associated with hazardous materials that could occur due to construction and/or operation of the Project. The databases from the SWRCB (Geotracker) and DTSC (Envirostor) were used to verify the findings of the Phase I ESA (SWRCB 2022; DTSC 2022).

As there is a potential for natural, manmade, and other hazards to occur within the Project vicinity, an analysis of emergency response plans and emergency evacuation plans are included in this analysis. A discussion of fire and police protection and emergency medical response is provided in Sections 4.15, Public Services and 4.17 Transportation, of this Draft EIR.

Given that the Project site and surrounding area are susceptible to wildland fires, the analysis also evaluates impacts regarding wildland fires and considers the existing Project site conditions, existing regulations that address fire hazards, the availability of fire protection services, and future uses and Project features that could expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Analysis of wildland fire hazards is also provided in Section 4.20, Wildfire, of this Draft EIR.

4.9.5 Impact Analysis

Threshold 4.9a: Would the project create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials?

Construction Impacts

Earthwork and construction activities would require the use of heavy equipment and machinery and various building materials, which would require the use of hazardous substances. Construction of the Project would involve the temporary transport, storage, and use of commonly used hazardous substances, such as gasoline, diesel fuel, lubricating oils, paint, grease, adhesives, welding gases, solvents, and vehicle and equipment-maintenance related materials. No hazardous materials would be produced or disposed on-site during construction activities. These materials would be used and stored in accordance with manufacturers' instructions and handled in compliance with the LACoFD Health Hazardous Materials Division's Compliance Guideline for Hazardous Wastes and Materials (2009), which provides guidance to ensure compliance with federal, State, and local laws.

Additionally, the construction contractor would be required to prepare and implement a HMBP that would require that hazardous materials used for construction be properly used and stored in appropriate containers, that spill prevention measures are implemented, and that spill response procedures are in place to respond to accidental releases. The California Fire Code would also require measures for the safe storage and handling of hazardous materials in accordance with Chapter 50, which details safeguards to minimize the risk of unwanted releases, fires, or explosions involving hazardous materials.

During construction activities, the commonly used hazardous substances would be transported to and from the Project site, and at the conclusion of construction, in accordance with USEPA, Hazardous Materials Transportation Act, Cal/OSHA, RCRA, LACoFD, and Utility Notification requirements. Any remaining hazardous materials would be transported off-site in accordance with applicable regulatory requirements and wastes disposed of at a licensed facility in accordance with the receiving facilities' requirements and all applicable CHP and DOT transportation requirements. Consequently, use of construction-related hazardous materials would not pose a significant risk to

the public or environment through the routine transport, use, or disposal of hazardous materials, and construction impacts would be less than significant.

Operational Impacts

No hazardous materials would be produced on-site during long-term operations of the Project. Once constructed, the Project would include residential land uses, a recreation center, associated infrastructure, natural and improved open space, and associated landscape and facility maintenance. These land uses would involve the transport, use, and disposal of common hazardous materials, such as household-type cleaning products, maintenance products (e.g., paints, solvents, cleaning products), fuels and other petroleum products (e.g., for vehicles, lawn mowers, or other household uses), swimming pool chemicals (e.g., chlorine) and refrigerants associated with building mechanical heating, ventilation, and air conditioning (HVAC) systems. Grounds and landscape maintenance could also use a variety of commercial products formulated with hazardous materials, including fuels, cleaners and degreasers, solvents, paints, lubricants, adhesives, sealers, and pesticides/herbicides. It is anticipated that any potentially hazardous materials used during Project operation would be stored in relatively small volumes (i.e., less than five gallons). Such chemicals are typically used in an urban environment, and when used in accordance with manufacturer's recommendations and applicable regulations, do not result in a risk to human health or the environment. In addition, all hazardous materials are labeled to inform users of potential risks and to instruct them in appropriate storage, handling, and disposal procedures in accordance with regulatory requirements.

Although the Project would introduce new residential land uses to the site, resulting in an increased use of commercially available hazardous materials (e.g., petroleum products, paints, cleaning solvents, bleach, and detergents, pesticides, herbicides), there is an established, comprehensive framework independent of the CEQA process, which is intended to reduce the risks associated with the use, transportation, and disposal of hazardous materials (refer to Section 4.9.2, Regulatory Requirements). The use and disposal of these substances would be subject to all applicable federal, State, and local health and safety laws and regulations that are intended to minimize health risk to the public associated with hazardous materials, such as those promulgated by the USEPA, OSHA, Cal/OSHA, and the LACoFD Health Hazardous Materials Division.

There would be no commercial or industrial-related transport of hazardous materials to the Project site. In addition, the transportation of hazardous materials and wastes are required to comply with federal laws and regulations that are monitored and enforced by the CHP. Compliance with existing laws and regulations would ensure the use of hazardous materials during Project operation would not pose a significant risk to the public or environment through the routine transport, use, or disposal of hazardous materials, and impacts would be less than significant.

Threshold 4.9b: 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 or waste into the environment?

Construction Impacts

Construction would require the use of heavy equipment and machinery. Hazardous materials that may be used during construction and demolition activities of the Project include, but are not limited to, gasoline, diesel fuel, lubricants, grease, adhesives, welding gases, solvents, paints, and vehicle and equipment-maintenance related materials. These materials would be stored in designated construction staging areas within the boundaries of the Project site and the construction contractor must ensure that they would be used in accordance with the manufacturer's specifications and with all applicable federal, state, and local laws and regulations, including the

LACoFD's Compliance Guideline for Hazardous Wastes and Materials, which provides regulatory guidance to ensure compliance with federal, State, and local laws (LACoFD 2009). The use of these construction-related hazardous materials for their intended purpose would not pose a significant risk to the public or environment.

The construction contractors are required to prepare and implement a HMBP which requires that all hazardous materials used for construction are used and stored in appropriate containers, that spill prevention measures are implemented, and that spill response procedures are provided in the event of an accidental release. Localized and spill response measures set forth in the HMBP would limit the exposure and environmental risks of any accidental releases of hazardous materials into the environment. The California Fire Code would also require measures for the safe storage and handling of hazardous materials that the construction contractor would be required to adhere to.

Additionally, compliance with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit requires implementation of best management practices (BMPs) that would include measures to address the safe handling of hazardous materials, and in the unlikely event of an inadvertent release, also requires spill response measures to contain any release of hazardous materials. The use of construction BMPs, implemented as part of a stormwater pollution prevention plan (SWPPP) (discussed further in Section 4.10, Hydrology and Water Quality), as required by the NPDES General Construction Permit, would minimize the potential adverse effects from accidental release of hazardous materials or wastes. These BMPs could include, but are not necessarily limited to, the following:

- Establishment of a dedicated area for fuel storage and refueling activities that includes secondary containment protection measures and spill control supplies
- Requirements to follow manufacturer's recommendations on use, storage and disposal of chemical products used in construction
- Avoidance of overtopping construction equipment fuel gas tanks
- Proper containment and removal of grease and oils during routine maintenance of construction equipment
- Proper disposal of discarded containers of fuels and other chemicals

In general, aside from refueling needs for heavy equipment, the hazardous materials typically used on a construction site would be brought onto the site by the construction contractor, packaged in consumer quantities, and used in accordance with manufacturer recommendations. The overall quantities of these materials on the site at any one time would not result in large bulk amounts that, if spilled, could cause significant soil or groundwater contamination. If a spill of hazardous materials on the construction sites were to occur, the spilled materials would be localized because of the relatively small quantities involved and would be cleaned up in a timely manner in accordance with identified BMPs and the HMBP.

As described above, refueling activities of heavy equipment would likely occur in a dedicated and controlled area with secondary containment and protective barriers to minimize any potential hazards that might occur with an inadvertent release as required by the Project-specific SWPPP prepared in accordance with the NPDES General Construction Permit requirements. In addition, LACoFD provides a Hazardous Wastes and Materials Compliance Guide, detailed in Section 4.9.2, above, which identifies specific strategies regarding the use, storage, disposal, transportation, and accident requirements for hazardous materials. With required protective measures (i.e., BMPs) implemented in accordance with these state and local requirements, and the quantities of hazardous materials typically needed for construction projects, such as the Project, the threat of exposure to the public or contamination to soil and/or groundwater from construction-related hazardous materials would be reduced. All construction-

related materials would be transported off-site and disposed of in accordance with USEPA, Hazardous Materials Transportation Act, OHSA, RCRA, and Utility Notification requirements.

Earthwork activities associated with construction could also disturb soils that contain potential legacy contaminants, including aerially deposited lead (ADL), due to the historical use of leaded gasoline and close proximity to I-5. While leaded gasoline began being phased out starting in 1974, some of these ADL concentrations have been found to exceed hazardous waste levels, especially in surface soils adjacent to roads that have had high vehicle emissions from large traffic volumes or congestion during the era of leaded gasoline use. According to the DTSC, the highest concentrations of lead are usually found within 10 feet of the edge of the pavement but can extend 20 feet or more from the edge of the pavement (DTSC 2016). For purposes of a conservative analysis, it is assumed that ADL could be located within 30 feet from the edge of I-5.

The Project site is located 110 feet from the edge of I-5, and as such, is unlikely to contain ADL within its soils. However, the Project would also require off-site improvements to and within The Old Road, which is closer to I-5 than the Project site. While only a portion of The Old Road (near the northern edge of the Project site) is located within 30 feet of the edge of I-5, much of The Old Road is further than 30 feet from the edge of the pavement of I-5. The Project's disturbances in The Old Road would be closer to the center line of the road, and therefore, further from I-5. Therefore, it is not anticipated that the Project's off-site improvement activities would encounter the areas that can contain high concentrations of ADL. If construction activities would occur within 30 feet of I-5, there would be a potentially significant impact related to the possible exposure of hazardous levels of ADL. As a result, while it is unlikely that activities would be within 30 feet of I-5, and as such, unlikely to encounter hazardous concentrations of lead, MM-4.9-1, Soil Management Plan (SMP), would be required to ensure that protocols are in place to reduce the potential hazards to less than significant levels. The SMP shall set forth protocols for surface soil sampling within 30 feet of the edge of the pavement of I-5, within The Old Road, to determine ADL concentrations in areas of planned disturbance. MM-4.9-1 shall require that if soils are adversely affected by ADL, they are managed consistent with the DTSC-Caltrans Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils (Docket no. ESPO-SMA 15/16-001) (DTSC 2016). As such, with implementation of MM-4.9-1, the Project would have a less than significant impact regarding the potential to create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of ADL into the environment.

In addition to the possibility of release of ADL, as detailed above, earthwork activities associated with construction could also disturb soils that could contain Valley Fever spores in the soil. As detailed in Section 4.9.1, Existing Conditions, Valley Fever is an illness caused by a fungus that lives in the soil and dirt of some places in California and within the southern United States, which can be released into the air during disturbance of soils with Valley Fever spores present. People and animals can be infected when they inhale the spores into their lungs. It can present symptoms that appear flu-like; most people who contract Valley Fever have mild symptoms, but in rare cases, severe sickness occurs (LACDPH 2019). While Valley Fever predominantly occurs in Kern and King County, incidences in Valley Fever in Los Angeles County have increased (CDPH 2024). While there is currently no evidence of Valley Fever spores on-site, it is possible that Valley Fever spores could be located within on-site soils, which could be released during ground-disturbing activities of the Project, and particularly, grading, trenching, and landscaping (LACDPH 2019). As such, the release of potential Valley Fever fungal spores could be inhaled by persons present at the Project site during implementation of construction and landscaping activities.

As detailed in Section 4.3, Air Quality, Project activities would be subject to South Coast Air Quality Management District (SCAQMD) rules, including Rule 402, Nuisance, and Rule 403, Fugitive Dust, which prohibit the discharge from any source of air contaminants or other materials which could cause injury, determent, nuisance, or annoyance

that may endanger the comfort, health, or safety of the public as well as requiring best available control measures to prohibit visible particulate matter from crossing any property line. To demonstrate compliance with SCAQMD Rule 403, projects must submit a fugitive dust control plan describing the methods of compliance during construction. As Valley Fever spores could be released and carried with fugitive dust, dust control measures, such as watering two to three times per day, and the requirement that no visible particulate matter (dust) would cross any property line, would reduce any potential impacts to off-site receptors to less than significant. Although compliance with SCAQMD's Rule 402 and 403 would also benefit construction and operations personnel within active Project ground-disturbance areas and reduce exposure to Valley Fever, given the proximity to dust, impacts to construction and operations personnel near ground-disturbing activities would be potentially significant prior to mitigation. As such, implementation of MM-4.9-1 is required to reduce impacts to less than significant. MM-4.9-1 requires that respiratory masks be made available to construction or operations personnel who request it during ground-disturbance activities. MM-4.9-1 also requires that educational material be provided to all construction and operations personnel that includes information on how to recognize symptoms of Valley Fever and ways to minimize exposure; proper cleaning procedures to minimize accidental exposure; and demonstrations on how to use personal protective equipment, such respiratory protection, skin, and eye protection. With implementation of MM-4.9-1, impacts to construction and operations personnel during ground-disturbing activities would be less than significant.

It should be noted that the Phase I ESA did not reveal any recognized environmental conditions (RECs) at the Project site. However, if potential legacy contaminants, including polychlorinated biphenyls (PCBs), lead-based paint, or asbestos containing materials, are discovered during earthwork activities at the Project site, this would represent a potentially significant impact regarding the potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment. The presence of the pole-mounted transformer on the Project site indicates a potential for the transformer to have contained PCBs, a known carcinogen. Many transformers no longer contain PCBs, but the soil beneath the transformer could potentially contain PCBs from past spills or leaks which could represent potential health risks when disturbed through construction and earthwork activities. The Phase I report conducted a site reconnaissance and found no evidence of any soil staining beneath the transformer (Appendix F). In addition, while there are currently no structures onsite, other potential health hazards could be present from buried debris with lead-based paint or asbestos containing materials from the former structures that were historically present on the site, potential septic systems, or any legacy contamination that may be discovered during earthwork activities. Concern for lead-based paint is primarily related to residential structures, of which none exist at the Project site, and therefore, lead-based paint is not considered a recognized environmental condition at the Project site.

Therefore, MM-4.9-1, Soil Management Plan, is required in the event that earthwork activities encounter previously unidentified hazardous materials or wastes at the Project site or within off-site improvement areas. MM-4.9-1 shall require the Applicant to retain a Qualified Environmental Specialist to prepare a SMP that addresses the protocols for all earthwork activities. Potential conditions and/or hazards that may be encountered during construction activities include but are not limited to buried septic systems, buried debris (e.g. building debris with lead-based paint chips or asbestos), areas of soil staining, or other suspect conditions that can be identified visually and/or from odors within the Project's proposed disturbance area. If suspect materials or conditions are encountered, then the following minimum actions are required and specific protocols shall be included in the SMP: (1) earthwork activities in that area shall cease until sampling and characterization is completed by the Qualified Environmental Specialist; (2) depending on sampling/analysis results, the appropriate oversight agency shall be notified (e.g. Regional Water Quality Control Board, DTSC, or the local Certified Unified Program Agency; (3) hazards shall be addressed to the satisfaction of the appropriate oversight agency; (4) documentation shall be prepared that itemizes required sampling, results, and actions taken; and (5) protocols for resuming earthwork activities following

approval from the oversight agency and any required removal of contamination, if deemed necessary by the oversight agency. As such, with implementation of MM-4.9-1, the Project would have a less than significant impact regarding the potential to create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of potential legacy contaminants, including PCBs, lead-based paint, or asbestos containing materials) into the environment.

By following the appropriate procedures and policies required by applicable regulations outlined in Section 4.9.2 above, including the LACoFD's Hazardous Wastes and Materials Compliance Guidelines and applicable NPDES and General Construction Permit requirements, and with implementation of MM-4.9-1, construction impacts to the public or environment through the release of hazardous materials (as a result of reasonably foreseeable upset and accident conditions) would be less than significant with mitigation.

Operational Impacts

Once construction is complete, the Project could be expected to include the use and storage of relatively limited quantities of hazardous materials, such as fuel, paints, and other chemicals that are commonly associated with residential and recreational land uses. The handling of relatively small amounts of commercial-grade hazardous materials, such as cleaning solutions, solvents, pesticides for landscaping, and petroleum products associated with building maintenance would also be expected to occur within the Project site. In addition, the operation of the swimming pool would include the storage and handling of chemicals such as chlorine. If not handled appropriately, these hazardous materials would have the potential to be released into the environment and present potential exposure risks. However, the appropriate use, storage, and handling of these hazardous materials would be subject to federal, State, and local regulations. Conformance with regulatory requirements combined with the relatively limited quantities of hazardous materials that would be associated with the Project's land uses, would limit the potential for accidental upset conditions.

The Project would therefore be subject to hazardous materials regulations, which are codified in Titles 8, 22, and 26 of the CCR, and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety Code, which were established at the State level to ensure compliance with federal regulations and to reduce the risk to human health and the environment from the routine use of hazardous substances. Protection against accidental spills and releases provided by this legislation includes physical and mechanical controls of fueling operations, including automatic shutoff valves; requirements that fueling operations are contained on impervious surface areas; oil/water separators or physical barriers in catch basins or storm drains; vapor emissions controls; leak detection systems; and regular testing and inspection (California Health and Safety Code 2014).

During operations, the Project would also require usage of hazardous materials typically used for building/property maintenance and associated facilities including cleaning products, solvents, lubricants, adhesives, refrigerants, sealants, other chemical materials. Such chemicals would be handled, stored, and disposed of in accordance with applicable regulations and under LACoFD guidelines. As mandated by OSHA, any hazardous materials stored onsite would be accompanied by a Material Safety Data Sheet, which would inform onsite personnel about the necessary remediation procedures in the case of accidental release. Further, the LACoFD is the designated CUPA and is responsible for implementing at the local level the Unified Program, which serves to coordinate the administrative requirements, permits, inspections, and enforcement activities related to hazardous materials and waste management. Thus, potential impacts that may occur during operation of the Project, including the residential and recreational land uses, due to reasonably foreseeable upset and accident conditions from the Project involving the release of hazardous materials or waste into the environment would be less than significant.

Threshold 4.9c: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of sensitive land uses?

Sensitive land uses within a one-quarter mile of the Project site boundary include residences and a daycare center, and the Project is 0.28-mile from Wiley Canyon Elementary School. However, the Project would not include any activities or land uses during either construction or operation that could result in substantive hazardous emissions and the Project would not handle or emit acutely hazardous materials, substances or wastes.

Construction Impacts

Project-related construction activities would include site preparation, grading, building construction, architectural coating, and paving activities. Demolition activities, which typically could result in the release of hazardous material emissions, would not occur with implementation of the Project, as the site is vacant. However, as detailed in response to Threshold 4.9b, earthwork activities associated with construction could disturb soils that might contain potential legacy contaminants including ADL and lead-based paint, PCBs, asbestos, and Valley Fever, which could result in hazardous emissions. Implementation of MM-4.9-1 would ensure that the potential to produce hazardous emissions are reduced to less than significant levels.

In addition, as detailed in Section 4.3, Air Quality, construction activities would be subject to SCAQMD rules, including Rule 402, Nuisance, and Rule 403, Fugitive Dust, which prohibit the discharge from any source of air contaminants or other materials which could cause injury, determent, nuisance, or annoyance that may endanger the comfort, health, or safety of the public as well as requiring best available control measures to prohibit visible particulate matter from crossing any property line. To demonstrate compliance with SCAQMD Rule 403, projects must submit a fugitive dust control plan describing the methods of compliance during construction. Also, any potential legacy contaminants, as discussed in more detail under Threshold 4.9d, would occur in a manner that would ensure negligible emissions of hazardous materials and would also be minimized through adherence to Rule 403. The Project's potential to emit hazardous emissions within one-quarter mile of sensitive land uses would be less than significant with mitigation.

Operational Impacts

Operationally, the Project would not include the manufacturing or industrial-scale emissions or handling of any hazardous or acutely hazardous materials, substances or waste. Although the Project would include the use, storage, transport, and disposal of limited quantities of common hazardous materials, as described above, it would be consistent with types of existing land uses in the Project area. Any transport of hazardous materials would be minor and related to activities commonplace to residential development and building maintenance and would not involve commercial or industrial-related hazardous materials. Further, the LACoFD is the designated CUPA and is responsible for implementing at the local level the Unified Program, which serves to coordinate the administrative requirements, permits, inspections, and enforcement activities related to hazardous materials and waste management. Therefore, operational impacts associated with hazardous emissions or acutely hazardous materials, substances, or waste within one-quarter mile of a sensitive land use would be less than significant.

Threshold 4.9d: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Construction and Operational Impacts

The Project is not located on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5. According to the findings of the Phase I ESA, which included a search of environmental databases, the nearest hazardous waste site included on a list compiled pursuant to Government Code Section 65962.5 is the Valencia Oaks Ranch, which has been identified as a non-generator that does not presently generate hazardous waste and has had no reported violations (Appendix F). There are no other hazardous materials sites located near the Project site that would constitute a potential hazard or recognized environmental condition that would be considered capable of adversely affecting the Project site (Appendix F).

As discussed above in response to Threshold 4.9a, Existing Conditions, there is one identified plugged subsurface oil well (Ayers 1 – API 03706017), previously owned by the Sun Drilling Company, that could be a source of potential adverse effects. Presence of an oil well could have the potential to act as a conduit for transmission of methane gas emissions, if disturbed. The plugged oil well is located within the center of the Project site and has been identified on both the CalGEM Well Finder map, as well as the Public Works' SWMS database, which have been compiled pursuant to Government Code Section 65962.5. Refer to Figure 2-5, Special Management Areas in Chapter 2, Environmental Setting of this Draft EIR for the approximate location of this plugged well. Reportedly, the well did not produce and was subsequently plugged (Appendix F). Based on the location of the inactive oil well, the well is located within 300 feet of certain proposed residential units and, therefore, this would be a potentially significant impact as a potential source of methane gas emissions to future residents at the Project.[2]

Section 110.4 of the County Code prohibits new buildings or enclosed structures, additions, or conversions of buildings to hospitable space that are located on, adjacent to, or within 300 feet of an abandoned oil well, unless designed according to recommendations contained in a report prepared by a registered design professional, such as a licensed civil engineer and/or licensed petroleum engineer, to evaluate whether such wells are being properly operated or maintained, or are abandoned. No permits shall be issued until documentation of proper operation, maintenance, abandonment, or reabandonment is submitted to and approved by the Building Official. The Project would place residential units within 300 feet of the abandoned well. As such, implementation of MM-4.9-2, Well Assessment, would be required. MM-4.9-2 requires that, prior to issuance of a grading permit, the Project Applicant shall retain a California-registered design professional, such as a licensed civil engineer and/or licensed petroleum engineer to evaluate the exact location, condition, and abandonment status of the well on the Project site pursuant to Section 110.4 of the LACBC. MM-4.9-2 ensures that evaluation of the abandonment of the well is documented and approved by Public Works for safety, which would ensure compliance with Section 110.4 of the LACBC.

In addition, as stated in the Phase I ESA, and given the proximity of the plugged well to the development footprint area, methane hazards would be considered a potentially significant hazard to future occupants proximate to the plugged well.[3] To ensure that methane gas hazards associated with the plugged well do not present a risk to future

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2 The California Supreme Court in a December 2015 opinion (California Building Industry Assn. v. Bay Area Air Quality Management District) held that CEQA does not apply to the impacts of the environment on a project on the environment, but rather the effects of the project on the environment. However, the potential impacts of exposure to methane is presented here for informational and disclosure purposes.

3 Note that CalGEM considers that a well is critical or within an environmentally sensitive area if the wellhead is within 300 feet from any public recreational area or building.

occupants, implementation of MM-4.9-3, Methane Gas Survey and Remediation, would be required. MM-4.9-3 requires that the Applicant conduct a methane gas survey for the potential of methane gas emissions on the Project site, in accordance with CalGEM and DTSC methane assessment guidelines prior to the issuance of grading permits. The methane survey would inform the requirements for any further remediation and closure or removal of the oil well. The results from the methane survey and documentation that the well has been properly abandoned in accordance with all applicable standards of CalGEM and the LACBC would be provided to Public Works prior to issuance of a grading permit. Should the results of field surveys indicate additional hazards to future occupants of the Project site, the Project Applicant would be required to install a gas protection system for all future habitable structures within 300 feet of the well, and within areas with hazardous methane levels (as detailed in MM-4.9-3). In addition, grading activity recommendations must be implemented to the satisfaction of the Public Works, which would include a soil gas investigation and installation of methane gas mitigation systems where methane levels exceed 5,000 parts per million by volume, should any such levels occur.

The Phase I ESA also included an evaluation of the potential for radon gas health risks at the Project site. Radon is a colorless, tasteless radioactive gas that is considered to have potential health risks when concentrations exceed the EPA action level of 4.0 PicoCuries per liter (pCi/L) of air for residential properties. However, the hazard is considered of greater concern where there is inadequate ventilation of an interior space such as subterranean garages or basements.

According to the Phase I ESA, the Project site is located in Zone 2 which is considered to be an area that has a moderate potential for radon but at concentrations below the regulatory threshold (i.e., between 2.0 and 4.0 pCi/L). None of the 16 tests conducted in the zip code area that includes the Project site (91381) had a detection above 4 pCi/L. In addition, mapping of radon hazard areas in Southern Los Angeles County by the California Geological Survey (CGS), shows the Project site in a low hazard zone. Therefore, considering that the Project site is not located in a high radon hazard area, no testing within the site vicinity have discovered radon levels above the regulatory threshold, and the Project does not propose to construct any subterranean living spaces, the potential for adverse effects from radon gas would be less than significant.

Implementation of MM-4.9-2 and MM-4.9-3, would reduce impacts associated with the presence of the plugged oil well, including potential methane gas hazards, to a less-than-significant level.

Threshold 4.9e: 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?

The closest airport to the Project site is the privately-operated Western Jet Aviation airport, located approximately 9 miles to the northeast. The closest public airport to the Project site is the Whiteman Airport, located approximately 11.5 miles southeast, in the San Fernando Valley. The Van Nuys Airport, located approximately 11.6 miles south of the Project site, is the second closest public airport. As the Project is not located within 2 miles of a public airport or within an airport land use plan for any airport, the Project would not result in a safety hazard or excessive noise for people residing or working in the Project area, and there would be no impact.

Threshold 4.9f: Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

According to the General Plan, the nearest disaster evacuation route to the Project site is I-5, located approximately 150 feet east of the Project site. Local access to the Project site is currently provided via The Old Road. The Old

Road is generally the eastern boundary of the Project site and it connects to I-5. Regional access to the Project site is provided via I-5 with on- and off-ramps in both directions located at Calgrove Boulevard near the southeast corner of the site. Calgrove Boulevard intersects with The Old Road, which parallels I-5 as a frontage road adjacent to the Project site. Regional access to the Project site is also provided in both directions via the Pico Canyon/Lyons Avenue on- and off- ramps located north of the site.

Impairment of emergency response plans or emergency evacuation plans would occur if the Project would introduce an undue or extraordinary burden on emergency responders during an emergency. Common examples of such a situation include Project placement and design that could preclude access by emergency responders or the orderly evacuation of a site in the event of natural disasters including wildfires. Undersized roadways, underrated bridges and culverts, steep grades and pinch points, remoteness, and inadequate points of ingress and egress to and from a site are examples of the difficulties that emergency responders can experience. Additionally, indirect emergency access impacts could occur if emergency access easements and internal roadways that connect off-site and adjacent developments are obstructed.

Construction Impacts

As detailed in Section 4.17, Transportation, Project construction would be ongoing for approximately 4.5 years and would include off-site improvements such as utility infrastructure and roadway improvements on The Old Road and upgrades to Pump Stations 4 and 5. The Project would require temporary lane closures along the segment of The Old Road in the vicinity of the Project during some of the construction activities. If not managed appropriately, these temporary closures could interfere with evacuation or emergency plans. However, a temporary traffic control and access plan is required to permit activity within the County public right of way when temporary disruption of traffic is implemented. This plan would also address safety and access for pedestrians, bicyclists and passage of public transit vehicles and implement parking restrictions, if required. MM-4.17-1, Construction Traffic Management Plan, of Section 4.17, Transportation, requires preparation of a Construction Traffic Management Plan in compliance with the County's Traffic Control Requirements to provide temporary traffic controls and access within the County public rights-of-way when temporary disruption of traffic is anticipated. This includes compliance with the latest California Manual on Uniform Traffic Control Devices (California MUTCD), as well with the provision that emergency access to all nearby properties shall be maintained at all times, unless the permit allows a temporary restriction. The Construction Traffic Management Plan would require notifications in advance of closing, partially closing or reopening public throughways, traffic lanes and clearances, pedestrian access, and other emergency traffic controls, such as the provision of flagmen, which may also be required pursuant to Section 15.76.170 (Flagmen at construction and maintenance areas) of the County Code. With preparation and implementation of a Construction Traffic Management Plan, per MM-4.17-1, the off-site impacts of the Project's short-term construction activities related to physical interference with an emergency response plan or emergency evaluation plan would be less than significant.

Operational Impacts

The I-5 is a regional travel route located directly adjacent to the east of the Project site and is the primary route for emergency access or egress. Implementation of the Project would not result in the closure of I-5 or any streets feed into I-5. As discussed in Section 3.2.4, Circulation Plan, of Chapter 3, Project Description, the Project would provide emergency vehicle access via proposed public "A" and "B" Streets, in addition to a private access road that would be used as a fire road, for access for emergency or maintenance vehicles. An egress-ingress roadway to the property west of the Project site, proposed Tentative Tract Map (TTM) 74979, would be provided. Consistent with County

Code Title 21, Subdivisions and access requirements of the County Fire Code, the Project's roadways would meet all County access requirements for new residential development in a VHFHSZ. The emergency access route would also include a gate to prevent the public from obstructing the roadway and limit access to adjacent wildland areas. The gate would comply with all regulations of the County Fire Code, including being operatable by one person if power fails, a Knox Box, and be made of non-combustible materials, as detailed in Section 4.20, Wildfire. Additionally, as further detailed in Section 4.20, Wildfire, the Project would implement MM-4.20-1, Wildfire Education Program, which would provide Project residents with potential egress route information and instructions for following the "Ready, Set, Go!" model of the County and include the requirements of the Wildfire Evacuation Plan and the Fire Protection Plan. For more information related to wildfire evacuation, refer to the discussion of emergency access in Section 4.17, Transportation, Threshold 4.17d.

The proposed multiple vehicular access points, emergency vehicle access points, as well as interior street and circulation elements designed in required compliance with County and fire department standards would ensure that emergency response to a wildfire or other evacuation from the Project site would not be impaired. The Project would be consistent with applicable General Plan polices adopted to ensure new development includes adequate access for emergency response and evacuation, as described in Section 4.20, Wildfire, of this Draft EIR.

The Project's provision of multiple points of vehicular access and egress from the Project site, including emergency vehicle access that meets County Fire Department and Fire Code requirements, the Project's required compliance with County policies and development standards adopted to ensure proper emergency response and evacuation, and implementation of MM-4.20-1 would ensure that impacts related to impairment of an adopted emergency response plan or emergency evacuation plan would be less than significant with mitigation. See also analysis of evacuation in Section 4.17, Transportation (Threshold 4.17d), and Section 4.20, Wildfire (Threshold 4.20a), of this Draft EIR.

Threshold 4.9g: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving fires, because the project is located:

i. within a high fire hazard area with inadequate access?

As discussed above in Section 4.9.1, Existing Conditions, the Project site is located within Fire Zone 4, and designated by the Los Angeles County Fire Department (LACoFD) and CAL FIRE a VHFHSZ that falls within the SRA. The regional natural vegetation in this area is highly prone to wildfires. Wildfires occurred on portions of the Project site most recently in 2016, 2020, and 2021. The effects of climate change indicate a potential for wildfires to continue with increased frequency and potentially in intensity. As such, impacts associated with wildland fires are an existing condition given the site's designation as a VHFHSZ, its location relative to existing wildlands, and the history of fire occurrences combined with the potential anticipated effects of climate change.

Construction Impacts

During construction, as discussed more thoroughly in Section 4.17, Transportation (Threshold 4.17d) and Section 4.20, Wildfire, (Threshold 4.20a) of this Draft EIR, on-site and off-site construction activities could have the potential to result in inadequate access within a high fire hazard area due to potential street closure during construction activities, which would result in a potentially significant impact prior to mitigation. Additionally, there would be a potential for insufficient access during a potential wildfire during construction of the Project, prior to completion of "A" and "B" Streets and the private access maintenance road, resulting in a potentially significant impact regarding inadequate access on-site during construction. Therefore, implementation of MM-4.20-4, Construction Fire

Prevention Plan, is required. MM-4.20-4 requires that the Project Applicant prepare a Construction Fire Prevention Plan (FPP) to train construction personnel on fire-suppression procedures and equipment used during construction. Additionally, implementation of MM-4.20-5, Construction Related Fire Prevention Measures, shall ensure that all required fuel modification for each phase of construction activity is implemented prior to commencement of that phase and prior to combustible building materials being delivered to the site, and other related prevention measures. As a result of on-site and off-site construction activities, there may be temporary closures of portions of The Old Road, thereby resulting in inadequate access to roads during construction activities. Therefore, the Project shall implement MM-4.17-1, Construction Traffic Management Plan, which requires the minimization of obstructions in traffic lanes and maintenance of emergency access throughout construction activities (e.g., use of flag persons to minimize obstructions along The Old Road, signage, scheduling of vehicle movements to ensure traffic flow, and limiting schedule of deliveries and truck traffic). Additionally, the Project shall implement MM-4.20-4, Construction Fire Prevention Plan. With implementation of MM-4.17-1, MM-4.20-4, and MM-4.20-5, on- and off-site construction impacts would result in less than significant impacts regarding exposure of people or structures to a significant risk of loss, injury, or death involving fires within a high fire hazard area with inadequate access.

Operational Impacts

Once constructed, as discussed above in response to Threshold 4.9f, as a component of the Project, emergency vehicle access via "A" Street and "B" Street would be provided, in addition to the private access road that would connect to the on-site residential lots. An egress-ingress roadway would be built to meet all minimum fire apparatus access requirements of the County Fire Code to the property west of the Project site, proposed TTM 74979. Consistent with Title 21, Subdivisions, of the County Code, the Project's roadways would meet all County access requirements for new residential development in a VHFHSZ. The County Fire Code requirements describe the applicable County access standards (i.e., roadway widths, all-weather surface requirements, length of streets, turning requirements, grade restrictions, maintenance requirements, and parking restrictions) would be implemented by the Project. Specific fire and life safety requirements would be addressed at the building permit phase when architectural plans are submitted to the LACoFD for review and approval. However, prior to mitigation, the Project would result in a potentially significant impact regarding the potential to expose people or structure, either directly or indirectly, to a significant risk of loss, injury, or death involving fires due to its location within a high fire hazard area with inadequate access during operations.

Therefore, mitigation would be required to reduce operational impacts to less than significant. As discussed in Section 4.20 Wildfire, MM-4.20-1, Wildfire Education Program, shall ensure that the Homeowners' Association (HOA) provide residents with various safety measures (e.g., evacuation education, information to residents regarding notification to County OEM and Health and Human Services of special needs residents, and transportation or other special requirements that can be provided during an emergency evacuation, and trail signage). MM-4.20-1 shall require that relevant information from the Project's Wildfire Evacuation Plan, Fire Protection Plan, and related educational information be provided to all residents and occupants of the Project site. See also analysis of emergency access in Sections 4.17, Transportation and 4.20, Wildfire of this Draft EIR. With implementation of MM-4.20-1, operational impacts would result in a less than significant impact regarding the potential to expose people or structure, either directly or indirectly, to a significant risk of loss, injury, or death involving fires due to its location within a high fire hazard area with inadequate access.

Therefore, construction and operational impacts regarding exposure of people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving fires, because the Project is located within a high fire

hazard area with inadequate access would be less than significant with inclusion of MM-4.17-1, MM-4.20-1, MM-4.20-4, and MM-4.20-5.

ii. within an area with inadequate water and pressure to meet fire flow standards?

Construction Impacts

Construction of the Project would occur on a currently undeveloped site and in off-site, developed areas (i.e., The Old Road and at Pump Stations 4 and 5), where water is not currently available on-site. This could result in a potentially significant impact to people or structures, either directly or indirectly, due to the Project's location in an area with inadequate water and pressure to meet fire flow standards during construction activities. However, implementation of MM-4.20-4, Construction Fire Prevention Plan, shall require training of construction personnel and fire-suppression procedures and equipment to be used on-site during construction. The Construction Fire Prevention Plan shall be consistent with the requirements in California Building Code Chapter 33 and California Fire Code Chapter 33. Additionally, MM-4.20-4 requires specifications for access to adequate water supplies and/or water trucks to service construction activities. Additionally, MM-4.20-5, Construction Related Fire Prevention Measures shall ensure that all fuel modification for each phase of construction activity is implemented prior to commencement of that phase and prior to combustible building materials being delivered to the site. Additionally, prior to bringing lumber onto the Project site, operable fire hydrants, a temporary roadway surface, and other fire suppressing measures shall be implemented under MM-4.20-5. Therefore, with implementation of MM-4.20-4 and MM-4.20-5, the Project's construction impacts to people or structures, either directly or indirectly, because the Project site is located in an area with inadequate water and pressure to meet fire flow standards, would be less than significant with mitigation.

Operational Impacts

During operation of the Project, the Project would incorporate infrastructure to ensure fire safety, including a new water tank to assure a reliable fire flow water pressure for the new residential structures, fire hydrants, and an emergency access road. Fire sprinkler systems would also be required consistent with the LACBC installed in all habitable structures, along with all other applicable department regulations and standards. Fire hydrants would be spaced in accordance with County requirements and installed, tested, and accepted or bonded prior to Final Map approval. Fire flow levels must meet LACoFD minimum standards. LACoFD's requirements for fire flows are discussed in detail in Section 4.19, Utilities and Service Systems of this Draft EIR. The Project includes construction of a new water tank, which would be required to comply with the preliminary fire flow requirements of the LACoFD. The water tank would assure a reliable fire flow water pressure for the new residential developments on-site. Therefore, by design, the Project, and specifically the newly constructed water tank, would meet LACoFD requirements in order to assure a reliable fire flow water pressure for the proposed improvements and impacts related to adequate water and pressure to meet fire flow standards would be less than significant. See also analysis of water infrastructure in Section 4.19, Utilities and Service Systems of this Draft EIR.

i. within proximity to land uses that have the potential for dangerous fire hazard?

The Project is primarily surrounded by open space to the south, west, and southeast, with other residential development to the north, and the I-5 and development within the City of Santa Clarita to the east. The open space areas are also within a VHFHSZ and could be susceptible to future wildfires as has been observed in the past. This could result in a potentially significant impact regarding proximity to land uses that have the potential for dangerous fire hazards during construction and operation of the Project.

Construction Impacts

As noted above, construction activities would be required to adhere to California Fire Code Chapter 33, Fire Safety During Construction and Demolition, Title 32 Sections 326 of the County Fire Code and construction requirements outlined in MM-4.20-4 and MM-4.20-5 as further discussed in Section 4.20, Wildfire. MM-4.20-4 and MM-4.20-5 would require preparation and implementation of a Construction Fire Prevention Plan and construction related fire prevention measures (e.g., implement fuel modification prior to commencement of construction, have operable fire hydrants in place prior to bringing lumber onsite, and placement of permanent power lines underground). As such, even though the Project site is located adjacent to areas of high potential risks for fire hazards, the adherence to the CBC and LACoFD requirements for fire safety and implementation of MM-4.20-4 and MM-4.20-5 would ensure that potential construction impacts associated with the proximity of lands that have the potential for dangerous fire hazard would be less than significant with mitigation.

Operational Impacts

The proposed improvements associated with the Project would be required to comply with development designs, applicable provisions, and safety requirements provided in Title 32, Fire Code and Title 26, Requirements for Wildland-Urban Interface Fire Areas of the County Code; and 2022 CBC Chapter 7A, Materials and Construction Methods for Exterior Wildfire Exposure requiring fire-resistant construction materials and techniques. Consistent with the County's Fire Code requirements (Title 32), a fuel modification plan must be prepared for the Project, and is described in detail in Section 4.20, Wildfire of this Draft EIR.

The fuel modification plan for the Project would be prepared pursuant to the LACoFD's Fuel Modification Guidelines and Best Practices. The Conceptual fuel modification plan must be approved by the Los Angeles County Fuel Modification Division of the LACoFD prior to approval of the Tentative Map for the Project and the final fuel modification plan would also require approval from the same department prior to the issuance of building permits. Upon occupancy and as regulated by the Forestry Department of the LACoFD, there would be random, annual inspections for compliance with brush clearance regulations as required by the Fire Code of the County's Municipal Code. The specific fuel modification components would incorporate a number of design and maintenance features to ensure fire safety, including but not limited to, fire road access, building offsets, planting setbacks, and native brush clearing to remove thin combustible vegetation. Therefore, even though the Project site is located adjacent to areas of high potential risks for fire hazards, the adherence to the CBC and LACoFD requirements for fire safety would ensure that potential impacts associated with the proximity of lands that have the potential for dangerous fire hazard would be less than significant.

Threshold 4.9h: Does the proposed use constitute a potentially dangerous fire hazard?

Construction and Operational Impacts

The Project would develop currently undeveloped land and increase human activities that could become a source of fire-related incidences during construction or operation of the Project. Therefore, implementation of the Project could result in a potentially significant impact regarding a potentially dangerous fire hazard. As discussed in Section 4.20, Wildfire of this Draft EIR, in southern California, wildfire ignition commonly stems from human activities, such as smoking, generating fires and playing with fire, exhaust or sparks from power saws or other equipment with gas or electric motors, and powerlines (Keeley and Syphard 2018). The introduction of the Project's land uses into the wildland areas would bring opportunities for man-made activities to pose a potentially dangerous fire hazard due to the surrounding open spaces within a VHFHSZ.

To minimize the impacts related to potential ignition sources, the Project has designed multi-scaled fire protection features to address the existing fire hazard, reduce ignition probability, and lower the fire risk for the Project and the surrounding area, through land-use planning and ignition prevention during both construction and operation of the Project. Development of the Project would require compliance with development designs, applicable provisions, and safety requirements provided in County Code Title 32, Fire Code; County Code Title 26, Requirements for Wildland-Urban Interface Fire Areas; 2022 CBC Chapter 7A, Materials and Construction Methods for Exterior Wildfire Exposure requiring fire-resistant construction materials and techniques; implementation of a Wildfire Evacuation Plan (Appendix M-2); implementation of a Construction Fire Prevention Plan (MM-4.20-4); implementation of construction-related fire prevention measures (MM-4.20-5); and implementation of a fuel modification plan with annual fuel modification maintenance requirements for long term fire protection, as discussed in detail in Section 4.20, Wildfire of this Draft EIR.

The fuel modification plan for the Project would cover the entirety of the proposed development footprint, and must be prepared pursuant to the LACoFD's Fuel Modification Guidelines and Best Practices and approved by the Los Angeles County Fuel Modification Division of the LACoFD prior to approval of the Tentative Map for the Project. The Final fuel modification plan would also require approval from the same department prior to the issuance of building permits. Random annual inspections for compliance with brush clearance regulations as required by the Fire Code of the County's Municipal Code would also occur after occupancy.

Project development would be consistent with Policies S 3.4, S 3.5, and S 3.12 of the General Plan. For example, the Project would be required to comply with measures such as using fire-retardant construction materials for structures adjoining the natural open space areas, establishment of fuel modification/management zones to provide defensible space and assist in wildland fire suppression, use of fire retardant and drought tolerant landscaping, and installation of fire hydrants spaced at 600 feet or less would be implemented. Policy S 3.4 aims to reduce the risk of wildland fire hazards through the use of regulations and performance standards, such as fire-resistant building materials, vegetation management, fuel modification and other fire hazard reduction programs. The Project would be also consistent with Policy S 3.5, which encourages the use of low-volume and well-maintained vegetation that is compatible with the natural vegetative habitats. The Project would be required to prepare a fuel modification plan, which would require landscaping to be designed in compliance with the LACoFD's Fuel Modification Guidelines and best practices. The fuel modification plan would categorize the Project site into fuel modification zones for planting, which would include Zone A, Setback Zone; Zone B, Irrigated Zone; Zone C, Native Brush Thinning Zone; and a fire access road zone. Zone A extends 20 feet beyond the edge of any combustible structure, accessory structure, appendage, or projection and would primarily consist of green lawns, ground cover, and adequately spaced shrubs. Plants within Zone A would be highly fire-resistant. Zone B, Irrigated Zone, would extend from the outermost edge of Zone A to 100 feet from proposed structures. Landscaping within Zone B would consist of primarily green lawns, ground cover, shrubs, and trees. Zone C, Native Brush Thinning Zone, would extend from the outermost edge of Zone B, up to 200 feet from structures or the Project site boundary. Plants in Zone C would likely consist of existing native vegetation and adequately spaced ornamental shrubs and trees. Existing native vegetation would be modified by thinning and removing portions of the vegetation if the species constitute a fire risk. As such, the Project would be consistent with Policies S 3.4 and S 3.5 of the General Plan.

The preliminary fuel modification plan for the perimeter of the proposed development would incorporate required set back zones, fire road clearance, long-term maintenance requirements, and conceptual planting. Each fuel modification zone would be designed to specifically address fire suppression. The zones would include requirements for minimum structure setbacks, permanent irrigation systems, fire retardant plants from a County-approved plant list, and landscape and planting maintenance. The majority of the Project site (approximately 150

acres) would be unimpacted natural open space contiguous to other existing natural open space, major hilltops and ridgelines would be preserved and undeveloped, consistent with Policy S 3.7.

The Project would be consistent with Policy S 3.7, regarding siting developments in a sensitive manner to reduce the wildfire risk. The Project proposes development of the site (i.e., dwelling units) in a configuration defined by the County as "density-controlled development" (Chapter 22.140.170, Density-Controlled Developments, of the County's Zoning Code). Density-controlled development is defined as "a concentration of dwelling units within one or more portions of a lot, resulting in the remainder of the lot being free of buildings or structures, as opposed to development spread throughout the entire lot". As such, even though the Project site is 233.49 acres, development of the Project's dwelling units would be concentrated within approximately 41 acres in the northeastern portion of the Project site. In total, the area of land within the Project's grading limits, as well as a surrounding construction buffer area, includes 72.55 acres that are in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space. The clustered development footprint would reduce opportunities for wildfire risk by concentrating Project development, including residential uses, and the recreational component, proximate to The Old Road, I-5, and existing residences nearby. In addition, the Project Applicant would be required to comply with the Developer Fee Program, with the LACoFD, to further enhance fire protection to the proposed development.

Additionally, as detailed in Section 4.20, Wildfire, with implementation of MM-4.20-1, Wildfire Education Program, MM-4.20-2, Alternative Materials and Methods, MM-4.20-3, Annual Fuel Modification Zone Inspection, MM-4.20-4, Construction Fire Prevention Plan, and MM-4.20-5, Construction Related Fire Prevention Measures, the Project would further reduce fire risks at the Project site. For example, MM-4.20-4, Construction Fire Prevention Plan would require implementation of an educational program for future residents at the site. Therefore, even though the introduction of the Project's land uses into the wildland areas would bring opportunities for man-made activities to pose a potentially dangerous fire hazard due to the surrounding open spaces within a VHFHSZ, the adherence to fire suppression and fire safety requirements and implementation of MM-4.20-1 through MM-4.20-5 would reduce potential construction and operational impacts from a potentially dangerous fire hazard to a less than significant level.

4.9.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., related projects) used for this analysis are presented in in Section 2.6, Cumulative Impacts, of Chapter 2, Environmental Setting, of this Draft EIR. The geographic areas of analysis for hazards and hazardous materials impacts are detailed below under each threshold.

Threshold 4.9a: Would the project create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials?

As detailed in the cumulative impact analysis of the General Plan, cumulative impacts related to hazards and hazardous materials are more prevalent for commercial or industrial land uses, and hazardous material use or hazardous emission would be cumulatively significant when the combined activities of individual industrial or commercial businesses that use, transport, or dispose of hazardous materials result in hazardous conditions (County of Los Angeles 2014). Impacts related to the routine transport, storage, use or disposal of hazardous

materials or wastes tend to be site-specific and do not combine with one another to become cumulatively considerable. Cumulative projects nearest the Project site, including Cumulative Projects LA1, LA2, LA3, LA13, and SC1, are primarily residential projects, and therefore, there is no significant cumulative impact related to a significant hazard to the public, or the environment, through the routine transport, storage, production, use or disposal of hazardous materials with implementation of these cumulative projects. The types and quantities of hazardous materials/wastes and their exposure hazards can vary greatly from site to site. The Project site is located in an area that includes open space with negligible hazardous materials use and other residential land uses that can be characterized as having relatively little routine hazardous materials usage when compared to something like industrial land uses. Cumulative projects would be required to comply with all applicable federal, state, and local standards regarding the handling, use, transportation, storage, and disposal of hazardous materials, which are intended to minimize the risk to public health and the environment. With adherence to existing regulatory requirements during construction and operation, including transportation regulations, releases from routine transport, use or disposal of hazardous materials from the cumulative projects would be minimized, and would apply to all cumulative projects. Therefore, the proposed Project would not result in cumulatively considerable impacts related to routine transport, storage, use, or disposal of hazardous materials during construction and operation, and the impacts would be less than significant.

Threshold 4.9b: 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 or waste into the environment?

Cumulative projects nearest to the Project site would be applicable to this analysis, as these hazardous impacts are generally site-specific, but could combine with nearby projects to be cumulatively considerable. As such, this would include Cumulative Projects LA1, LA2, LA3, LA13, and SC1. The cumulative projects are generally residential/commercial projects that would not represent a cumulatively considerable significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment. Construction and operation of the Project, like other largely residential cumulative projects, including LA1, LA2, LA3, and SC1, would include the use of relatively small quantities of hazardous materials and generation of small amounts of hazardous wastes. The Project and other cumulative projects would not require the transport, storage, use, or disposal of any unusually large, toxic, or explosive quantities of hazardous materials or hazardous wastes, as the projects are generally residential projects with similar characteristics to the Project. The Project and Cumulative Projects LA1, LA2, LA3, LA13, and SC1 would use, store, handle, and dispose of relatively limited quantities of hazardous materials, such as cleaning fluids, lubricants, paints, solvents, and fuels. Similarly, these types of projects generate small quantities of hazardous wastes, including small leftover amounts of hazardous materials previously discussed, paint cans, unused consumer products, and also petroleum products such as used motor oils.

The Project and Cumulative Projects LA1, LA2, LA3, LA13, and SC1 would be required to adhere to the comprehensive set of existing federal, State, and local regulatory requirements, including the HMBP programs and SCAQMD's Rule 402 and 403, and applicable City of Santa Clarita regulations, for Cumulative Project SC1 (and SC2 through SC26), which is located within the City's jurisdiction. These programs require all users of hazardous materials to implement employee training, safe storage, and appropriate handling requirements to ensure that upset and accident conditions are minimized. In the unlikely event that an accidental release was to occur, these programs require spill response measures to ensure that incidents are quickly contained and, therefore, would not travel off-site in a way that could cumulatively combine to affect large numbers of people or affect substantial parts of the environment.

For the reasons described above, the Project, in conjunction with other cumulative projects, would not 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 during construction and operation, and cumulative impacts would be less than significant.

Threshold 4.9c: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of sensitive land uses?

Cumulative projects nearest to the Project site (particularly within one-quarter mile of the site) would be applicable to this analysis, as these hazardous impacts are generally site-specific, but could combine with nearby projects to be cumulatively considerable. As such, this would include Cumulative Projects LA1, LA2, and SC1. Similar to the proposed Project, the Cumulative Projects LA1, LA2, and SC1 would be located in proximity to existing residential land uses. Cumulative Projects LA2 and SC1 would be within one-quarter mile of some of the same residential land uses as the Project. However, as stated above, the Project would not include any activities or land uses during either construction or operation that could result in substantive hazardous emissions and the Project would not handle or emit acutely hazardous materials, substances or wastes. Similarly, the Cumulative Projects are primarily residential projects (Cumulative Project SC1 does include a commercial use) that are not anticipated to result in substantive hazardous emissions or handle substantive hazardous substances. All cumulative project construction activities would be subject to SCAQMD rules, including Rule 402, Nuisance, which prohibits the discharge from any source of air contaminants or other materials which could cause injury, determent, nuisance, or annoyance that may endanger the comfort, health, or safety of the public. Operationally, none of the cumulative projects would include the manufacturing or industrial-scale emissions or handling of any hazardous or acutely hazardous materials, substances or waste and all would be subject to the same regulatory requirements as the proposed Project. Cumulative Projects LA1, LA2, and SC1 do not represent a significant cumulatively considerable impact. The Project would require implementation of MM-4.9-1, which would reduce potential on-site impacts to less than significant. Therefore, the Project would not result in cumulatively considerable impacts associated with hazardous emissions or acutely hazardous materials, substances, or waste within one-quarter mile of a sensitive land use.

Threshold 4.9d: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

As discussed above in Threshold 4.9c for the Project analysis, hazardous materials sites are handled on a project-by-project basis and generally do not contribute to a cumulative significant impact related to hazardous materials sites. As discussed above, the nearest hazardous waste site included on a list compiled pursuant to Government Code Section 65962.5 is the Valencia Oaks Ranch, which has been identified as a non-generator that does not presently generate hazardous waste and has had no reported violations. Given there has been no indication of a release or underground features, this facility would not be considered an environmental concern to the Project site or Cumulative Projects LA1 through LA14 or SC1 through SC26. Cumulative Projects LA1 through LA14 or SC1 through SC26 may be located on a hazardous materials list compiled pursuant to Government Code Section 65962.5. However, there are multiple government agencies who oversee development on hazardous materials sites, including the LARWQCB, which provides guidelines for soil and water contaminations, and the LACoFD Hazardous Materials Division, which provides the Compliance Guideline for Hazardous Wastes and Materials.

As discussed above, MM-4.9-2 and MM-4.9-3 are required to reduce potential impacts associated with the presence of a plugged and abandoned oil well. However, the site-specific presence of an abandoned oil well would not result in a cumulative impact related to hazards to the public or the environment for Cumulative Projects LA1 through LA13 or SC1 through SC23due to distance. Depending on the methane levels in proximity to the oil well, gas protection system for future habitable structures within 300 feet of the well may be required, which is too far to affect any of the cumulative projects of Table 2-2 in Chapter 2, Environmental Setting. Cumulative hazardous materials sites are not anticipated to affect on-site conditions due to the proximity and current hazardous materials regulations, and the presence of the on-site oil well is too far to affect the cumulative projects. Therefore, the Project would not result in a cumulatively considerable impact related to hazardous materials sites and impacts would be less than significant.

Threshold 4.9e: 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?

The Project site is not located within two miles of a private or public airport and therefore could not combine with any cumulative projects to become a cumulative impact related to this criterion. There would be no cumulative impact.

Threshold 4.9f: Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

The County is vulnerable to several hazards including but not limited to wildfires, earthquakes, drought, hazardous material releases, and human threat events/terrorism. The County updates and implements a Hazard Mitigation Plan in accordance with the Disaster Relief Act and provides the coordination, conjunction and collaboration with all County departments to maximize the County's potential to prevent, prepare for, respond to and recover from these hazards. The adopted 2020 Los Angeles County AHMP provides specific courses of action that jurisdictions intend to follow to reduce vulnerability and exposure to future hazard events. Hazard mitigation strategies help to eliminate losses by limiting new exposures in identified hazard areas, diverting a hazard by reducing its impact, and developing an awareness of hazard area locations to plan responsibly for future development (County of Los Angeles 2020).

The Project, in conjunction with Cumulative Projects LA1 through LA14 or SC1 through SC26 would similarly be constructed to current design standards and building codes, would not impair or interfere with the AMHP or the County's ability to prevent, prepare or respond to and recover from the identified hazards because existing codes are designed to minimize hazards and protect public health and safety. The Project shall implement MM-4.17-1, Construction Traffic Management Plan, which requires preparation of a Construction Traffic Management Plan in compliance with the County's Traffic Control Requirements to provide temporary traffic controls and access within the County public rights-of-way when temporary disruption of traffic is anticipated existing access for emergency service providers would be maintained during the entire construction phase and enhanced after development of the Project is complete. The Project would also implement MM-4.20-1, Wildfire Education Program, as detailed in Section 4.20, Wildfire, which would reduce the overall cumulative emergency evacuation impacts in the area, thereby not contributing to a cumulatively considerable impact. Additionally, the Project would not cause hazards to emergency response to aircrafts as no structures over 100 feet tall are proposed. Therefore, the Project could result in cumulatively considerable impacts prior to mitigation. However, with mitigation, the potential cumulative impact related to interference with an adopted emergency evacuation plan would be less than significant.

Threshold 4.9g: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving fires, because the project is located:

i. Within a high fire hazard area with inadequate access?

ii. Within an area with inadequate water and pressure to meet fire flow standards?

iii. Within proximity to land uses that have the potential for dangerous fire hazard?

The potential for wildland fires resulting in the loss of life or property is generally unique to each site. All cumulative projects are subject to the fire codes and regulations and, with some projects, the preparation of Fire Protection Plans to determine the potential risk for wildland fires. Similar to the Project, other cumulative projects would be required to include such features as fuel modification zones, fire access roads, and fire hydrants to reduce the risk of potential wildland fires. Further, the Project would result in increased access via The Old Road by providing additional vehicular accessways—thereby enhancing emergency egress and ingress in the event of an emergency or evacuation. Additionally, implementation of MM-4.20-1 through MM-4.20-4 would reduce fire hazards to the site to less than significant. All cumulative projects in the County and City cannot be approved unless it is determined to meet the fire codes (e.g., fire retardant roof materials, increased setbacks, fire sprinklers on structures) and regulations for the fire authority having jurisdiction over the cumulative projects. The Project site is currently vacant and is located in an area surrounded by open space and similar residential development. Through the Project's compliance with the final fuel modification plans, the addition of a water tank, , and above-mentioned MM-4.20-1 through MM-4.20-4, the Project would not make a cumulatively considerable contribution to a potential impact from wildland fires and would be less than significant. Refer to Section 4.20, Wildfire, of this Draft EIR for further details of fire hazards.

Threshold 4.9h: Does the proposed use constitute a potentially dangerous fire hazard?

The Project and many of the Cumulative Projects from LA1 through LA14 or SC1 through SC26 would develop currently undeveloped land and increase human activities that could become a source of a fire-related incidences. As detailed in responses to Threshold 4.9h under Section 4.9.5, Impact Analysis, the Project must implement MM-4.20-1 through MM-4.20-4, which would reduce impacts to less than significant. However, development of the Project and Cumulative Projects LA1 through LA13 would require compliance with development designs, applicable provisions, and safety requirements provided in County Code Title 32, Fire Code; County Code Title 26, Requirements for Wildland-Urban Interface Fire Areas; 2022 CBC Chapter 7A, Materials and Construction Methods for Exterior Wildfire Exposure requiring fire-resistant construction materials and techniques; and implementation of a fuel modification plan. Cumulative Projects SC1 through SC26 are within City of Santa Clarita and would be subject to existing related code requirements. Therefore, the Project's contribution related to the creation of a potentially cumulatively significant hazardous fire conditions would be less than significant with implementation of MM-4.20-1 through MM-4.20-4 and adherence to regulatory requirements.

4.9.7 Mitigation Measures

MM-4.9-1 Soil Management Plan. Prior to issuance of a grading permit, the Applicant shall retain a Qualified Environmental Specialist to prepare a Soil Management Plan (SMP) for submittal to the Los Angeles County Fire Department Hazardous Materials Division for approval. The SMP shall provide the protocols for all earthwork activities and the potential to encounter previously unidentified

hazardous materials or wastes on the Project site as well as within off-site disturbance areas. Potential conditions and/or hazards that may be encountered during construction activities include but may not limited to buried septic systems, buried debris (e.g., building debris with lead-based paint chips or asbestos), areas of soil staining, or other suspect conditions that can be identified visually and/or from odors within the Project's proposed disturbance area. If suspect materials or conditions are encountered, then the following actions are required and specific protocols, consistent with applicable Health and Safety Code and Health Hazardous Materials Division of the Los Angeles County Fire Department (LACoFD) requirements, shall be included in the SMP: (1) earthwork activities in that area shall cease until sampling and characterization is completed by the Qualified Environmental Specialist; (2) depending on sampling/analysis results, the appropriate oversight agency shall be notified (e.g. Regional Water Quality Control Board, Department of Toxic Substances Control (DTSC), or the local Certified Unified Program Agency (LACoFD); (3) documentation shall be prepared that itemizes required sampling, results, and actions in conformance with regulatory standards to be taken; (4) protocols for resuming earthwork activities following approval from the oversight agency and remediation of contamination, if any, as deemed necessary by the Qualified Environmental Specialist and oversight agency; (5) National Institute for Occupational Safety and Health (NIOSH)-approved half-face respirators equipped with minimum N-95 protection factor shall be available upon request for use during worker collocation with surface disturbance activities; and (6) hand washing facilities and areas for changing of clothing shall be provided during worker collocation with surface disturbance activities.

The SMP shall outline requirements for construction activities that occur within 30 feet of the edge of Interstate 5 (I-5) to address potential aerially deposited lead (ADL) from historic vehicle emissions that included leaded fuels. The SMP shall set forth protocols for soil sampling beneath the pavement of The Old Road within 30-feet of I-5 to determine ADL concentrations and require that if soils are affected by ADL, they shall be managed consistent with all applicable DTSC standards and requirements.

The SMP shall outline requirements for ground-disturbing activities as part of the Project as it relates to the potential of releasing spores of Coccidioidomycosis (also known as Valley Fever) into the air. In addition to providing N-95 respiratory masks upon request for construction personnel during any ground-disturbance activities, the SMP shall require the provision of educational material to construction personnel. This educational material shall include information on how to minimize exposure to and recognize symptoms of Valley Fever and ways report symptoms of Valley Fever; proper cleaning procedures to minimize accidental exposure; and demonstrations on how to use personal protective equipment, such respiratory protection, skin, and eye protection.

The SMP shall require that any heavy equipment with factory enclosed cabs be provided with high-efficiency particulate absorbing filter (HEPA)-rated air filtration and positive pressure air. The General Contractor utilizing applicable heavy equipment shall provide proof of worker training on proper use of applicable heavy equipment cabs. Communication methods, such as two-way radios, shall be available for use in enclosed cabs.

MM-4.9-2 Well Assessment. Prior to issuance of a grading permit, the Applicant shall retain a California registered design professional, such as a licensed civil engineer and/or licensed petroleum engineer to evaluate the exact location, condition, and abandonment status of the well on the

Project site. A summary report detailing the findings of the well conditions and abandonment status shall be submitted to the Los Angeles Department of Public Works (Public Works) Building Official and California Geologic Energy Management (CalGEM) for review and approval prior to issuance of a grading permit. Pursuant to Section 110.4 of the Los Angeles County Building Code (LACBC), building permits shall not be issued for new buildings or enclosed structures, additions, or conversions of any building or structure to habitable or occupiable space on, adjacent to, or within 300 feet (91.44 meters) of the existing plugged well without documentation, stamped and signed by the licensed engineer, of proper abandonment of the existing well consistent with CalGEM guidelines and approval by the Public Works Building Official. A CalGEM monitor shall be present on site during all abandonment activities of the on-site oil well. Any further additional abandonment or removal of the plugged well as required by CalGEM shall be completed and approved by CalGEM prior to issuance of a grading permit.

MM-4.9-3 Methane Gas Survey and Remediation. Prior to issuance of a grading permit, the Applicant shall conduct methane gas testing for the presence of methane gas emissions within 300 feet of the plugged well, in accordance with CalGEM and Los Angeles County Department of Public Works (Public Works) methane gas assessment guidelines. The Project applicant shall retain a Qualified Geotechnical Specialist to perform the methane gas soil survey and provide a summary report of the findings with recommendations for remedial work, if necessary. The summary report shall be submitted to the Public Works Building Official for review and approval prior to issuance of a grading permit.

In the event that the soil gas investigation indicates methane levels that exceed 5,000 parts per million by volume, the Project Applicant shall include installation of a gas protection system for residences within 300 feet of the plugged oil well. The gas protection system shall be developed in compliance with the Public Works Methane Hazard Mitigation Policy and become part of the project design plans. The Applicant shall submit documentation to Public Works that ensures compliance with the proper abandonment standards and necessary approvals from CalGEM regarding the appropriate well abandonment. It shall ensure that this has been completed prior to commencement of construction of the Project and that all remedial and grading activity recommendations have been implemented to the satisfaction of CalGEM and the Public Works Building Official prior to commencement of construction grading.

MM-4.17-1 and MM-4.20-1 through MM-4.20-5 in Section 4.20, Wildfire of this Draft EIR are applicable to this analysis.

4.9.8 Level of Significance After Mitigation

The Project would have less than significant impacts regarding creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and no mitigation is required.

The Project's potential to create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment would be less than significant with implementation of MM-4.9-1.

The Project would have less than significant impacts regarding hazardous emissions within one-quarter-mile of sensitive land uses with implementation of MM-4.9-1.

Impacts regarding a significant hazard from the Project site's location on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 would be potentially significant due to the presence of an abandoned oil well. MM-4.9-2 and MM-4.9-3 are required to reduce potential impacts to a level less than significant.

Project implementation would result in no impacts regarding safety hazards or excessive noise for people residing or working in the Project area due to proximity within a public airport.

Impacts regarding the Project's potential to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan would be less than significant with implementation of MM-4.17-1.

The Project would result in less than significant impacts regarding exposure of people or structures to a significant risk of loss injury or death involving fires with implementation of MM-4.17-1, MM-4.20-1, MM-4.20-4, and MM-4.20-5.

Regarding the Project's potential use as constituting a dangerous fire hazard, the Project would result in less than significant impacts with implementation of MM-4.20-1 through MM-4.20-5 from Section 4.20, Wildfire.

4.9.9 References

CAL FIRE (California Department of Forestry and Fire Protection). 2016. "Fire Incidents for Year 2016." Accessed May 9, 2022. https://www.fire.ca.gov/incidents/2016/.

CAL FIRE. 2020. "Elsmere Fire." Accessed May 23, 2022. https://www.fire.ca.gov/incidents/2020/8/3/elsmere-fire/.

CAL FIRE. 2021. "Fire Incidents for Year 2021." Accessed May 9, 2022. https://www.fire.ca.gov/incidents/2021/.

Cal OES (California Governor's Office of Emergency Services). 1991. *California Hazardous Material Incident Contingency Plan. January 1991*. Accessed May 13, 2022. https://www.caloes.ca.gov/wp-content/uploads/Fire-Rescue/Documents/HazMat-Incident-Contingency-Plan-HMICP.pdf.

CalGEM (California Geologic Energy Management Division). "2022, Well Finder, Ayers Well Report." Accessed May 11, 2022. https://maps.conservation.ca.gov/doggr/wellfinder/#/-118.55283/34.36303/15.

CDPH (California Department of Public Health). 2024. Valley Fever in California Dashboard. Page last updated January 16, 2024. Accessed August 22, 2024. https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/ValleyFeverDashboard.aspx.

County of Los Angeles. 2014. *Los Angeles County General Plan Update Draft Environmental Impact Report*. June 2014. Accessed April 27, 2023. https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

County of Los Angeles. 2015. *Los Angeles County General Plan 2035*. Adopted October 6, 2015. Accessed May 13, 2022. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

County of Los Angeles. 2020. *2020 County of Los Angeles All-Hazards Mitigation Plan*. Adopted May 2020. Accessed May 13, 2022. https://ceo.lacounty.gov/wp-content/uploads/2022/04/County-of-Los-Angeles-All-Hazards-Mitigation-Plan-APPROVED-05-2020.pdf.

DTSC. 2016. Final Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils, Docket No. ESPO-SMA 15/16-001. June 30, 2016. Accessed April 2023. https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/11/DTSC-Caltrans-ADL-Agreement-Signed-w-Exhibits-Final-6-30-16.pdf.

DTSC. 2022a. EnviroStor Environmental Database Search. Accessed May 13, 2022. https://www.envirostor.dtsc.ca.gov/public.

Keeley, J.E., and A.D. Syphard. 2018. "Historical Patterns of Wildfire Ignition Sources in California Ecosystems." *International Journal of Wildland Fire 27*(12): 781–799. https://doi.org/10.1071/WF18026.

LACDPH (Los Angeles County Department of Public Health). 2019. Acute Communicable Disease Control Program And Department Of Environmental Health; Coccidioidomycosis (Valley Fever) Management Plan: Guidelines for Employers. August 2019. Accessed August 2024. http://publichealth.lacounty.gov/acd/docs/valleyfeverplan2019.pdf.

LACoFD (Los Angeles County Fire Department). 2009. *Compliance Guideline for Hazardous Wastes and Materials*. Revised December 3, 2009. Accessed May 13, 2022. https://fire.lacounty.gov/wp-content/uploads/2019/08/HHMD-Compliance-Guidance-Document-2-1-1.pdf.

OJP (U.S. Department of Justice, Office of Justice Programs). 1999. "Federal Response Plan, April 1999 Executive Overview." Last updated April 1999. Accessed May 13, 2022. https://www.ojp.gov/ncjrs/virtual-library/abstracts/federal-response-plan-april-1999-executive-overview.

Public Works (Los Angeles County Department of Public Works). 2020. "Policies, Procedures, and Guidelines—Subject: Gas Hazard Mitigation Policy and Standards." Effective date January 1, 2020. Accessed May 13, 2022. https://pw.lacounty.gov/epd/swims/docs/pdf/methane/GasHazardPolicy.pdf.

SCAQMD (South Coast Air Quality Management District). 2005. *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, A Reference for Local Governments Within the South Coast Air Quality Management District*. May 6, 2005. Accessed May 26, 2022. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf?sfvrsn=4.

Stantec. 2023. *Revised Phase I Environmental Site Assessment, Lyons Canyon, Unincorporated Santa Clarita, California*. July 8, 2020. Revised April 10, 2023. (Appendix F).

SWRCB (State Water Resources Control Board). 2022. Geotracker Environmental Database Search. Accessed May 13, 2022. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Santa+Clarita%2C+CA.

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4.10 Hydrology and Water Quality

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to hydrology and water quality, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data and reports from the Los Angeles County Department of Regional Planning, California Department of Water Resources, Santa Clarita Valley Water Agency (SCV Water), Los Angeles Regional Water Quality Control Board, Los Angeles County Public Works (Public Works), Regional Water Management Group, Santa Clarita Valley Groundwater Sustainability Agency (SCVGSA), and Upper Santa Clara River Watershed Management Group, as well as the following:

Appendix G-1 Low Impact Development (LID) Report for Tract No. 83301, prepared by United Civil, Inc., dated September 25, 2024

Appendix G-2 Hydrology Report for Tract No. 83301, prepared by United Civil, Inc, dated September 25, 2024

Appendix G-3 Lyons Canyon Drainage Concept Report- Volume 1, Regional Flood Protection and Debris Management Tract No. 83301, prepared by Pacific Advanced Civil Engineering, Inc., dated September 2024

Appendix G-4 FEMA Conditional Letter of Map Revision Request, prepared by Pacific Advanced Civil Engineering, Inc., dated September 2024

Appendix L-2 The Trails at Lyons Canyon Water Supply Assessment, prepared by SCV Water, dated April 13, 2022

Appendix L-3 Addendum to WSA, prepared by SCV Water, dated May 8, 2023

Other sources consulted are listed in Section 4.10.9, References.

4.10.1 Existing Conditions

This section describes the existing conditions in the Project area and identifies the hydrological resources that could be affected by the Project.

Project Site Hydrology

The Project site is predominantly vacant with fencing, an abandoned water tank, water wells, irrigation lines, Southern California Edison (SCE) electrical distribution lines, a billboard, and dirt roads. The topography of the Project site is characterized by hillside and valley terrain with moderate to steep variations (Figure 4.10-1, On-Site Topography and Drainage). A significant ridgeline in the southern portion of the Project site is not proposed for development. Elevations in the Project site range from approximately 1,654 feet above mean sea level (msl) at the southwest corner to approximately 1,300 feet msl at the northeast corner. The Project site and Project vicinity have been substantially affected by historical and recent wildfires. Wildfires occurred on portions of the Project site in 1940, 1949, 1970, 1974, 1989, 2003, and most recently in 2016.

As shown in Figure 4.10-1, the Project site is traversed by blue-line Lyons Creek, which trends east-southeast across the central portion of the site and then turns north before exiting the property in the northeast portion of the site. An east-trending tributary blue-line creek flows into Lyons Canyon Creek in the northern part of the site. Lyons Creek flows eastward into the South Fork of the Santa Clara River, which leads to the Santa Clara River, approximately 3.75 miles northeast of the Project site (Figure 4.10-2, Existing Drainages and Watershed, and Figure 4.10-3, Upper Santa Clara River Watershed and Floodplain Areas). The on-site portion of Lyons Creek drains into an existing double 8-foot by 8-foot reinforced concrete box (RCB) culvert, in the northeast corner of the site, which carries flow under The Old Road and Interstate-5 (I-5) freeway to Los Angeles County Flood Control District (LACFCD) stormwater facilities (Figure 4.10-4, Existing Condition Subwatersheds). Two large offsite tributary watersheds and several small offsite watersheds drain through the project area to the existing box culvert storm drain (Appendix G-2).

The Project and the surrounding area are located in the Oak Mountain quadrant of Isohyet Map 1-H1.35. The 24-hour 50-year storm is 8.4 inches of precipitation. In the existing condition, approximately 868 acres of undeveloped land are included within the subwatershed that includes the Project site, which generates a 50-year storm event bulked/burned flow of 1,551 cubic feet per second (cfs). Figure 4.10-4, Existing Conditions Subwatersheds depicts the existing watershed that drains to the RCB culvert at The Old Road (Appendix G-2).

Regional Hydrology

The Project site is located within the Santa Clara Watershed, which drains into the Santa Clara River, which is the largest river system in southern California that remains in a relatively natural state. The Santa Clara Watershed drains about 1,634 square miles, with approximately 40% of the watershed in the northwestern portion of Los Angeles County and approximately 60% northern/central portion of Ventura County. The Santa Clara River is approximately 100 miles in length and originates in the northern slope of the San Gabriel Mountains in Los Angeles County, traverses Ventura County, and flows into the Pacific Ocean halfway between the cities of San Buenaventura and Oxnard.

The Upper Santa Clara River is the portion of the watershed that is within Los Angeles County (Figure 4.10-3). This portion of the River is largely defined as an ephemeral stream with highly variable flows, depending on precipitation levels, and it can be prone to flooding (RWMG 2014). The principal tributaries to the Upper Santa Clara River are Castaic Creek, San Francisquito Creek, Bouquet Creek, Mint Canyon and the South Fork of the Santa Clara River. The Project site drains to the South Fork of the Santa Clara River and ultimately to Reach 6 of the Santa Clara River (between I-5 and Bouquet Canyon Road). Thirty-six percent of the watershed is controlled by dams, such as Santa Felicia and Pyramid Dams on Piru Creek and Castaic Dam on Castaic Creek. Releases from reservoirs and several point sources contribute to surface water flow in the Santa Clarita Valley. All surface water flows into the Santa Clara River, which flows east to west from Los Angeles County to Ventura County, and then ultimately to the Pacific Ocean. Tributary stream flow into the River is ephemeral with most tributaries dry for much to most of the time. The hydrology of the Santa Clara River is complex; perennial flows occur in some portions of the river before disappearing into the permeable bed material and then reappearing further downstream where groundwater surfaces (LARWQCB 2014).

Surface Water Quality

The Santa Clara River receives tertiary-treated recycled water discharged from the Saugus and Valencia water reclamation plants (WRPs), which are operated by the Santa Clarita Valley Sanitation District (SCVSD). The Project site is in the vicinity of Reach 6 of the River. This Reach is listed on the 303(D) List of impaired water bodies in the Upper Santa Clara River watershed for chlorpyrifos, chloride, coliform bacteria, diazinon, and toxicity (LARWQCB

2018).[1] Sources of chloride include self-regenerating water softeners, drinking water, and other additives that contribute to chloride in wastewater effluent. Wastewater discharges from the Saugus and Valencia WRPs were determined to be the principal source, making up an estimated 70%of the chloride load into Reaches 5 and 6. Major contributors of coliform (bacteria) to the Upper Santa Clara River are discharges from the stormwater conveyance system that drains urban areas. In contrast, runoff from natural landscapes has not been found to be a significant source of bacteria.

The State Water Resources Control Board (SWRCB) establishes statewide water quality control policy and regulation. The SWRCB also coordinates Regional Water Boards, which are responsible for designating beneficial uses, establishing water quality objectives to protect those uses, and identifying programs of implementation to meet objectives through the preparation of a basin plan. The Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) sets forth policies that address region-wide water quality concerns. The beneficial land uses in Santa Clara River Reach 6 as set forth in the Basin Plan are identified in Table 4.10-1.

Table 4.10-1. Beneficial Use Designations for Water Bodies in the Project Area

Beneficial Use	Water Body
	Santa Clara River Reach 6
Municipal and Domestic Supply (MUN)	P
Agriculture Supply (AGR)	E
Industrial Service Supply (IND)	E
Industrial Process Supply (PROC)	E
Groundwater Recharge (GWR)	E
Freshwater Replenishment (FRSH)	E
Navigation (NAV)	N/A
Hydropower Generation (POW)	N/A
Commercial and Sport Fishing (COMM)	N/A
Aquaculture (AQUA)	N/A
Wildlife Habitat (WILD)	E
Marine Habitat (MAR)	N/A
Warm Freshwater Habitat (WARM)	E
Cold Freshwater Habitat (COLD)	N/A
Inland Saline Water Habitat (SAL)	N/A
Estuarine Habitat (EST)	N/A
Preservation of Rare and Endangered Species (RARE)	E
Wetland Habitat (WET)	E
Migration of Aquatic Organisms (MIGR)	N/A
Spawning, Reproduction, and/or Early Development (SPWN)	N/A

Source: LARWQCB 2014.
Note: N/A = not applicable; E = existing beneficial use; P = potential beneficial use)

[1] Chlorpyrifos and diazinon for Reach 6 are not prioritized for the because constituents with no exceedances within the past 5 years and in areas where MS4s are not a source contributing to the exceedances are not considered to be priorities for the EWMP. Toxicity was not prioritized because other prioritized constituents are expected to address these constituents and other specific constituents contributing to impairments (USCRWMG 2016).

Santa Clara River Valley East Groundwater Subbasin

The Project site is underlain by the Santa Clara River Valley East Groundwater Subbasin (East Subbasin), which is bordered on the north by the Pico Mountains, on the west by impervious rocks of the Modelo and Saugus Formations, and on the south by the Santa Susana Mountains. The East Subbasin consists of an alluvial trough bounded by granite and granodiorite of the San Gabriel Mountains to the east and southeast, the Santa Susana Mountains to the south, the Topatopa and Piru Mountains to the north and northwest, and the Sierra Pelona Mountains to the northeast. Lithologic units, from the stratigraphic top to the stratigraphic bottom, include alluvium, terrace deposits, and the Saugus Formation, which comprises the deepest freshwater-bearing formations in the SCV. The Saugus Formation is underlain by various non-freshwater-bearing formations.

Figure 4.10-5, Santa Clara River Valley East Groundwater Subbasin- Land Uses, depicts the boundaries of the East Subbasin and the general land use categories within the region. As shown, the South Fork of the Santa Clara River is generally surrounded by residential development. Groundwater in the East Subbasin is generally unconfined in the alluvium, but may be confined, semi-confined, or unconfined in the Saugus Formation. Developable quantities of groundwater are present in the alluvium (Alluvial Aquifer) and in portions of the Saugus Formation, and these units are underlain and laterally bounded by non-water-bearing bedrock units that do not contain significant quantities of water and cannot be developed for municipal purposes (SCVGSA 2022).

Average annual precipitation in the East Subbasin ranges from 14 inches to 16 inches. Rain falling in the upper elevations of the watershed infiltrates into the soil, where some of the water evaporates or is transpired by vegetation and the remainder becomes stormwater that can also infiltrate to groundwater. A portion of the rainfall runs off the land surface and flows into side canyons and tributaries to the river. In the urban areas, precipitation falling on impervious surfaces is directed to storm drains that flow to the river or the stormwater is directed to swales and allowed to percolate in some locations (SCVGSA 2022).

Groundwater Supply

As stated in the SCV Water's Urban Water Management Plan, current and proposed groundwater supplies from the Alluvial Aquifer and the Saugus Formation are sustainable (SCV Water 2021). Current and future pumping levels when combined with non-purveyor pumping for average year, single dry year and multiple dry years remain within the basin yield, which considers an updated climate change analysis consistent with DWR guidance for preparation of groundwater sustainability plans. With the installation of groundwater treatment facilities and new wells, estimated to occur by 2035, SCV Water estimates its Alluvial pumping to be 30,790 AFY during normal years and when combined with 6,410 AFY of pumping by others totals 37,200 AFY. This is within the 30,000-40,000 AF operating range for the groundwater basin. For locally dry years, pumping would be reduced to 26,090 AFY and when combined with 6,401 AFY of pumping by others totals 32,500. This is within the groundwater operating range of 30,000-35,000 AFY for dry years (SCV Water 2021).

Groundwater Quality

With some exceptions, the quality of groundwater in the East Subbasin's two primary aquifer systems is suitable for drinking water and agricultural uses (SCVGSA 2022). Within the East Subbasin, perchlorate, volatile organic compounds (VOCs), and per- and polyfluoroalkyl substances (PFAS) are the primary human caused constituents of concern. The most frequently detected VOCs in the Basin are trichloroethylene (TCE) and tetrachloroethylene (PCE). Less frequently detected compounds include chloroform, and 1,1-dichloroethene which have been detected in trace amounts below the state drinking water standards maximum contaminant level (MCL) in the Basin. The Salt

and Nutrient Management Plan (SNMP) prepared by SCV Water in 2016 identified dichlorodiphenyltrichloroethane (DDT) and polychlorinated biphenyls (PCBs) as other constituents of concern. PFAS is considered a contaminant of emerging concern in the Subbasin. Formerly extensively used in firefighting foams, non-stick coatings, cookware, carpets, and furniture, these substances tend to accumulate in groundwater and long-term exposure could potentially affect the immune system, thyroid, liver, and can cause cancer (SCVGSA 2022). The most common types of PFAS are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS).

The presence of these constituents of concern has necessitated construction of wellhead treatment facilities at some supply wells (SCVGSA 2022). During planning and construction of these treatment facilities, affected wells have been shut down and SCV Water (and its predecessor agencies) have relied on other wells and/or imported water to make up for the temporary reduction in supply. The California Division of Drinking Water (DDW) lowered their response level guidelines in 2020 related to PFAS and SCV Water responded with a voluntary quarterly sampling program and an expedited schedule for construction of treatment facilities. These temporary reductions in supply from some wells have not impacted the ability of SCV Water to provide high quality groundwater. These responses to contamination have been conducted under the oversight of the DDW (SCVGSA 2022).

Chloride is a naturally occurring inorganic salt, but higher concentrations in groundwater can be associated with anthropogenic activities such as urban runoff or discharge of recycled water. Nitrate is a compound that is associated with agricultural activities, septic systems, confined animal facilities, landscape fertilization, and water treatment facilities. Long-term groundwater quality monitoring data for TDS in the Alluvial Aquifer shows a consistent pattern of meeting drinking water standards, which supports the conclusion that the Alluvial Aquifer remains a viable ongoing water supply source in terms of groundwater quality (SCVGSA 2022).

Project Site Groundwater

The Project site overlies the Santa Clara River Valley East Groundwater Subbasin. Groundwater beneath the Project site occurs in the alluvial deposits within Lyons Canyon and major tributary canyons. Exploration completed within the Project site by Pacific Soils in 2006 indicated groundwater within the alluvial valley floor at depths ranging from 53 to 69 feet below existing ground surface. Groundwater was not encountered within the borings within the valley floor within the main easterly canyon to depths of 25 feet. However, seepage was encountered in the northerly draining canyon at depths of 25 and 20 feet, respectively. Additional tests were performed but did not provide a consistent groundwater depth (refer to Section 4.7, Geology and Soils of this Draft EIR). Based on the historical water depth just north of the Project site along The Old Road at 30 feet, a historic high water of 30 feet at the Project site was conservatively utilized for the Geotechnical Report (RTF&A 2024).

The local groundwater basin is managed by the Santa Clarita Valley Groundwater Sustainability Agency (SCVGSA) pursuant to the requirements of the Sustainable Groundwater Management Act (SGMA). The SCVGSA has adopted a groundwater sustainability plan (GSP) that outlines sustainability criteria and management actions needed to ensure the groundwater basin is not depleted.

Flood Hazards

As illustrated in Figure 4.10-6, Flood Hazard Zones, the Project site includes 27 acres, or 12% of the Project site, within FEMA Zone A, which is a High Risk/Special Flood Hazard Area (FEMA 2022). Special Flood Hazard Areas (Zone A), also referred to as the base flood or 100-year flood zone, are defined as the area that will be inundated by a flood event having a 1% chance of being equaled or exceeded in any given year. A portion of the areas proposed to be graded/developed is within the 100-year Flood Zone A. The remainder of the Project site is designated as

Zone D, which is used for areas where there are possible but undetermined flood hazards, and Zone X, which depicts areas with low risk of flooding, or areas outside the 2% chance flood area (i.e., the 500-year flood plain).

Dam Failure

Dam failure can result from natural or human-made causes, including earthquakes, erosion, improper dam siting or design, rapidly rising flood waters, or structural flaws. Dam failure may cause loss of life, damage to property, and displacement of persons residing in the inundation path. Within the Santa Clarita Valley, the two major reservoirs that could have a significant impact on the Santa Clarita Valley in the event of a dam failure are Castaic Lake and Bouquet Creek Reservoir. The Project site is not located within the potential inundation areas associated with dam failure of either of these dams (City of Santa Clarita 2011).

4.10.2 Regulatory Requirements

Federal

Clean Water Act

The Clean Water Act (CWA) was first introduced in 1948 as the Water Pollution Control Act. The CWA authorizes Federal, state, and local entities to cooperatively create comprehensive programs for eliminating or reducing the pollution of state waters and tributaries. The primary goals of the CWA are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. As such, the CWA forms the basic national framework for the management of water quality and the control of pollutant discharges. The CWA also sets forth a number of objectives in order to achieve the above-mentioned goals. These objectives include regulating pollutant and toxic pollutant discharges; providing for water quality that protects and fosters the propagation of fish, shellfish and wildlife; developing waste treatment management plans; and developing and implementing programs for the control of non-point sources of pollution.

Since its introduction, major amendments to the CWA have been enacted (e.g., 1961, 1966, 1970, 1972, 1977, and 1987). Amendments enacted in 1970 created the U.S. Environmental Protection Agency (EPA), while amendments enacted in 1972 deemed the discharge of pollutants into waters of the United States from any point source unlawful unless authorized by a EPA National Pollutant Discharge Elimination System (NPDES) permit. Amendments enacted in 1977 mandated development of a "Best Management Practices" Program at the state level and provided the Water Pollution Control Act with the common name of "Clean Water Act," which is universally used today. Amendments enacted in 1987 required the EPA to create specific requirements for discharges.

In response to the 1987 amendments to the CWA and as part of Phase I of its NPDES permit program, EPA began requiring NPDES permits for: (1) Municipal Separate Storm Sewer Systems (MS4s) generally serving, or located in, incorporated cities with 100,000 or more people (referred to as municipal permits); (2) 11 specific categories of industrial activity (including landfills); and (3) construction activity that disturbs 5 acres or more of land. Phase II of EPA's NPDES permit program, which went into effect in early 2003, extended the requirements for NPDES permits to: (1) numerous small MS4s, (2) construction sites of 1 to 5 acres, and (3) industrial facilities owned or operated by small MS4s. The NPDES permit program is typically administered by individual authorized states.

In 2008, EPA published draft Effluent Limitation Guidelines for the construction and development industry. On June 27, 2016, EPA finalized its 2016 Effluent Guidelines Program Plan.

In California, the NPDES stormwater permitting program is administered by the State Water Resources Control Board (SWRCB). The SWRCB was created by the Legislature in 1967. The joint authority of water distribution and water quality protection allows the Board to provide protection for the State's waters, through its nine Regional Water Quality Control Boards (RWQCBs). The RWQCBs develop and enforce water quality objectives and implement plans that will best protect California's waters, acknowledging areas of different climate, topography, geology, and hydrology. The RWQCBs develop "basin plans" for their hydrologic areas, issue waste discharge requirements, enforce action against stormwater discharge violators, and monitor water quality.

Section 303 of the Clean Water Act (Beneficial Use and Water Quality Objectives)

The Los Angeles Regional Water Quality Control Board (LARWQCB) is responsible for the protection of the beneficial uses of waters within the Project area in the County. The LARWQCB uses its planning, permitting, and enforcement authority to meet its responsibilities adopted in the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) (LARWQCB 2014) to implement plans, policies, and provisions for water quality management.

In accordance with state policy for water quality control, the RWQCB employs a range of beneficial use definitions for surface waters, groundwater basins, marshes, and mudflats that serve as the basis for establishing water quality objectives and discharge conditions and prohibitions. The Basin Plan has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction (LARWQCB 2014). Under CWA Section 303(d), the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. A TMDL defines how much of a specific pollutant/stressor a given water body can tolerate and still meet relevant water quality standards. The LARWQCB has developed TMDLs for select reaches of water bodies.

Section 401 of the Clean Water Act (Water Quality Certification)

Section 401 of the CWA requires that an applicant for any federal permit (e.g., a U.S. Army Corps of Engineers [ACOE] Section 404 permit) obtain certification from the state, requiring that discharge to waters of the United States would comply with provisions of the CWA and with state water quality standards. For example, an applicant for a permit under Section 404 of the CWA must also obtain water quality certification per Section 401 of the CWA. Section 404 of the CWA requires a permit from the ACOE prior to discharging dredged or fill material into waters of the United States, unless such a discharge is exempt from CWA Section 404. For the Project area, the LARWQCB must provide the water quality certification required under Section 401 of the CWA. As discussed in Section 4.4, Biological Resources, of this Draft EIR, an ACOE Section 404 permit is expected to be required for the Project site. Water quality certification under Section 401 of the CWA, as well as the associated requirements and terms, is required in order to minimize or eliminate the potential water quality impacts associated with the action(s) requiring a federal permit.

Section 402 of the Clean Water Act (National Pollutant Discharge Elimination System)

The NPDES permit program, as authorized by Section 402 of the CWA, was established to control water pollution by regulating point sources that discharge pollutants into waters of the United States (33 USC 1342). In the state of California, the U.S. Environmental Protection Agency (EPA) has authorized the State Water Resources Control Board (SWRCB) permitting authority to implement the NPDES program.

Regulations (Phase II Rule) that became final on December 8, 1999, expanded the existing NPDES Program to address stormwater discharges from construction sites that disturb land equal to or greater than 1.0 acre and less

than 5.0 acres (small construction activity). The regulations also require that stormwater discharges from small MS4s be regulated by an NPDES General Permit for Storm Water Discharges Associated with Construction Activity, Order No. 99-08-DWQ. The Construction General Permit requires the development and implementation of a stormwater pollution prevention plan (SWPPP), which describes best management practices (BMPs) the discharger would use to protect stormwater runoff. The SWPPP must contain a visual monitoring program, a chemical monitoring program for non-visible pollutants to be implemented if there is a failure of BMPs, and a sediment-monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Routine inspection of all BMPs is required under the provisions of the Construction General Permit. On September 2, 2009, the SWRCB issued a new NPDES General Permit for Storm Water Associated with Construction Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002), which became effective July 1, 2010.

Section 404 of the Clean Water Act

Section 404 of the CWA established a permitting program to regulate the discharge of dredged or filled material into waters of the United States, which include wetlands adjacent to national waters (33 USC 1344). This permitting program is administered by the ACOE and enforced by the EPA.

Safe Drinking Water Act

Congress passed the Safe Drinking Water Act in 1974 to protect public health by regulating the nation's public drinking water supply. The act authorizes EPA to set national health-based standards for drinking water to protect against both naturally occurring and human-made contaminants that may be found in drinking water.

Per Section 1424(e) of the Safe Drinking Water Act, EPA established the Sole Source Aquifer Program in 1977 to help prevent contamination of groundwater from federally funded projects. The Sole Source Aquifer Program allows for EPA environmental review of any project that is financially assisted by federal grants or federal loan guarantees to determine whether such projects would have the potential to contaminate a sole source aquifer. The Wellhead Protection Program was developed as a part of the Ground Water Protection Strategy for States and Tribes under the 1986 Amendments to the Safe Drinking Water Act. The Wellhead Protection Program includes delineation of Wellhead Protection Program areas, detection of possible contamination, remediation and monitoring of contamination, contamination prevention, and public education and participation. In March 2021, EPA made a determination to issue drinking water regulations for PFOA and PFAS and as part of that process issued a PFAS Strategic Roadmap in October 2021.This roadmap states that EPA will issue drinking water regulations for PFAs under an accelerated time frame.

National Flood Insurance Act

The National Flood Insurance Act of 1968 established the National Flood Insurance Program in order to provide flood insurance within communities that were willing to adopt floodplain management programs to mitigate future flood losses. The act also required the identification of all floodplain areas within the United States and the establishment of flood-risk zones within those areas. FEMA is the primary agency responsible for administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is responsible for preparing Flood Insurance Rate Maps that delineate the areas of known special flood hazards and their risk applicable to the community. The program encourages the adoption and enforcement by local communities of floodplain management ordinances that reduce flood risks. In support of the program, FEMA identifies flood hazard areas throughout the United States on FEMA flood hazard boundary maps.

Executive Order 11988

Under Executive Order 11988 – Floodplain Management, the FEMA is responsible for management of floodplain areas defined as the lowland and relatively flat areas adjoining inland and coastal waters subject to a 1% or greater chance of flooding in any given year (the 100-year floodplain). FEMA requires that local governments covered by federal flood insurance pass and enforce a floodplain management ordinance that specifies minimum requirements for any construction within the 100-year floodplain. The Order addresses floodplain issues related to public safety, conservation, and economics. It generally requires federal agencies constructing, permitting, or funding a project in a floodplain to avoid incompatible floodplain development, be consistent with the standards and criteria of the National Flood Insurance Program, and restore and preserve natural and beneficial floodplain values.

State

Port-Cologne Water Quality Control Act

The Porter-Cologne Act of 1967 (California Water Code Section 13000 et seq.) is the basic water quality control law for California. The Act established the legal and regulatory framework for California's water quality control. The California Water Code (CWC) authorizes the SWRCB to implement the provisions of the CWA, including the authority to regulate waste disposal and require cleanup of discharges of hazardous materials and other pollutants.

As discussed above, the State of California is divided into nine RWQCBs, governing the implementation and enforcement of the Water Code and Clean Water Act. The Project site is located within Region 4, also known as the Los Angeles Region (i.e. the LARWQCB). Each RWQCB is required to formulate and adopt a Basin Plan for its region. The LARWQCB's Basin Plan is a comprehensive document that reports beneficial uses for surface and groundwaters, defines narrative and numeric parameters to protect water quality, and describes implementation programs to protect waters throughout the Region. This Plan must adhere to the policies set forth in the Water Code and established by the SWRCB. The RWQCB is also given authority to include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste. The criteria for the Project area are contained in the Los Angeles Basin Plan, adopted by the LARWQCB on September 11, 2014 (LARWQCB 2014).

California Water Code

The California Water Code includes 22 kinds of districts or local agencies with specific statutory provisions to manage surface water. Many of these agencies have statutory authority to exercise some forms of groundwater management. For example, a Water Replenishment District (California Water Code Section 60000 et seq.) is authorized to establish groundwater replenishment programs and collect fees for that service, while a Water Conservation District (California Water Code Section 75500 et seq.) can levy groundwater extraction fees. Through special acts of the legislature, 13 local agencies have been granted greater authority to manage groundwater. Most of these agencies, formed since 1980, have the authority to limit export and even control some in-basin extraction upon evidence of overdraft or the threat of an overdraft condition. These agencies can also generally levy fees for groundwater management activities and for water supply replenishment.

California Toxics Rule

In 2000, EPA promulgated the California Toxics Rule, which establishes water quality criteria for certain toxic substances to be applied to waters in the State. In 1994, a California state court revoked the State's water quality control plans, which contained numeric criteria for water quality. This was in direct violation of the CWA and required

EPA action. The EPA then implemented the California Toxics Rule. The EPA promulgated this rule based on Section 303(c)(2)(B) of the Clean Water Act, which dictates that states must adopt numeric criteria in order to protect human health and the environment. The California Toxics Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water such as inland surface waters and enclosed bays and estuaries that are designated by the LARWQCB as having beneficial uses protective of aquatic life or human health.

Groundwater Management Act

In 1992, Assembly Bill 3030 was passed, which greatly increased the number of local agencies authorized to develop a groundwater management plan and set forth a common framework for management by local agencies throughout California. These agencies could possess the same authority as a water replenishment district to "fix and collect fees and assessments for groundwater management" (California Water Code Section 10754), provided they receive a majority of votes in favor of the proposal in a local election (California Water Code Section 10754.3).

Sustainable Groundwater Management Act

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package—Assembly Bill 1739, Senate Bill 1168, and Senate Bill 1319—collectively known as the Sustainable Groundwater Management Act (SGMA). SGMA requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through SGMA, the California Department of Water Resources provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form Groundwater Sustainability Agencies to manage basins sustainably and requires those Groundwater Sustainability Agencies to adopt Groundwater Sustainability Plans (GSPs) for crucial (i.e., medium- to high-priority) groundwater basins in California. The Santa Clara River Valley East Groundwater Subbasin is considered a high-priority basin with respect to SGMA [DWR 2019]). The passage of SGMA in 2014 required replacing the Castaic Lake Water Agency (CLWA) Groundwater Management Plan with the Santa Clara River Valley East Groundwater Subbasin Groundwater Sustainability Plan (SCVGSA 2022). The Santa Clara River Valley East Groundwater Subbasin Groundwater Sustainability Plan was adopted January 2022, in accordance with the SGMA (SCVGSA 2022).

Regional and Local

Los Angeles Regional Water Quality Control Board Basin Plan

As mentioned above, the LARWQCB Basin Plan was written and implemented by the LARWQCB to preserve and enhance water quality throughout the Los Angeles County. The Basin Plan outlines water quality parameters for both inland surface waters and for groundwaters for a wide variety of water quality constituents. Specifically, the Basin Plan (1) identifies beneficial uses for surface and ground waters, (2) includes the narrative and numerical water quality objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's anti-degradation policy, and (3) describes implementation programs and other actions that are necessary to achieve the water quality objectives established in the Basin Plan.

NPDES Permit Program

The NPDES permit program was first established in 1972 under authority of the federal government through the CWA to control the discharge of pollutants from any point source into the waters of the United States (EPA 2022). As indicated above, in California, the NPDES stormwater permitting program is administered by the SWRCB through the LARWQCB. For all water quality related objectives for CWA purposes, including the NPDES, the state must achieve water quality standards in effect at the state level as well as the regional level (EPA 2021). At the regional level, the effective plan is the LARWQCB's Basin Plan.

NPDES Construction General Permit

Construction projects that disturb more than 1 acre of land surface are subject to the *NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). The Construction General Permit regulates discharges of pollutants in stormwater associated with construction activity to waters of the U.S. from construction sites that disturb 1 acre or more of land surface, or that are part of a common plan of development or sale that disturbs more than 1 acre of land surface. The permit regulates stormwater discharges associated with construction or demolition activities, such as clearing and excavation; construction of buildings; and linear underground projects, including installation of water pipelines and other utility lines.

The Construction General Permit requires that construction sites be assigned a Risk Level of 1 (low), 2 (medium), or 3 (high), based both on the sediment transport risk at the site and the receiving waters risk during periods of soil exposure (e.g., grading and site stabilization). The sediment risk level reflects the relative amount of sediment that could potentially be discharged to receiving water bodies and is based on the nature of the construction activities and the location of the site relative to receiving water bodies. The receiving waters risk level reflects the risk to the receiving waters from the sediment discharge. Depending on the risk level, the construction projects could be subject to the following requirements:

- Effluent standards;
- Good site management "housekeeping;"
- Non-stormwater management;
- Erosion and sediment controls;
- Run-on and runoff controls;
- Inspection, maintenance, and repair; or
- Monitoring and reporting requirements.

The Construction General Permit requires the development and implementation of a SWPPP that includes specific BMPs designed to prevent sediment and pollutants from contacting stormwater from moving off site into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management and good housekeeping, and are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area. Each category contains specific BMPs to achieve the goals of the overarching category. Specific BMPs may include the following:

- Soil stabilizing BMPs: Use of straw mulch, erosion control blankets or geotextiles, and/or wood mulching;

- Sedimentation control BMPs: Use of storm drain inlet protection, sediment traps, gravel bag berms, and fiber rolls;
- Waste management BMPs: Stockpile management, solid waste management, and concrete waste management; and
- Good Housekeeping BMPs: Vehicle and equipment cleaning, implementing water conservation practices, and implementing rules for fueling construction vehicles and equipment.

Routine inspection of all BMPs is required under the provisions of the Construction General Permit. In addition, the SWPPP is required to contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

The SWPPP must be prepared before the construction begins. The SWPPP must contain a site map(s) that delineates the construction work area, existing and proposed buildings, parcel boundaries, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the Project area. The SWPPP must list BMPs and the placement of those BMPs that the applicant would use to protect stormwater runoff. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Examples of typical construction BMPs include scheduling or limiting certain activities to dry periods, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment and vehicles used for construction. Non-stormwater management measures include installing specific discharge controls during certain activities, such as paving operations, vehicle and equipment washing and fueling. The Construction General Permit also sets post-construction standards (i.e., implementation of BMPs to reduce pollutants in stormwater discharges from the site following construction).

In the Project area, the Construction General Permit is implemented and enforced by the LARWQCB, which administers the stormwater permitting program. Dischargers are required to electronically submit a Notice of Intent (NOI) and permit registration documents (PRDs) in order to obtain coverage under this Construction General Permit. Dischargers are responsible for notifying the LARWQCB of violations or incidents of non-compliance, as well as for submitting annual reports identifying deficiencies of the BMPs and how the deficiencies were corrected. The risk assessment and SWPPP must be prepared by a State Qualified SWPPP Developer and implementation of the SWPPP must be overseen by a State Qualified SWPPP Practitioner. A Legally Responsible Person, who is legally authorized to sign and certify PRDs, is responsible for obtaining coverage under the permit.

NPDES Municipal Separate Storm Sewer System

The Municipal Stormwater Permitting Program regulates stormwater discharges from MS4s. Stormwater runoff and authorized non-storm flows (conditionally exempt discharges) are regulated under NPDES stormwater permits. Phase I NPDES permits require medium and large cities, or certain counties with populations of 100,000 or more, to obtain NPDES permit coverage for their stormwater discharges. Phase II permits require regulated small MS4s in urbanized areas, as well as small MS4s outside the urbanized areas that are designated by the permitting authority, to obtain NPDES permit coverage for their stormwater discharges. The MS4 permits require the discharger to develop and implement a Stormwater Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practicable, the performance standard specified in CWA Section 402(p), typically through the application of BMPs. The management programs specify what BMPs will be used to

address certain program areas. The program areas include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations.

The current Los Angeles County MS4 Permit (Order No. R4-2012-0175) became effective on December 28, 2012. Stormwater runoff and authorized non-storm flows (conditionally exempt discharges) from unincorporated areas of Los Angeles County under County jurisdiction, and 84 cities within the Los Angeles County Flood Control District (the Permittees) are regulated under the MS4 NPDES permit. The MS4 permit contains minimum standards that the Permittees must enforce when construction activities disturb an area greater than 1 acre, such as the Project would (see also requirements for the statewide construction permit discussed above, which is a permit that the construction contractor must apply for and adhere to). Compliance with MS4 construction requirements includes implementation of worksite BMPs similar to those described for the Construction General Permit for erosion, sediment, non-stormwater management, and waste management.

During operation of the Project, non-stormwater discharges from the Project site would be prohibited (with some conditional exceptions). Stormwater discharges must meet water-quality-based effluent limitations, or water quality standards for discharges leaving the Project site and must not cause or contribute to the exceedance of receiving water limitations (water quality standards for receiving waters). The MS4 permit requires implementation of a Planning and Land Development Program for all "New Development" and "Redevelopment" projects subject to the Order to accomplish the following objectives:

- Lessen the water quality impacts of development by using smart growth practices such as compact development, directing development toward existing communities via infill or redevelopment, and safeguarding of environmentally sensitive areas.
- Minimize the adverse impacts from stormwater runoff on the biological integrity of Natural Drainage Systems and the beneficial uses of water bodies in accordance with requirements under the California Environmental Quality Act (CEQA).
- Minimize the percentage of impervious surfaces on land developments by minimizing soil compaction during construction, designing projects to minimize the impervious area footprint, and employing low-impact development (LID) design principles to mimic predevelopment water balance hydrology through infiltration, evapotranspiration, and rainfall harvest and use.
- Maintain existing riparian buffers and enhance riparian buffers when possible.
- Minimize pollutant loadings from impervious surfaces such as rooftops, parking lots, and roadways through the use of properly designed, technically appropriate BMPs (including Source Control BMPs such as good housekeeping practices), LID Strategies, and Treatment Control BMPs.
- Properly select, design, and maintain LID and Hydromodification Control BMPs to address pollutants that are likely to be generated, reduce changes to predevelopment hydrology, ensure long-term function, and avoid the breeding of vectors.
- Prioritize the selection of BMPs to remove stormwater pollutants, reduce stormwater runoff volume, and beneficially use stormwater to support an integrated approach to protecting water quality and managing water resources.

The MS4 permit order specifies the criteria or thresholds for determining projects that are classified as "New Development" and "Redevelopment Projects" subject to the requirements above.

The Municipal NPDES permit provisions require that Projects include a Standard Urban Stormwater Mitigation Plan (SUSMP), or functional equivalent document, to address potential water quality impacts on-site using LID, and that the potential impact on downstream water bodies (i.e., hydromodification) is evaluated. BMPs are required in all drainage areas to be developed. Additionally, the NPDES permit requires owners or operators to implement BMPs to retain the 0.75-inch, 24-hour rain event, or the 85th percentile, 24-hour storm event, whichever is greater, and achieve applicable water quality-based effluent limitations and/or receiving water limitations established pursuant to TMDLs. The discharger would be required to prepare a Monitoring and Reporting Program documenting outfall-based stormwater monitoring data (where stormwater exits the facility), wet and dry weather receiving water monitoring data, outfall-based non-stormwater monitoring data, and other relevant regional studies. The frequency of required monitoring and sampling activities is determined by a number of factors, including the types of receiving water body. In case of exceedance, the discharger would be required to submit an Integrated Monitoring and Compliance Report. This report would be used to determine additional measures to prevent or reduce pollutants contributing to the exceedance of receiving water limitations.

Upper Santa Clara River Integrated Regional Water Management Plan

The Integrated Regional Water Management Plan (IRWMP) for the Upper Santa Clara River covers the upper Basin and encompasses the City of Santa Clarita and unincorporated surrounding communities. The IRWMP integrates planning and implementation efforts and facilitates regional cooperation to help reduce potable water demands, increase water supply, improve water quality, promote resource stewardship over the long term, reduce negative effects from flooding and hydromodification, and adapt to and mitigate climate change. The IRWMP was most recently updated in 2018 to be consistent with the California Department of Water Resources (DWR) Proposition 1 Integrated Regional Water Management Guidelines (SCV Water 2018).

Santa Clara River Valley East Groundwater Subbasin Groundwater Sustainability Plan

In 2001, as part of legislation authorizing Castaic Lake Water Agency (CLWA) to provide retail water service in addition to its ongoing wholesale supply, California Assembly Bill (AB) 134 included a requirement for the preparation of a groundwater management plan (GWMP). Adopted in 2003, the GWMP for the Santa Clarita Valley Groundwater Basin for the East Subbasin formalized a number of existing water supply and water resource planning and management activities in the now-Santa Clarita Valley (SCV) Water service area. The GWMP was replaced in January 2022 by the Santa Clara River Valley East Groundwater Subbasin Groundwater Sustainability Plan (GSP), which was prepared in accordance with SGMA requirements (SCVGSA 2022). The GSP provides information about the Basin setting, the quantitative methods and sustainable management criteria for evaluating the health (sustainability) of the Basin, the monitoring networks, projects and management actions to achieve sustainability, and the implementation plan for the GSP (SCVGSA 2022). The GSP includes a description of the groundwater conditions, including groundwater levels and flow directions, changes in storage, the potential for seawater intrusion or land subsidence, locations where surface water and groundwater are interconnected, the identification and distribution of groundwater-dependent ecosystems, and a discussion of groundwater quality for drinking water and agricultural irrigation (SCVGSA 2022). The GSP presents the historical, current, and projected future water budgets for the Basin, including quantification of the estimated change in storage, as well as a description of the monitoring programs for groundwater levels, storage, water quality, land subsidence, and interconnected surface water (SCVGSA 2022). The GSP provides the sustainability goal for the Basin, describes the process through which sustainable management criteria were established and how they pertain to chronic lowering of groundwater levels, reduction in groundwater storage, seawater intrusion, degraded water quality, land subsidence, and depletion of interconnected surface water (SCVGSA 2022).

Salt and Nutrient Management Plan for the Santa Clara River Valley East Subbasin

In 2014, a SNMP was prepared for the Santa Clara River Valley East Subbasin to provide the framework for water management practices to ensure protection of beneficial uses and allow for the sustainability of groundwater resources consistent with the Water Quality Control Plan. The SNMP for the Basin determined current water quality conditions to ensure that all water management practices (including the use of recycled water) are consistent with site-specific water quality objectives (WQOs) set by the LARWQCB for the Basin. WQOs have been set by the LARWQCB for the Alluvial Aquifer but not for the Saugus Formation. The SNMP identifies WQOs for TDS, chloride, and nitrate, but state that further analysis is necessary in order to establish meaningful WQOs. As part of the SNMP, a monitoring plan has been developed for the Basin that identifies key monitoring locations within each subunit for both surface water and groundwater. The Santa Clara River influences groundwater quality in the losing reaches of the river (where river water infiltrates to groundwater). The Santa Clara River has been identified as an impaired water body and listed in the Clean Water Act Section 303(d) list published by the U.S. Environmental Protection Agency (EPA). The Upper Santa Clara River has been listed for the following contaminants: coliform bacteria, boron, and sulfates (SCVGSA 2022).

2020 Urban Water Management Plan and Water Shortage Contingency Plan

SCV Water is made up of three water divisions: Newhall Water Division (NWD), Santa Clarita Water Division (SCWD) and Valencia Water Division (VWD) (SCV Water 2021). SCV Water also continues to serve Los Angeles County Waterworks District (LACWWD) 36. The UWMP provides water supply planning over a 30-year period and identifies and quantifies existing and projected water supplies and water supply opportunities, including recycled water, for existing and future demands, in normal, single-dry and multiple-dry years. The UWMP requires implementation of conservation and efficient use of urban water supplies. Concurrent with the 2020 UWMP update, SCV Water also updated its Water Shortage Contingency Plan (WSCP) consistent with requirements of the California Water Code (SCV Water 2021). The WSCP is an attachment to the UWMP and it outlines SCV Water's action plan for a drought or a water supply shortage and specifies opportunities to reduce demand and augment supplies under such conditions (SCV Water 2021).

The SCV Water's water supplies are made up of approximately equal amounts of imported water and local groundwater, as well as a small portion of recycled water (SCV Water 2021). SCV Water has evaluated the long-term water needs (water demand) within its service area and has compared these needs against existing and potential water supplies. Demand projections are based on applicable population projections and county and city land use plans, and account for conservation as well as climate change impacts and other relevant factors. The UWMP shows that the total projected water supplies available to the SCV Water service area over the 30-year projection during normal, single-dry, and multiple-dry year (5-year drought) periods are sufficient to meet the total projected water demands throughout the Valley; provided that SCV Water continues to utilize available State Water Project (SWP) Table A Amounts, and will continue to incorporate conjunctive use (coordinated use of surface water and groundwater), water conservation, water transfers, recycled water, and water banking as part of the total water supply portfolio and management approach to long-term water supply planning and strategy (SCV Water 2021).

Los Angeles County 2035 General Plan

The County of Los Angeles Board of Supervisors adopted the Los Angeles County 2035 General Plan on October 6, 2015. The 2035 General Plan is intended to provide policy framework for development within the County through the year 2035 (County of Los Angeles 2015).

County of Los Angeles General Plan Conservation and Natural Resources Element

Chapter 9 of Los Angeles County General Plan 2035 is the Conservation and Natural Resources Element. This element, adopted in 2015, outlines goals and policies for local water resources, covering both surface water protection and groundwater, as outlined below (County of Los Angeles 2015):

Policy C/NR 5.1. Support the LID philosophy, which seeks to plan and design public and private development with hydrologic sensitivity, including limits to straightening and channelizing natural flow paths, removal of vegetative cover, compaction of soils, and distribution of naturalistic BMPs at regional, neighborhood, and parcel-level scales.

Policy C/NR 5.2. Require compliance by all County departments with adopted Municipal Separate Storm Sewer System (MS4), General Construction, and point source NPDES permits.

Policy C/NR 5.6. Minimize point and non-point source water pollution.

Policy C/NR 6.1. Support the LID philosophy, which incorporates distributed, post-construction parcel-level stormwater infiltration as part of new development.

County of Los Angeles General Plan Safety Element

Chapter 12 of the Los Angeles County General Plan 2035 is the Safety Element. This element, adopted in 2015, outlines goals and policies intended to reduce the risk of death, injuries, and economic damage as a result of natural and man-made disasters. The Safety Element outlines Flood Hazards related policies, as outlined below (County of Los Angeles 2015):

Goal S 2. An effective regulatory system that prevents or minimizes personal injury, loss of life, and property damage due to flood and inundation hazards.

Policy S 2.1. Discourage development in the County's Flood Hazard Zones.

Policy S 2.2. Discourage development from locating downslope from aqueducts.

Policy S 2.4. Ensure that developments located with the County's Flood Hazard Zones are sited and designed to avoid isolation from essential services and facilities in the event of flooding.

Policy S 2.5. Ensure that the mitigation of flood related property damage and loss limits impacts to biological and other resources.

Policy S 2.6. Work cooperatively with public agencies with responsibility for flood protection, and with stakeholders in planning for flood and inundation hazards.

County of Los Angeles General Plan 1980 Water and Waste Management Element

The County of Los Angeles 1980 General Plan Water and Waste Management Element outlines applicable objectives and policies related to hydrology and water quality, as outlined below:

Objective. To mitigate hazards and avoid adverse impacts in providing water and waste services and to protect the health and safety of all residents.

Objective. To develop improved systems of resource use, recovery, and reuse.

Policy 25. Encourage development and application of water conservation, including recovery and reuse of storm and waste water.

Objective. To provide efficient water and waste management services.

Objective. To maintain the high quality of our coastal, surface, and groundwaters.

Policy 17. Protect public health and prevent pollution of groundwater through the use of whatever alternative is necessary.

Policy 19. Avoid or mitigate threats to pollution of the ocean, drainage ways, lakes, and groundwater reserves.

An analysis of all applicable County General Plan policies and objectives is included in Section 4.11, Land Use and Planning of this Draft EIR.

Los Angeles County Code

Appendix J-Grading

Section 101.2, Flood Hazard Areas, requires that a hydrology and hydraulic analysis be prepared in accordance with standard engineering practice by a California licensed civil engineer to demonstrate that the proposed work will not result in any increase in the level of the base flood, grading, excavation and earthwork construction, including fills and embankments. Otherwise, the construction would not be permitted in floodways designated in Chapter 11.60 of Title 11 (Health and Safety) of the Los Angeles County Code ("County Code"), or in floodways that are in flood hazard areas established in Section 1612.3, or in flood hazard areas where design flood elevations are specified but floodways have not been designated.

Section J101.6, Protection of Adjacent Property, requires that the permittee and owner of the property on which the grading is performed must be responsible for the prevention of damage to adjacent property. Excavation on land sufficiently close to the property line to endanger any adjoining public street, sidewalk, alley, or other public or private property without taking adequate measures to support and protect such property from settling, cracking, or other damage that might result from the proposed work is prohibited.

Section J101.7, Storm Water Control Measures, requires the permittee and the owner of the property on which the grading is performed to put into effect and maintain all precautionary measures necessary to protect adjacent water courses and public or private property from damage by erosion, flooding, and deposition of mud, debris, and construction-related pollutants originating from the site during grading and related construction activities.

Section J104.2, Site Plan Requirements, requires that a grading plan show the existing grade and finished grade in contour intervals of sufficient clarity to indicate the nature and extent of the work and show in detail that it complies with the requirements of this Code. The plans shall show the existing grade on adjoining properties in sufficient detail to identify how grade changes will conform to the requirements of the Title 26, Building Code. This section

requires that grading in excess of 5,000 cubic yards must be performed in accordance with an approved grading plan and specifications prepared by a Civil Engineer and that an application for a permit for engineered grading must be accompanied by plans and specifications, and supporting data consisting of a geotechnical report and engineering geology report.

Section J105.11, Routine Field Inspections and Reports, requires that the Field Engineer for all engineered grading projects must prepare routine inspection reports and file these reports with the Building Official as follows: (1) Bi-weekly during all times when grading of 400 cubic yards or more per week is occurring on the site; (2) Monthly, at all other times; and (3) At any time when requested in writing by the Building Official. Such reports must certify to the Building Official that the Field Engineer has inspected the grading site and related activities and has found them in compliance with the approved grading plans and specifications, the County Code, all grading permit conditions, and all other applicable ordinances and requirements.

Section J110.8.2, Storm Water Pollution Prevention Plan (SWPPP) of the County Code requires that the Building Official determine if a SWPPP is required. The SWPPP must contain details of BMPs, including desilting basins or other temporary drainage or control measures, or both, as may be necessary to control construction-related pollutants that originate from the site as a result of construction-related activities. When the Building Official requires a SWPPP, no grading permit can be issued until the SWPPP has been submitted to and approved by the Building Official.

Section J110.8.3, Erosion and Sediment Control Plans (ESCP) of the County Code requires that when a grading permit is issued and the Building Official determines that the grading will not be completed prior to November 1, the owner of the site must, on or before October 1, file with the Building Official an ESCP. The ESCP must include specific BMPs to minimize the transport of sediment and protect public and private property from the effects of erosion, flooding, or the deposition of mud, debris, or construction-related pollutants. The BMPs included the ESCP must be installed on or before October 15. The plans must be revised annually or as required by the Building Official to reflect the current site conditions.

Low Impact Development Standards

Chapter 12.84 of the County Code outlines LID Standards and their applicability to projects in the County (County of Los Angeles 2022). The purposes of these Standards are as follows:

- Lessen the adverse impacts of stormwater runoff from development and urban runoff on natural drainage systems, receiving waters and other water bodies.
- Minimize pollutant loadings from impervious surfaces to incorporate properly designed, technically appropriate BMPs and other LID strategies.
- Minimize erosion and other hydrologic impacts on natural drainage systems by requiring development projects to incorporate properly designed, technically appropriate hydromodification control principles and technologies.

County Code Chapter 12.84 requires that “All new development projects involving one (1) acre or greater of disturbed area and adding more than then thousand (10,000) square feet of impervious surface area” are subject to the LID Standards. Projects that fall under this requirement are considered Designated Projects. Designated Projects shall comply with the following requirements:

1. The project shall retain one hundred percent (100%) of the Stormwater Quality Design Volume ("SWQDv") on-site, through infiltration, evapotranspiration, rainfall harvest and use, or a combination thereof, unless the Director determines that it would be technically infeasible to do so;
2. If the Director determines that it would be technically infeasible to retain one hundred percent (100%) of the SWQDv on-site, the Project shall comply with one of the following alternative compliance measures:
    a. The project shall provide for on-site biofiltration of one and one-half (1.5) times the portion of the SWQDv that is not retained on-site;
    b. The project shall include infiltration or bioretention BMPs to intercept the portion of the SWQDv that is not retained on-site at an offsite location, as approved by the Director. The project shall also provide for treatment of the portion of the SWQDv discharged from the Project site, as approved by the Director;
    c. The project shall provide for the replenishment of groundwater supplies that have a designated beneficial use in the Basin Plan;
        i. Groundwater replenishment projects shall include infiltration, or bioretention BMPs to intercept the portion of the SWQDv that is not retained on-site at an offsite location, as approved by the Director;
        ii. Groundwater replenishment projects shall also provide for treatment of the portion of the SWQDv discharged from the Project site, as approved by the Director;
    d. The project shall include infiltration, bioretention, or rainfall harvest and use BMPs to retrofit an existing development, with similar land uses as the project, to intercept the portion of the SWQDv that is not retained on-site; or
    e. The County, independently or in conjunction with one (1) or more cities, may apply to the Regional Water Board for approval of a regional or sub-regional stormwater mitigation program to substitute in part or wholly for the provisions of this chapter for the area covered by the regional or sub-regional stormwater mitigation program. If the Regional Water Board approves the program, the provisions of the program shall apply in lieu of any conflicting provisions of this chapter (County of Los Angeles 2022).

County of Los Angeles Hydrology Manual

The County of Los Angeles Hydrology Manual (Hydrology Manual) established the Los Angeles County Department of Public Works' (Public Works') hydrologic design procedures and serves as a reference and training guide (Public Works 2006). The primary purpose of the Hydrology Manual is to explain the steps involved in converting rainfall to runoff flow rates and volumes using Public Works' standards. The Hydrology Manual contains procedures and standards developed and revised by the Public Works Water Resources Division based on historic rainfall and runoff data collected within the County. The hydrologic techniques in the Hydrology Manual apply to the design of local storm drains, retention and detention basins, pump stations, and major channel projects. The techniques also apply to storm drain deficiency and flood hazard evaluations. There are numerous instances where a drainage system must provide more than a single level of flood protection. Drainage systems must meet the criteria described in the Hydrology Manual (Public Works 2006).

Santa Clarita Valley Area Plan "One Valley, One Vision"

The One Valley, One Vision (OVOV) was adopted by the Board of Supervisors on November 27, 2012. The Plan Amendment and related zone changes took effect on December 27, 2012 (County of Los Angeles 2012). The Santa Clarita City Council and Los Angeles County Board of Supervisors initiated the joint planning effort, called "One Valley, One Vision," in recognition of a mutual need to coordinate land uses and the pace of development with provision of adequate infrastructure, conservation of natural resources, and common objectives for the Valley.

Major goals of the joint planning effort were to achieve greater cooperation between the County and the City, coordinate planning for roadways, infrastructure, and resource management, and enhance quality of life for all who live and work in the Santa Clarita Valley. It refines the policies of the General Plan as they apply to a smaller geographic area and is implemented by ordinances and other discretionary actions, such as zoning regulations and Community Standards Districts. The following policies apply to hydrology and water quality (County of Los Angeles 2012).

Policy LU-1.3.6. Encourage retention of natural drainage patterns and the preservation of significant riparian areas, both of which are commonly located in hillside areas.

Policy LU-7.3.2. Maintain stormwater runoff onsite by directing drainage into rain gardens, natural landscaped swales, rain barrels, permeable areas and use of drainage areas as design elements, where feasible and reasonable.

Policy LU-7.3.3. Seek methods to decrease impermeable site area where reasonable and feasible, in order to reduce stormwater runoff and increase groundwater infiltration, including use of shared parking and other means as appropriate.

Policy LU-7.3.4. Implement best management practices for erosion control throughout the construction and development process.

Policy LU-7.3.5. Limit development within flood-prone areas to minimize down-stream impacts.

An analysis of all applicable OVOV policies and objectives is included in Section 4.11, Land Use and Planning of this Draft EIR.

4.10.3 Thresholds of Significance

In accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to hydrology and water quality are listed below. A project may have a significant impact if it would:

Threshold 4.10a: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Threshold 4.10b: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

Threshold 4.10c: Substantially alter the existing drainage pattern of the site or area, including through the alteration of a federal 100-year flood hazard area or County Capital Flood floodplain[2]; 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?

[2] The capital flood is defined as the flooding produced by a 50-year frequency storm falling on a saturated watershed.

ii. Substantially increase the rate, amount, or depth of surface runoff in a manner which would result in flooding on- or offsite?

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?

iv. Impede or redirect flood flows which would expose existing housing or other insurable structures in a federal 100-year flood hazard area or County Capital Flood floodplain to a significant risk of loss or damage involving flooding?

Threshold 4.10d: Otherwise place structures in Federal 100-year flood hazard or County Capital Flood floodplain areas which would require additional flood proofing and flood insurance requirements?

Threshold 4.10e: Conflict with the Los Angeles County Low Impact Development Ordinance (County Code, Title 12, Ch. 12.84)?

Threshold 4.10f: Use onsite wastewater treatment systems in areas with known geological limitations (e.g. high groundwater) or in close proximity to surface water (including, but not limited to, streams, lakes, and drainage course)?

Threshold 4.10g: Be located in a flood hazard, tsunami, or seiche zone, and risk release of pollutants due to project inundation?

Threshold 4.10h: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

4.10.4 Methodology

The following analysis is based on the policies described above in Subsection 4.10.4, Regulatory Requirements, existing literature review and on the LID Report for Tract No. 83301, prepared by United Civil, Inc (Appendix G-1), the Hydrology Report for Tract No. 83301, prepared by United Civil Inc (Appendix G-2), the Lyons Canyon Drainage Concept Report-Volume I Regional Flood Protection and Debris Management, prepared by Pacific Advanced Civil Engineering, Inc (Appendix G-3), and the FEMA Conditional Letter of Map Revision Request (Appendix G-4).

4.10.5 Impact Analysis

Threshold 4.10a: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Construction

The Project would require approximately 1,500,000 cubic yards of cut and 1,300,000 cubic yards of fill for a total of 2,800,000 cubic yards of grading with 1,345,000 cubic yards of over excavation. There is expected to be 15% shrinkage on the over excavation for a total of 200,000 cubic yards. The total earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site parcel adjacent to The Old Road that would be constructed with manufactured slopes. The grading would balance onsite, and as such, no import or export of soils would be required for the Project. Grading would be followed by vertical building

construction, paving/concrete, and landscape installation. Construction of the Project would have the potential to result in local soil erosion during excavation, grading, trenching, and soil stockpiling. As discussed in Section 4.10-1, Existing Conditions, the undeveloped Project site is traversed by blue-line Lyons Creek, which trends east-southeast across the central portion of the site and then turns north before exiting the property in the northeast portion of the site. An east-trending tributary blue-line creek flows into Lyons Canyon Creek in the northern part of the site. Each of these construction-related activities would result in potential siltation of Lyons Creek and its on-site tributaries. Construction equipment and materials would include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, which are all commonly used in construction. During the construction phase of the Project, petroleum hydrocarbons in site runoff could result from construction equipment/vehicle fueling or spills. The accidental spill of hazardous materials could adversely affect the water quality of stormwater and/or surface water bodies.

As discussed in Section 4.9, Hazards and Hazardous Materials, of this Draft EIR, construction activities would be required to comply with numerous hazardous materials regulations designed to ensure that hazardous materials are transported, used, stored and disposed of in a safe manner to protect worker safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment, including stormwater and nearby surface water bodies. As discussed in Section 4.9, Hazards and Hazardous Materials of this Draft EIR, pursuant to California Health and Safety Code, Division 20, Chapter 6.95 the contractors would be required to prepare and implement Hazardous Materials Business Plan (HMBP) that would require that hazardous materials to be properly used and stored in appropriate containers, that spill prevention measures are implemented, and that spill response procedures are in place to respond to accidental releases. The California Fire Code would also require measures for the safe storage and handling of hazardous materials.

Construction activities must be conducted in compliance with SCAQMD Rule 403 – Fugitive Dust, which would minimize wind and water erosion at the site. Compliance with the SWRCB regulations requires preparation and implementation of a SWPPP, in accordance with the NPDES Construction General Permit. Additionally, the County Code Appendix J-Grading requires preparation of a site-specific SWPPP and ESCP, which would be prepared prior to earthwork activities and would be implemented during Project construction. The ESCP must include BMPs to address transport of sediment and protect properties from erosion, flooding, or the deposition of mud, debris, or construction-related pollutants. The SWPPP must include BMPs, including erosion control measures and proper handling of petroleum products, such as proper petroleum product storage and spill response practices, to prevent pollution in stormwater discharge. The construction-phase BMPs would assure effective control of not only sediment discharge, but also of pollutants associated with sediments, such as nutrients, heavy metals, and pesticides. The SWPPP would be subject to review and approval by the County for compliance with the Public Works' Construction Site Best Management Practices Manual, which is consistent with OVOV policies (Public Works 2010). All Project construction activities are required to comply with the Public Works grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction occurs during the rainy season, as well as inspections to ensure that sedimentation and erosion is minimized. Through compliance with these existing regulations, the Project would not result in any significant water quality impacts related to soil erosion during the construction phase.

In addition, as discussed in Section 4.4, Biological Resources (Threshold 4.4c), with implementation of MM-4.4-14, Jurisdictional Waters Compensation, there would be less than significant construction impacts regarding a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means. The greater

extent of jurisdictional streambeds and associated riparian habitat are depicted on Exhibit 8, Jurisdictional Streambeds Map, of Appendix C.

Operation

The Project includes replacement of existing open space with a new residential, recreational, and associated roadway and utility infrastructure. The primary sources of pollution in runoff from these land uses are expected to include oil, grease, petroleum products, and automobile-related pollutants, pathogens/bacteria from pets, pesticides/herbicides/insecticides and nitrogen and phosphorous from fertilizers for landscaping, and trash, lawn clippings, and debris that can accumulate impervious surfaces, such as parking lots, driveways, and sidewalks. Other potential pollutants that may be generated by the Project include household-type cleaning products, maintenance products (e.g., paints, solvents, cleaning products), and refrigerants associated with building mechanical heating, ventilation, and air conditioning (HVAC) systems.

Excess fertilizers, nutrients, and pathogens/bacteria from pets can impact water quality by promoting excessive and/or rapid growth of aquatic vegetation, which reduces water clarity and results in oxygen depletion. Pesticides/herbicides/insecticides can also enter urban runoff after application on landscaped areas and can be toxic to aquatic organisms and can bioaccumulate in larger species, such as birds and fish. The potential impacts of these substances on biological resources are discussed in Section 4.4, Biological Resources, of this Draft EIR. Oil, grease and heavy metals can enter dry-weather and stormwater runoff from vehicle leaks, traffic, and vehicle maintenance activities, and metals can enter runoff as surfaces corrode, decay, or leach.

These anticipated pollutants would be addressed through Project features, as described in Chapter 3.0, Project Description, as well as through compliance with regulatory requirements. During operations, the Project site would consist of vegetated open space, landscaped areas, buildings, and hardscapes. During storm events, all stormwater flows from outside of the Project's developed footprint would be directed into two larger, regional debris basins on Lot 14 (Basin A) and Lot 15 (Basin B), as well as five smaller desilting basins on Lots 19 (Basin C) and 33 through 36 (Basins J, F, G, and E, respectively). These basins would allow for settlement of debris and would then pass clear flows into the on-site storm drainage system to the outfall in the existing RBC culvert at The Old Road. All stormwater flows from on-site areas within the Project's developed footprint would be treated through proprietary biofiltration systems that would be placed throughout the development to treat stormwater flows, and then convey the flows into the on-site storm drainage system to the outfall in the existing RBC culvert at The Old Road. Figure 4.10-7, Proposed Drainage and Water Quality Infrastructure, depicts the proposed basins that would capture flows from undeveloped areas and convey them into the Project's on-site storm drain system, as well as the proposed alignments and outfall location of the on-site storm drain system.

Figure 4.10-8a, Example Water Quality BMP with Internal Bypass Chamber, and Figure 4.10-8b, Example Water Quality BMP Biofiltration System, depict some of the proposed technologies that would be used to treat on-site stormwater runoff from the developed portion of the Project site. As shown, the Project would include modular wetlands to treat flows from the developed pads, including proprietary units that would be adequately sized to treat flows from the main streets.

The proposed water quality BMP and storm drainage system design would ensure that there would be no contact between stormwater from the developed Project site and the adjacent undeveloped land, thereby ensuring that no

undeveloped areas would be subject to erosion or associated siltation due to Project operations.[3] Further, the proposed water quality BMPs would be sized to have sufficient capacity to treat 1.5-times the design volume generated on-site, based on the 85th percentile rainfall, which would ensure adequate treatment capacity in accordance with the County's LID Manual requirements (Appendix G-1).

Stormwater discharge occurs as a result of rainfall that runs off of the land and impervious surfaces. The Project would increase the amount of impervious surfaces when compared to current conditions, which would increase stormwater flows, as further discussed below under Threshold 4.10b.

The Project would be required to comply with the MS4 permit as administered by the County of Los Angeles, in addition to statewide water quality program administered by the RWQCB including the Porter-Cologne Water Quality Control Act, as described above, as well as the OVOV policies. As such, discharges of the Project covered under the MS4 permit requirements would be required to adhere with the Waste Load Allocations assigned to MS4 discharges for applicable TMDLs, including the TMDLs in the Upper Santa Clarita River Watershed Management Area.

To achieve these requirements, the Project would include water quality BMPs (Appendix G-1) that includes biofiltration for water quality treatment across the Project and within the conveyance channel, as described above.

In addition, the Project would also comply with the Los Angeles County MS4 NPDES permit development standards, LID practices, and all applicable BMPs pertaining to water quality standards, and waste discharge requirements. The Project's water quality BMPs and compliance with applicable laws and regulations would ensure that operation of the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, and impacts would be less than significant.

In addition, as discussed in Section 4.4, Biological Resources (Threshold 4.4c), with implementation of MM-4.4-14, there would be less than significant operational impacts regarding a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means. The greater extent of jurisdictional streambeds and associated riparian habitat are depicted on Exhibit 8, Jurisdictional Streambeds Map, of Appendix C.

Threshold 4.10b: 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?

Construction

The construction of the Project would not require the use of on-site groundwater supplies, and all water that would be required for on-site dust suppression during construction would come from the municipal water supply. Although grading and excavation of hilltops may approach 100 feet of elevation change to create building pads, excavation for the Project would not require deep excavation in the lower areas of the site that could potentially encounter groundwater. As described above, when measured by soil borings, the groundwater table on average was encountered at a depth of 53 and 69 feet below ground surface of the valley floor. The hilltop grading and the structural footings and other underground elements to be constructed for the Project would not extend to these depths. In areas where soils exhibit moisture caused by precipitation within the upper watershed, the soil moisture

[3] Fuel modification on the Project site, as discussed in Section 4.20, Wildfire of this Draft EIR, includes some areas that are undeveloped and ungraded adjacent to the edge of the grading for the Project site that would be included within the 50-foot wide Zone C, which would be subject to vegetation thinning for wildfire protection services. The Zone C would not be subject to grading and would not alter contours of the soil that could affect surface runoff or otherwise alter the hydrology of the Project site.

would continue to seep unimpeded to the lower watershed because of the balanced cut and fill activities that would not include any removal of soils offsite. As such, construction of the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge or otherwise impede sustainable groundwater management of the basin.

Operation

The Project water supply would be provided by SCV Water, and according to the Water Supply Assessment and Water Supply Assessment Addendum, provided by SCV Water for the Project and included as Appendices L-2 (SCV Water 2022) and L-3 (SCV Water 2023) of this Draft EIR, the Project would not install new groundwater wells as a water source and would strictly rely on water supplied by SCV Water (SCV Water 2022; Appendix L-2). The Project site overlies the East Groundwater Subbasin. As noted in SCV Water's most recent 2020 Urban Water Management Plan (UWMP) completed in 2021, water supplied to the Project area is accessed from diverse sources including local groundwater, imported water, and recycled water. The SCV Water is a State Water Contractor with access to imported water from the State Water Project (SWP) operated by the California Department of Water Resources. SCV Water is responsible for managing water supplies to ensure projected future demands are met through local and imported sources in addition to implementing local conservation efforts.

Since the proposed density is consistent with the County General Plan growth assumptions, as detailed in Section 4.11, Land Use and Planning, of this Draft EIR, it is included within demand projections included in the 2020 UWMP. SCV Water may rely on several sources to meet demands including imported water and local groundwater. The local groundwater basin is managed by the SCVGSA pursuant to the requirements of the SGMA. The SCVGSA has adopted a groundwater sustainability plan that outlines sustainability criteria and management actions needed to ensure the groundwater basin is not depleted. As a result, the Project's water demands to be supplied by SCV Water would not result in the depletion of groundwater supplies, since SCV Water is subject to the GSP requirement to avoid significant impacts to groundwater. The GSP defines chronic lowering of groundwater levels as a sustainability criteria indicator and establishes minimum thresholds that would require the implementation of management actions to avoid chronic adverse effects. As a result, the adherence with the GSP criteria and management actions ensures that groundwater is managed sustainably. Water supply is analyzed further in Section 4.19, Utilities and Service Systems, of this Draft EIR, which concluded that adequate water supply would be available to serve the Project, and impacts on water supply would be less than significant. Once constructed, the Project would result in an increase in new impervious surfaces that would reduce groundwater infiltration during infrequent storms. Upon Project implementation, the Project site would include approximately 150 acres of natural open space and approximately 24 acres of Homeowners' Association (HOA) maintained open space, including active and passive recreation areas, within Lots 1 through 13, 16 through 18, and 20 through 23, as shown on Figure 3-2, Vesting Tentative Tract Map No. 83301 in Chapter 3.0, Project Description of this Draft EIR. Nevertheless, the Project would result in an increase in new impervious surface since it would develop current open space. The Project would construct seven primary flood control facilities, including two regional debris basins and five smaller desilting basins. Lot 14 would contain a 3.97-acre debris basin (Basin A), Lot 15 would contain a 3.76-acre debris basin (Basin B), and Lots 19 (Basin C) and 33 through 36 (Basins J, F, G, and E, respectively) would contain five desilting basins for a total of 3.0 acres, as shown on Figure 4.10-7, Proposed Drainage and Water Quality Infrastructure. These facilities would be designed to intercept debris and stormwater runoff from the developed portion of the Project site for the purposes of flood control and would be conveyed to the Los Angeles County Flood Control District (LACFCD) for ongoing maintenance. The Project would also contain detention basins which would also retain water during storm events and would be maintained by the HOA. The side slopes and bottom of the basins would be natural and unlined to allow for a natural aesthetic. All basins would include a paved access ramp for inspection,

maintenance, and debris removal. The proposed basins would result in some percolation of stormwater in that the facility is earthen; however, the development of the Project would reduce overall groundwater recharge into the groundwater basin.

The Project would include 72.55 acres of grading, including approximately 22 acres of unpaved and maintained open space lots/basins, which would overly a 66,000-acre groundwater basin managed by the SCVGSA, which is responsible for ensuring groundwater extraction does not result in undesirable results, such as excessively low groundwater levels. The GSP describes how the local groundwater basin is recharged by winter precipitation, with groundwater levels decreasing during the hot summer months (SCVGSA 2022). Reduction of winter infiltration may exacerbate this seasonal decrease locally. However, winter storms will continue to recharge the groundwater basin within the greater watershed. The GSP recognizes that development in the Santa Clarita Valley will affect infiltration rates. The minor reduction of recharge in the Project area resulting from the increase in impervious surfaces would not significantly reduce groundwater recharge since the total area affected is approximately 0.12% of the watershed (83 acres compared with 66,000 acres in the watershed). Therefore, although the Project would result in development of impervious surfaces that would reduce infiltration of stormwater, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge, and the Project would not impede sustainable groundwater management of the basin, and impacts would be less than significant.

Threshold 4.10c: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of a federal 100-year flood hazard area or County Capital Flood floodplain; 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?

Construction

As discussed under Threshold 4.10a, the Project would require construction activities, including grading and removing vegetation, that would alter existing drainage patterns and flows within the Project site could generate erosion, siltation on- site and off-site. However, the development footprint of the Project within the approximately 233-acre site would minimize impacts by clustering the approximately 83 acres of development toward the northeast portion of the Project site and preserving approximately 150 acres of natural open space in the southerly portion of the Project site. The proposed grading would also alter the portion of the Project site that includes a 100-year Flood Zone A (discussed further below in response to Threshold 4.10c.[iv]).

As discussed above, the County Code Appendix J-Grading requires preparation of a site-specific SWPPP and ESCP, which would be prepared prior to all earthwork activities and would be implemented during Project construction and grading activities including the grading activities of the existing flood zone. The ESCP must include BMPs to address transport of sediment and protect properties from erosion, flooding, or the deposition of mud, debris, or construction-related pollutants. The SWPPP must include BMPs, including erosion control measures and proper handling of petroleum products, such as proper petroleum product storage and spill response practices, to prevent pollution in stormwater discharge. The construction-phase BMPs would assure effective control of not only sediment discharge, but also of pollutants associated with sediments, such as nutrients, heavy metals, and pesticides. The SWPPP would be subject to review and approval by the County for compliance with the Los Angeles County Public Works Construction Site Best Management Practices Manual (Public Works 2010). Additionally, all Project construction activities are required to comply with the Public Works grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction occurs during the rainy season, as well as inspections to ensure that sedimentation and erosion is minimized. Through compliance with these

existing regulations, the Project would not result in significant soil erosion or siltation impacts during the construction phase related to the alteration of drainage patterns, flood hazard areas, or alteration of a stream or river (the addition of impervious surfaces is discussed below).

Operation

As discussed in section 4.10-1, Existing Conditions, as shown in Figure 4.10-1, On-Site Topography and Drainage, the undeveloped Project site is traversed by blue-line Lyons Creek, which trends east-southeast across the central portion of the site and then turns north before exiting the property in the northeast portion of the site. An east-trending tributary blue-line creek flows into Lyons Canyon Creek in the northern part of the site. Two large offsite tributary watersheds and several small offsite watersheds drain through the project area to the existing box culvert storm drain (Appendix G-2).

The proposed development would locally alter the drainage pattern of Lyons Creek and its tributary creeks within the northeastern portion of the Project site. Proposed offsite flood control improvements will include two regional debris basins and five small desilting basins to intercept offsite flows and capture debris (Figure 4.10-7, Proposed Drainage and Water Quality Infrastructure). Clear flows from the regional debris basins will be conveyed in a 42-inch storm drain under the proposed private drive along the west and north project perimeter to the historical drainage through the box culvert under I-5. In addition, overflow from the basins would be conveyed by a 96-inch RCP storm drain under the perimeter private drive to the culvert under I-5 (Appendix G-2). By clustering the development footprint within the approximately 233-acre Project site to approximately 83 acres of disturbed area toward the northeast portion of the Project site, the Project would avoid impacts to approximately 150 acres of natural open space, including Lyons Creek, in the southerly and westerly portion of the Project site.

During storm events, all stormwater flows from outside of the Project's developed footprint would be directed into the Project's flood control facilities, which includes two regional debris basins and five smaller desilting basins, which would allow for settlement of debris and would then pass clear flows into the on-site storm drainage system to the outfall in the existing box drainage culvert at The Old Road. The Project would not alter the potential for soil erosion or siltation from areas outside of the graded/developed footprint.

The developed portion of the Project site would include pervious (e.g. landscaped areas, manufactured slopes, debris basins) and impervious surfaces (e.g. paved roads, buildings). These developed areas would not be a substantial source of erosion or siltation because they would be designed in accordance with the County standards for slope stability and drainage. The two larger debris basins (Basins A and B [Lots 14 and 15, respectively]) would be transferred to Los Angeles County with the right to quitclaim to the Los Angeles County Flood Control District (LACFCD) and other pervious areas would be maintained by the HOA to ensure that long-term operations on the site are conducted in accordance with the requirements of the MS4 permit. Debris basins require periodic removal of accumulated sediment and debris, which would be conducted as needed by the Maintaining Agency and HOA in accordance with County Code requirements for infrastructure maintenance. Further, all stormwater flows from on-site areas within the Project's developed footprint would be treated through proprietary biofiltration systems that would be placed throughout the development to treat stormwater flows, and then convey the flows into the on-site storm drainage system to the outfall in the existing RBC culvert at The Old Road (see Figure 4.10-7).

The proposed water quality BMP and storm drainage system design, in accordance with MS4 permit requirements, County standards and OVOV policies, would ensure that there would be no contact between stormwater from the developed Project site and the adjacent undeveloped land, thereby ensuring that no undeveloped areas would be subject to erosion or associated siltation due to Project operations (Appendix G-1 and G-2).The Project's Drainage

Concept Report determined that the proposed basins would reduce the existing 50-year peak flow rate at the Caltrans culvert under I-5 from 1,656 cfs to 1,218 cfs, a reduction of 438 cfs (Appendix G-3). A CLOMR will be processed through and approved by FEMA prior to the approval of storm drain plans and construction of the proposed channel and basins (Appendix G-4). Additionally, the proposed debris basins and desilting basins would remove 48.8 acre-feet of sediment from the previously burned areas, reducing the potential for sediment to impact the capacity of the downstream drainage network. As noted above, the two larger regional debris basins (Basins A and B, [Lots 14 and 15, respectively]) would be transferred to Los Angeles County with the right to quitclaim to the LACFCD including the periodic removal of sediment on an as-needed basis and the five desilting basins (Basins C, J, F, G, and E [Lots 19 and 33 through 36, respectively]) would also be maintained by LACFCD.

All debris basins would include an incised slope around the perimeter of each basin with the bottom of the basins excavated below the adjacent channels. During a storm event, flows would be contained in the debris basins to allow for settlement of the debris/sediment before entering the storm drain system beneath the on-site roads (see Figure 4.10-7). The two larger regional basins (Basins A and B) would include outlet towers connected to drainage pipes that would drain into the storm drain system, and would also include a spillway designed to pass the capital flood flows with allowance for a burned watershed and bulking of the flow that may be caused by debris. The side slopes and bottom of the basins would be pervious (natural and unlined), which would provide for a natural aesthetic. A standard access ramp at each basin would be installed for inspection, maintenance, and debris removal.

Each basin would intercept storm flows and provide peak flow detention to meet the County hydrology standard requirements for a 24-hour, 50-year storm event and a 24-hour, 100-year event, with a minimum of two feet of freeboard for all publicly-maintained basins. The proposed basins would capture sediment and reduce flows to the pre-project conditions before releasing flows to the downstream drainage network (Appendix G-3 and Appendix G-4). As a result, the incorporation of the regional debris basins, smaller desilting basins, stormwater drainage facilities, and compliance with regulations, the operation of the Project would not substantially alter the existing drainage pattern of the site, including through alteration of a flood zone (discussed further below in response to Threshold 4.10c.[iv]); alteration of a stream or river; or additional impervious surfaces, in a manner that would result in erosion or siltation, and impacts would be less than significant.

In addition, 27 acres along Lyons Canyon Creek is within a FEMA Zone A, High Risk/Special Flood Hazard Area (Figure 4.10-6, Flood Hazard Zones). FEMA Zone A is also referred to as the 100-year flood zone, or area that will be inundated by a flood event having a 1% chance of being equaled or exceeded in any given year. As illustrated in Figure 4.10-9, Floodplain Comparison Map, following construction, all flooding within the Project site would be contained within the proposed debris basins and storm drains. As such, the proposed floodplain would be limited to the basin ponding areas. A Conditional Letter of Map Revision (CLOMR), which was requested in May 2024 (Appendix G-4), would be processed through and approved by FEMA prior to the approval of storm drain plans and construction of the proposed channel and basins. A LOMR would be processed through and approved by FEMA upon completion of the drainage improvements to officially revise the FIRM to remove the Project site from being within the SFHA. The County's Floodway Map would also be revised in accordance with Public Works' Floodplain Management Plan requirements that includes measures to review and update flood risk hazards when new data becomes available (Public Works 2021). The County is on a cycle to update the floodplain management plan every 5 years or sooner if conditions warrant it. Upon completion of the Project, no additional flood proofing or flood insurance requirements would be required for occupants of the Project site. See Threshold 4.10d for additional information.

ii. Substantially increase the rate, amount, or depth of surface runoff in a manner which would result in flooding on- or offsite?

Construction

The Project would require construction activities, including grading and removing vegetation, that would alter existing drainage patterns and flows within the Project site that would increase the rate of surface flows which could contribute to flooding during construction activities. However, the Project's construction must be implemented in accordance with County Code- Appendix J, Grading, which sets forth detailed requirements for site grading activities, including the requirement to submit a grading plan to the satisfaction of the County's Building Official, which must be based on an approved geotechnical report. As discussed in Section 4.7, Geology and Soils of this Draft EIR, the County Code- Appendix J (see J104.2.2-Regular Grading Requirements) sets forth detailed requirements for grading requirements that address the contours, flow areas, elevations or slopes that define existing and proposed drainage patterns, location of all recorded floodways as established by Chapter 11.60 of Title 11 - Health and Safety - of the County Code, and location of all Special Flood Hazard Areas as designated and defined in Title 44 of the Code of Federal Regulations. Further, as required by Appendix J Section J105.11, routine inspection reports must be prepared and filed with the County's Building Official to ensure requirements with all applicable County Code mandates. Therefore, the Project would be constructed in a manner that requires surface runoff during construction activities to comply with the approved grading plan in accordance with the grading permit restrictions, and would not result in significant on-site or off-site flooding. Operation

As described under Threshold 4.10c(i), the Project's hydrologic and hydraulic analysis determined that the proposed basins would reduce the existing 50-year peak flow rate at the RCB culvert under I-5 from 1,656 cfs to 1,218 cfs, a reduction of 438 cfs (Appendix G-3). A CLOMR will be processed through and approved by FEMA prior to the approval of storm drain plans and construction of the proposed channel and basins. Additionally, the proposed basins would remove 48.8 acre-feet of sediment from the previously burned areas, reducing the potential for sediment to impact the capacity of the downstream drainage network. Therefore, the Project would not substantially increase the rate, amount, or depth of surface runoff in a manner that could result in flooding on- or offsite, and impacts would be less than significant.

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?

Construction

The Project would not result in substantial additional sources of polluted runoff during short-term construction activities, as described under Threshold 4.10a. Additionally, the Project would not create or contribute runoff that would exceed the capacity of existing stormwater drainage systems during short-term construction because the Project site would remain pervious during grading/earthwork. A site-specific SWPPP and ESCP would be implemented during construction to address transport of sediment and protect properties from erosion, flooding, or the deposition of mud, debris, or construction-related pollutants. As described under Threshold 4.10c(iii) above, all earthwork would be implemented in accordance with the grading permit and County Code- Appendix J, Grading, which sets forth detailed requirements for site grading activities and would ensure that stormwater flows were addressed through on-site BMPs to meet County Code requirements for hydromodification and water quality. The RCB culvert at the northwest corner of the Project site would continue to receive stormflows from the Project site during construction activities and could accommodate flows from the site, similar to the existing conditions.

Operation

As described under Threshold 4.10a, the Project's water quality BMPs and compliance with applicable laws and regulations would ensure that operation of the Project would not substantially degrade surface or groundwater quality, and impacts would be less than significant.

As described under Threshold 4.10c(i), the Project's Drainage Concept Report would reduce the existing 50-year peak flow rate at the Caltrans culvert under I-5 by 438 cfs (Appendix G-3). A CLOMR will be processed through and approved by FEMA prior to the approval of storm drain plans and construction of the proposed channel and basins (Appendix G-4). Additionally, the proposed basins would remove 48.8 acre-feet of sediment from the previously burned areas, reducing the potential for sediment to impact the capacity of the downstream drainage network. Therefore, the Project would not contribute runoff that would exceed the capacity of the existing RCB culvert or other stormwater drainage systems or provide substantial additional sources of polluted runoff.

> ***iv. Impede or redirect flood flows which would expose existing housing or other insurable structures in a federal 100-year flood hazard area or County Capital Flood floodplain to a significant risk of loss or damage involving flooding?***

As discussed under Threshold 4.10c(i), the Project site includes 27 gross acres, or approximately 12% of the Project site, which is within a FEMA Zone A, High Risk/Special Flood Hazard Area (Figure 4.10-6, Flood Hazard Zones). The remainder of the site includes Zone D, areas where there are possible but undetermined flood hazards, and Zone X, Area of Minimal Flood Hazard (FEMA 2022).

Because a portion of the proposed area of development is within Zone A, there is the potential for the Project to redirect flood flows that could lead to loss of structures involving flooding. To minimize risks of flood damage to housing or other structures, the Project would require substantial earthwork to develop the site in a manner to accommodate the development and eliminate potential flood hazards associated with Zone A. Grading would require approximately 1,500,000 cubic yards of cut and 1,300,000 cubic yards of fill with 1,345,000 cubic yards of over excavation (with 15% shrinkage [i.e. 200,000 cubic yards]), resulting in approximately 2,845,000 cubic yards of earthwork to develop the graded pads. The Project also includes an engineered storm drainage system to collect and treat runoff from the developed site and to provide flood control protection. The two regional and five smaller desilting basins would capture flows from surrounding undeveloped land and convey flows through the Project site, within the storm drainage system, to the existing culvert under I-5 (Figure 4.10-7). Each basin would intercept storm flows and provide peak flow detention to meet the County Capital Flood hydrology standard requirements for a 24-hour, 50-year storm event and to meet FEMA standard requirements for a 24-hour, 100-year event, with a minimum of two feet of freeboard for all publicly maintained basins.. The proposed basins would capture sediment and reduce flows to the pre-project conditions before releasing flows to the downstream drainage network (Appendix G-3 and Appendix G-4). As illustrated in Figure 4.10-9, following construction, all flooding within the Project site would be contained within the proposed debris basins and storm drains. As such, the proposed floodplain would be limited to the basin ponding areas. A CLOMR was requested for the project in May 2024 (Appendix G-4).

In addition, as discussed for Threshold 4.10c (i, ii, and iii), the Project's Drainage Concept Report determined that the proposed detention basins would reduce the existing 50-year peak flow rate at the Caltrans culvert under I-5 by 438 cfs (Appendix G-3). A CLOMR will be processed through and approved by FEMA prior to the approval of storm drain plans and construction of the proposed channel and basins (Appendix G-4). Additionally, the proposed basins would remove 48.8 acre-feet of sediment from the previously burned areas, reducing the potential for sediment to

impact the capacity of the downstream drainage network. As noted above, the two larger regional debris basins (Basins A and B) would be transferred to Los Angeles County with the right to quitclaim to the LACFCD, and would be maintained, including the periodic removal of sediment on an as-needed basis, and the five desilting basins (Lots 19 and 33 through 36) would also be maintained by LACFCD. As a result, with construction of the proposed detention basins and storm drain infrastructure, downstream stormwater runoff flow rate would not increase as a result of Project construction and no downstream/off-site flooding impacts would occur.

In addition, the areas of the site within FEMA Zone D, areas where there are possible but undetermined flood hazards, are hydrologic tributaries to the Zone A 100-year flood zones. As a result, the stormwater runoff contributions from these tributaries have been incorporated into the 100-year flood analysis. Therefore, Project grading would not impede or redirect flood flows which would expose existing housing or other insurable structures in a federal 100-year flood hazard area or County Capital Flood floodplain to a significant risk or loss of damage involving flooding. Impacts would be less than significant.

Threshold 4.10d: Would the Project otherwise place structures in Federal 100-year flood hazard or County Capital Flood floodplain areas which would require additional flood proofing and flood insurance requirements?

As described under Threshold 4.10c(i), a portion of the Project site is within Zone A, which is a High Risk/SFHA, and the Project would require substantial grading and infrastructure improvements to address potential flooding hazards. As illustrated in Figure 4.10-9, Floodplain Comparison Map, following construction, all flooding within the Project site would be contained within the proposed debris basins and storm drains. As such, the proposed floodplain would be limited to the basin ponding areas. As described for Threshold 4.10c, based on a 100-year flood analysis completed for the proposed Project (Appendix G-4), proposed detention basins would reduce off-site stormwater runoff flow rate such that downstream/off-site flooding impacts would not occur. As a result, impacts would be less than significant.

In addition, to facilitate identifying areas with flood potential, FEMA has developed Flood Insurance Rate Maps (FIRMs) that can be used for planning purposes, including floodplain management, flood insurance, and enforcement of mandatory flood insurance purchase requirements. Los Angeles County is a participating jurisdiction in the National Flood Insurance Program (NFIP) and, therefore, all new development must comply with the minimum requirements of the NFIP. Because the floodplain would be modified by the Project to reduce the flooding potential, a LOMR must be prepared and submitted to FEMA to remove the northern portion of the Project site west of the Caltrans culvert from a FEMA Flood Zone A designation. LOMRs are generally based on the implementation of physical measures (e.g., grading) that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway. A LOMR officially revises the FIRM or Flood Boundary and Floodway Map (FBFM), or both, and sometimes the Flood Insurance Study Report, which would confirm that the proposed structures are no longer located within a flood zone. The LOMR would provide the documentation that the portion of the Project site currently designated as a flood zone is removed from the flood hazard area.

A CLOMR was requested for the project in May 2024 (Appendix G-4). A CLOMR would be processed through and approved by FEMA prior to the approval of storm drain plans and construction of the proposed channel and basins. A LOMR would be processed through and approved by FEMA upon completion of the drainage improvements to officially revise the FIRM to remove the Project site from being within the SFHA. The County's Floodway Map would also be revised in accordance with Public Works' Floodplain Management Plan requirements that includes measures to review and update flood risk hazards when new data becomes available (Public Works 2021). The County is on a cycle to update the floodplain management plan every 5 years or sooner if conditions warrant it.

Upon completion of the Project, no additional flood proofing or flood insurance requirements would be required for occupants of the Project site.

Threshold 4.10e: Would the Project conflict with the Los Angeles County Low Impact Development Ordinance (County Code, Title 12, Ch. 12.84)?

All development within the County, as defined in Chapter 12.84 (Low Impact Development Standards) of Title 12 (Environmental Protection) of the County Code, must comply with the County's LID requirements. The purpose of LID standards are to: (1) lessen the adverse impacts of stormwater runoff from development and urban runoff on natural drainage systems, receiving waters and other water bodies; (2) minimize pollutant loadings from impervious surfaces by requiring development projects to incorporate properly designed, technically appropriate BMPs and other LID strategies; and (3) minimize erosion and other hydrologic impacts on natural drainage systems by requiring development projects to incorporate properly designed, technically appropriate hydromodification control development principles and technologies. The County's LID standards require that projects satisfy the following: (1) mimic undeveloped stormwater runoff rates and volumes in any storm event up to and including the Capital Flood; (2) prevent pollutants of concern from leaving the development site in stormwater as the result of storms, up to and including a Water Quality Design Storm Event; and (3) minimize hydromodification impacts to natural drainage systems.

The Project's LID Report (see Appendix G-1) must be prepared to the satisfaction of the Public Works in order to comply with the County Code requirements, 2014 LID Manual, and Public Works standards. Currently, the Project site is 100% pervious. The Public Works LID Manual requires that the following priority check list should be followed in determining storm water treatment design for a project: 1) Infiltration, 2) Capture and Use, 3) Biofiltration, and 4) Combination.

Due to the cut/fill grading transitions and proximity to major slopes across the Project site, the Geotechnical Report (see Section 4.7, Geology and Soils) recommended that infiltration is infeasible for use on the Project site. Additionally, rainwater harvesting was also deemed infeasible due to the proposed use of drought tolerant vegetation per the proposed landscape plan as well as due to long-term storage of harvested rainwater that could result in vector and other health concerns. Therefore, biofiltration was selected for water quality treatment across the Project site, and two types of proprietary biofiltration units are proposed. As shown on Figure 4.10.8a, units with internal bypass chambers are proposed to treat the flows from the main streets and as shown on Figure 4.10-8b, modular wetlands are proposed to treat flow from the pads. The County's LID Manual requirements would be satisfied by the biofiltration units that are sized to treat 1.5 times the volume generated onsite, based on 85th percentile rainfall (Appendix G-1). The treated flows would be discharged to an existing off-site RCB culvert in The Old Road at the northeast corner of the site. The Project would not conflict with the Los Angeles County LID Ordinance (County Code, Title 12, Ch. 12.84) and impacts would be less than significant and no mitigation is required.

Threshold 4.10f: Would the Project use onsite wastewater treatment systems in areas with known geological limitations (e.g. high groundwater) or in close proximity to surface water (including, but not limited to, streams, lakes, and drainage course)?

The Project would not require the use of onsite wastewater treatment systems. As discussed in Section 4.19, Utilities and Service Systems of this Draft EIR, the Project would require new onsite sewage infrastructure to convey the sewage from the Project to the Santa Clarita Valley WRPs, including the Saugus WRP and Valencia WRP. There would be no impacts associated with the use of onsite wastewater treatment systems.

Threshold 4.10g: Would the Project be located in a flood hazard, tsunami, or seiche zone, and risk release of pollutants due to project inundation?

The Project site is not located near any body of water that could create a seiche that could impact the Project. The nearest body of water to the Project site is Castaic Lake approximately 10.5 miles to the north, but this lake is lower in elevation in the watershed and would not affect the Project site. The Project is not located within the Castaic Lake Dam inundation zone (DWR 2018). Further, the nearest dam or levee to the Project site is the Castaic Lake, which is approximately 10.5 miles north and down gradient. If the Castaic Lake Dam failed, the flows would flood the Santa Clara River corridor and ultimately the Oxnard plains in route to the Pacific Ocean. The Project site is over 21 miles from the ocean, and would not be subject to the risks of a tsunami. As such, the Project would not risk release of pollutants as a result of inundation by a seiche or tsunami.

In terms of flood hazards, a portion of the Project site designated for development is within the 100-year flood zone (Zone A). To minimize risks of flood damage including release of pollutants due to inundation, the Project includes an engineered storm drainage system to collect and treat runoff from the developed site and provide flood control protection by constructing detention basins and a new flood control channel, which would reduce the flows from the Project site and convey them to the existing culvert under I-5. The drainage system would be designed to meet the County's 24-hour, 50-year Capital Flood control standards and FEMA's 24-hour, 100-year flood standards, to protect the development as well as the remaining floodplain that could be affected by the modification. As illustrated in Figure 4.10-9, Floodplain Comparison Map, following construction, all flooding within the Project site would be contained within the proposed debris basins and storm drains. As such, the proposed floodplain would be limited to the basin ponding areas. As a result, although a portion of the Project site is currently located within a 100-year flood zone, the Project would not risk release of pollutants due to Project inundation. Impacts would be less than significant.

Threshold 4.10h: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Construction

The Project would be required to comply with the Construction General Permit requiring preparation and implementation of a SWPPP to control runoff from construction work sites. The ESCP must include BMPs to address transport of sediment and protect properties from erosion, flooding, or the deposition of mud, debris, or construction-related pollutants. Implementation of BMPs including physical barriers to prevent erosion and sedimentation, construction of sedimentation basins, limitations on work periods during storm events, use of infiltration swales, protection of stockpiled materials, and a variety of other measures would substantially reduce the potential for impacts to surface water quality from occurring during construction. Therefore, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, and impacts from construction would be less than significant.

Operations

The Project is subject to the requirements of the LARWQCB Basin Plan, overlying the East Groundwater Subbasin, which is managed by the SCVGSA through the GSP adopted in January 2022. The Basin Plan outlines water quality objectives for all surface water resources within the basin including the South Fork of the Santa Clara River. Compliance with the Basin Plan is ensured through Waste Discharge Requirements for all surface water discharges including stormwater. The County of Los Angeles as a Permittee under the Los Angeles County NPDES MS4 Permit

is required to implement stormwater BMPs that comply with water quality objectives, including capturing and treating stormwater runoff. An LID Plan has been developed for the Project as required under the LARWQCB NPDES MS4 Permit and in accordance with the Public Works LID Manual (Appendix G-1). The LID Plan includes biofiltration for water quality treatment, as described under Threshold 4.10a. The biofiltration filter units would be designed to treat 150% of the volume generated onsite per the LID Manual (Appendix G-1). Compliance with the NPDES MS4 permit and LID requirements would ensure that the Project is consistent with the Basin Plan's water quality objectives.

Further, the SCVGSA's GSP outlines sustainability criteria and management actions needed to avoid undesirable results from groundwater extraction. The Project would not install new groundwater extraction wells or otherwise adversely affect the groundwater basin. Construction related excavation would not reach depths where groundwater occurs. Although the Project would reduce groundwater infiltration over 72.55 acres, the development would avoid impacts to approximately 150 acres of natural open space in the southerly portion of the Project site. The small reduction in infiltration area compared to the large 66,000-acre groundwater basin capture area would not significantly reduce groundwater recharge in a manner that would conflict with the GSP. The GSP recognizes that urban development will occur in the watershed and establishes criteria to sustainable manage the groundwater basin as development occurs (SCVGSA 2022). The GSP was built on and is consistent with the current groundwater operating plan as described in the SCV Water's Groundwater Management Plan which includes management objectives or goals to protect groundwater resources (Appendix L-2). Therefore, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, and impacts would be less than significant.

4.10.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., cumulative projects) used for this analysis are presented in Table 2-2, List of Cumulative Projects and on Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR. For purposes of hydrology and water quality, the geographical area of cumulative impacts varies by threshold, further detailed below.

Threshold 4.10a: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

The geographic area under consideration for the topic of surface and groundwater quality includes the boundaries of the East Groundwater Subbasin (see Figure 4.10-5) and the watershed for the South Fork of the Santa Clara River (see Figures 4.10-2 and 4.10-3).

Construction

During construction activities, the Project site, the three cumulative projects, as well as other activities within the watershed would use hazardous material (e.g., fuel, oil, paint) and an accidental spill of hazardous materials could result in inadvertent releases to surface waters, which could adversely affect surface or groundwater quality. In addition, construction would have the potential to result in local soil erosion during excavation, grading, trenching, and soil stockpiling. Erosion could result in sediment and other pollutants entering surface water bodies and adversely affecting water quality. However, the Project and the cumulative projects would be subject to the same regulatory requirements discussed above. Any cumulative project that has the potential to impact hydrology and

water quality would also be required to comply with NPDES Construction General Permit and its required SWPPP, the NPDES MS4 BMP requirements, the ESCP to address transport of sediment and protect properties from erosion, and the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program and its required HMBP, all designed to prevent impacts to water quality and have procedures in place for responding to spills. While it is possible that the Project cumulative projects that contribute flows to the South Fork of the Santa Clara River could result in releases of sediment and/or pollutants that could adversely affect water quality, the responsible parties associated with the Project and the other cumulative projects would be required to control runoff and respond to spills to the same or similar established regulatory standards from the City of Santa Clarita, as discussed both above in this section and in Section 4.9, Hazards and Hazardous Materials, of this Draft EIR. Therefore, compliance with water quality regulations would ensure that the cumulative impacts would not be considerable.

Operations

Once constructed, the designs of the Project in addition to the cumulative projects would result in the drainage systems for each site incorporating the requirements of the regulations discussed above during construction. As a result, the cumulative projects would incorporate on-site runoff management infrastructure, water quality BMPs, and adequate connections to the existing stormwater drainage system. Therefore, with compliance with these regulations and implementation of stormwater management measures, the Project would not cause or contribute to a cumulatively significant impact to hydrology and water quality.

Threshold 4.10b: 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?

The geographic area under consideration for the topic of groundwater supplies and recharge includes boundaries of the East Groundwater Subbasin (see Figure 4.10-5).

Construction

The geographic scope of cumulative effects on groundwater supplies is the local groundwater basin. The East Groundwater Subbasin underlies the Santa Clarita Valley and receives infiltration from the entire watershed. According to the GSP for the subbasin, current and future pumping levels, when combined with non-purveyor pumping for average year, single dry year and multiple dry years, remain within the basin yield out until 2050 (SCVGSA 2022). In general, water use during construction is not substantial, mostly due to the relatively low quantities required and the duration of water supply needs which is for relatively short time periods. During construction, most, if not all, cumulative projects would require grading and excavation that would likely require water for dust suppression. However, the source of water for dust suppression could come from a variety of sources and again would only be required on a temporary basis. Therefore, considering that the subbasin has a sustainable yield that includes future growth impacts from construction activities, along with the relatively minimal amount of water supplies needed, the potential impacts related to groundwater supplies and sustainable management of the subbasin would not be cumulatively considerable.

Operation

As discussed above, current and future pumping levels for average year, single dry year and multiple dry years remain within the basin yield, which considers an updated climate change analysis consistent with DWR guidance for preparation of groundwater sustainability plans (SCVGSA 2022). Once constructed, the Project would rely on water supply from SCV Water and would not install new groundwater wells or contribute to a cumulative reduction

in groundwater supplies. The GSP for the East Groundwater Subbasin projects water demand for growth in the subbasin, and, as a result, considers the additional demands that would be attributed to all the cumulative projects. However, increases in impervious surfaces, such as would occur with the Project and likely other cumulative projects, could contribute to a cumulative reduction in natural recharge within the groundwater subbasin. However, as described above for the Project, cumulative projects are required to implement LID drainage control features which encourage as much onsite infiltration of stormwater runoff as feasible. Furthermore, any cumulative reduction of groundwater recharge caused by cumulative projects in the watershed would be accounted for by the SCVGSA through implementation of the GSP. Management of the groundwater basin by the SCVGSA would ensure that groundwater supplies would not be depleted by cumulative development within the watershed. Therefore, the subbasin is considered to be within a sustainable yield and the GSP includes for the kind of growth that is representative of the cumulative projects, the Project would not contribute substantially to a cumulative decrease in groundwater supplies or interfere substantially with groundwater recharge such that sustainable groundwater management of the basin would be impeded, and the Project would not cause or contribute to a cumulatively significant impact to groundwater supplies.

Threshold 4.10c: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of a federal 100-year flood hazard area or County Capital Flood floodplain; 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?

ii. Substantially increase the rate, amount, or depth of surface runoff in a manner which would result in flooding on- or offsite?

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?

iv. Impede or redirect flood flows which would expose existing housing or other insurable structures in a federal 100-year flood hazard area or County Capital Flood floodplain to a significant risk of loss or damage involving flooding?

The geographic area under consideration for the topic of alterations to existing drainage patterns that could result in substantial erosion/siltation, flooding on-site or off-site, exceed stormwater drainage system capacity or generate polluted runoff, or result in possible loss or damage due to flooding, includes the watershed for the South Fork of the Santa Clara River (see Figures 4.10-2 and 4.10-3).

Construction

The Project and other related projects would be subject to the same or similar regulatory requirements from the City of Santa Clarita for water quality and hydrology, including compliance with site-specific SWPPPs required by the General Construction Permit, the ESCP to control erosion, and other grading requirements in accordance with the County Code or relevant local requirements such as those required by the City of Santa Clarita. Existing regulations would require BMPs and erosion control measures to prevent erosion and off-site siltation from each of the construction sites. Therefore, the cumulative impact with respect to erosion and flooding would not be cumulatively considerable.

Operation

The Project and other proposed developments within the watershed would be subject to storm flow management designs imposed by the City and the County to ensure that cumulative development does not result in excessive runoff that could overwhelm regional flood control facilities. The Project would be designed to reduce flows to the pre-project conditions. The Project's Drainage Concept Report determined that the proposed basins would reduce the existing 50-year peak flow rate at the Caltrans culvert under I-5 from 1,656 cfs to 1,218 cfs, a reduction of 438 cfs (Appendix G-3). A CLOMR will be processed through and approved by FEMA prior to the approval of storm drain plans and construction of the proposed channel and basins (Appendix G-4). Additionally, the proposed basins would remove 48.8 acre-feet of sediment from the Project site, reducing the potential for sediment to impact the capacity of the downstream drainage network.

The designs of the Project and other proposed development would result in the drainage systems of each site incorporating either the City, County, and/or FEMA requirements to avoid downstream flood impacts. As a result, cumulative projects would also be required to incorporate on-site runoff management measures, water quality BMPs, and adequate connections to the existing County stormwater drainage system. In addition, each project would be required to comply with the NPDES MS4 BMP requirements and LID practices, along with City Municipal Code or County Code requirements, that would minimize pollutants in stormwater runoff. Therefore, reducing Project flows to pre-project conditions would ensure that Project effects on drainage would not be cumulatively considerable.

Threshold 4.10d: Would the Project otherwise place structures in Federal 100-year flood hazard or County Capital Flood floodplain areas which would require additional flood proofing and flood insurance requirements?

The geographic area under consideration for the topic of flood hazards includes the watershed for the South Fork of the Santa Clara River (see Figures 4.10-2 and 4.10-3). Areas within the watershed, especially low-lying areas within proximity to the Santa Clara River, include flood hazard areas. In general, flood hazards are site-specific and do not become cumulatively considerable unless they are all within the same flood hazard area. The Project site includes a portion of the site within Zone A and requires grading/earthwork in compliance with County Code standards to ensure that development is removed from the flood hazard zone. Based on a 100-year flood analysis (Appendix G-4), grading within the existing flood zone would not impede or redirect flood flows such that off-site flooding impacts would occur at cumulative project sites. Following construction, all flooding within the Project site would be contained within the proposed debris basins and storm drains. As such, the proposed floodplain would be limited to the basin ponding areas. Cumulative project sites would not be required to obtain additional flood proofing or flood insurance requirements as a result of Project development. As a result, flood related impacts would not be cumulatively considerable.

Threshold 4.10e: Would the Project conflict with the Los Angeles County Low Impact Development Ordinance (County Code, Title 12, Ch. 12.84)?

The geographic area under consideration for the topic of hydrology impacts includes the watershed for the South Fork of the Santa Clara River (see Figures 4.10-2 and 4.10-3). However, impacts related to consistency with the County's LID Ordinance are project-specific and do not combine to become cumulatively considerable. The Project and Cumulative Projects LA1 through LA14 would be subject to the applicable requirements of the County's ordinance, and as Cumulative Projects SC1 through SC26 are located within City of Santa Clarita, it would not be subject to this ordinance. As previously described, the Project's Drainage Concept Report determined that the proposed basins would reduce the existing 50-year peak flow rate at the Caltrans culvert under I-5 from 1,656 cfs

to 1,372 cfs, a reduction of 284 cfs (Appendix G-3). Additionally, the proposed basins would remove 48.8 acre-feet of sediment from the previously burned areas, reducing the potential for sediment to impact the capacity of the downstream drainage network. The proposed water quality BMP and storm drainage system design would ensure that there would be no contact between stormwater from the developed Project site and the adjacent undeveloped land, thereby ensuring that no undeveloped areas would be subject to erosion or associated siltation due to Project operations. Further, the proposed water quality BMPs would be sized to have sufficient capacity to treat 1.5-times the design volume generated on-site, based on the 85th percentile rainfall, which would ensure adequate treatment capacity in accordance with the County's LID Manual requirements (Appendix G-1). Therefore, the Project's adherence to the ordinance ensures that it would not contribute to a significant cumulative impact.

Threshold 4.10f: Would the Project use onsite wastewater treatment systems in areas with known geological limitations (e.g. high groundwater) or in close proximity to surface water (including, but not limited to, streams, lakes, and drainage course)?

The Project would not require the use of onsite wastewater treatment systems and as a result would not contribute to any cumulative impacts associated with the use of onsite wastewater treatment systems.

Threshold 4.10g: Would the Project be located in a flood hazard, tsunami, or seiche zone, and risk release of pollutants due to project inundation?

The geographic area under consideration for the topic of flood hazards includes the watershed for the South Fork of the Santa Clara River (see Figures 4.10-2 and 4.10-3). Neither the Project nor the three cumulative projects would be located near a body of water that would be impacted by a seiche and would not be subject to the risks of a tsunami due to distance from the ocean and elevation. The nearest dam to the Project site is the Castaic Lake, which is approximately 10.5 miles north and down gradient. If the Castaic Lake dam failed, the flows would flood the Santa Clara River corridor in route to the Pacific Ocean and would not affect the Project nor the cumulative projects. The Project is currently in a flood hazard zone, but the property would be developed to remove the developed area from the Zone A and eliminate hazards associated with a flood zone. During construction, all related projects would require the preparation of a SWPPP in accordance with the General Construction Permit. During operations, all related projects would be required to comply with the NPDES Municipal Permits and its MS4 BMP requirements and LID practices, along with County Code requirements, which would prevent significant amounts of pollutants in runoff. Therefore, the cumulative impact with respect to flood hazards, tsunami, and seiche would not be cumulatively considerable.

Threshold 4.10h: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The geographic area under consideration for the topic of surface and groundwater quality includes the boundaries of the East Groundwater Subbasin (see Figure 4.10-5) and the watershed for the South Fork of the Santa Clara River (see Figures 4.10-2 and 4.10-3). All future projects within the Basin Plan and SCVGSA area would be required to comply with the LARWQCB NPDES MS4 and the Public Works' LID Standards Manual. In addition, the SCVGSA GSP identifies management actions for the entire groundwater basin. None of the new developments proposed would install new extraction wells or cause substantial reduction in groundwater levels that would conflict with the GSP. Therefore, the Project would not cause or contribute to a cumulatively significant impact to the Basin Plan or a GSP.

4.10.7 Mitigation Measures

No mitigation is required.

4.10.8 Level of Significance After Mitigation

The Project would result in less than significant impacts with mitigation regarding the potential to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

The Project would result in less than significant impacts regarding the potential to substantially alter the existing drainage pattern of the site or area, including through the alteration of a federal 100-year flood hazard area or County Capital Flood floodplain; 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.

The Project would result in less than significant impacts regarding the potential to substantially alter the existing drainage pattern of the site or area, including through the alteration of a federal 100-year flood hazard area or County Capital Flood floodplain; 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, amount, or depth of surface runoff in a manner which would result in flooding on- or offsite.

The Project would result in less than significant impacts regarding the potential to substantially alter the existing drainage pattern of the site or area, including through the alteration of a federal 100-year flood hazard area or County Capital Flood floodplain; the alteration of the course of a stream or river; or through the addition of impervious surfaces in a manner which 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.

The Project would result in less than significant impacts regarding the potential to substantially alter the existing drainage pattern of the site or area, including through the alteration of a federal 100-year flood hazard area or County Capital Flood floodplain; 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 which would expose existing housing or other insurable structures in a federal 100-year flood hazard area or County Capital Flood floodplain to a significant risk of loss or damage involving flooding.

The Project would result in less than significant impacts regarding the potential to place structures in Federal 100-year flood hazard or County Capital Flood floodplain areas which would require additional flood proofing and flood insurance requirements.

The Project would result in less than significant impacts regarding the potential to conflict with the Los Angeles County Low Impact Development Ordinance (County Code, Title 12, Ch. 12.84).

The Project would result in less than significant impacts regarding the potential to use onsite wastewater treatment systems in areas with known geological limitations (e.g. high groundwater) or in close proximity to surface water (including, but not limited to, streams, lakes, and drainage course).

The Project would result in less than significant impacts regarding the potential to risk release of pollutants due to project inundation in a flood hazard, tsunami, or seiche zone.

The Project would result in less than significant impacts regarding the potential to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan

4.10.9 References

City of Santa Clarita. 2011. "Safety Element." In *City of Santa Clarita General Plan*. June 2011. Last accessed July 5, 2022. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/7%20-%20Safety%20Element.pdf.

County of Los Angeles. 2012. *Santa Clarita Valley Area Plan, One Valley One Vision*. Los Angeles Department of Regional Planning. Last accessed July 5, 2022.

County of Los Angeles. 2015. *General Plan 2035*. October 6, 2015. Last Accessed July 5, 2022. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

County of Los Angeles. 2022. County Code Chapter 12.84, Low Impact Development Standards. Last accessed, July 13, 2022. https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances?nodeId=TIT12ENPR_CH12.84LOIMDEST.

DWR (California Department of Water Resources). 2018. "Castaic Dam Inundations Map for Sunny-Day Hypothetical Failure Maximum Depth." December 21, 2018. Last accessed July 5, 2022. https://fmds.water.ca.gov/maps/damim/service/document/download/2217.

DWR. 2019. *Sustainable Groundwater Management Act 2019 Basin Prioritization*. May 2020. Last accessed June 5, 2022. https://data.cnra.ca.gov/dataset/13ebd2d3-4e62-4fee-9342-d7c3ef3e0079/resource/ffafd27b-5e7e-4db3-b846-e7b3cb5c614c/download/sgma_bp_process_document.pdf.

EPA (United States Environmental Protection Agency). 2021. "How Are Water Quality Standards Developed?" Updated September 22, 2021. Last accessed July 5, 2022. https://www.epa.gov/standards-water-body-health/how-are-water-quality-standards-developed.

EPA. 2022. "About NPDES." National Pollutant Discharge Elimination System (NPDES). Last accessed July 5, 2022. https://19january2017snapshot.epa.gov/npdes/about-npdes_.html.

FEMA (Federal Emergency Management Agency). 2022. FEMA's National Flood Hazard Layer (NFHL) Viewer. Last accessed July 5, 2022. https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd.

LARWQCB (Los Angeles Regional Water Quality Control Board). 2014. "Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties." Last accessed June 5, 2022. https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.html.

LARWQCB. 2018. Santa Clara River Watershed Impaired Waters. Updated April 23, 2018. Accessed February 27, 2024. https://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/Water_Quality_and_Watersheds/santa_clara_river_watershed/303.shtml.

Public Works (Los Angeles County Department of Public Works). 2006. *Hydrology Manual*. January 2006. Last accessed July 5, 2022. http://www.dpw.lacounty.gov/wrd/publication/engineering/2006_Hydrology_Manual/2006%20Hydrology%20Manual-Divided.pdf.

Public Works. 2010. *Construction Site Best Management Practices (BMPs) Manual*. August 2010. Last accessed July 5, 2022. https://dpw.lacounty.gov/cons/specs/BMPManual.pdf.

Public Works. 2021. *Los Angeles County Comprehensive Floodplain Management Plan*. July 2021. Accessed July 15, 2022. https://dpw.lacounty.gov/Wmd/NFIP/FMP/documents/Comprehensive%20Floodplain%20Management%20Plan.pdf.

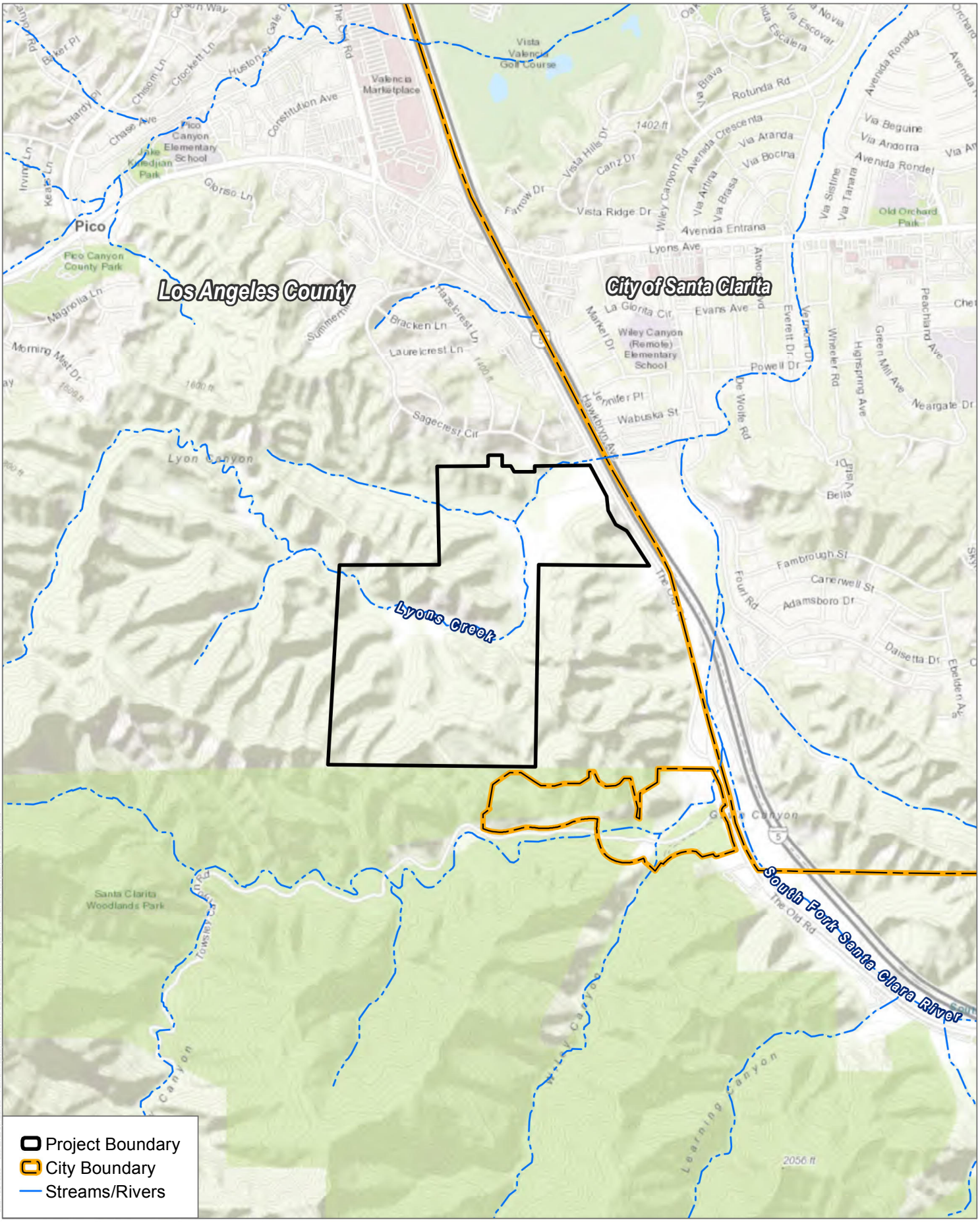
SCV Water (Santa Clarita Valley Water). 2018. Upper Santa Clara River 2014 Integrated Regional Water Management Plan 2018 Amendments. Last accessed February 8, 2024. https://dpw.lacounty.gov/wmd/scr/docs/2018%20Draft%20Amendments%20to%20USCR%202014%20IRWM%20Plan.PDF.

SCV Water. 2021. *2020 Urban Water Management Plan for the Santa Clarita Valley Water Agency (Los Angeles County Waterworks District No. 36/Cooperating Agency).* Vol. 1 Final. June 2021. Last accessed July 5, 2022. https://www.yourscvwater.com/sites/default/files/SCVWA/SCVWA-2020-UWMP-Volume-I_FINAL.pdf.

SCVGSA (Santa Clarita Valley Groundwater Sustainability Agency). 2022. Santa Clara River Valley East Groundwater Subbasin Groundwater Sustainability Plan. https://cawaterlibrary.net/document/santa-clara-river-valley-east-groundwater-sustainability-plan/.

USCRWMG (Upper Santa Clara River Watershed Management Group). 2016. "Upper Santa Clara River Watershed Enhanced Watershed Management Program–Response to Regional Board Comments Received February 9, 2016." Last accessed July 5, 2022. https://www.waterboards.ca.gov/rwqcb4/water_issues/programs/stormwater/municipal/watershed_management/santa_clara/upper/USCRW_Comment%20Response_022016.pdf.

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SOURCE: ESRI World Topographic Map, NHD 2022

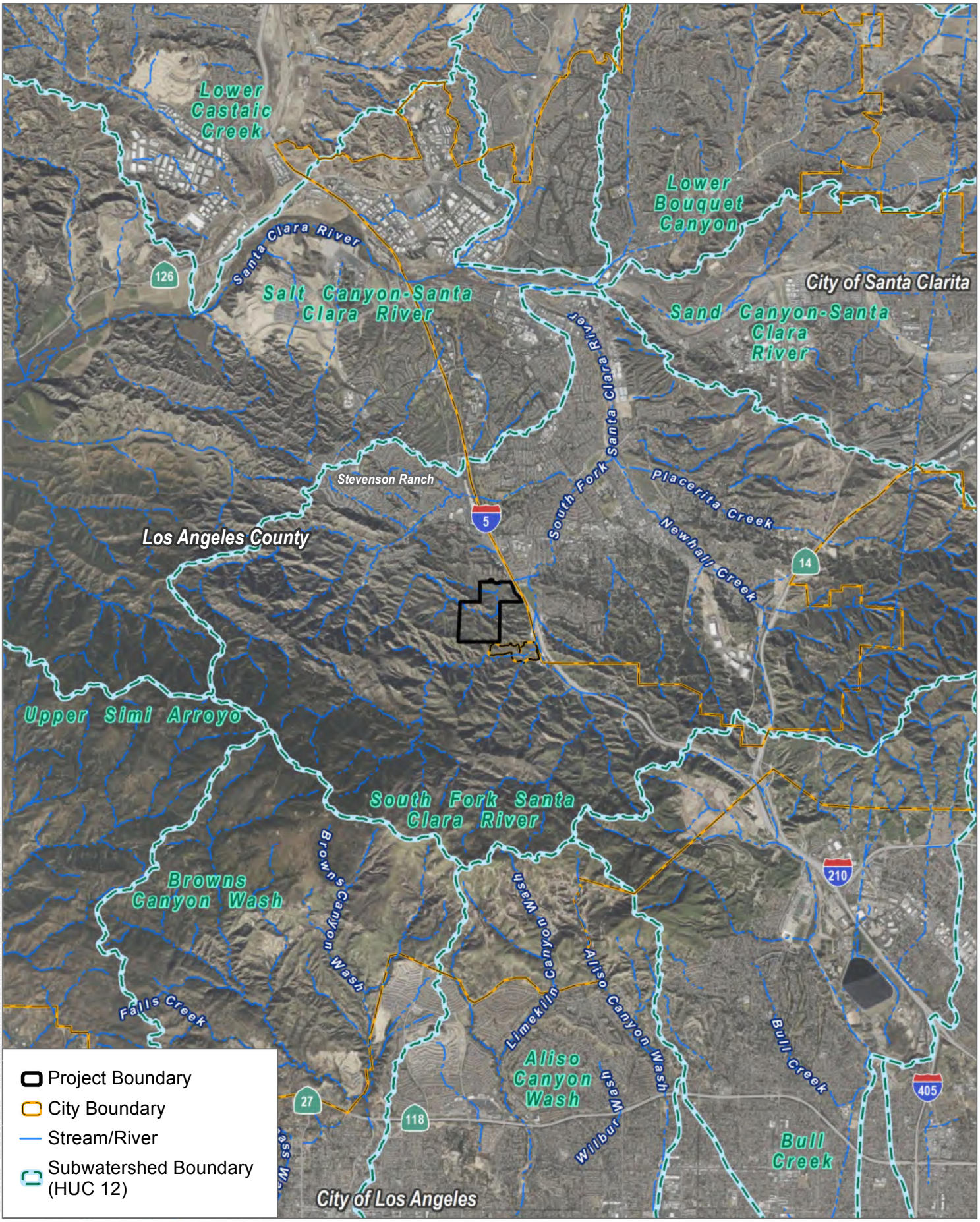
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FIGURE 4.10-1

On-Site Topography and Drainage

Trails at Lyons Canyon Project

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SOURCE: Bing Maps 2021, Open Street Map 2019, NHD

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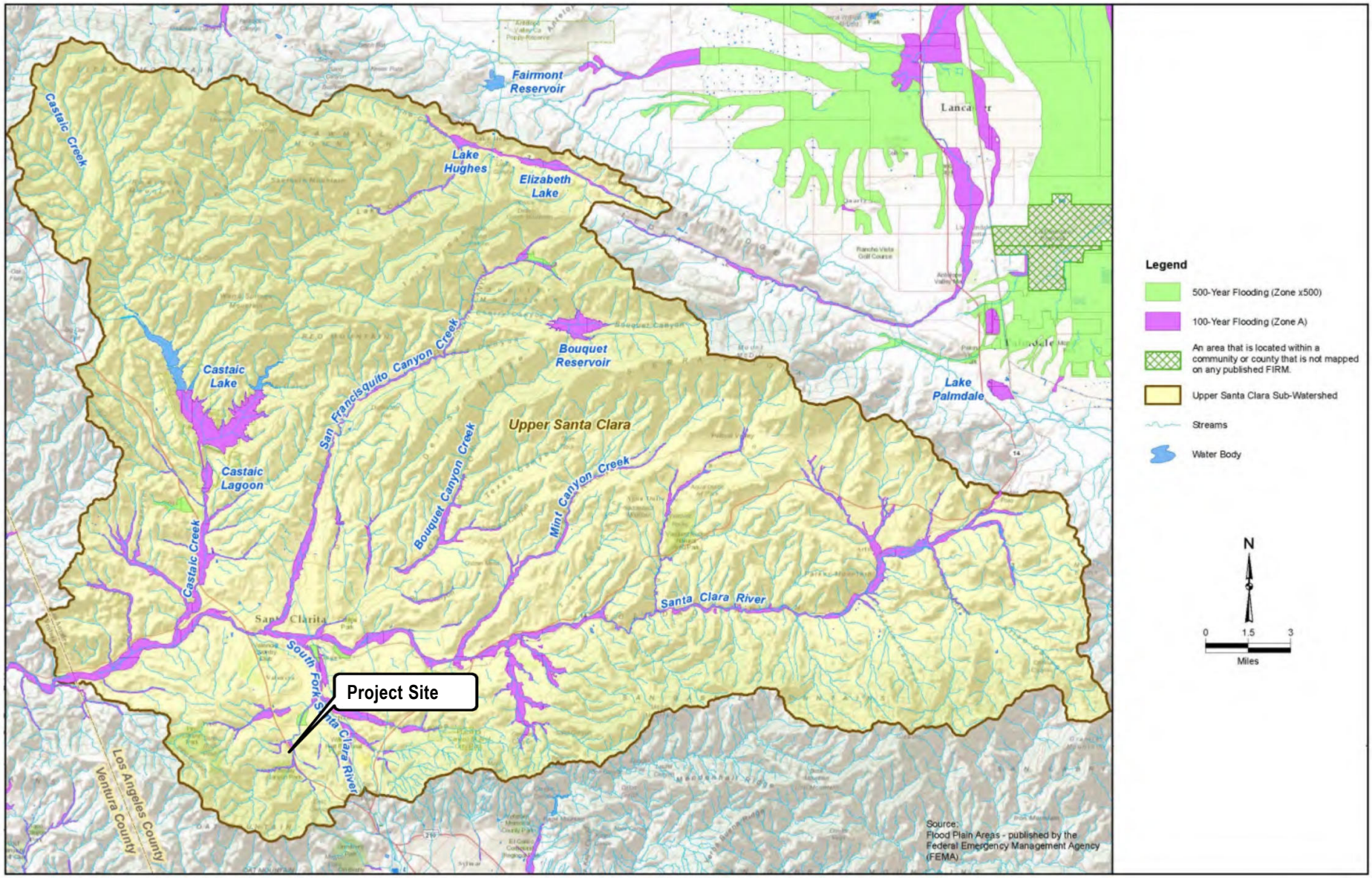
0 4,200 8,400 Feet

FIGURE 4.10-2

Existing Drainages and Watershed

Trails at Lyons Canyon Project

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SOURCE: Flood Plain Areas - published by the Federal Emergency Management Agency (FEMA), Kennedy/Jenks Consultants 2012

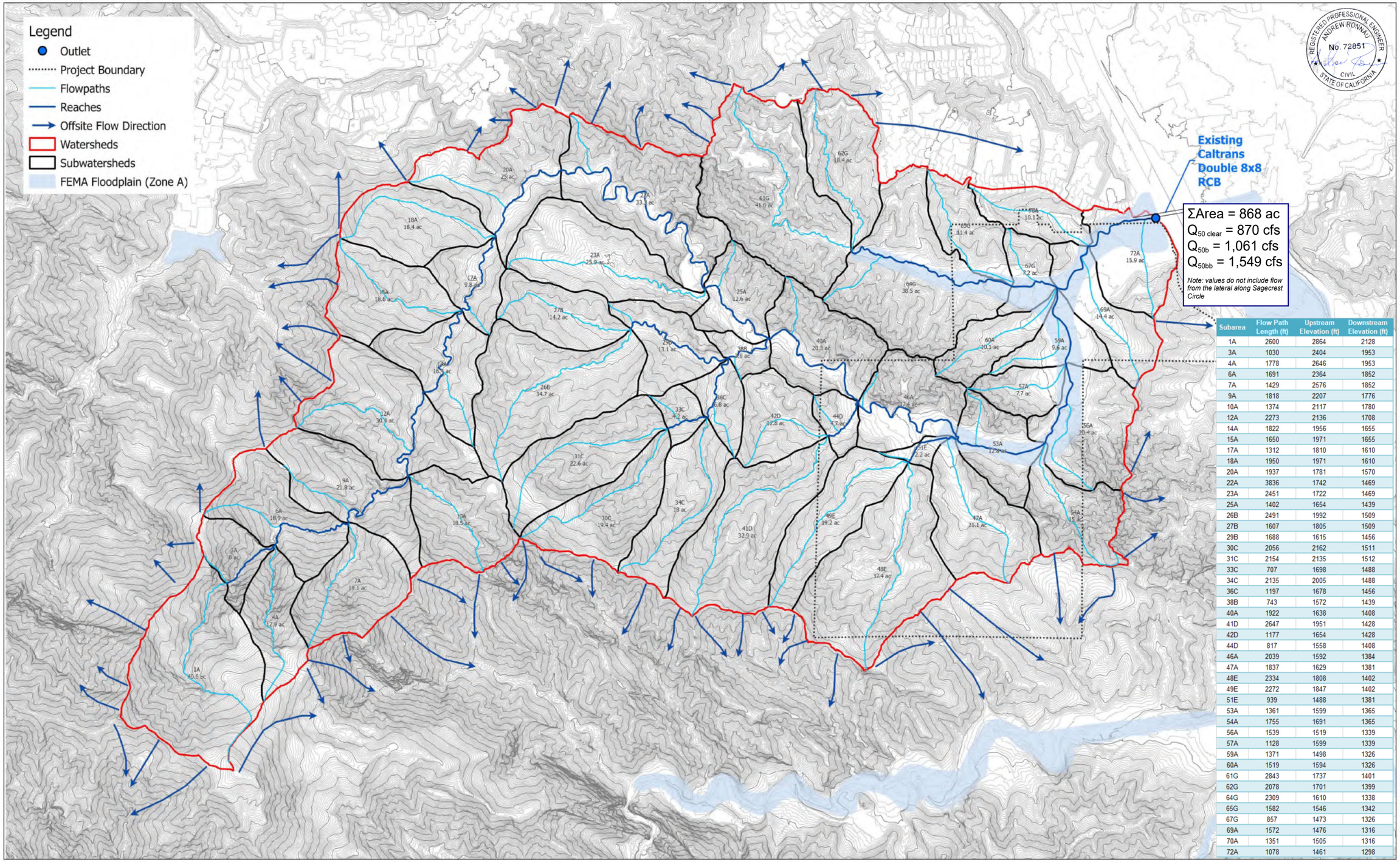
FIGURE 4.10-3

Upper Santa Clara River Watershed and Floodplain Areas

Trails at Lyons Canyon Project

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Subarea	Flow Path Length (ft)	Upstream Elevation (ft)	Downstream Elevation (ft)
1A	2600	2864	2128
3A	1030	2404	1953
4A	1778	2646	1953
6A	1691	2364	1852
7A	1429	2576	1852
9A	1818	2207	1776
10A	1374	2117	1780
12A	2273	2136	1708
14A	1822	1956	1655
15A	1650	1971	1655
17A	1312	1810	1610
18A	1950	1971	1610
20A	1937	1781	1570
22A	3836	1742	1469
23A	2451	1722	1469
25A	1402	1654	1439
26B	2491	1992	1509
27B	1607	1805	1509
29B	1688	1615	1456
30C	2056	2162	1511
31C	2154	2135	1512
33C	707	1698	1488
34C	2135	2005	1488
36C	1197	1678	1456
38B	743	1572	1439
40A	1922	1638	1408
41D	2647	1951	1428
42D	1177	1654	1428
44D	817	1558	1408
46A	2039	1592	1384
47A	1837	1629	1381
48E	2334	1808	1402
49E	2272	1847	1402
51E	939	1488	1381
53A	1361	1599	1365
54A	1755	1691	1365
56A	1539	1519	1339
57A	1128	1599	1339
59A	1371	1498	1326
60A	1519	1594	1326
61G	2843	1737	1401
62G	2078	1701	1399
64G	2309	1610	1338
65G	1582	1546	1342
67G	857	1473	1326
69A	1572	1476	1316
70A	1351	1505	1316
72A	1078	1461	1298

SOURCE: Pace Advanced Water Engineering 2024a

FIGURE 4.10-4

Existing Condition Subwatersheds

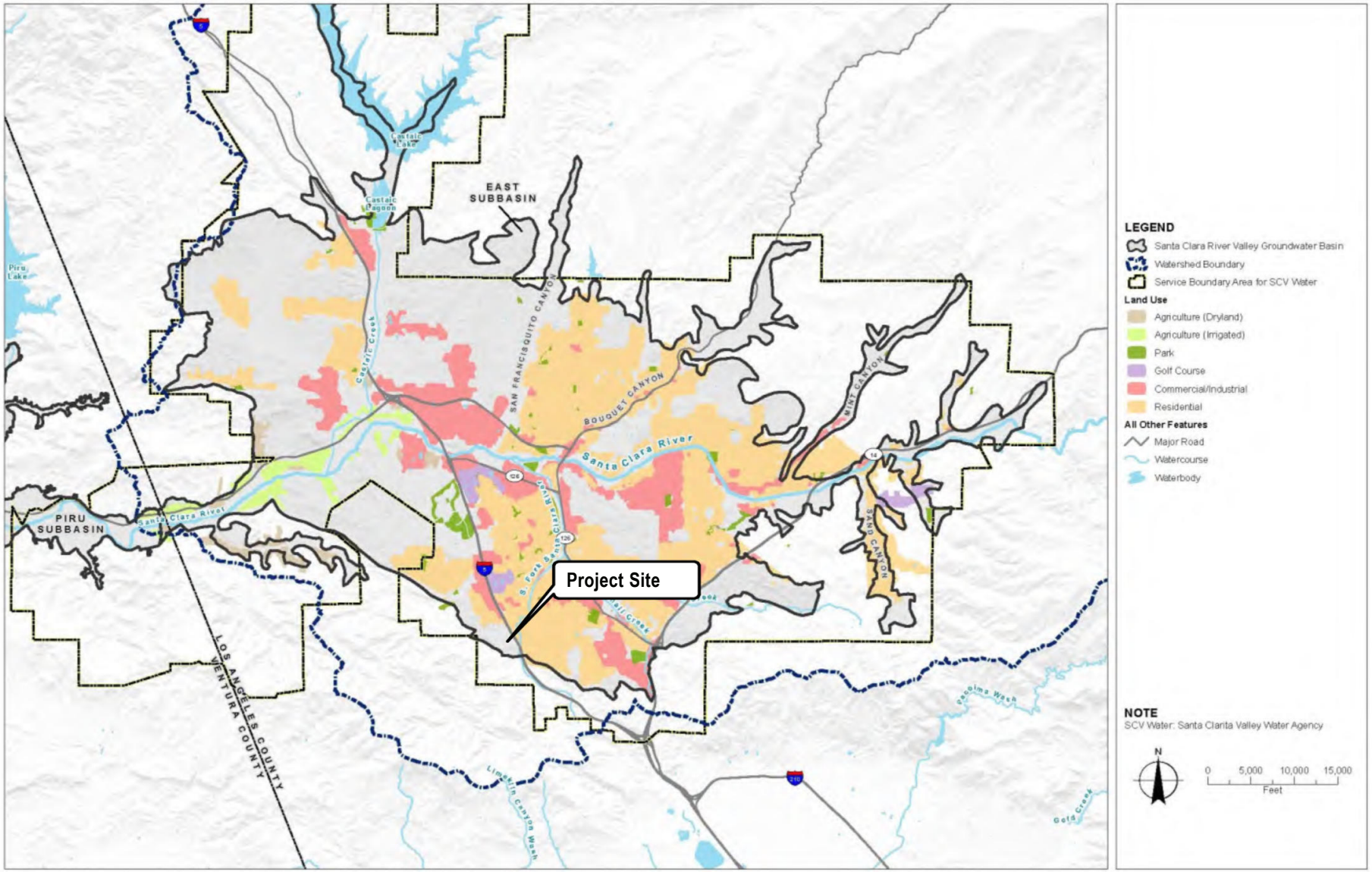
Trails at Lyons Canyon Project

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Exhibit 4

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SOURCE: USGS, Southern California Association of Governments (2008), LA County and City of Santa Clarita (2012), DWR Bulletin 118, GSI Water Solutions

FIGURE 4.10-5

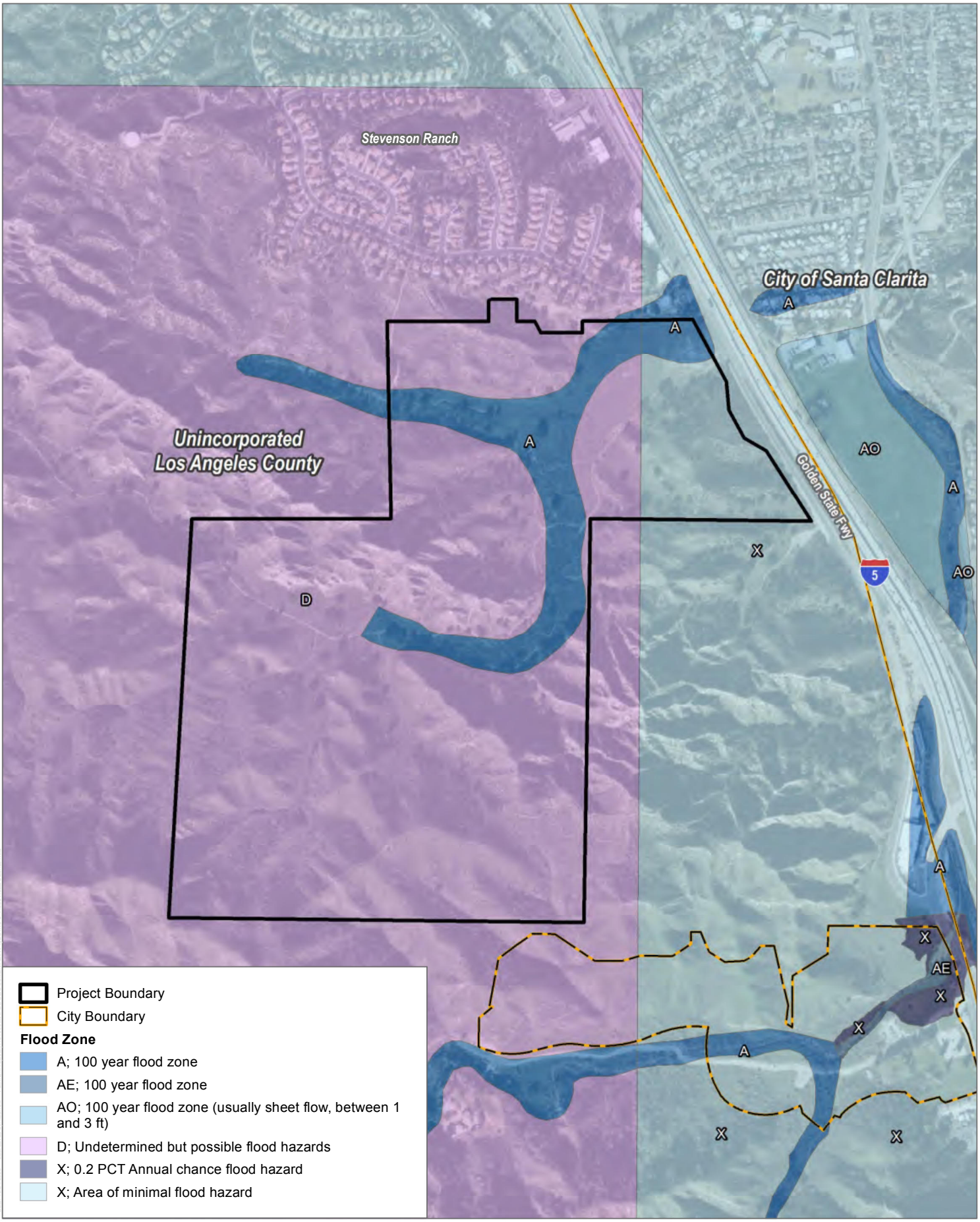
Santa Clara River Valley East Groundwater Subbasin- Land Uses

Trails at Lyons Canyon Project

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SOURCE: Bing Maps 2021, Open Street Map 2019, FEMA 2021

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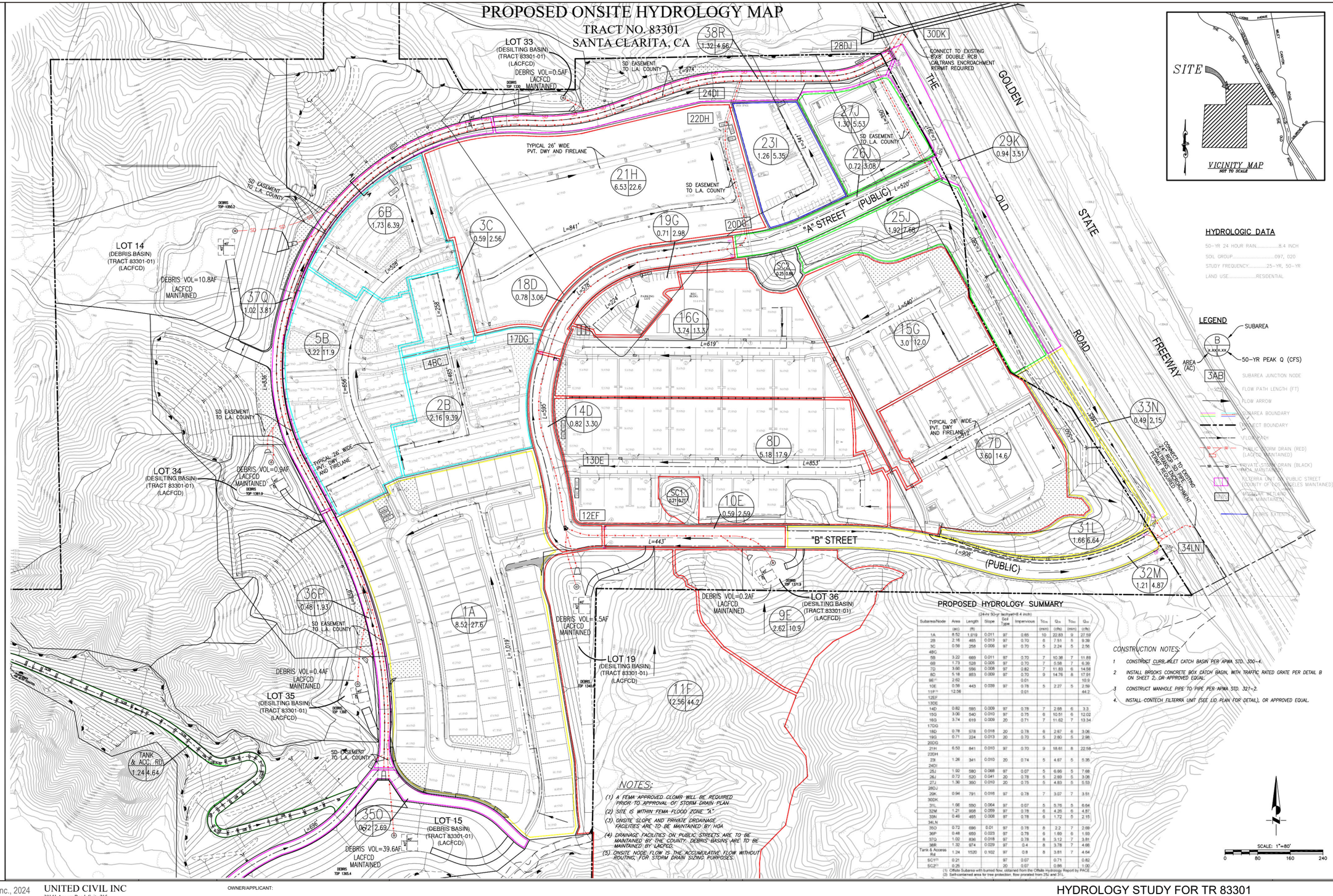
FIGURE 4.10-6

Flood Hazard Zones

Trails at Lyons Canyon Project

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PROPOSED ONSITE HYDROLOGY MAP
TRACT NO. 83301
SANTA CLARITA, CA



PROPOSED HYDROLOGY SUMMARY

(24-hr 50-yr Isohyet=8.4 inch)

Subarea/Node	Area (ac)	Length (ft)	Slope	Soil Type	Imperviousness	$T_{C_{DEV}}$ (min)	Q_{50} (cfs)	$T_{C_{DEV}}$ (min)	Q_{50} (cfs)
1A	8.52	1,019	0.011	97	0.65	10	22.83	9	27.59
2B	2.16	465	0.013	97	0.70	5	7.51	5	9.39
3C	0.56	256	0.006	97	0.70	5	2.24	5	2.56
4BC									
5B	3.22	669	0.011	97	0.70	7	10.38	7	11.88
6B	1.73	528	0.005	97	0.70	7	5.58	7	6.39
7D	3.60	556	0.008	97	0.82	7	11.83	6	14.58
8D	5.18	853	0.008	97	0.70	9	14.75	8	17.91
9E[1]	2.62				0.01				10.9
10E	0.59	443	0.009	97	0.78	5	2.27	5	2.59
11F[1]	12.56				0.01				44.2
12EF									
13DE									
14D	0.82	585	0.009	97	0.78	7	2.68	6	3.3
15G	3.00	540	0.010	97	0.75	6	10.51	6	12.02
16G	3.74	619	0.009	20	0.71	7	11.62	7	13.34
17DG									
18D	0.78	578	0.018	20	0.78	6	2.67	6	3.06
19G	0.71	224	0.013	20	0.70	5	2.80	5	2.98
20DG									
21H	6.53	841	0.010	97	0.70	9	18.61	8	22.58
22DH									
23I	1.26	341	0.010	20	0.74	5	4.67	5	5.35
24DI									
25J	1.92	580	0.068	97	0.07	5	6.66	5	7.68
26J	0.72	520	0.041	20	0.78	5	2.89	5	3.06
27J	1.30	350	0.010	20	0.75	5	4.83	5	5.53
28DJ									
29K	0.94	791	0.016	97	0.78	7	3.07	7	3.51
30DK									
31L	1.66	550	0.064	97	0.07	5	5.75	5	6.64
32M	1.21	908	0.059	97	0.78	5	4.26	6	4.87
33N	0.49	485	0.008	97	0.78	6	1.72	5	2.15
34LN									
35O	0.72	696	0.01	97	0.78	8	2.2	7	2.68
36P	0.48	659	0.023	97	0.78	6	1.69	6	1.93
37Q	1.02	836	0.018	97	0.78	6	3.12	7	3.81
38R	1.32	974	0.029	97	0.4	8	3.78	7	4.66
Tank & Access Rd	1.24	1520	0.102	97	0.8	8	3.81	7	4.64
SC1[1]	0.21			97	0.07		0.71		0.82
SC2[1]	0.25			20	0.07		0.86		1.06

(1) Offsite Subarea with burned flow, obtained from the Offsite Hydrology Report by PACE
(2) Self-contained area for tree protection, flow prorated from 3% and 31%

CONSTRUCTION NOTES:

1. CONSTRUCT CURB INLET CATCH BASIN PER APWA STD. 300-4.
2. INSTALL BROOKS CONCRETE BOX CATCH BASIN, WITH TRAFFIC RATED GRATE PER DETAIL B ON SHEET 2, OR APPROVED EQUAL
3. CONSTRUCT MANHOLE PIPE TO PIPE PER APWA STD. 321-2.
4. INSTALL CONTECH FILTERRA UNIT (SEE LID PLAN FOR DETAIL), OR APPROVED EQUAL.

NOTES:

(1) A FEMA APPROVED CLOMR WILL BE REQUIRED PRIOR TO APPROVAL OF STORM DRAIN PLAN
(2) SITE IS WITHIN FEMA FLOOD ZONE "A"
(3) ONSITE SLOPE AND PRIVATE DRDAINAGE FACILITIES ARE TO BE MAINTAINED BY HOA
(4) DRAINAGE FACILITIES ON PUBLIC STREETS ARE TO BE MAINTAINED BY THE COUNTY; DEBRIS BASINS ARE TO BE MAINTAINED BY LACFCD.
(5) ONSITE NODE FLOW IS THE ACCUMULATIVE FLOW WITHOUT ROUTING, FOR STORM DRAIN SIZING PURPOSES.

SOURCE: United Civil Inc., 2024

UNITED CIVIL INC
30141 Agoura Road, Suite 215
Agoura Hills, CA 91301
PH: (818) 707-8648

OWNER/APPLICANT:

NUWI LYONS CANYON, LLC
2001 WILSHIRE BOULEVARD, SUITE 401
SANTA MONICA, CA 90403
TEL: (310) 864-2427

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HYDROLOGY STUDY FOR TR 83301

PROPOSED ONSITE HYDROLOGY

LOCATED IN THE UNINCORPORATED TERRITORY OF
THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

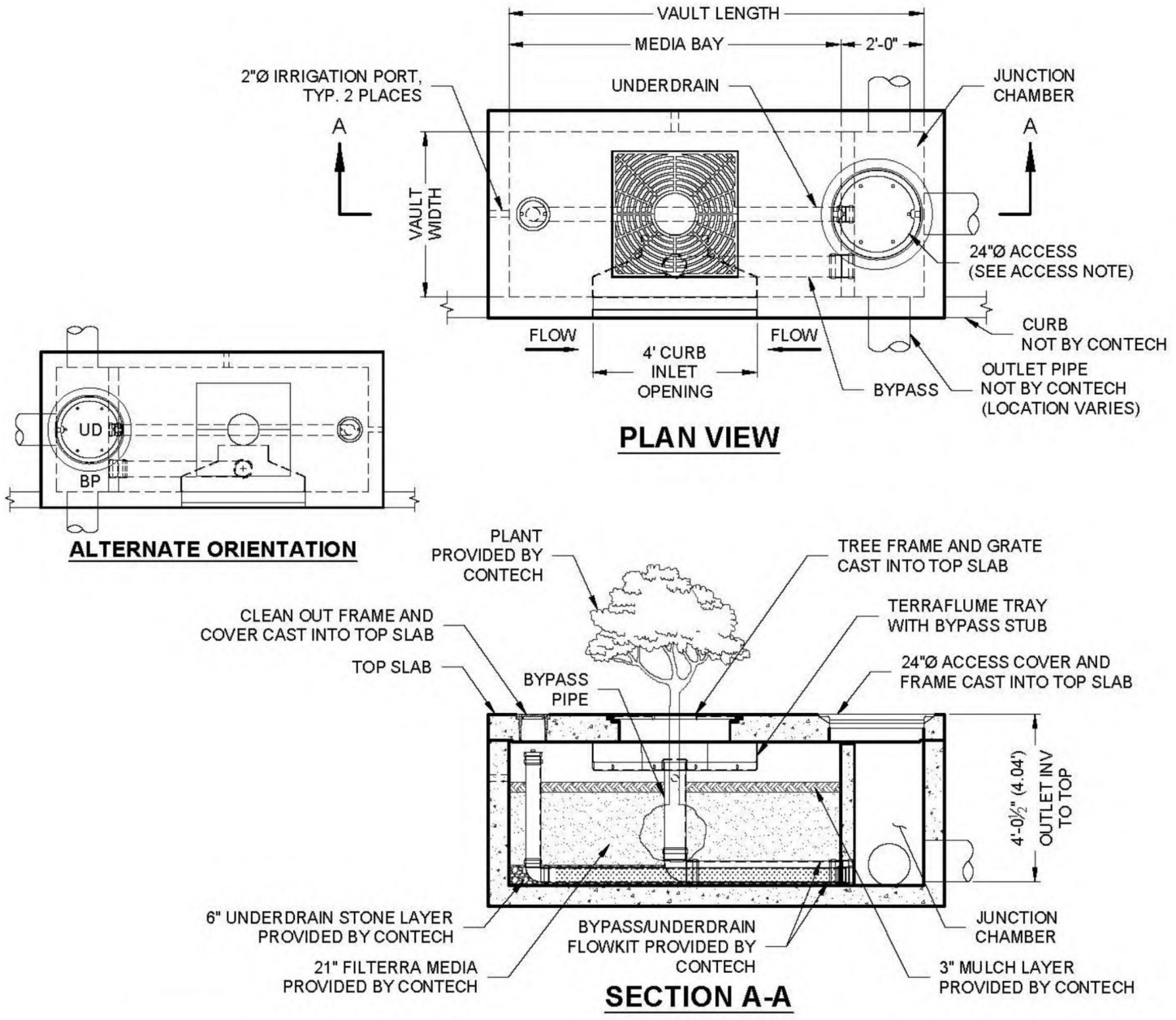
FIGURE 4.10-7

Proposed Drainage and Water Quality Infrastructure

Trails at Lyons Canyon Project

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SOURCE: Contech Engineered Solutions LLC

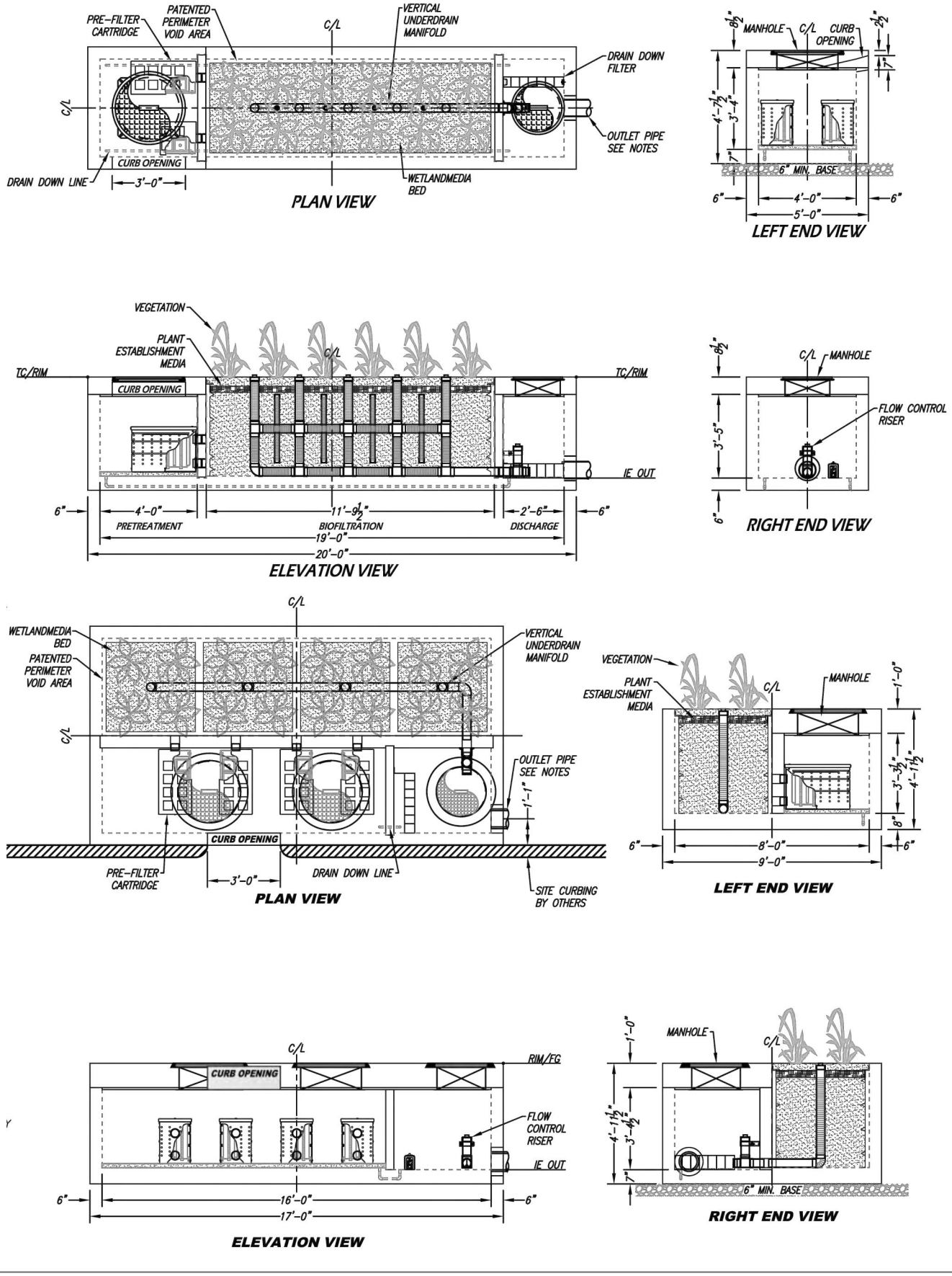
FIGURE 4.10-8a

Example Water Quality BMP with Internal Bypass Chamber

Trails at Lyons Canyon Project

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SOURCE: Contech Engineered Solutions LLC

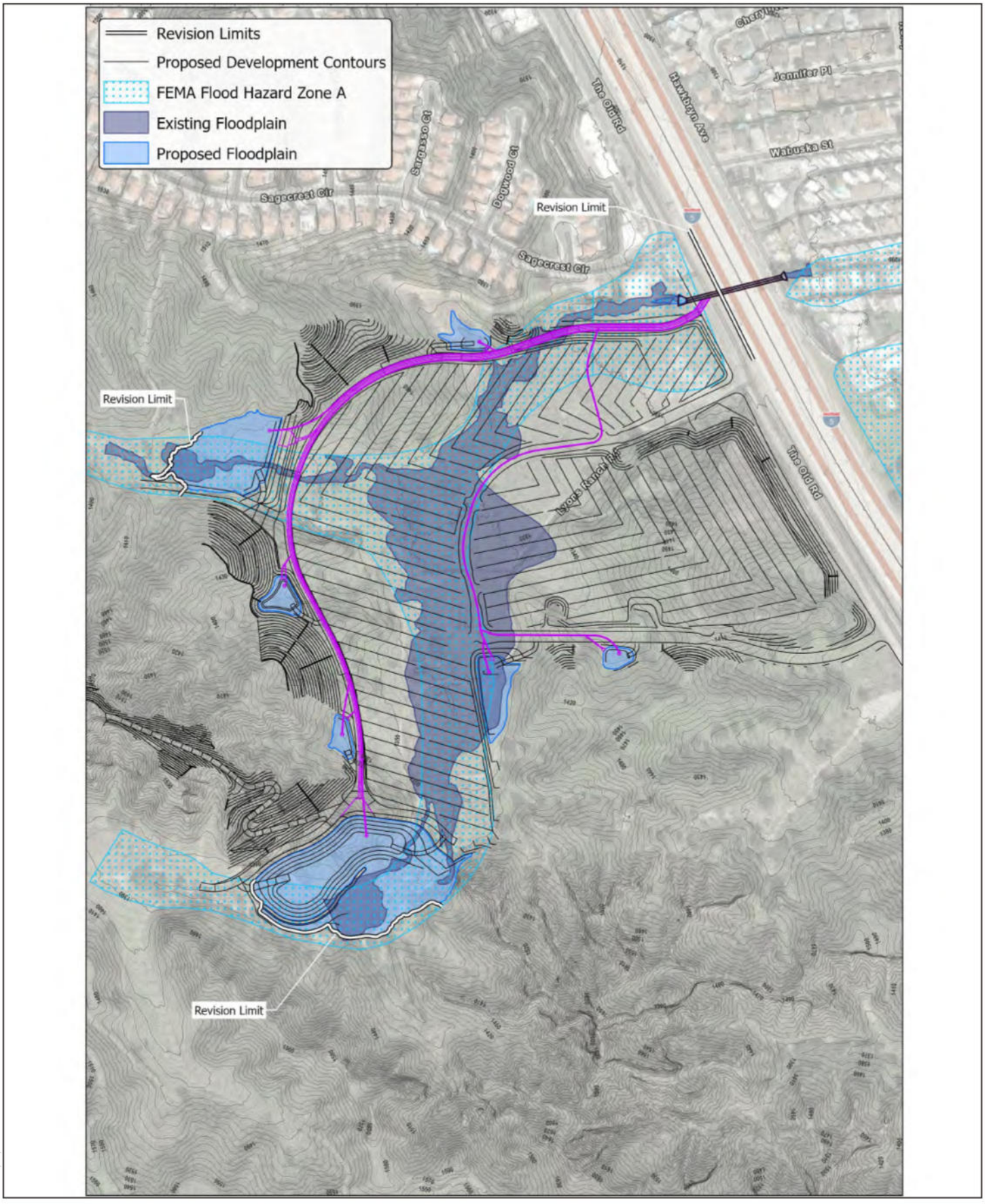
FIGURE 4.10-8b

Example Water Quality BMP Biofiltration System

Trails at Lyons Canyon Project

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SOURCE: Pace Advanced Water Engineering 2024b

FIGURE 4.10-9

Floodplain Comparison Map

Trails at Lyons Canyon Project

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4.11 Land Use and Planning

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to land use and planning, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data, including the Los Angeles County 2035 General Plan (General Plan), the Santa Clarita Valley Area Plan "One Valley, One Vision" (OVOV), the Los Angeles County Code (County Code), and specifically, Title 22, Planning and Zoning, of the County Code (Zoning Code). Other sources consulted are listed in Section 4.11.9, References.

Appendix C Biota Report—Trails at Lyons Canyon, prepared for NUWI Lyons Canyon, LLC. Prepared by Dudek, dated December 2024

Appendix E-1 Revised Geotechnical 100-Scale Plan Review- Lyons Canyon Development, Vesting Tentative Tract Map No. 83301- Los Angeles County, California, For NUWI – Lyons Canyon, LLC. Prepared by R.T. Frankian and Associates, dated February 22, 2024

Appendix G-1 Low Impact Development (LID) Report for Tract No. 83301, prepared by United Civil, Inc, dated October 3, 2024

Appendix G-3 Lyons Canyon Drainage Concept Report- Volume 1, Regional Flood Protection and Debris Management Tract No. 83301, prepared by Pacific Advanced Civil Engineer, Inc. dated September 2024

Appendix I-1 Los Angeles County Fire Department Request for Information Letter, dated July 2021

Appendix J Transportation Impact Analysis, prepared by Fehr and Peers, dated November 2023

Appendix M-1 Fire Protection Plan (FPP), prepared by Dudek, dated November 2023

Appendix M-2 Wildfire Evacuation Plan (WEP), prepared by Dudek, dated October 2023

4.11.1 Existing Conditions

This section describes the existing land use conditions in the Project site and in the surrounding areas.

Regional Setting

County of Los Angeles

With approximately 4,083 square miles, the County is geographically one of the largest counties in the country (County of Los Angeles 2015). The County stretches along 75 miles of the Pacific Coast of Southern California and is bordered to the southeast by Orange County and San Bernardino County, to the north by Kern County, and to the west by Ventura County. The County includes 88 cities and unincorporated areas. Unincorporated areas of the County comprise approximately 2,656 square miles, and include over one million people (County of Los Angeles 2015; LAA 2022).

Santa Clarita Valley Planning Area

The Santa Clarita Valley Planning Area (one of 11 County planning areas) is located approximately 30 to 40 miles northwest of downtown Los Angeles and includes the City of Santa Clarita, the residential communities at the city's periphery, and mountainous areas surrounding the Santa Clarita Valley (County of Los Angeles 2012).[1] Existing land use patterns can be traced largely to the influence of geographic constraints. The Santa Clarita Valley is framed by mountain ranges, including the San Gabriel, Santa Susana, and Sierra Pelona ranges. Angeles National Forest land, most of which is undeveloped and protected, surrounds much of the Santa Clarita Valley Planning Area. The natural topography of the Santa Clara River and its many tributary canyons, in conjunction with the National Forest holdings, has focused growth in the Santa Clarita Valley on the more central, level areas between the Valley's two major freeways: Interstate 5 (I-5) and State Route (SR) 14 (County of Los Angeles 2012). Most of the urbanized areas of the Santa Clarita Valley are concentrated within a "V" shaped area formed by these two major transportation routes. The land use map created for the County's Santa Clarita Valley Area Plan, referred to as "One Valley, One Vision" (OVOV), has reinforced the concentration of urban land uses within central portions of the Valley by designating significant areas of open space and rural residential uses between more developed areas and the National Forest lands. The intent of these designations is to maintain urban uses within the flatter portions of the Valley that have access to infrastructure, roads, and public facilities, and to minimize encroachment of urban development into hillside areas (County of Los Angeles 2012).

Local Setting

Project Site Land Use Designations

The Los Angeles County General Plan 2035 (General Plan) land use designation of Residential 2/H2 encompasses the entire Project site (County of Los Angeles 2015). As detailed further below, the Project site is included in the OVOV, as shown on Figure 2-6, Existing Land Use Designation, of Chapter 2, Environmental Setting. The land use designations of OVOV define the Residential 2 (H2) land use category as "urban residential," allowing a permitted residential density of up to two dwelling units per net acre. According to the OVOV, the Residential 2 (H2) designation provides for residential neighborhoods at densities that require urban services, providing a transition between higher density, urban development and rural communities throughout the planning area. Within land designated Residential 2 (H2), density-controlled development (clustering) is encouraged in areas with significant environmental and or topographical features or resources, in order to preserve open space for protection of these natural features or resources (County of Los Angeles 2012).

Project Site Zoning Designations

As depicted on Figure 2-7, Existing Zoning Designations, of Chapter 2, Environmental Setting, of this Draft EIR, the Project site has the following zoning designations: Heavy Agricultural (A-2-2 and A-2-1) and Unlimited Commercial-Development Program (General Commercial [C-3] and C-3-DP). The Project site is not included in a community standards district. Details of the zoning designations are provided below.

[1] With over 480 square miles (including 235 square miles within the National Forest boundaries) the Santa Clarita Valley Planning Area is the second largest of the County's 11 planning areas (after the Antelope Valley Planning Area) (County of Los Angeles 2012, 2015). The unincorporated areas under the jurisdiction of County are addressed in the General Plan and the OVOV, while the areas within the boundaries of the City of Santa Clarita are addressed in the City's General Plan. The Project site is located within the unincorporated areas of the Santa Clarita Valley Planning Area and is therefore subject to the General Plan and OVOV.

The Heavy Agricultural designations of A-2-2 and A-2-1 allow for uses such as single-family residences, crops, animal hospitals, dairies, dog kennels, and oil wells. According to Title 22, Planning and Zoning (Zoning Code), of the Los Angeles County Code (County Code), and more specifically, Chapter 22.16, Agricultural, Open Space, Resort and Recreation, and Watershed Zones, the Heavy Agricultural (A-2) zone permits a comprehensive range of agricultural uses in areas particularly suited for agricultural activities. The A-2 zone also permits low-density single-family residential development, outdoor recreational uses, and public and institutional facilities.

As stated above, portions of the Project site are zoned General Commercial (C-3) and General Commercial-Development Program (C-3-DP). According to Chapter 22.20, Commercial Zones, of the County's Zoning Code, the commercial zones provide for the orderly, well-planned, and balanced growth of commercial districts; support commercial activity to meet the needs of the community; strengthen the County's tax base; and provide appropriate transitions between commercial and residential uses to promote commercial opportunities and preserve residential quality of life. In addition to commercial uses, residential uses (including townhouses, multiple-family residential, and senior housing) are permitted or conditionally permitted within the C-3 and C-3-DP zoning designations.

Special Management Areas

Special Management Areas (SMAs) are defined by the County as areas that require additional development regulations due to the presence of natural resources, scenic resources, or identified hazards (County of Los Angeles 2015). SMAs are discussed in Section 4.11.2, Relevant Plans, Policies, and Ordinances, below. The Project site is located within the following SMAs: Hillside Management Area (HMA), Significant Ecological Area (SEA), and Fire Hazard Severity Zone (FHSZ). Specifically, the Project site is within a HMA with slopes that exceed 50% (County of Los Angeles 2019a), the Santa Susana Mountains and Simi Hills SEA (County of Los Angeles 2021a), and a "Very High" Fire Hazard Severity Zone (VHFHSZ) (County of Los Angeles 2021b).

Surrounding Land Uses

The Project site is located within unincorporated County land but, at its closest point, is approximately 300 feet west of the City of Santa Clarita (City) boundary. I-5 and a segment of The Old Road act as the dividing line between the unincorporated County areas to the east and the City to the west.[2] The Project site is surrounded by open space, single-family residential, and limited commercial uses, and is characterized by its immediate proximity to the I-5 corridor, a highly trafficked regional and interstate travel route. Figure 2-6, Existing Land Use Designations, and Figure 2-7, Existing Zoning Designations, of Chapter 2, Environmental Setting, of this Draft EIR, provide an overview of nearby land use and zoning. The land uses surrounding the Project site include the following (County of Los Angeles 2015; City of Santa Clarita 2022a):

1. **Land Uses to the North:** The Project site is bound by single-family residential uses on Sagecrest Circle in the Stevenson Ranch residential community development to the north, which is within the unincorporated County. Existing land use designations immediately north of the Project site and west of The Old Road include General Plan designations of Residential 2, Conservation (OS-C), and Major Commercial (CM) with respective zoning of Residential Planned Development (RPD), Open Space (O-S), and C-3. City land use and zoning designations to the north and east of I-5 include Urban Residential 2 (UR2) and Public Institutional (PI).[3]

[2] The City's jurisdictional boundaries spill across The Old Road to the southeast of the Project site to encompass the Taylor Trail Wilderness and Open Space and the Rivendale Park and Open Space.

[3] The City uses the same titles for land use and zoning designations within these areas.

2. **Land Uses to the East:** The Project site is bounded by The Old Road and I-5 on its northeastern boundary[4] and vacant lands on its southwestern boundary. Parcels immediately east of the Project site and west of The Old Road are vacant and designated Rural Land 5 (RL5) and Residential 2, with respective zoning of A-2-1 (with a small area of C-3) and A-2-2. On the east side of the neighboring parcel (APN 2826-023-916 - located to the east of the southwest corner of the Project site) there is a small parcel in between The Old Road and I-5 that is currently under development (APN 2826-023-041). This parcel has a General Plan land use designation of Light Industrial, and corresponding zoning of Light Manufacturing (M-1). Land uses located on the eastern side of I-5 across from the Project site include predominantly single-family residential use with isolated areas of general commercial use, as well as several vacant or partially vacant and disturbed parcels. The City land use and zoning designation east of I-5 is Mixed Use Neighborhood (MXN). The MXN is applicable to vacant and partially developed lands (including a commercial strip mall) immediately east of I-5 from just south of Hawkbryn Avenue to Calgrove Boulevard (City of Santa Clarita 2022b).
3. **Land Uses to the South:** The Mountains Recreation and Conservation Authority (MRCA) Santa Clarita Woodlands Park, including Ed Davis Park in Towsley Canyon, is located southwest of the Project site. Southeast of the Project site's boundary is the City of Santa Clarita's Taylor Trail Wilderness and Open Space and Rivendale Park and Open Space. Land located to the south of the Project site in the unincorporated County is designated Parks and Recreation (OS-PR) and zoned O-S. The Rivendale Park and Open Space Area, as well as the Ed Davis Park at Towsley Canyon, have a City land use and zoning designation of Open Space (OS). These areas support a network of dedicated and nondedicated trails.
4. **Land Uses to the West:** West of the Project site is vacant land owned by the United States Department of the Interior Bureau of Land Management (BLM), the Santa Monica Mountains Conservancy (SMMC), the MRCA, and private landowners. Current County land located immediately to the west of the Project site is designated Rural Land 2 (RL2), Rural Land 20 (RL20), and OS-C, and zoned A2-2 and O-S. Lands to the west of the Project site consist entirely of undisturbed natural open space, which support a limited network of nondedicated and unimproved dirt trails.

4.11.2 Regulatory Requirements

Federal

There are no federal policies or regulations applicable to land use and planning with respect to the Project.

State

Government Code Section 65915

California Government Code (GOV) Section 65915 sets forth the State's Density Bonus Law. The purpose of the Density Bonus Law, which was enacted in 1979, is to encourage cities and counties to offer density bonuses, incentives, and waivers to housing developments that include certain percentages of affordable units. As recognized by California courts, the Density Bonus Law rewards a "developer who agrees to build a certain percentage of low-income housing with the opportunity to build more residences than would otherwise be permitted by the applicable local regulations" (*Friends of Lagoon Valley v. City of Vacaville* [2007] 154 Cal. App. 4th 807,

[4] A small segment of the Project's northeastern boundary is defined by APN 826-022-901, which consists of currently undeveloped, publicly owned land between The Old Road to the east and the Project site to the west.

824). By incentivizing developers, the Density Bonus Law promotes the construction of housing for those low-income and special needs populations.

Senate Bill (SB) 1818 amended the State Density Bonus program (GOV Section 65915, detailed above) that became effective on January 1, 2005. SB 1818 imposed new state housing mandates on California cities regarding required density bonuses and incentives for housing developers and lowered the set-aside requirements for affordable units and the density bonus. SB 1818 increased the density bonus to a maximum of 35%. In addition, SB 1818 required that jurisdictions provide housing developers with at least one to three incentives, such as reductions in setbacks, open space, etc., rather than one that was previously required based on the percentage of affordable units in the development. The legislation also authorized housing developers to request a waiver of development standards if necessary to make a development feasible and cities must grant concessions unless certain findings are made. SB 1818 also includes density bonus provisions for senior housing development and for housing developers that donate land for affordable housing that continues the previous density bonus provisions to encourage the inclusion of childcare facilities in affordable housing developments.

Effective January 1, 2022, Assembly Bill (AB) 2345 amends SB 1818 to expand and enhance development incentives for projects with affordable and senior housing components. AB 2345 amends SB 1818 to increase the maximum density bonus from 35% to 50%. To be eligible for the maximum bonus, a project must set aside at least (i) 15% of total units for very low-income households, (ii) 24% of total units for low-income households, or (iii) 44% of for-sale units for moderate income households. Levels of bonus density between 35% and 50% are granted on a sliding scale.

Regional Housing Needs Allocation (RHNA)

The Regional Housing Needs Allocation (RHNA) is mandated by State Housing Law as part of a periodic process of updating local housing elements in city and county general plans. In Southern California, the Southern California Association of Governments (SCAG) prepares the RHNA. It contains a forecast of housing needs within each jurisdiction within the SCAG region for eight-year periods. The RHNA provides an allocation of the existing and future housing needs by jurisdiction that represents the jurisdiction's fair share allocation of the projected regional population growth. SCAG is required to develop a final RHNA methodology to distribute existing and projected housing need for the most recent (i.e., the "6th cycle") RHNA for each jurisdiction, which will cover the planning period October 2021 through October 2029. The California Department of Housing and Community Development (HCD) provided SCAG a final regional determination of 1,341,827 units for the 6th cycle RHNA on October 15, 2019. Of these total units, 90,052 must be accommodated for within the unincorporated County areas. For a more detailed discussion of RHNA and affordable housing mandates within the County and broader SCAG region, refer to Section 4.14, Population and Housing, of this Draft EIR.

Regional and Local

Los Angeles County 2035 General Plan

In accordance with State planning law (GOV Section 65300 et seq.), the General Plan provides the policy framework and establishes the long-range vision for how and where the unincorporated areas will grow through the year 2035. Adopted on October 6, 2015, as an update to the County's 1980 General Plan, the current General Plan establishes goals, policies, and programs to foster healthy, livable, and sustainable communities throughout the unincorporated County. The General Plan consists of chapters, which are called "elements", each of which covers a different topic, such as land use, housing, open space, or conservation. The General Plan consists of the following elements: Land

Use, Mobility, Air Quality, Conservation and Natural Resources, Parks and Recreation, Noise, Safety, Public Services and Facilities, Economic Development, and Housing. The purpose and objective(s) of each of these elements are summarized, below. Goals and policies established within these elements that are (1) relevant to land use and planning; and (2) applicable to the Project as listed in Table 4.11-2, General Plan Conflict Analysis, within Section 4.11.5, Impact Analysis.

Land Use Element. The Land Use Element provides strategies and planning tools to facilitate and guide future development and revitalization efforts throughout the County. In accordance with the California Government Code, the Land Use Element designates the proposed general distribution and general location and extent of various land uses. The General Plan Land Use Policy Map and Land Use Legend serve as the "blueprint" for how land will be used to accommodate growth and change in the unincorporated areas.

Special Management Areas. Special Management Areas (SMAs) are land use overlays included in the General Plan. SMAs are defined by the County as areas that require additional development regulations due to the presence of natural resources, scenic resources, or identified hazards (County of Los Angeles 2015). SMAs in the County include the following categories: SEA; National Forest; Coastal Zone; Agricultural Resource Area; Mineral Resource Zone; Scenic Resource (including HMA); Historic, Cultural, and Paleontological Resources; Seismic Hazard Zone; Flood Hazard Zone; Fire Hazard Severity Zone (FHSZ); and Airport Influence Area (County of Los Angeles 2015). The Project site is within an SEA, HMA, and FHSZ, as discussed in further detail in Section 4.11.5, Impact Analysis, for SEAs and HMAs, and in Section 4.9, Hazards and Hazardous Materials, and Section 4.20, Wildfire, for FHSZ.

Significant Ecological Areas. The Significant Ecological Area (SEA) designation is given to land in the County that contains irreplaceable biological resources. Cumulatively, the SEAs represent the wide-ranging biodiversity of the County and contain many important biological resources. Individual SEAs include undisturbed or lightly disturbed habitat that support valuable and threatened species, linkages and corridors that facilitate species movement, and are sized to support sustainable populations of its component species. The SEA Program, for those SEAs located in unincorporated areas, is administered through the General Plan goals, policies and implementation programs and the SEA Ordinance, discussed in further detail under the "Los Angeles County Code" subsection provided below. The Project site is in the Santa Susana Mountains/Simi Hills SEA (referred to as SEA) within the unincorporated County. The SEA Program prioritizes avoidance of impacts to SEA resources and onsite mitigation, however, the Program allows for offsite mitigation when avoidance and onsite mitigation is infeasible.

Hillside Management Areas. To conserve the natural beauty and public benefit of hillsides, hillside development land use activities that may result in environmental degradation are subject to regulations and design guidelines for impacts affecting, but not limited to, slope, soil erosion, natural drainage channels, and seismic and fire hazards (County of Los Angeles 2015). Hillside Management Areas (HMAs) are defined in the Land Use Element as mountainous or foothill terrain with a natural slope of 25% or greater (County of Los Angeles 2015). The HMA Ordinance is a regulatory vehicle to consider potential environmental degradation and hillside alteration in HMAs (County of Los Angeles 2015). The HMA Ordinance is codified in Chapter 22.104 (Hillside Management Areas) of the Zoning Code, which is further discussed under "Los Angeles County Code" subsection provided below.

Fire Hazard Severity Zones. While all of California is subject to some degree of fire hazard, there are specific features that make some areas more hazardous. The California Department of Forestry and Fire Protection (CAL FIRE) is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as FHSZs, influence how and where buildings are constructed to reduce risks associated with wildland fires. FHSZs are discussed in greater detail under the "Safety Element" subsection, below and in

Section 4.20, Wildfire, of this Draft EIR. FHSZs in the unincorporated areas are classified as Very High, High, and Moderate. The Project site is located within a VHFHSZ (County of Los Angeles 2021b).

Mobility Element. The Mobility Element provides an overview of the transportation infrastructure and strategies for developing an efficient and multimodal transportation network. This Element assesses the challenges and constraints of the Los Angeles County transportation system and offers policy guidance to reach the County's long-term mobility goals. Two sub-elements—the Highway Plan and Bicycle Master Plan—supplement the Mobility Element. These plans establish policies for the roadway and bikeway systems in the unincorporated areas, which are coordinated with the existing road and bikeway networks in the 88 cities in the County. The General Plan also establishes a program to prepare community pedestrian plans, with guidelines and standards to promote walkability and connectivity throughout the unincorporated areas. Applicable goals and policies from the Mobility Element are also included in Section 4.17, Transportation.

Air Quality Element. The Air Quality Element summarizes air quality issues and outlines the goals and policies in the General Plan that will improve air quality and reduce greenhouse gas emissions. One sub element— the Community Climate Action Plan—supplements the Air Quality Element. This plan establishes actions for reaching the County's goals to reduce greenhouse gas emissions in the unincorporated areas. Applicable goals and policies from the Air Quality Element are also included in Section 4.3, Air Quality and 4.8, Greenhouse Gas Emissions, in this Draft EIR.

Housing Element. State law requires that each jurisdiction's Housing Element consist of "identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled program actions for the preservation, improvement and development of housing" (GOV Section 65583). The Housing Element must analyze and plan for housing for all segments of the community. The Housing Element was adopted by the County Board of Supervisors on May 17, 2022 (County of Los Angeles 2022a). The following strategies included in the 2021-2029 Housing Element (Housing Element) are applicable to the Project (County of Los Angeles 2022a):[5]

> ***Strategy 1.*** Ensure Housing Availability. The State recognizes that housing availability is an issue of "vital State-wide importance." The County places particular emphasis on providing housing opportunities to extremely low, very low, low, and moderate income households, and those with special needs. Accordingly, the following policies are designed to guide future development toward the production of a diverse housing supply to meet the varied needs of the population as a whole.
>
> ***Strategy 2.*** Ensure Housing Affordability. To accommodate the housing needs of all economic segments of the population, the County must ensure a housing supply that offers a range of choices. A variety of mechanisms should be explored to enhance affordability.
>
> ***Strategy 5.*** Affirmatively Further Fair Housing and Ensure Equity. The opportunity to obtain adequate housing without discrimination is not only an integral part of creating and maintaining a diverse housing supply, but also an important strategy for equitable development.
>
> ***Strategy 6.*** Ensure Sustainability in Housing Production. To meet state, regional, and local sustainability goals, the County must minimize the negative impacts of housing production on the environment. The Housing Element, however, encourages planned housing in areas covered by a County-approved area plan or specific plan that has been analyzed by the County under the California Environmental Quality Act and

[5] Potential to conflict with Housing Element goals and policies is addressed in Table 4.11-1 in Section 4.11.5, Impact analysis. Goals and policies are also included in Section 4.14, Population and Housing, of this Draft EIR.

that plans for housing, affordable housing, natural resource protection, open space preservation, adequate water supplies, necessary infrastructure, wildfire protection, energy conservation, and other sustainable development features.

Conservation and Natural Resources Element. The Conservation and Natural Resources Element guides the long-term conservation of natural resources and preservation of available open space areas. The Conservation and Natural Resources Element addresses the following conservation areas: Open Space Resources; Biological Resources; Local Water Resources; Agricultural Resources; Mineral and Energy Resources; Scenic Resources; and Historic, Cultural and Paleontological Resources. Applicable goals and policies from the Conservation and Natural Resources Element are also included in Section 4.4, Biological Resources, of this Draft EIR.

Parks and Recreation Element. The Parks and Recreation Element provides policy direction for the maintenance and expansion of the County's parks and recreation system. The purpose of the Parks and Recreation Element is to plan and provide for an integrated parks and recreation system that meets the needs of residents. The goals and policies set forth in this Element address the growing and diverse recreation needs of the communities served by the County. Applicable goals and policies from the Parks and Recreation Element are also included in Section 4.16, Recreation, of this Draft EIR.

Noise Element. Noise levels can have a significant impact on quality of life. Excessive levels of noise result in increased neighborhood annoyance, dissatisfaction, and in some cases, health and safety hazards. Due to the County's geographic, environmental, and cultural diversity, the levels and types of noise issues vary significantly. The purpose of the Noise Element is to reduce and limit the exposure of the general public to excessive noise levels. The Noise Element sets the goals and policy direction for the management of noise in the unincorporated areas. Applicable goals and policies from the Noise Element are also included in Section 4.13, Noise, of this Draft EIR.

Safety Element. The purpose of the Safety Element is to reduce the potential risk of death, injuries, and economic damage resulting from natural and man-made hazards. The California Government Code requires the General Plan to address "the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction, and other seismic hazards…; flooding; and wildland and urban fires." The Safety Element addresses only limited aspects of man-made disasters, such as hazardous waste and materials management, in particular, those aspects related to seismic events, fires, and floods. In general, hazardous materials management is addressed in the Los Angeles County Integrated Waste Management Plan (California Code of Regulations [CCR] Section 18755.5). The Safety Element works in conjunction with the Operational Area Emergency Response Plan (OAERP), which is prepared by County's Chief Executive Office - Office of Emergency Management (CEO OEM). The OAERP strengthens short and long-term emergency response and recovery capability and identifies emergency procedures and emergency management routes in the County. Applicable goals and policies from the Safety Element are also included in Section 4.9, Hazards and Hazardous Materials, Section 4.15 Public Services, and Section 4.19, Utilities and Service Systems, of this Draft EIR.

Public Services and Facilities Element. The Public Services and Facilities Element promotes the orderly and efficient planning of public facilities and infrastructure in conjunction with land use development and growth. This Element focuses on services and facilities that are affected the most by growth and development: Drinking Water; Sanitary Sewers; Solid Waste; Utilities; Early Care and Education; and Libraries. The Element also discusses the key role of collaboration among County agencies in efficient and effective service provision and facilities planning. This Element works in conjunction with the Los Angeles County Department of Public Works (Public Works) Strategic Plan, which outlines service delivery goals for sanitary sewer, water supply, flood protection, water quality, garbage

disposal, and traffic lighting; Integrated Waste Management Plan; Sewer System Management Plan; Library Strategic Plan; and other plans to address the provision of public services and facilities to the unincorporated areas. Applicable goals and policies from the Public Services and Facilities Element are also included in Section 4.9, Hydrology and Water Quality, Section 4.15 Public Services, and Section 4.19, Utilities and Service Systems, of this Draft EIR.

Economic Development Element. The Economic Development Element outlines the County's economic development goals and provides strategies that contribute to the economic well-being of the County. The overall performance of the economy and economic development efforts strongly effect land use and development patterns. Through the implementation of this Element, the County is planning for the economic health and prosperity of its physical and social environments and planning strategically for the future economy. The Element works in conjunction with the Los Angeles County Strategic Plan for Economic Development, which was adopted by the County Board of Supervisors in 2010.

Santa Clarita Valley Area Plan (OVOV)

The General Plan provides goals and policies to achieve County-wide planning objectives for the unincorporated areas and is the foundational document for all community-based plans that serve the unincorporated areas, such as Area Plans, community or neighborhood plans, and Transit Oriented District specific plans. The General Plan identifies 11 Planning Areas, which make up the Planning Areas Framework. The purpose of the Planning Areas Framework is to provide a mechanism for local communities to work with the County to develop plans that respond to their unique and diverse character. Area plans focus on land use and policy issues that are specific to the Planning Area. Community or neighborhood plans cover smaller geographic areas within the Planning Area, and address neighborhood and/or community-level policy issues. An Area Plan must be prepared or updated for each of the 11 Planning Areas, which provides opportunities to update community-based plans, as well as implementation tools of the General Plan, such as specific plans and community standards districts. As detailed further below, the Project site is located within the Santa Clarita Valley Area Plan, and the OVOV.

The OVOV is a component of the County's General Plan and is intended to provide focused goals, policies, and maps to guide the regulation of development within the unincorporated portions of the Santa Clarita Valley, and is consistent with both the County's comprehensive General Plan and with the City of Santa Clarita's General Plan. The Santa Clarita Valley Area Plan Update was adopted by the County Board of Supervisors on November 27, 2012. It was created as a joint planning effort with the City of Santa Clarita. The other component is the City of Santa Clarita General Plan, which was adopted by the City of Santa Clarita City Council on June 14, 2011. Together, the County's Area Plan and the City's General Plan provide a unified vision for development and conservation for the entire Santa Clarita Valley (County of Los Angeles 2012).

The Santa Clarita Valley Planning Area is the second largest after the Antelope Valley Planning Area. It includes the City of Santa Clarita, the residential communities at the city's periphery, and mountainous areas surrounding the valley. Although most of the unincorporated area in the Planning Area consists of vacant mountainous areas, unincorporated areas near the City of Santa Clarita include a wide variety of land uses. The wide valleys east of the City include the communities such as Agua Dulce. These areas consist primarily of single-family residential and farming uses. However, parcels used for industrial and utility uses are scattered throughout these areas. Areas directly north and west of the City feature a range of urbanized land uses, including single-family uses, major commercial retail centers along I-5 (including Six Flags Magic Mountain), utilities, and a large concentration of industrial uses west of I-5 and north of SR-126. Rural canyon neighborhoods such as Val Verde are primarily single-family uses surrounded by mountainous undeveloped land.

Los Angeles County Code

Title 22, Planning and Zoning. The Zoning Code includes regulations concerning where and under what conditions various land uses may occur in the County's unincorporated areas. It also establishes zone-specific height limits, setback requirements, and other development standards, for residential, agricultural, commercial, and all other types of land uses. The Zoning Code is the primary tool for implementing the County's General Plan. The purpose of the Zoning Code is to encourage, classify, designate, regulate, and restrict the highest and best locations and uses of buildings and structures, for residential, agricultural, commercial, or other purposes. Applicable chapters/sections of the Zoning Code include Section 22.16.030 (Land Use Regulations for Zones A-1, A-2, O-S, R-R, and W); Section 22.20.030 (Land Use Regulations for Zones C-H, C-1, C-2, C-3, C-M, C-MJ, and C-R); Chapter 22.102 (Significant Ecological Areas Ordinance); Chapter 22.104 (Hillside Management Areas Ordinance); Section 22.140.170 (Density Controlled Development); Chapter 22.166 (Housing Permits); and Chapter 22.174 (Oak Tree Ordinance).

Section 22.16.030, Development of Townhouses within A-2-Zones. As stated in Section 22.16.030, Land Use Regulations for Zones A-1, A-2, O-S, R-R, and W of the County's Zoning Code, a CUP is required for development of townhouses within the A-2 zone, pursuant to Section 22.158.050. The Project includes townhouses within the A-2-1 and A-2-2 zones.

Chapter 22.102, Significant Ecological Areas. Chapter 22.14 (Definitions) of the Zoning Code defines an SEA as "…[l]and that is identified to hold important biological resources representing the wide-ranging biodiversity of the County, based on the criteria for SEA designation established by the General Plan and as mapped in the adopted SEA Policy Map" (County of Los Angeles 2022b). Chapter 22.102 establishes regulations to conserve the unique biological and physical diversity of the natural communities found within SEAs by requiring development to be designed to avoid and minimize impacts to SEA resources. Pursuant to Chapter 22.102.080 (SEA Conditional Use Permit), projects that are located within an SEA are subject to SEA Technical Advisory Committee (SEATAC) review, and generally require an SEA CUP, unless it is determined through SEATAC review that a project would not conflict with Sections 22.102.070 (Protected Tree Permit), 22.102.090 (SEA Development Standards) and 22.102.100 (Natural Open Space Preservation) of the Zoning Code. In support of this SEATAC review process, an Implementation Guide was issued on January 16, 2020. The SEA CUP now incorporates review of the SEA Protected Tree Standards, incorporating the Protected Tree Permit otherwise administered under the Los Angeles County Oak Tree Ordinance. All projects that are located within an SEA must provide a Burden of Proof statement detailing how a project will meet each required SEA finding. Burden of Proof statements provide details as to how a project meets the findings, either through project design elements or mitigation measures.

Chapter 22.104, Hillside Management Areas. Per Chapter 22.14.080 of the Zoning Code, HMAs are defined as areas with 25% or greater natural slopes (County of Los Angeles 2022b). County HMAs (and significant ridgelines) are identified in the General Plan's Hillside Management Areas and Ridgeline Management Map, which further categorizes HMAs by their relative slope percentages (e.g., HMAs with slopes ranging from 25% to 50%, and HMAs with slopes in exceedance of 50%) (County of Los Angeles 2021a). The purpose of Chapter 22.104 is to ensure that development in hillside areas "…preserves and enhances the physical integrity and scenic value of [HMAs], to provide open space, and to be compatible with and enhance community character" (County of Los Angeles 2022b). Pursuant to Chapter 22.104.101, the County requires that hillside development in the unincorporated areas be located outside of HMAs, to the extent feasible (County of Los Angeles 2022b). If it is determined to be infeasible to locate development entirely outside of HMAs, then a project shall concentrate development in the portions of HMAs with the fewest

possible “hillside constraints” and shall apply sensitive hillside design techniques tailored to the unique site characteristics.

Whereas the General Plan contains policies to preserve significant natural features in hillside areas, Appendix I of Chapter 22.104 includes the County’s Hillside Design Guidelines as a mechanism to implement these policies. The Hillside Design Guidelines include specific and measurable design techniques that can be applied to residential, commercial, and other types of projects. Some design techniques may be more appropriate or feasible than others, depending on the type of project, location, size, complexity, site constraints, and other design techniques incorporated into the project. The Hillside Design Guidelines are divided into five major design categories containing a variety of sensitive hillside design measures. The categories include site planning, grading and facilities, road circulation, building design, and landscaping. Pursuant to Chapter 22.104.070 (Development by County of Special District), the County is required to review projects proposed within HMAs and prepare a written report that documents substantial compliance with the Hillside Design Guidelines. The reports are subsequently included in a Project’s publicly available documents (County of Los Angeles 2022b).

In addition to compliance with the Hillside Design Guidelines, pursuant to Chapter 22.104.030, a CUP is required for any development located wholly or partially in an HMA. The CUP imposes required conditions of approval (COAs) (Chapter 22.104.150), including COAs pertaining to required preservation of open space (County of Los Angeles 2022b). Chapter 22.104.050.A.2 requires that (a) at least 25% of the net area of the project site be provided as required open space; and (b) that up to 50% of the required open space may be improved open space (subject to County review). In terms of use and configuration (Chapter 22.104.050.B) at least 51% of required natural open space must be configured into one contiguous area. In addition, pursuant to Chapter 22.104.050.B.6(a), improved open space may include: (i) parks, playgrounds, golf courses, and other recreational facilities; (ii) equine riding, hiking, and mountain biking trails; (iii) pedestrian paseos; and (iv) community gardens (County of Los Angeles 2022b).

Section 22.140.170, Density Controlled Development. Chapter 22.140.170 of the Zoning Code establishes standards related to CUPs for density-controlled development. Pursuant to Chapter 22.14 (Definitions) “density-controlled development" is the concentration of dwelling units on one or more portions of a lot resulting in the remainder of the lot being free of buildings or structures, as opposed to development spread throughout the entire lot (County of Los Angeles 2022b). Density controlled development is accomplished by computing density on a project level rather than a lot-by-lot basis, and by the use of smaller lots than are customarily permitted in the zone in which the development is proposed, while retaining the remaining portion of such lot as permanent open space (County of Los Angeles 2022b). In approving a CUP for density-controlled development, the County imposes the following Required Standards (Chapter 22.140.170.C): (1) the Preservation of Commonly Owned Areas; (2) Required Area Per Dwelling Unit; (3) Dwelling Unit Type; and (4) Location, Separation, and Height of Buildings (County of Los Angeles 2022b). Pursuant to Chapter 22.140.170.D, the County may also impose additional standards via the CUP related to the location of parking facilities, architectural design, yards, landscaping and/or utilities (County of Los Angeles 2022b).

Chapter 22.166, Housing Permits. As stated in Chapter 22.166, Housing Permits of the Zoning Code, a housing permit is required by the County to facilitate the increased production of affordable housing and senior housing. This applies to the Project, which would provide affordable senior housing; therefore, the Project is eligible to receive various benefits, including but not limited to: density bonuses, incentives, waivers or reductions of development standards, and permit streamlining pursuant to the State Density Bonus Law, as set forth in GOV Section 65915, as amended, or any other State laws or local ordinances or

policies that aim to increase the production of affordable housing, including transitional and supportive housing, and senior housing. The Project's proposed waivers and incentives are detailed in Section 3.2.1, Land Entitlements, of Chapter 3, Project Description.

Chapter 22.174, Oak Tree Permit. The Oak Tree Permit process is established (a) to recognize oak trees as significant historical, aesthetic and ecological resources, and as one of the most picturesque trees in the County, lending beauty and charm to the natural and manmade landscape, enhancing the value of property, and the character of the communities in which they exist; and (b) to create favorable conditions for the preservation and propagation of this unique, threatened plant heritage, particularly those trees that may be classified as heritage oak trees,[6] for the benefit of current and future residents of the County. One purpose of the permit is to preserve and maintain healthy oak trees in the development process. Damage to or removal of oak trees is prohibited under this Code section.

Under Chapter 22.174.040, where a change in grade is proposed, the change within the protected zone of each plotted tree shall be specified, including the location of all oak trees proposed to be removed and/or relocated, or within 200 feet of proposed construction, grading, landfill or other activity. Each tree shall be assigned an identification number on the plan and the protected zone shall be shown for each plotted tree and the location and size of all proposed replacement trees, proposed and existing land uses, location of all surface drainage systems, and other development features which the director deems necessary to process the application must be plotted.

4.11.3 Thresholds of Significance

The thresholds used for the analysis of land use and planning impacts are based on the County's adopted California Environmental Quality Act (CEQA) Guidelines, which incorporates Appendix G of the State CEQA Guidelines as well as County-specific thresholds of significance. A project would have a significant impact with respect to land use and planning if it would:

Threshold 4.11a: Physically divide an established community.

Threshold 4.11b: Cause a significant environmental impact due to a conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Threshold 4.11c: Conflict with the goals and policies of the General Plan related to Hillside Management Areas or Significant Ecological Areas.

4.11.4 Methodology

The physical division of an established community (see Threshold 4.11a) can occur through construction of new linear transportation infrastructure (e.g., roads, railroad), which would result in truncation or interruption of pedestrian and vehicular connectivity in an area that may isolate certain areas of a community. For the purposes of this Draft EIR, the potential for the Project to physically divide an established community is evaluated through

[6] Heritage oak trees are either of the following: any oak tree measuring 36 inches or more in diameter, measured 4.5 feet above the natural grade; any oak tree having significant historical or cultural importance to the community, notwithstanding that the tree diameter is less than 36 inches (Section 22.174.040 of the Zoning Code).

consideration of whether new roads, freeways, railways, or other barriers would be constructed through an existing community that would physically impair mobility within an existing community.

Section 4.11.5, Impact Analysis, identifies significant impacts related to land use and conflicts with applicable planning documents. As stated in CEQA Guidelines Section 15382, a conflict would not result in a significant impact unless it would result in an adverse physical change to the environment. The evaluation under Thresholds 4.11b and 4.11c evaluates the potential for Project implementation to interfere with land use plans adopted for the purpose of avoiding or mitigating an environmental effect, as well as interfere with the goals and policies of HMAs or SEAs, such that significant adverse environmental effects would result. This section focuses on direct land use impacts. Indirect impacts are secondary effects resulting from land use policy implementation and are generally addressed in other topical sections of this Draft EIR. For example, air quality impacts resulting from increased vehicle trips as a result of Project implementation are discussed in Section 4.3, Air Quality, of this Draft EIR; transportation impacts resulting from an increase in vehicle miles traveled (VMT) associated with Project implementation are discussed in Section 4.17, Transportation, of this Draft EIR.

4.11.5 Impact Analysis

Threshold 4.11a: Would the project physically divide an established community?

The Project site is largely undeveloped and is bordered by open space on its western, southern, and southeastern boundaries. The Old Road and I-5 are east of the Project site. Residential uses are located immediately north of the Project site, and a mix of commercial and residential uses are located on the eastern side of I-5, across from the Project site. Previously disturbed portions of the Project site include some basic infrastructure, such as fencing, a metal frame bridge, trails, and dirt roads. Lyons Ranch, which is currently used as an emergency access road and non-dedicated trail, intersects the Project site from the northeastern end and continues off-site to the west. Direct access to the Project site is currently provided by The Old Road, parallel to the easternmost boundary of the Project site.

The physical division of an established community typically refers to the construction of a linear feature (e.g., a major highway or railroad tracks) or removal of a means of access (e.g., a local road or bridge) that would impair mobility within an existing community. Although the Project site is private property and does not contain any developed uses, the Project site is currently used to access dedicated and non-dedicated trails, parks, and open space located to the northwest, west, south, and/or east of the Project's proposed development footprint. Implementation of the Project could result in a physical division of an existing community if access to and connectivity with the existing on- and off-site trail network is not adequately preserved. Although the Project would remove and modify portions of the existing alignment of Lyons Ranch Road (a private, on-site access road), the Project's proposed roadway network and trail improvements would facilitate rather than impair mobility within the existing community (as discussed in further detail, below) and these improvements would not create a physical barrier within the site. Furthermore, California Civil Code Section 1009 restricts implied dedications to the public for all uses, including recreational uses, on private property (CA Civ Code Section 1009 [2019]). Therefore, the public cannot gain access easements on private land for trail usage. As such, the Project would not physically divide an established community due to non-dedicated trail usage of the site.

Implementation of the Project would result in development of 510 dwelling units with a mix of attached and detached dwelling units, a recreational lot, infrastructure improvements, as well as approximately 175 acres of preserved open space and improved open space. Project infrastructure would include internal roadways, proposed

trails (i.e., private access road), with connections to existing trails, and the conservation of existing non-dedicated trails in the southern portion of the Project site. With implementation of the Project, local public access to the Project site would continue to be provided by The Old Road, which would be widened to accommodate an increase in roadway traffic anticipated as a result of the Project's residential development (for a more detailed analysis of impacts to the Project's proposed circulation system, refer to Section 4.17, Transportation, of this Draft EIR).

As shown on Figure 3-2, Vesting Tentative Tract Map No. 83301, of Chapter 3, Project Description, the Project would construct a gated, on-site private access road that would be located along the outer northern and western edge of the proposed development area. This paved access road would also be available for pedestrian, hiking, equestrian, and/or biking use for future residents and the public. The access road would serve as a multi-use trail system, would be 28-feet wide, and would have a reciprocal access easement to provide access to all residential lots, open spaces, County-maintained facilities, and adjacent properties. A new trailhead would be constructed near the gated connection of the access road to The Old Road at the northeastern corner of the Project site. As depicted on Figure 3-5, Conceptual Trail Map, of Chapter 3 of this Draft EIR, these on-site non-dedicated trails would connect to adjacent public open spaces outside of the Project boundaries, including the City of Santa Clarita's Rivendale Park and Open Space in Towsley Canyon (City of Santa Clarita 2024). Additionally, a portion of the proposed private access road would replace the existing Lyons Ranch Road on the southern portion of the Project site and would continue off-site towards the west. As illustrated in Figure 3-5, several existing non-dedicated trails are located within the designated natural open space portion of the Project site, which would be preserved as part of the Project. Existing non-dedicated trails on the southern portion of the site would also remain and would eventually connect to the off-site portions of Rivendale Park and Open Space and Ed David Park at Towsley Canyon.

Due to the location of the Project site immediately west of I-5 and south of the nearest residential community, Project implementation would not impair mobility within an existing community. As discussed above and in Chapter 3, Project Description, the Project would preserve and enhance local roadway access to the Project site for future Project residents and the public via the widening of The Old Road and development of a formal, on-site roadway network. In addition, the Project would maintain existing pedestrian/hiking/biking/equestrian access to the non-dedicated trail network on- and off-site, which would subsequently preserve existing connectivity with the surrounding parks and open space areas. Therefore, the Project would not physically divide an established community and the impact would be less than significant.

Threshold 4.11b: Would the project cause a significant environmental impact due to a conflict with any County land use plan, policy, or regulation adopted for **the** ***purpose of avoiding or mitigating an environmental effect?***

The County land use plans applicable to the Project and adopted for the purpose of avoiding or mitigating an environmental effect include the General Plan and the OVOV, which is implemented under the General Plan (County of Los Angeles 2012, 2015). The Project's potential conflict with the goals, objectives, and policies of these plans is addressed per the analysis provided within Tables 4.11-1 and 4.11-2, below. Applicable County regulations adopted for the purpose of avoiding or mitigating an environmental effect include the standards codified within Chapters 22.102 (Significant Ecological Areas), 22.104 (Hillside Management Areas), 22.172 (Oak Tree Permits); and 22.140.170 (Density-Controlled Developments) of the Zoning Code (County of Los Angeles 2022b). The Project's potential to conflict with these code standards is also analyzed and discussed below.

Los Angeles County 2035 General Plan Conflict Analysis

This analysis provides the reader with a general overview of whether the Project is in harmony with the overall intent of the County's General Plan goals and policies. It is within the County's purview to decide if the Project conflicts or

does not conflict with applicable County goals or policies. The discussions in this Draft EIR on the subject of General Plan potential to conflict represent the best attempt of County staff to advise the Board of Supervisors of its opinions as to whether the Project is consistent with identified goals and policies of the General Plan. Based on the evaluations contained in the Draft EIR, including the following discussion, the Project generally does not conflict with the General Plan. The Project's potential to conflict with applicable goals and policies of the County's General Plan is evaluated below in Table 4.11-1, Potential to Conflict with Applicable General Plan Goals and Policies.

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
Chapter 6, Land Use Element	
Goal LU 1. A General Plan that serves as the constitution for development, and a Land Use Policy Map that implements the General Plan's Goals, Policies and Guiding Principles.	
Policy LU 1.10. Prohibit plan amendments that increase density of residential land uses within mapped fire and flood hazard areas unless generally surrounded by existing built development and the County determines the adjoining major highways and street networks can accommodate evacuation as well as safe access for emergency responders under a range of emergency scenarios, as determined by the County.	**No Conflict.** As discussed in Section 4.20, Wildfire, of this Draft EIR, the Project site is located within a VHFHSZ that falls within a State Responsibility Area (SRA). In addition, the lowland areas in the northeastern portion of the Project site are situated in a 100-year flood zone (Zone A), as detailed in Section 4.10, Hydrology and Water Quality, of this Draft EIR. However, the Project site is adjacent to existing built development (i.e., commercial, and residential uses) to the north and appurtenant to The Old Road and I-5 (a major highway) to the east. As detailed in Section 4.17, Transportation of this Draft EIR, vehicular access to the Project site would be provided directly from The Old Road via two unsignalized driveways at the north and south, which have been analyzed to determine their ability to accommodate an increase in traffic. The analysis found that both driveways are projected to operate at an acceptable Level of Service and would not substantially increase hazards related to queuing of vehicles entering or exiting the Project site in the event of an evacuation. The Project would provide on-site emergency vehicle access via proposed "A" Street and "B" Street, in addition to the 26-foot clear-to-sky private access road that would be used as a fire road, for emergency or maintenance vehicle access (see Section 4.9, Hazards and Hazardous Materials, and Section 4.17 of this Draft EIR for further details). An egress-ingress roadway to the property west of the Project site, proposed Tentative Tract Map (TTM) 74979, would also be provided. Consistent with County Code Title 21, Subdivisions and access requirements of the County Fire Code, the Project's roadways would meet all County access requirements for new residential development in a VHFHSZ. The private access road, which would also serve as an emergency access route, would also include a gate to prevent the public from obstructing the roadway and limit access to adjacent wildland areas. The gate would comply with all regulations of the County Fire Code, including being operatable by one person if power fails, a Knox Box, and be made of non-combustible materials, as detailed in Section 4.20 of this Draft EIR. The Project's Wildfire Evacuation Plan (Appendix M-2) determined that the Project, including any existing land uses would be able to evacuate within identified potential evacuation routes available to residents and provides emergency preparedness resources to support situational awareness and household preparedness.
Goal LU 2. Community-based planning efforts that implement the General Plan and incorporate public input, and regional and community level collaboration.	
Policy LU 2.10. Ensure consistency between land use policy and zoning by	**No Conflict.** No zone changes are proposed or required for the Project. The proposed development would be located on smaller lots through the density-controlled development CUP being sought by the Applicant, which is intended to

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
undergoing a comprehensive zoning consistency analysis that includes zoning map changes and Zoning Code amendments, as needed.	preserve more expansive open space on the Project site than would otherwise be achievable without the CUP. Approval of a CUP for development of townhouses within the A-2 zone would be required with implementation of the Project.
Goal LU 3. A development pattern that discourages sprawl and protects and conserves areas with natural resources and SEAs.	
Policy LU 3.1. Encourage the protection and conservation of areas with natural resources, and SEAs.	**No Conflict.** As detailed in Chapter 2, Environmental Setting, the Project site is within the SEA and within an HMA. The Project would cluster development in a manner that would designate approximately 175 acres of the Project site as preserved areas and improved open space, thereby concentrating development and minimizing development within the SEA and HMA. Additionally, the Project would reduce impacts to federal and State-listed species by providing on-site habitat preservation, as detailed in Section 4.4, Biological Resources. The Project includes several mitigation measures to reduce SEA impacts resulting from the Project to less than significant. The Project is consistent with the SEA Ordinance as modified based on biological recommendations from SEATAC, and adequacy of the Biota Report (Appendix C). As detailed in Chapter 3, of EIR, the Project would require an Oak Tree Permit in accordance with Chapter 22.17, Oak Tree Permits, of the County Code. The Project would also require approval of a CUP to remove SEA-protected trees. With approval of the SEA CUP, the Project's proposed residential design would protect natural resources and the SEA. Additionally, the Project would be required to demonstrate compliance with the County's Hillside Design Guidelines (County of Los Angeles 2019b). The Project proposes a number of amenities to residents and to the surrounding community, including abundant open space and an extensive trail network connecting the public to the Project's open space and adjacent off-site trail networks and open space. With implementation of mitigation measures, and approved CUPs, the Project would not conflict with this policy.
Goal LU 6. Protected rural communities characterized by living in a non-urban or agricultural environment at low densities without typical urban services.	
Policy LU 6.1. Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.	**No Conflict.** The Project would be compatible in character and use with the existing residential uses on Sagecrest Circle in the Stevenson Ranch development, directly north of the Project site, as well as with surrounding open space and parkland. Both subdivisions exhibit similar lot size, and the Project would be developed with high-quality dwelling units that would enhance the residential character of the area. Additionally, through the density-controlled development CUP, which is the County's mechanism for encouraging flexible siting and design techniques in hillside areas, and the CUPs to allow townhouses in the A-2 and A-2-1 districts, respectively, the Project would locate residential areas near existing residential uses, with the majority of the Project site designated for natural open space, proximate to open space located to the west, south, and east of the Project site. The Project's on-site natural and improved open space land would buffer the Lyon Canyon drainage and oak woodland resources from the proposed development area. In addition, the Project would enhance the natural vegetation within the dedicated open space with plantings of additional oak trees and would remove invasive species as part of the

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
	Project's SEA resource preservation. The Project would not have incompatible land uses.
Policy LU 6.7. Protect rural communities from the encroachment of incompatible development.	**No Conflict.** The Project site is located adjacent to an existing suburban community, and there are no rural communities adjacent to the Project site. As a result, no rural community would be affected by the Project, and the Project would not conflict with this policy.
Policy LU 6.8. Encourage land uses and developments that are compatible with the natural environment and landscape.	**No Conflict.** The Project site is located appurtenant to the I- 5 freeway to the east and adjacent to an existing residential subdivision (Stevenson Ranch) to the north. The Applicant is requesting a density-controlled development (clustered unit) program, meaning that the Project's proposed residential development, roadway infrastructure, and service systems (e.g., water, wastewater, power, telecommunications, etc.) would all be clustered within the northeastern portion of the Project site. The northeastern portion of the site is closest to existing development/service systems and is more readily accessible from I-5 via The Old Road, which would promote efficiencies in services, transportation, and infrastructure. The Project would designate open space comprising 175 acres of preserved open space and improved open space over the remainder of the Project site. The Project's open space areas would mostly be on the southern and northwestern portion of the site, in an area contiguous to existing natural open space and recreational uses and, thus, would support the conservation and protection of those uses. The Project's proposed clustering of development and preservation of open space would reduce impacts to wildlife, natural drainage courses, and protected trees, and would preserve significant ridgelines by avoiding development in these areas.
Goal LU 9. Land use patterns and community infrastructure that promote health and wellness.	
Policy LU 9.2. Design development adjacent to natural features in a sensitive manner to complement the natural environment.	**No Conflict.** The Project would provide open space contiguous to existing open space to the west, south, and east of the Project site's boundary. In addition, the Project site would buffer the retained Lyon Canyon drainage and oak woodland resources from the proposed development area. The Project would enhance the natural vegetation within the dedicated open space with plantings of additional oak trees and removal of invasive species as part of the Project and SEA resource preservation, as detailed in Section 4.4, Biological Resources. By clustering development and preserving the vast majority of the Project site as open space, the Project has designed development adjacent to natural features in a sensitive manner to complement the natural environment.
Policy LU 9.3. Consider the built environment of the surrounding area in the design and scale of new or remodeled buildings, architectural styles, and reflect appropriate features such as massing, materials, color, detailing or ornament.	**No Conflict.** The Project would construct 510 residential dwelling units, including townhouses and a senior housing facility, within approximately 41 acres in the northeastern portion of the Project site. In total, the Project's on-site impact area, including the Project development footprint, fuel modification zones, and debris extents, would be approximately 83 acres in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space. This area is easily accessible from I-5 via The Old Road and is adjacent to existing development, such as the Stevenson Ranch residential community and commercial buildings. As detailed in Chapter 3 of this Draft EIR, the design of the proposed residences takes into consideration aesthetics, with a variety of visually cohesive architectural styles and a mix of complementary building materials. The architectural styles, building materials, and color palette have been chosen to ensure compatibility with the existing adjacent development. The townhouses would be two- to three-story buildings with a maximum height of 38 feet, while

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
	the senior housing facility would have a maximum height of 45 feet. The proposed architectural elements conform to Irving Gill, Spanish Modern, and Wrightian styles, which are visually compatible with the adjacent Stevenson Ranch community. The overall design, scale, massing, materials, color, and detailing of the proposed buildings complement the features of the adjacent built environment. Additionally, the proposed landscaping and surrounding hillside and valley terrain would contribute to the visual appeal of the site while also providing some screening for the development. As a result, the Project is expected to integrate seamlessly within the surrounding area, minimizing conflicts and enhancing the visual quality of the built environment.
Goal LU 10. Well-designed and healthy places that support a diversity of built environments.	
Policy LU 10.1. Encourage new development to employ sustainable energy practices, such as utilizing passive solar techniques and/or active solar technologies.	**No Conflict.** As described in Section 4.8, Greenhouse Gas Emissions, of this Draft EIR, the Project would be designed to include numerous energy-saving features that would allow the Project to comply with energy conservation standards found in the California Green Building Standards Code (CALGreen) code. Specifically, the Project would install Energy Star-rated heating, cooling, lighting, and appliances; install a 7-kilowatt (kw) solar photovoltaic electric generating system at the recreation center; install Cool Pavement; utilize 100% zero-carbon electricity; and install electric vehicle charging on-site.
Policy LU 10.2. Design development adjacent to natural features in a sensitive manner to complement the natural environment.	**No Conflict.** As discussed above in the analysis of Policy LU 6.8, the Applicant is employing a density-controlled development program to reduce impacts on wildlife, natural drainage courses, protected trees, and significant ridgelines, ensuring minimal disturbance. The Project would concentrate developed and habitable uses, such as residential dwelling units and a recreational center, in the northeastern portion of the Project site. This approach allows most of the Project site (approximately 150 acres), to remain as preserved open space, which is contiguous with open space areas adjacent to the Project's western, southern, and southeastern boundaries. Additionally, the Project site would include approximately 24 acres of improved open space consisting mainly of manufactured slopes and water quality features (e.g., debris and retention basins). The strategic placement of this improved open space between natural open space and the developed residential area would act as a buffer, ensuring a smooth visual transition from natural spaces to residential development and associated infrastructure. By minimizing impacts to sensitive habitat and ridgelines, and carefully planning the Project's design/siting, the proposed development would preserve natural features and maintain harmony with the surrounding environment.
Policy LU 10.7. Encourage the use of density controlled design techniques to conserve natural resource areas.	**No Conflict.** The Project would comply with the requirements of Chapter 22.140.170, Density-Controlled Developments, of the County's Zoning Code. As stated above, this would reduce impacts to wildlife, natural drainage courses, protected trees, and ridgelines. The majority of the Project site would remain as natural open space, which would be contiguous with existing open space surrounding the Project's western, southern, and eastern boundaries.
Goal LU 11. Development that utilize sustainable design techniques.	
Policy LU 11.1. Encourage new development to employ sustainable energy practices, such as utilizing passive solar techniques	**No Conflict.** The Project would meet or exceed the applicable requirements of Title 24, Part 6, as well as the California Green Building Standards Code (CALGreen) in Title 24, Part 11, including measures such as energy efficient design, use of light-colored paving materials, reflective roofing materials, and solar energy. The Project would include solar power, which at a minimum, would

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
and/or active solar technologies.	be provided for newly built low-rise residential buildings. Per Title 24, the Project is required to install 1,122 kW of solar as part of the proposed residential development. The Project would also implement MM-4.8-3 (discussed in further detail in Section 4.8, Greenhouse Gas Emissions, of this Draft EIR), which requires installation of energy star appliances and a 7-kW solar photovoltaic system at the recreation center. As required by CALGreen, multiple family residential units would require 10% of all parking spaces to be capable of charging electric vehicles. Other required mitigation measures set forth in Section 4.8 (e.g., MM-4.8-2 through MM-4.8-5) further demonstrate the Project's commitment to sustainable energy practices, including requirements for onsite renewable energy, energy conservation, and use of zero-carbon electricity.
Policy LU 11.2. Support the design of developments that provide substantial tree canopy cover, and utilize light colored paving materials and energy-efficient roofing materials to reduce the urban heat island effect.	**No Conflict.** As detailed in Chapter 3 of this Draft EIR, the overall planting palette would include shade and accent trees, screening shrubs and hedges, groundcovers, vines, and lawn. The plantings would provide seasonal interest and shade in the warmest times of the year and would be composed of safe, non-invasive, non-thorny, and non-toxic flowers, leaves, and seeds. The overall planting palette would be primarily low maintenance and low water use, and plantings would be grouped and organized according to consistent seasonal maintenance practices, water use, and solar exposure. The use of native plants is recommended; however, the palette could also reflect the planting and geographic diversity of Southern California and use species that are climatically appropriate. Approximately one-quarter of the Project site would be planted with restored native habitat planting, including indigenous oak trees. The Project would utilize tree canopy cover in its landscaping throughout the developed area, and would retain open space acreage which would reduce the urban heat island effect. In addition, the Project would comply with Title 24 Building Energy Efficiency Standards (Title 24, Parts 6 and 11), which is designed to reduce wasteful and unnecessary energy consumption newly constructed and existing buildings. The Project includes use of light-colored paving materials, reflective roofing materials, and solar energy.
Policy LU 11.6. Ensure that subdivisions in VHFHSZs site open space to minimize fire risks, as feasible.	**No Conflict.** As discussed in Section 4.20, Wildfire, of this Draft EIR, the Project site is located within a VHFHSZ that falls within an SRA. The Project would include 150 acres of unimpacted, natural open space, and improve approximately 24 acres of open space within the development footprint. The natural open space would be mostly located in the southern portion of the site, in an area contiguous to existing natural open space. Because the site is within a VHFHSZ the Project Applicant would be required to prepare a conceptual fuel modification plan to be reviewed and approved by the Los Angeles County Fuel Modification Division of the County Fire Department (LACoFD) prior to approval of the Tentative Map. Final fuel modification plans will require approval from the same department prior to the issuance of building permits. Upon occupancy, the Forestry Department of the LACoFD will perform random, annual inspections for compliance with brush clearance regulations per the County's Fire Code. In addition, the Project would provide emergency vehicle access via the maintenance road, "A" Street, and "B" Street, in addition to the 26-foot clear-to-sky private drive and fire lanes within the residential lots. Additionally, the Project has prepared a Fire Protection Plan (Appendix M-1) and Wildfire Evacuation Report (Appendix M-2). As detailed in Section 4.20, Wildfire, compliance with MM-4.20-1 through MM-4.20-5 would reduce wildfire impacts to less than

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
	significant. As such, the Project would ensure that the open space has been sited to minimize fire risks, and thus, would not conflict with this policy.
Policy LU 11.7. Encourage the use of design techniques to conserve natural resource areas.	**No Conflict.** The Project would comply with the requirements of Chapter 22.140.170, Density-Controlled Developments, of the County's Zoning Code. As stated above, this would reduce impacts to wildlife, natural drainage courses, protected trees, and ridgelines. The clustering of development would improve efficiency of access to off-site transportation and utilities. In addition, clustering would enable the preservation of open space within the southern portion of the Project site. The Project would also incorporate a landscape plan that utilizes native and appropriate non-native drought tolerant species. Drought-tolerant, native landscaping would be used in public common areas to reduce water consumption, in compliance with Title 24 Building Energy Efficiency Standards and CALGreen building code.
Policy LU 11.8. Encourage sustainable subdivisions that meet green neighborhood standards, such as Leadership in Energy and Environmental Design–Neighborhood Development (LEED-ND)	**No Conflict.** As discussed in Section 4.8 of this Draft EIR, the Project would be consistent with applicable plans, policies, or regulations adopted to facilitate sustainable development and other green neighborhood standards, including the County's Climate Action Plan, the General Plan and OVOV, the County's Green Building Standards, OurCounty Sustainability Plan, SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), the California Air Resources Board (CARB) Scoping Plan, and statewide 2030 and 2050 GHG reduction targets identified in SB 32 and EO S-3-05. The Project would meet or exceed the applicable requirements of Title 24 Building Energy Efficiency Standards and CALGreen Code. In addition, the Project design provides for the installation of conduit and panel capacity to accommodate future electric vehicle charging stations for all dwelling units. In accordance with Title 24, the Project would install solar photovoltaic systems on the residential dwelling units' rooftops. The Project would also implement mitigation to ensure compliance with applicable standards, including installation of energy star appliances and a 7-kW solar photovoltaic system at the recreation center (see MM-4.8-3, discussed in further detail in Section 4.8, Greenhouse Gas Emissions, of this Draft EIR), mandatory residential measures for electric vehicle charging spaces (see MM-4.8-5 in Section 4.8), low-impact development (see MM-4.8-6 in Section 4.8), cool roofs (see MM-4.8-3 in Section 4.8), construction waste management (see MM-4.8-7 in Section 4.8).
Mobility Element	
Goal M 1. Street designs that incorporate the needs of all users.	
Policy M 1.1. Provide for the accommodation of all users, including pedestrians, motorists, bicyclists, equestrians, users of public transit, seniors, and children.	**No Conflict.** The Project would improve The Old Road adjacent to the Project site consistent with the circulation plan for streets and highways to ensure adequate access for motorists, pedestrians, cyclists, and other users. With implementation of the Project, the eastern portion of the proposed private access road would connect to an existing off-site hiking trail (Taylor Trail) and the Taylor Trail Wilderness and Open Space area, through a proposed easement for a twenty-foot-wide multi-use trail (for hiking, mountain biking, and equestrian use). These easements and trail connections would be maintained by the Los Angeles County Department of Parks and Recreation (LACDPR). The Project would also improve The Old Road at the Project site consistent with the County's circulation plan for

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
	streets and highways to ensure adequate access for motorists, pedestrians, cyclists, and other users. Sidewalks meeting Americans with Disabilities Act (ADA) standards would be constructed along all on-site streets. Trail improvements on the Project site would include an accessible loop path that would connect to the onsite trail system leading to nature trails within the County trails system.
Policy M1.2. Ensure that streets are safe for sensitive users, such as seniors and children.	**No Conflict.** As stated above, the Project would construct all roadways to County subdivision standards, including sidewalks meeting ADA standards within all on-site streets and The Old Road, which would benefits seniors and children. Lots 10 and 11 would accommodate very-low-income senior housing, and the lots and surrounding lots would be developed to ensure safety for seniors on-site with sidewalks and connectivity throughout the site. The Project would comply with all applicable County Fire Code requirements related to roadway safety and access standards (i.e., roadway widths, all-weather surface requirements, length of streets, turning requirements, grade restrictions, maintenance requirements, and parking restrictions). Specific fire and life safety requirements would be addressed at the building permit phase when architectural plans are submitted to the Los Angeles County Fire Department for review and approval. As discussed in Draft EIR Section 4.17, Transportation, the Project site and its vicinity do not have any hazardous design features such as sharp curves or dangerous intersections. Vehicular access to the Project site would be provided directly from The Old Road via two unsignalized driveways at the north and south, which have been analyzed to determine their ability to accommodate anticipated traffic levels. The analysis found that both driveways are projected to operate at an acceptable Level of Service and would not substantially increase hazards related to queuing of vehicles entering or exiting the Project site. Furthermore, Project access and circulation has been reviewed by Public Works with respect to Caltrans/Los Angeles County standards to ensure that the Project does not substantially increase hazards due to a design feature. The County would also periodically review traffic operations in the Project vicinity once the Project is constructed to ensure that traffic operations are satisfactory.
Goal M 2. Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths and trails that promote active transportation and transit use.	
Policy M 2.1. Design streets that accommodate pedestrians and bicyclists, and reduce motor vehicle accidents through a context-sensitive process that addresses the unique characteristics of urban, suburban, and rural communities.	**No Conflict.** The Project's interior roadway system has been designed consistent with County roadway design criteria for Private Drives. Streets "A' and "B" include a 6-foot, 4-inch-wide striped bike lane on each side of the road, including a 4-foot-wide parkway on one side and 6-foot-wide parkway adjacent to an 8-foot-wide sidewalk on the housing side, creating a pedestrian path of travel throughout the community. The two streets create a loop system for ingress and egress to The Old Road. Additionally, the Project would provide a recreational center area with an accessible loop path that connects to the onsite trail system that connects to the County trails system. As such the Project would design streets and trails that accommodate pedestrians and bicyclists.
Policy M 2.9. Encourage the planting of trees along streets and other forms of landscaping to enliven streetscapes by blending natural features with built features.	**No Conflict.** The Project would provide street trees and other forms of landscaping such as shrubs, with fire-retardant species and spaced to reduce fire hazard (see discussion above under Policy LU 11.2).

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
Goal M 4. An efficient multimodal transportation system that serves the needs of all residents.	
Policy M 4.15. Reduce vehicle trips through the use of mobility management practices, such as the reduction of parking requirements, employer/institution based transit passes, regional carpooling programs, and telecommuting.	**No Conflict.** As detailed in Section 4.17, Transportation, of this Draft EIR, the Project would include several strategies to reduce vehicle trips, including Class III bicycle lanes, carpool/vanpool incentives, subsidized transit passes, and other Transportation Demand Management (TDM) measures to mitigate impacts to vehicles miles traveled, as required through MM-4.17-2. The Project does not include any commercial uses that would generate vehicle trips. The Project is also located near I-5 and Santa Clarita transit options (bus, rail), which would provide easy access to jobs and other commercial areas in Santa Clarita and the greater Los Angeles area. As such, the Project would not conflict with this policy.
Policy M 4.16. Promote mobility management practices, including incentives to change transit behavior and using technologies, to reduce VMTs.	**No Conflict.** As stated above, the Project proposes to implement a TDM program (MM-4.17-2), which would include several strategies to reduce vehicle trips to offsite places of employment and encourage alternative modes of transportation, such as carpooling, taking transit, walking, and biking for residents. Through MM-4.17-2, the Project shall include a Class III bicycle route on-site to facilitate mobility and connect to the County's future Class II bicycle route on The Old Road. TDM Program Strategies include subsidized transit passes, a school carpool program for ridesharing, and a commute marketing program designed to advertise different commuting options and encourage alternatives modes of transportation. The Project is also located near I-5 and Santa Clarita transit options (bus and rail), which would provide easy access to jobs and other commercial areas in Santa Clarita and the greater Los Angeles area. As such, the Project would not conflict with this policy.
Air Quality Element	
Goal AQ 1. Protection from exposure to harmful air pollutants.	
Policy AQ 1.1. Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors.	**No Conflict.** The Project does not propose industrial toxic land uses. As detailed in Section 4.3, Air Quality, of this Draft EIR, with implementation of MM-4.3-1, which shall require the use of CARB-certified Tier 4 Final construction equipment, the Project's air pollutant emissions would be less than the South Coast Air Quality Management District (SCAQMD) mass daily regional and localized significance thresholds (LSTs). Additionally, as detailed in Section 4.3, the Project would not result in a local hotspot. The Project would not conflict with the policy.
Policy AQ 1.2. Encourage the use of low or no volatile organic compound (VOC) emitting materials.	**No Conflict.** As described in Section 4.3, Air Quality, of this Draft EIR, construction of the Project would comply with SCAQMD Rule 1113, which controls VOC emissions from architectural coatings.
Policy AQ 1.3. Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible.	**No Conflict.** The generation of particulate inorganic and biological emissions during grading and excavation operations associated with adherence to SCAQMD Rule 403, which controls for fugitive dust.

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
Goal AQ 2. The reduction of air pollution and mobile source emissions through coordinated land use, transportation and air quality planning.	
Policy AQ 2.1. Encourage the application of design and other appropriate measures when siting sensitive uses, such as residences, schools, senior centers, daycare centers, medical facilities, or parks with active recreational facilities within proximity to major sources of air pollution, such as freeways.	**No Conflict**. As detailed in Section 4.3 of this Draft EIR, for informational purposes only, a health risk assessment (HRA) was performed to evaluate potential health risks of the proximate I-5 freeway to future sensitive receptors of the Project, which determined that toxic air contaminant (TAC) emissions from I-5 freeway would be less than the SCAQMD's significance thresholds. The Project would not conflict with this policy.
Policy AQ 2.3. Support the conservation of natural resources and vegetation to reduce and mitigate air pollution impacts.	**No Conflict.** The Project would cluster development on the approximately 233-acre Project site for the conservation of natural resources and vegetation to reduce and mitigate air pollution impacts.
Goal AQ 3. Implementation of plans and programs to address the impacts of climate change.	
Policy AQ 3.1. Facilitate the implementation and maintenance of the Community Climate Action Plan to ensure that the County reaches its climate change and greenhouse gas emission reduction goals.	**No Conflict.** As detailed in Section 4.8, Greenhouse Gas Emissions, of this Draft EIR, the 2015 CCAP expired in 2020 and is anticipated to be replaced by the Los Angeles County 2045 Climate Action Plan (2045 CAP). However, the Project includes several features that would reduce GHG emissions, thus helping the County reach its climate change and GHG emission reduction goals. The Project would adhere to the statewide and County's regulations related to the Climate Change Scoping Plan listed in Table 4.8-15 of Section 4.8 of this Draft EIR. The Project would meet or exceed the applicable requirements of Title 24, Part 6, as well as the California Green Building Standards Code in Title 24, Part 11. For example, the Project would include solar power, which at a minimum, would be provided for newly built low-rise residential buildings. Per Title 24, the Project is required to install 1,122 kW of solar as part of the proposed residential development. The Project would also implement MM-4.8-3 (discussed in further detail in Section 4.8 of this Draft EIR), which requires installation of energy star appliances and a 7-kW solar photovoltaic system at the recreation center. As such, the Project would not conflict with this goal. MM-4.8-2 through MM-4.8-5 support the measures through on-site renewable energy, energy conservation, use of zero-carbon electricity, and EV charging stations.
Policy AQ 3.5. Encourage energy conservation in new development and municipal operations.	**No Conflict.** The Project would comply with mandatory energy conservation standards found in the CALGreen code. For example, all residences would include energy and water efficient fixtures and fittings and energy efficient mechanical systems. MM-4.8-2 through MM-4.8-5 support the measures through onsite renewable energy, energy conservation, use of zero-carbon electricity, and EV charging stations.
Policy AQ 3.6. Support rooftop solar facilities on new and existing buildings.	**No Conflict.** The Project would be required to comply with the latest requirements in effect at the time of building permit issuance for Title 24, Part 6 and 11. Title 24 standards include solar requirements for residential buildings. Additionally, the 2022 Title 24 Energy Code standards includes increased on-site renewable energy generation from solar compared to earlier Title 24 standards (CEC 2021).

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
	MM-4.8-2 through MM-4.8-5 support the measures through onsite renewable energy, energy conservation, use of zero-carbon electricity, and EV charging stations.
Conservation and Natural Resources Element	
Goal C/NR 1. Open space areas that meet the diverse needs of Los Angeles County.	
Policy C/NR 1.1. Implement programs and policies that enforce the responsible stewardship and preservation of dedicated open space areas.	**No Conflict.** The Project would include approximately 175 acres of preserved open space and improved open space at the Project site. The improved open space would be managed by a Homeowners' Association established for the Project. On-site easements for trails and trail connections would be maintained by LACDPR.
Policy C/NR 1.6. Prioritize open space acquisitions for available lands that contain unique ecological features, streams, watersheds, woodlands, grasslands, and/or offer linkages that enhance wildlife movements and genetic diversity.	**No Conflict.** While the Project does not propose or involve acquisition of lands, the Project would preserve substantial open space areas that would include oak trees and other natural features. The permanent open space dedication would ensure preservation of trees and ridgelines. Additionally, the Project is designed to maintain existing wildlife movement corridors within the Project site to provide connections to existing off-site dedicated open space to the southeast (Taylor Trail Wilderness and Open Space, and Rivendale Park and Open Space) and to the southwest (Santa Clarita Woodlands Park, including Ed Davis Park in Towsley Canyon). The Project site provides local wildlife movement opportunities for lands associated with the Santa Susana Mountains. As discussed in Section 4.4, Biological Resources, of this Draft EIR, the regional movement corridors between the Santa Susana Mountains, Santa Monica Mountains, San Gabriel Mountains, and Los Padres National Forest would not be affected by the Project.
Goal C/NR 3. Permanent, sustainable preservation of genetically and physically diverse biological resources and ecological systems including. habitat linkages, forests, coastal zone, riparian habitats, streambeds, wetlands, woodlands, alpine habitat, chaparral, shrublands, and SEAs.	
Policy C/NR 3.1. Conserve and enhance the ecological function of diverse natural habitats and biological resources.	**No Conflict.** The Project would cluster development on approximately 83 acres adjacent to an existing off-site residential subdivision (Stevenson Ranch) and would include 150 acres of open space over the remainder of the Project site. In total, the Project's total impact area (including the Project development footprint, fuel modification zones, and debris extents), includes approximately 83 acres that are in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space. The Project's open space component would mostly be located in the southern and northwestern portion of the Project site, in an area contiguous to existing natural uses and, thus, would support the conservation and protection of those uses. The clustering of the development in the northeastern portion of the Project site, which is nearest to existing development and service systems (water, wastewater, power, telecommunications, etc.) would preserve resources within the SEA.
Policy C/NR 3.2. Create and administer innovative County programs incentivizing the permanent dedication of SEAs and other important biological resources as open space areas.	**No Conflict.** This policy is directed at the County and not individual development projects. Nevertheless, the Project site is located within an SEA under the OVOV. As discussed in Section 4.4, Biological Resources, of this Draft EIR, the Project site is located entirely within the SEA. As such the Project would require approval of a CUP to remove SEA protected trees and include mitigation measures to reduce impacts to federal- and State-listed species to less than significant. As part of the approval of the SEA CUP, the Project includes several mitigation measures to reduce SEA impacts resulting from the project to less than

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
	significant. The Project is consistent with the SEA Ordinance as modified based on biological recommendations from SEATAC, and adequacy of the Biota Report (Appendix C). The Project proposes a number of amenities to residents and to the surrounding community, including abundant open space and an extensive trail network connecting the public to the Project's open space and adjacent off-site trail networks and open space. With implementation of mitigation measures and approved CUPs, the Project would not conflict with this policy.
Policy C/NR 3.6. Assist state and federal agencies and other agencies, as appropriate, with the preservation of special status species and their associated habitat and wildlife movement corridors through the administration of the SEAs and other programs.	**No Conflict.** This policy is directed at the County and not individual development projects. Nevertheless, the Project site is located within an SEA under the OVOV. As discussed in Section 4.4, Biological Resources, of this Draft EIR, the Project site is located entirely within the SEA. As such the Project would require approval of an SEA CUP to remove SEA protected trees. Through a conservation easement (MM-4.4-1), the Project would designate 144.43 acres of on-site undistributed, preserved open space, which contain several special status plant and wildlife species. With implementation of MM-4.4-3, Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation, MM-4.4-8, Crotch's Bumble Bee Pre-Construction Surveys, MM-4.4-10, Special-Status Wildlife Relocation Plan, and MM-4.4-16, SEA Protected Trees Replacement/Compensation, all impacts to special status species and their associated habitat and wildlife movement corridors, would be less than significant. The Project would not conflict with this policy.
Policy C/NR 3.9. Consider the following in the design of a project that is located within an SEA, to the greatest extent feasible: Preservation of biologically valuable habitats, species, wildlife corridors and linkages; Protection of sensitive resources on the site within open space; Protection of water sources from hydromodification in order to maintain the ecological function of riparian habitats; Placement of the development in the least biologically sensitive areas on the site (prioritize the preservation or avoidance of the most sensitive biological resources onsite); Design required open spaces to retain contiguous undisturbed open space	**No Conflict.** As discussed in Section 4.4, Biological Resources, of this Draft EIR, the Project site is located entirely within the SEA. The Project would minimize development within the SEA by using controlled development (clustering) in accordance with the provisions of the Zoning Ordinance. The Project's on-site impact area (including the Project development footprint, debris basins, and fuel modification zones) would total approximately 83 acres in the northeastern portion of the Project site. As a result, a majority of the Project site's 233.49 acres would be undisturbed natural open space, thus preserving sensitive resources, such as riparian woodland and oak woodlands, on the upland portion of the site (MM-4.4-1). In addition, this natural open space would be contiguous with existing natural open space to the south, east, and west of the Project site, thus providing linkages for wildlife to these areas. Finally, rainwater runoff would be captured in the seven proposed debris and desilting basins, on Lots 14, 15, 19, and 33-36, specifically, which would be designed to retain and diffuse the flows to the existing system downstream. The Project includes several mitigation measures to reduce SEA impacts resulting from the Project to less than significant. The Project is consistent with the SEA Ordinance as modified based on biological recommendations from SEATAC, and adequacy of the Biota Report (Appendix C). Although the Project site is located at the interface of undeveloped lands and existing development, it encompasses the northern 1,500 feet of a County-designated wildlife corridor, which provides movement for highly mobile species such as mountain lion, deer, and badger from lands associated with the SEA to undeveloped lands associated with the San Gabriel Mountains further east. Wildlife movement from northwest and west to the south is expected to be unimpeded by the Project since there are geographic features (ridges and canyons), with hiking trails, within the Conservation Area that have connectivity to Rivendale Open Space, which is adjacent to the open space in Towsley Canyon.

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
that preserves the most sensitive biological resources onsite and/or serves to maintain regional connectivity; Maintenance of watershed connectivity by capturing, treating, retaining, and/or infiltrating storm water flows onsite; and Consideration of the continuity of onsite open space with adjacent open space, in project design.	
Goal C/NR 4. Conserved and sustainably managed woodlands.	
Policy C/NR 4.1. Conserve and sustainably manage oak woodlands.	**No Conflict.** With implementation of the Project, the Project would avoid impacts to approximately 150 acres of natural open space on-site. The Project includes approximately 22.66 acres of on-site oak woodland. Direct impacts would occur to approximately 12.95 acres of oak woodlands on the Project site, as defined by the Los Angeles County Oak Woodlands Conservation Management Plan, and approximately 1.57 acres in the off-site brush thinning zone, for a total of approximately 14.52 acres. This requires 3:1 mitigation resulting in the need to preserve 43.56 acres of oak woodland. With the implementation of MM-4.4-1, the remaining oak woodland (i.e., approximately 9.76 acres) within the Conservation Area would be preserved in perpetuity. MM-4.4-9 would require the preservation of offsite oak woodland. MM-4.4-2 would be implemented to restore and enhance these preserved vegetation communities. As such the proposed mitigation measures, MM-4.4-1, MM-4.4-9, and MM-4.4-2 would meet SEA guidelines for recommended preservation, reduce the Project impacts to less than significant, making the Project compatible with SEA resources. The Project is consistent with the SEA Ordinance as modified based on biological recommendations from SEATAC, and adequacy of the Biota Report (Appendix C) and would not conflict with this policy.
Goal C/NR 5. Protected and useable local surface water resources.	
Policy C/NR 5.1. Support the LID philosophy, which seeks to plan and design public and private development with hydrologic sensitivity, including limits to straightening and channelizing natural flow paths, removal of vegetative cover, compaction of soils, and distribution of naturalistic BMPs at	**No Conflict.** As detailed in Section 4.10, Hydrology and Water Quality, of this Draft EIR, water quality treatments across the Project site would use biofiltration units, including proposed modular wetlands to treat stormwater flow from building pads, and proposed Filterra units to treat flows from streets. Additionally, the majority of the Project site would remain natural open space, which would allow most of the site to maintain its hydrologic sensitivity by limiting any changes to natural flow paths, and removal of vegetative cover and soil compactions. Overall, as demonstrated in Section 4.10, the County's low-impact development (LID) standards would be satisfied through these mechanisms.

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
regional, neighborhood, and parcel-level scales.	
Policy C/NR 5.6. Minimize point and non-point source water pollution.	**No Conflict.** As detailed in Section 4.10, Hydrology and Water Quality, of this Draft EIR, water quality treatments across the Project site would use biofiltration units, including proposed modular wetlands to treat stormwater flow from building pads, and proposed Filterra units to treat flows from streets. As demonstrated in Section 4.10, the point and non-point water sources would be satisfied through these mechanisms.
Goal C/NR 6. Protected and usable local groundwater resources.	
Policy C/NR 6.1. Support the LID philosophy, which incorporates distributed, post-construction parcel-level stormwater infiltration as part of new development.	**No Conflict.** As detailed above, in response to Policies C/NR 5.1 and 5.6, and in Section 4.10, Hydrology and Water Quality, of this Draft EIR, water quality treatments across the Project site would use biofiltration units to treat stormwater flow from building pads and from streets. Overall, as demonstrated in Section 4.10, the County's LID standards would be satisfied through these mechanisms.
Goal C/NR 13. Protected visual and scenic resources	
Policy C/NR 13.2. Protect ridgelines from incompatible development that diminishes their scenic value.	**No Conflict.** The Applicant is utilizing a density-controlled development (clustered unit) program, which would reduce impacts to wildlife, natural drainage courses, protected trees, and ridgelines. In addition, the Project design would protect the significant ridgeline that traverses the property in the southeast area through preservation. On-site impact areas are limited to approximately 83 acres of the 233.49-acre Project site at the northeastern portion of the site, proximate to off-site residential units.
Policy C/NR 13.3. Reduce light trespass, light pollution and other threats to scenic resources.	**No Conflict.** As discussed in Section 4.1, Aesthetics, of this Draft EIR, although the Project site is proximate to lands within the Rural Outdoor Lighting District ordinance (County Code Chapter 22.80, Rural Outdoor Lighting District), the Project site itself is not within the Rural Outdoor Lighting District boundary and is therefore not required to comply with Chapter 22.80 of the Zoning Code. However, Project development would be situated within the northeastern portion of the Project site, and as such, lighting would be absent within most of the Project site (i.e., natural open space areas). The clustered development program would minimize the amount of on-site lighting and light spillage onto adjacent areas, including open space areas. Further, Project lighting would be directed downward and limited for security purposes, which would reduce potential light trespass. In addition, the Project would comply with mandatory lighting requirements for indoor and outdoor spaces set forth in the 2022 Building Energy Efficiency Standards (24 CCR Part 6), as well as the sensitive hillside design measures found in the County's Hillside Design Guidelines (Chapter 22.104 of the Zoning Code), which include specific measures for residential streetlights and limits residential lighting for security purposes. For example, one design measure of Hillside Design Guidelines includes illumination of signs from the exterior, with downward-projecting, hooded light fixtures that minimize light trespass. Per Title 24 requirements, all residential outdoor lighting on the Project site would have a manual on/off switch and either a photocell and motion sensor or automatic time switch control or an astronomical time clock, which promote efficiency and reduce unnecessary light pollution. Finally, pavement across the Project site would not contain reflective surfaces and residential development would not be constructed with glare-producing materials (e.g., polished metal siding or bright-white architectural coatings).

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
Policy C/NR 13.5. Encourage required grading to be compatible with the existing terrain.	**No Conflict.** The final Project-design, as required by the California Building Code (CBC) and the County Code, would require that all permanent cut-and-fill slopes on site be seeded or planted with lightweight, deep-rooting, drought-resistant native vegetation. Grading activities would be balanced on site and drainage and erosion control measures would be designed in accordance with the standards set forth in the CBC. As a result, the manufactured slopes would be compatible with the existing terrain.
Policy C/NR 13.8. Manage development in HMAs to protect their natural and scenic character and minimize risks from natural hazards, such as fire, flood, erosion, and landslides.	**No Conflict.** The Project would include approximately 150 acres of natural open space. The clustering of development would allow for engineered slopes and other safety measures that would minimize risk from fire, flood, erosion and landslides in the developed portion of the Project site. Grading activities would be balanced on site and drainage and erosion control measures would be designed in accordance with the standards set forth in the CBC, which would minimize risks from erosion. Further specifics on impacts from potential fire, flood, erosion, and landslides can be found in Sections 4.20, Wildfire (fire), 4.7, Geology and Soils (erosion and landslides), and Section 4.10, Hydrology and Water Quality (flood), of this Draft EIR.
Policy C/NR 13.9. Consider the following in the design of a project that is located within an HMA, to the greatest extent feasible: Public safety and the protection of hillside resources through the application of safety and conservation design standards; Maintenance of large contiguous open areas that limit exposure to landslide, liquefaction and fire hazards and protect natural features, such as significant ridgelines, watercourses and SEAs.	**No Conflict.** The developed area of the Project site would be engineered for slope safety. As discussed in Section 4.7, Geology and Soils, of this Draft EIR, the Geotechnical Report prepared for the Project recommends a number of measures to reduce slope instability, such as the removal of potential debris material, building setbacks from ascending slopes, reduction and control of drainage on debris material, construction of debris basins, and the construction of an impact wall. These recommendations would be incorporated within the final Project-design, as required by the CBC. The Project would also designate a majority of the Project site as preserved open space and improved open space that would protect hillside resources and maintain a large contiguous open area with natural hillsides. In addition, a conceptual fuel modification plan would be required to be prepared and subsequently reviewed and approved by the Los Angeles County Fuel Modification Division of the LACoFD prior to approval of the Tentative Map. Final fuel modification plans will require approval from the same department prior to the issuance of building permits. The Project would implement fire protection measures, including fire-retardant structures adjoining natural open space areas and fuel modification/ management to provide defensible space and assist in wildland fire suppression. Significant ridgelines would be maintained in their natural states.
Goal C/NR 14. Protected historic, cultural, and paleontological resources.	
Policy C/NR 14.1. Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.	**No Conflict.** As detailed in Section 4.5, Cultural Resources, and Section 4.7, Geology and Soils, of this Draft EIR, all impacts to historic, cultural, and paleontological resources would be less than significant with implementation of mitigation measures MM-4.5-1 (Archeological Monitoring), MM-4.5-2 (Workers Environmental Awareness Program [WEAP] Training), MM-4.7-1 (Paleontological Monitoring), and MM-4.7-2 (Workers Environmental Awareness Program [WEAP] Training). Therefore, the Project would not conflict with this policy.
Policy C/NR 14.6. Ensure proper notification and recovery processes are carried out for development	**No Conflict.** As detailed in Section 4.5, Cultural Resources, and Section 4.7, Geology and Soils, of this Draft EIR, proper notification and recovery processes are required through MM-4.5-1 (Archeological Monitoring), MM-4.5-2 (Workers Environmental Awareness Program [WEAP] Training), MM-4.7-1 (Paleontological

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
on or near historic, cultural, and paleontological resources.	Monitoring), and MM-4.7-2 (Workers Environmental Awareness Program [WEAP] Training). Therefore, the Project would not conflict with this policy.
Parks and Recreation Element	
Goal P/R 1. Enhanced active and passive park and recreation opportunities for all users.	
Policy P/R 1.2. Provide additional active and passive recreation opportunities based on a community's setting, and recreational needs and preferences.	**No Conflict.** The Project is adjacent to Taylor Trail Wilderness and Open Space, and Rivendale Park and Open Space, on the southeast, and Santa Clarita Woodlands Park, which includes Ed Davis Park in Towsley Canyon, on the southwest. The Applicant is requesting approval of a density-controlled development CUP to avoid development on open hillsides and other sensitive areas. The density-controlled development CUP would allow the Project's attached and detached dwelling units, senior housing units, community recreation center, and associated infrastructure to be constructed on smaller lots clustered within the northeast portion of the Project site. By limiting the development footprint, the Project preserves the integrity of the hillside terrain and leaves approximately 150 acres of natural open space with existing non-dedicated trails and approximately 24 acres of improved open space land, trees, and biota for recreational purposes. In addition, the Applicant would provide for an on-site trail system. The on-site open space and trail system would provide linkages to the adjacent regional trail network and would expand trail facilities consistent with the objectives of the Santa Susana Trails Master Plan. As such, the Project would enhance active and passive park and recreation opportunities for all users.
Policy P/R 1.4. Promote efficiency by building on existing recreation programs.	**No Conflict.** The Project would provide a comprehensive trail network, including a publicly accessible trailhead, that would provide connections for the public to access existing open space areas and established trails. In addition to providing on-site trails and connections to existing off-site trails, the Project would provide a recreation center in the central portion of the Project site. The recreation center would include the following: a club room, fitness center, restrooms, conference room, study room, kitchen space, and entertainment/sitting areas. The site plan of the recreational lot is depicted on Figure 3-4, Conceptual Recreational Building Plan, of Chapter 3 of this Draft EIR. Other on-site recreational amenities would include an outdoor swimming pool and spa, a fire pit, lounge seating, barbeque pits and seating, a fenced dog park, and on-site walking paths.
Policy P/R 1.8. Enhance existing parks to offer balanced passive and active recreation opportunities through more efficient use of space and the addition of new amenities.	**No Conflict.** The preservation of open space at the Project site would allow for existing, non-dedicated on-site trails to be enhanced and connect to off-site trails. Several existing non-dedicated trails are located on the southern portion of the site (within the designated natural open space portion of the Project site), as shown on Draft EIR Figure 3-5 of Chapter 3 and would remain with implementation of the Project. The on-site trails would connect to the off-site portions of Rivendale Park and Open Space and Ed David Park at Towsley Canyon. Additionally, as detailed in Policy P/R 1.4, above, the Project would include a recreational center with several new amenities.
Policy P/R 1.10. Ensure a balance of passive and recreational activities in the development of new park facilities.	**No Conflict.** As detailed above, in Policy P/R 1.2, the Project is adjacent to Taylor Trail Wilderness and Open Space, and Rivendale Park and Open Space, on the southeast, and Santa Clarita Woodlands Park, which includes Ed Davis Park in Towsley Canyon, on the southwest. By limiting the Project's development footprint within the approximately 233-acre Project site to the northeast portion of the Project site, the Project preserves the integrity of the hillside terrain and

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
	leaves approximately 150 acres of natural open space with existing non-dedicated trails, as well as approximately 24 acres of improved open space land (consisting primarily of manufactured slopes, water quality features, and multi-use trails), supporting native trees and other biota. Furthermore, the on-site open space and improved or naturalized trail features would provide an important missing linkage in the existing regional trail network and expand trail facilities consistent with the objectives of the Santa Susana Trails Master Plan. As such, the Project would enhance active and passive park and recreation opportunities for all users. Therefore, the Project would ensure a balance of passive and recreational activities on-site and would not conflict with this policy.
Policy P/R 1.11. Provide access to parks by creating pedestrian and bicycle-friendly paths and signage regarding park locations and distances.	**No Conflict.** The Project's internal roadway system has been designed consistent with County roadway design criteria for private drives. The main interior streets, "A" Street and "B" Street, are proposed as Residential-Collector streets with sidewalks, creating a pedestrian path of travel throughout the community. Streets "A" and "B" would create a loop system for ingress and egress to The Old Road. The Project site would also provide multi-use access (including pedestrian, bicycle, and equestrian) via the private access road traversing the site (which would be redesigned as a multi-use trail). Additionally, the Project would provide a recreational center with an accessible loop path that connects to the on-site trail system and the adjacent County trails system.
Goal P/R 3. Acquisition and development of additional parkland.	
Policy P/R 3.1. Acquire and develop local and regional parkland to meet the following County goals. 4 acres of local parkland per 1,000 residents in the unincorporated areas and 6 acres of regional parkland per 1,000 residents of the total population of Los Angeles County.	**No Conflict.** As discussed in Section 4.16, Recreation, of this Draft EIR, the Project would be required to dedicate acres of parkland per County Code requirements or pay Quimby in-lieu fees. As required by Section 22.102.090, SEA Development Standards, of the County Code, the Project would avoid impacts to approximately 150 acres of contiguous, undisturbed open space on-site. Of the approximately 150 acres of undisturbed open space, 144.43 acres would be placed under an on-site Conservation Easement, as required by MM-4.4-1 of Section 4.4, Biological Resources. The Project would also include approximately 24 acres of improved open space within the Project's development footprint. The Project would also provide discreet passive and active open space areas throughout the residential lots, a recreation center, and multi-use, on-site trails. As further detailed in Section 4.16, Recreation, in addition to the recreational facilitates proposed by the Project, in accordance with the Quimby Act (Government Code Section 66477) and Sections 21.24.340, 21.240.350, and 21.28.140 of the County Code, the Project would be required to pay an in-lieu fee, which would be used for the purpose of acquiring local park land or developing new or rehabilitating existing recreational facilities.
Policy P/R 3.2. For projects that require zone change approvals, general plan amendments, specific plans, or development agreements, require developers to provide for local and regional parkland above and beyond their Quimby obligations as	**No Conflict.** The Project does not include or require any zone change approvals, general plan amendments, or specific plans. The Project would implement density-controlled development to allow for clustering of residential uses on approximately 41 acres of the Project site. In total, the Project's on-site impact area, including the Project development footprint, fuel modification zones, and debris extents, would be approximately 83 acres in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space. Through the density-controlled development CUP, and as required by Section 22.102.0390, SEA Development Standards, of the County Code, the Applicant will include approximately 144 acres of the 233.49-acre Project site as preserved open space under a conservation easement (see MM-4.4-1). This would allow the Applicant to preserve and provide for an extensive trail system. In

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
based on an appropriate nexus study.	addition, the Project would include substantial amenities maintained by the Homeowners' Association for residents of the Project, including a community recreation center.
Goal P/R 4. Improved accessibility and connectivity to a comprehensive trail system including rivers, greenways, and community linkages.	
Policy P/R 4.4. Maintain and design multi-purpose trails in ways that minimize circulation conflicts among trail users.	**No Conflict.** The Project site would provide multi-use access (including pedestrian, bicycle, and equestrian) via the private access road traversing the site. Additionally, the Project would provide a recreational center area with an accessible loop path that connects to the on-site trail system that connects to the County trails system. As shown on Figure 3-5, Conceptual Trail Map, of Chapter 3, Project Description, of this Draft EIR, Project implementation would result in the preservation of on-site trails, which would connect to off-site non-dedicated and dedicated trails. These trail connections and on-site easements for trails would be maintained by DPR. Additionally, as shown on Figure 3-5, the Project would provide a trail network connection on The Old Road, at the northeastern corner of the Project site. This proposed trail network connection would provide a 28-foot-wide multi-use trail available for public use within the Project site, and would connect to on-site and off-site trails, providing contiguous trail access throughout the Santa Clarita Valley. Therefore, the Project would not conflict with this policy.
Noise Element	
Goal N 1. The reduction of excessive noise impacts.	
Policy N 1.1. Utilize land uses to buffer noise-sensitive uses from sources of adverse noise impacts.	**No Conflict.** As detailed in Section 4.13, Noise, as proposed, residential structures would be arranged to create a relatively continuous building block along the exterior lot boundary (i.e., Lot boundary facing an adjacent property outside the Project site) for each lot. The gaps between structures would be minor compared to the length of connected structures and therefore the first row of buildings along the exterior lot boundary of each Lot would present an effective sound barrier for stationary noise sources more internal to the Project site.
Policy N 1.2. Reduce exposure to noise impacts by promoting land use compatibility.	**No Conflict.** As proposed, the land use zones of the Project site would juxtapose residential land uses adjacent to existing residential neighborhoods, promoting land use compatibility between the Project and residential neighbors and also creating a buffer between a higher noise generator (the on-site recreation center) and adjacent uses.
Policy N 1.3. Minimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering controls through Best Available Technologies (BAT).	**No Conflict.** As detailed in Section 4.13, Noise, of this Draft EIR, the Project's land uses would be compatible with existing, off-site residential uses north of the Project site. With implementation of MM-4.13-1 through MM-4.13-4, all construction noise impacts to off-site noise-sensitive land uses would be reduced to less than significant.
Policy N 1.8. Minimize noise impacts to pedestrians and transit-riders in the design	**No Conflict.** As detailed in Section 4.13, Noise, in accordance with MM 4.13-3 (Stationary Equipment Construction Noise Barrier), all stationary construction equipment located within 600 feet of the northern Project site property boundary in Lots 2, 3, 8, 9, 10, and 11 and within The Old Road Improvements

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
of transportation facilities and mobility networks.	construction zone must each be enclosed within a sound barrier of 10-foot minimum height. The required sound barrier(s) in accordance with MM-4.13-3 would reduce potential construction-related noise impacts for off-site pedestrians and transit-riders utilizing The Old Road. Therefore, the Project would not conflict with this policy.
Policy N 1.10. Orient residential units away from major noise sources (in conjunction with applicable building codes).	**No Conflict.** As detailed in Section 4.13, Noise, as proposed, residential structures would be arranged to create a relatively continuous building block along the exterior lot boundary (i.e., Lot boundary facing an adjacent property outside the Project site) for each lot. The gaps between structures would be minor compared to the length of connected structures and therefore the first row of buildings along the exterior lot boundary of each Lot would present an effective sound barrier for stationary noise sources more internal to the Project site. Additionally, residences in Lot 5 would have rear yards oriented toward I-5, which maximizes the separation distance between transportation noise sources and interior living spaces, and also makes erection of a noise barrier to protect the yard areas more feasible. The Project would not conflict with this policy.
Policy N 1.12. Decisions on land adjacent to transportation facilities, such as the airports, freeways and other major highways, must consider both existing and future noise levels of these transportation facilities to assure the compatibility of proposed uses.	**No Conflict.** As detailed in Section 4.13, Noise, of this Draft EIR, the transportation noise exposure analysis does employ 2030 Year traffic forecasting to assess future traffic noise exposure for Project residents. Overall, permanent increases in ambient noise levels at existing residences from Project operation, including on-site stationary noise sources and Project trip contributions to off-site traffic noise exposure levels, would have a less than significant impact regarding generation of substantial permanent increases in ambient noise levels in the vicinity of the Project. With implementation of MM-4.13-1 through MM-4.13-4, all construction noise impacts to off-site noise-sensitive land uses would be reduced to less than significant. Therefore, the Project would not conflict with this policy.
Safety Element	
Goal S 1. An effective regulatory system that prevents or minimizes personal injury, loss of life and property damage due to seismic and geotechnical hazards.	
Policy S 1.1. Discourage development in Seismic Hazard and Alquist-Priolo Earthquake Fault Zones.	**No Conflict.** As discussed in Section 4.7, Geology and Soils, of this Draft EIR, the Project site is not located in a Seismic Hazard or Alquist-Priolo Earthquake Fault Zone, and no known active or potentially active faults exist within the Project site.
Policy S 1.2. Prohibit construction of structures for human occupancy adjacent to active faults unless a comprehensive fault study that addresses seismic hazard risks and proposes appropriate actions to minimize the risk is approved.	**No Conflict.** As discussed above in Section 4.7, Geology and Soils, there are no Holocene-active faults that intersect or are within close proximity to the Project site, and the Project site is not located within an Alquist-Priolo Earthquake Fault Zone as defined by the CGS. Therefore, the Project would not conflict with this policy.
Policy S 1.3. Require developments to mitigate	**No Conflict.** As described in Chapter 3, Project Description, of this Draft EIR, the Project site is in a HMA due to the presence of slopes over 25%. As discussed in

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
geotechnical hazards, such as soil instability and landslides, in Hillside Management Areas through siting and development standards.	Section 4.7, Geology and Soils, of this Draft EIR, the Geotechnical Report prepared for the Project recommends a number of measures to reduce slope instability, such as the removal of potential debris material, building setbacks from ascending slopes, reduction and control of drainage on debris material, construction of debris basins, and the construction of an impact wall. These recommendations would be incorporated within the final Project-design, as required by the CBC. In addition, a large portion (approximately 150 acres) of the Project site would be natural open space. As such, most of the Project site that is located in HMAs would be retained in its natural condition and not developed.
Goal S 2. An effective regulatory system that prevents or minimizes personal injury, loss of life, and property damage due to climate hazards and climate-induced secondary impacts.	
Policy S 2.3. Require new residential subdivisions and new accessory dwelling units within hazard areas to meet required evacuation standards.	**No Conflict.** As discussed in Section 4.20, Wildfire, of this Draft EIR, the Project site is located within a VHFHSZ that falls within a State Responsibility Area (SRA). In addition, the lowland areas in the northeastern portion of the Project site are situated in a 100-year flood zone (Zone A), as detailed in Section 4.10, Hydrology and Water Quality, of this Draft EIR. As detailed in Section 4.17, Transportation of this Draft EIR, vehicular access to the Project site would be provided directly from The Old Road via two unsignalized driveways at the north and south, which have been analyzed to determine their ability to accommodate an increase in traffic. The analysis found that both driveways are projected to operate at an acceptable Level of Service and would not substantially increase hazards related to queuing of vehicles entering or exiting the Project site in the event of an evacuation. The Project would provide on-site emergency vehicle access via proposed "A" Street and "B" Street, in addition to the 26-foot clear-to-sky private access road that would be used as a fire road, for emergency or maintenance vehicle access (see Section 4.9, Hazards and Hazardous Materials, and Section 4.17 of this Draft EIR for further details). An egress-ingress roadway to the property west of the Project site, proposed Tentative Tract Map (TTM) 74979, would also be provided. Consistent with County Code Title 21, Subdivisions and access requirements of the County Fire Code, the Project's roadways would meet all County access requirements for new residential development in a VHFHSZ. The private access road, which would also serve as an emergency access route, would also include a gate to prevent the public from obstructing the roadway and limit access to adjacent wildland areas. The gate would comply with all regulations of the County Fire Code, including being operatable by one person if power fails, a Knox Box, and be made of non-combustible materials, as detailed in Section 4.20 of this Draft EIR. The Project's Wildfire Evacuation Plan (Appendix M-2) determined that the Project, including any existing land uses would be able to evacuate within identified potential evacuation routes available to residents and provides emergency preparedness resources to support situational awareness and household preparedness.
Goal S 3. An effective regulatory system that prevents or minimizes personal injury, loss of life, and property damage due to flood and inundation hazards.	
Policy S 3.1: Strongly discourage development in the County's Flood Hazard Zones, unless it solely provides a public benefit.	**No Conflict.** The Project site's lowland areas, located in the northeastern portion of the site, are situated in a 100-year flood zone (Zone A). To minimize risks of flood damage, the Project would result in the clustering of development to allow for engineered slopes and other safety measures that would minimize risk from floods in the developed portion of the Project site. Furthermore, the Project's drainage system would be designed to meet the County's flood control standards

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
	to protect the development as well as the remaining floodplain that could be affected by the modification. Since the flood plain would be modified by the Project, a Letter of Map Revision (LOMR) would be prepared and submitted to Federal Emergency Management Agency (FEMA) to remove the northern portion of the Project site west of the Caltrans culvert from the FEMA Flood Zone A designation. The LOMR would ensure that when the Project site is removed from the flood plain it is designed to ensure that downstream flood impacts are not increased. Additionally, the Project would include approximately 150 acres of natural open on-site. Further specifics on impacts related to potential floods can be found in Section 4.10, Hydrology and Water Quality, of this Draft EIR.
Policy S 3.3: Promote the use of natural, or nature-based flood protection measures to prevent or minimize flood hazards, where feasible.	**No Conflict.** Development of the Project would be clustered within the northeastern portion of the Project site. Additionally, the Project would include approximately 150 acres of natural open space, which would allow for preservation of natural grades and vegetation within this portion of the Project site.
Policy S 3.4. Ensure that developments located with the County's Flood Hazard Zones are sited and designed to avoid isolation from essential services and facilities in the event of flooding.	**No Conflict.** The lowland areas in northeastern portion of the Project site are located within a 100-year flood zone (Zone A), as detailed in Section 4.10, Hydrology and Water Quality, of this Draft EIR. To minimize risks of flood damage, the Project includes an engineered storm drainage system to collect and treat runoff from developed portion of the site and provide flood control protection by constructing four new detention basins and a new flood control channel, which would reduce stormwater flows from the Project site and convey them to the existing culvert under I-5. The drainage system would be designed to meet the County's flood control standards to protect the development as well as the remaining floodplain that could be affected by the modification. Since the flood plain would be modified by the Project, a Letter of Map Revision (LOMR) would be prepared and submitted to the Federal Emergency Management Agency (FEMA) to remove the northern portion of the Project site west of the Caltrans culvert from a FEMA Flood Zone A designation. The LOMR would ensure that when the Project site is removed from the flood plain, it is designed to ensure that downstream flood impacts are not increased. As a result, the Project site would not be isolated from access to essential services and facilities in the event of a flood.
Policy S 3.6: Infiltrate development runoff on-site, where feasible, to preserve or restore the natural hydrologic cycle and minimize increases in stormwater or dry weather flows.	**No Conflict.** To minimize risks of flood damage, the Project includes an engineered storm drainage system to collect and treat runoff from developed portion of the site and provide flood control protection by constructing four new detention basins and a new flood control channel, which would reduce stormwater flows from the Project site and convey them to the existing culvert under I-5. The drainage system would be designed to meet the County's flood control standards to protect the development as well as the remaining floodplain that could be affected by the modification.
Goal S 4. An effective regulatory system that prevents or minimizes personal injury, loss of life, and property damage due to fire hazards.	
Policy S 4.1. Prohibit new subdivisions in VHFHSZs unless: (1) the new subdivision is generally surrounded by existing or	**No Conflict.** As discussed in Section 4.20, Wildfire, of this Draft EIR, the Project site is located within a VHFHSZ that falls within the SRA. However, consistent with County Code Title 21, Subdivisions and access requirements of the County Fire Code, the Project's roadways would meet all County access requirements for new residential development in a VHFHSZ. The private access road, which would

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Goal or Policy	Analysis of Project Conflict
entitled development or is located in an existing approved specific plan or is within the boundaries of a communities facility district adopted by the County prior to January 1, 2022, including any improvement areas and future annexation areas identified in the County resolution approving such district; (2) the County determines there is sufficient secondary egress; and (3) the County determines the adjoining major highways and street networks are sufficient for evacuation as well as safe access for emergency responders under a range of emergency scenarios, as determined by the County. Discourage new subdivisions in all other FHSZs.	also serve as an emergency access route, would also include a gate that would comply with all regulations of the County Fire Code. The Project's Wildfire Evacuation Plan (Appendix M-2) determined that the Project, including any existing land uses would be able to evacuate within identified potential evacuation routes available to residents and provides emergency preparedness resources to support situational awareness and household preparedness. As discussed in Section 4.9, Hazards and Hazardous Materials, of this Draft EIR, the Project would implement a fire protection plan, which includes measures such as using fire-retardant construction materials for structures adjoining the natural open space areas, establishment of fuel modification/management zones to provide defensible space and assist in wildland fire suppression, use of fire retardant and drought tolerant landscaping, and installation of fire hydrants spaced at 600 feet or less would be implemented. In addition, the Applicant would comply with the Developer Fee Program, with the LACoFD to further enhance fire protection to the proposed development. The preliminary fuel modification plan for the perimeter of the proposed development would incorporate required set back zones, fire road clearance, long-term maintenance requirements, and conceptual planting. Each fuel modification zone would be designed to specifically address fire suppression. The zones would include requirements for minimum structure setbacks, permanent irrigation systems, fire retardant plants from a County-approved plant list, and landscape and planting maintenance. With the implementation of these features and other measures, fire hazard in the VHFHSZ would be reduced to a less-than-significant level. In addition, the Project would cluster development in the northeastern portion of the Project site, thereby substantially minimizing the development footprint at the Project site. Therefore, for these reasons, the Project would not conflict with this policy.
Policy S 4.2: New subdivisions shall provide adequate evacuation and emergency vehicle access to and from the subdivision on streets or street systems that are evaluated for their traffic access or flow limitations, including but not limited to weight or vertical clearance limitations, dead-end, one-way, or single lane conditions.	**No Conflict.** As detailed in Section 4.17, Transportation of this Draft EIR, vehicular access to the Project site would be provided directly from The Old Road via two unsignalized driveways at the north and south, which have been analyzed to determine their ability to accommodate an increase in traffic. The analysis found that both driveways are projected to operate at an acceptable Level of Service and would not substantially increase hazards related to queuing of vehicles entering or exiting the Project site in the event of an evacuation. The Project would provide on-site emergency vehicle access via proposed "A" Street and "B" Street, in addition to the 26-foot clear-to-sky private access road that would be used as a fire road, for emergency or maintenance vehicle access (see Section 4.9, Hazards and Hazardous Materials, and Section 4.17 of this Draft EIR for further details). An egress-ingress roadway to the property west of the Project site, proposed Tentative Tract Map (TTM) 74979, would also be provided. Consistent with County Code Title 21, Subdivisions and access requirements of the County Fire Code, the Project's roadways would meet all County access requirements for new residential development in a VHFHSZ. The private access road, which would also serve as an emergency access route, would also include a gate to prevent the public from obstructing the roadway and limit access to adjacent wildland areas. The gate would comply with all regulations of the County Fire Code, including being operatable by one person if power fails, a Knox Box, and be made of non-combustible materials, as detailed in Section 4.20 of this Draft EIR. The Project's Wildfire Evacuation Plan (Appendix M-2) determined that the Project, including any existing land uses would be able to evacuate within

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Goal or Policy	Analysis of Project Conflict
	identified potential evacuation routes available to residents and provides emergency preparedness resources to support situational awareness and household preparedness.
Policy S 4.3: Ensure that biological and natural resources are protected during rebuilding after a wildfire event.	**No Conflict.** As discussed in Section 4.20, Wildfire, of this Draft EIR, the Project site is located within a VHFHSZ that falls within the SRA. As such, the Applicant is required to prepare a conceptual fuel modification plan to be reviewed and approved by the Los Angeles County Fuel Modification Division of the LACoFD prior to approval of the Tentative Map. Final fuel modification plans will require approval from the same department prior to the issuance of building permits. Upon occupancy the Forestry Department of the LACoFD will conduct random, annual inspections for compliance with brush clearance regulations per the County's Fire Code. However, a scenario of "rebuilding after a wildfire event" is too speculative at this time.
Policy S 4.4: Reduce the risk of wildland fire hazards through meeting minimum State and local regulations for fire-resistant building materials, vegetation management, fuel modification, and other fire hazard reduction programs.	**No Conflict.** Potential wildland fire hazards would be mitigated, as discussed in Section 4.20, Wildfire, Section 4.9, Hazards and Hazardous Materials, and Section 4.15, Public Services and Recreation, of this Draft EIR. Additionally, the Applicant would be required to prepare a conceptual fuel modification plan to be reviewed and approved by the Los Angeles County Fuel Modification Division of the LACoFD prior to approval of the Tentative Map. Final fuel modification plans will require approval from the same department prior to the issuance of building permits. Upon occupancy and regulated by the Forestry Department of the LACoFD will be random, annual inspections for compliance with brush clearance regulations per the County's Fire Code.
Policy S 4.5: Encourage the use of climate-adapted plants that are compatible with the area's natural vegetative habitats.	**No Conflict.** As described in Chapter 3 of this Draft EIR, the overall planting palette would include low maintenance and low water use plants and trees, and plantings would be grouped and organized according to consistent seasonal maintenance practices, water use, and solar exposure. In addition, the Applicant would be required to prepare a conceptual fuel modification plan to be reviewed and approved by the Los Angeles County Fuel Modification Division of the LACoFD prior to approval of any tentative maps (LACoFD 2022). Final fuel modification plans will require approval from the same department prior to the issuance of building permits. Upon occupancy the Forestry Department of the LACoFD will conduct random, annual inspections for compliance with brush clearance regulations per the County's Fire Code (LACoFD 2022). All plant and tree species listed on the Project's landscape plan are listed in the LACoFD's plant selection guidelines.
Policy S 4.6: Ensure that infrastructure requirements for new development meet minimum State and local regulations for ingress, egress, peak load water supply availability, anticipated water supply, and other standards within FHSZs.	**No Conflict.** The Project would incorporate infrastructure to ensure fire safety, including a new 2-million-gallon water tank to ensure reliable fire flow water pressure for the new residential structures, fire hydrants, and an emergency access road. The development of the proposed dwelling units and buildings on-site would be required to comply with Chapter 7 of the California Fire Code (CFC), which requires the use of ignition resistant building materials, smoke barriers, sprinkler systems, fire protection systems, and door and window designs to avoid ember intrusion.
Policy S 4.7: Discourage building mid-slope, on ridgelines and on hilltops, and employ adequate	**No Conflict.** Through approval of the density-controlled development CUP, which is the County's mechanism for encouraging flexible siting and design techniques in hillside areas, and as required by Section 22.102.090, SEA Development Standards, of the County Code, the Project would designate approximately 150

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
setbacks on and below slopes to reduce risk from wildfires and post-fire, rainfall-induced landslides and debris flows.	acres of the approximately 233-acre Project site as preserved open space and improved open space. As such, the Project would preserve areas with steep slopes by clustering development in accordance with the provisions of the Zoning Ordinance. As discussed in Section 4.7, Geology and Soils, of this Draft EIR, the Geotechnical Report prepared for the Project recommends a number of measures to reduce slope instability, such as the removal of potential debris material, building setbacks from ascending slopes, reduction and control of drainage on debris material, construction of debris basins, and the construction of an impact wall. These recommendations would be incorporated within the final Project-design, as required by the CBC.
Policy S 4.10: Encourage the planting of native oaks in strategic locations and near existing oak woodlands, including those to be mapped in the Oak Woodlands Conservation Management Plan, to protect developments from wildfires, as well as to lessen fire risk associated with developments.	**No Conflict.** The Project would preserve oak trees on site, including at least 29 of the 51 heritage-sized oak trees, as discussed in Section 4.4, Biological Resources, of this Draft EIR. The Project would follow standard avoidance and protective measures, such as fencing, consistent with the County's Oak Tree Ordinance, as outlined in Chapter 22.174.010 of the Zoning Code, to preserve the long-term health of all protected oak trees not directly impacted by the Project. The Project would be required to plant 772 mitigation trees within the Conservation Area or Project landscaped areas as replacement trees as replacement trees for impacts (removals) of 318 SEA-Protected trees, including trees located within debris basins, which will remain that are counted as removals for mitigation purposes, as discussed in Section 4.4, Biological Resources, in compliance with both the County's Oak Tree and SEA Ordinances. The Project would also be required to comply with standard tree planting requirements pursuant to Title 21, requiring the planting of 303 trees onsite based on the Projects total street frontage, as outlined in County Code Section 21.32.195 (On-site Trees) of the Zoning Code.
Policy S 4.11: Support efforts to address unique pest, disease, exotic species and other forest health issues in open space areas to reduce fire hazards and support ecological integrity.	**No Conflict.** The Project would designate approximately 150 acres on-site as preserved open space and improved open space, thus preserving most of the oak trees, hillsides, and biological resources on the site.
Policy S 4.12: Support efforts to incorporate systematic fire protection improvements for open space, including the facilitation of safe fire suppression tactics, standards for adequate access for firefighting, fire mitigation planning with landowners and other stakeholders, and water sources for fire suppression.	**No Conflict.** Because the site is within a VHFHSZ the Project Applicant would be required to prepare a conceptual fuel modification plan to be reviewed and approved by the Los Angeles County Fuel Modification Division of the County Fire Department (LACoFD) prior to approval of the Tentative Map. Final fuel modification plans will require approval from the same department prior to the issuance of building permits. Upon occupancy, the Forestry Department of the LACoFD will perform random, annual inspections for compliance with brush clearance regulations per the County's Fire Code. In addition, the Project would provide emergency vehicle access via the maintenance road, "A" Street, and "B" Street, in addition to the 26-foot clear-to-sky private drive and fire lanes within the residential lots. Additionally, the Project has prepared a Fire Protection Plan (Appendix M-1) and Wildfire Evacuation Report (Appendix M-2). Potential wildland fire hazards would be mitigated, as discussed in Section 4.20, Wildfire, Section 4.9, Hazards and Hazardous Materials, and Section 4.15, Public Services and Recreation, of this Draft EIR. As detailed in Section 4.20, Wildfire, compliance with MM-4.20-1 through MM-4.20-5 would reduce wildfire impacts to less than significant.

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Goal or Policy	Analysis of Project Conflict
Policy S 4.13: Encourage the siting of major landscape features, including but not limited to large water bodies, productive orchards, and community open space at the periphery of new subdivisions to provide strategic firefighting advantage and function as lasting firebreaks and buffers against wildfires, and the maintenance of such features by respective property owners.	**No Conflict.** The Applicant would be required to prepare a conceptual fuel modification plan to be reviewed and approved by the Los Angeles County Fuel Modification Division of the LACoFD prior to approval of the Tentative Map. Final fuel modification plans will require approval from the same department prior to the issuance of building permits. Upon occupancy and regulated by the Forestry Department of the LACoFD will be random, annual inspections for compliance with brush clearance regulations per the County's Fire Code.
Policy S 4.14: Encourage the strategic placement of structures in FHSZs that conserves fire suppression resources, increases safety for emergency fire access and evacuation, and provides a point of attack or defense from a wildfire.	**No Conflict.** Because the site is within a VHFHSZ the Project Applicant would be required to prepare a conceptual fuel modification plan to be reviewed and approved by the Los Angeles County Fuel Modification Division of the County Fire Department (LACoFD) prior to approval of the Tentative Map. Final fuel modification plans will require approval from the same department prior to the issuance of building permits. Upon occupancy, the Forestry Department of the LACoFD will perform random, annual inspections for compliance with brush clearance regulations per the County's Fire Code. In addition, the Project would provide emergency vehicle access via the maintenance road, "A" Street, and "B" Street, in addition to the 26-foot clear-to-sky private drive and fire lanes within the residential lots. Additionally, the Project has prepared a Fire Protection Plan (Appendix M-1) and Wildfire Evacuation Report (Appendix M-2). Potential wildland fire hazards would be mitigated, as discussed in Section 4.20, Wildfire, Section 4.9, Hazards and Hazardous Materials, and Section 4.15, Public Services and Recreation, of this Draft EIR. As detailed in Section 4.20, Wildfire, compliance with MM-4.20-1 through MM-4.20-5 would reduce wildfire impacts to less than significant.
Policy S 4.18: Require Fire Protection Plans for new residential subdivisions in FHSZs that minimize and mitigate potential loss from wildfire exposure, and reduce impact on the community's fire protection delivery system.	**No Conflict.** The Project site is within a VHFHSZ. The Project has prepared a Fire Protection Plan (Appendix M-1) and Wildfire Evacuation Report (Appendix M-2). Potential wildland fire hazards would be mitigated, as discussed in Section 4.20, Wildfire, Section 4.9, Hazards and Hazardous Materials, and Section 4.15, Public Services and Recreation, of this Draft EIR. As detailed in Section 4.20, Wildfire, compliance with MM-4.20-1 through MM-4.20-5 would reduce wildfire impacts to less than significant.
Goal S 5: An effective regulatory system that prevents or minimizes personal injury, loss of life, and property damage due to extreme heat and drought impacts.	
Policy S 5.4: Ensure all park facilities, including recreational sports complexes, include a tree canopy, shade structures,	**No Conflict.** The Project would utilize tree canopy cover in its landscaping throughout the developed area, and would retain open space acreage which would reduce the urban heat island effect. In addition, the Project would comply with Title 24 Building Energy Efficiency Standards (Title 24, Parts 6 and 11), which is designed to reduce wasteful and unnecessary energy consumption

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
and materials with low solar gain to improve usability on high heat days and reduce heat retention	newly constructed and existing buildings. The Project includes use of light-colored paving materials, reflective roofing materials, and solar energy.
Policy S 5.8: Enhance and sustainably manage urban forests that provide shade and cooling functions.	**No Conflict.** The Project would utilize tree canopy cover in its landscaping throughout the developed area and would retain open space acreage.
Policy S 5.11: Encourage the conservation of water by employing soil moisture sensors, automated irrigation systems, subsurface drip irrigation, and weather-based irrigation controllers.	**No Conflict.** The Project would also incorporate a landscape plan that utilizes native and appropriate non-native drought tolerant species. Drought-tolerate, native landscaping would be used in public common areas to reduce water consumption, in compliance with Title 24 Building Energy Efficiency Standards and CALGreen building code.
Policy S 5.13: Encourage the use of drought tolerant landscaping in for new developments to reduce reliance on potable and recycled water resources	**No Conflict.** The Project would also incorporate a landscape plan that utilizes native and appropriate non-native drought tolerant species. Drought-tolerate, native landscaping would be used in public common areas to reduce water consumption, in compliance with Title 24 Building Energy Efficiency Standards and CALGreen building code.
Goal S 4. Effective County emergency response management capabilities.	
Policy S 4.1. Prohibit new subdivisions in VHFHSZs unless: (1) the new subdivision is generally surrounded by existing or entitled development or is located in an existing approved specific plan or is within the boundaries of a communities facility district adopted by the County prior to January 1, 2022, including any improvement areas and future annexation areas identified in the County resolution approving such district; (2) the County determines there is sufficient secondary egress; and (3) the County determines the adjoining major highways and street networks are sufficient for evacuation as well as safe access for emergency responders under a range of	**No Conflict.** As discussed above in response to General Plan Policy LU 1.10, the Project site is located within a VHVHSZ; however, the Project site is adjacent to existing development (i.e., commercial, and residential uses) to the north, while The Old Road and I-5 (a major highway) run parallel to the Project site to the east. As detailed further in Section 4.17 of this Draft EIR, the Project would provide emergency vehicle access via proposed public streets "A" and "B", in addition to a private access road that would be used as a fire road, for access for emergency and maintenance vehicles. An egress/ingress roadway to the property west of the Project site, proposed Tentative Tract Map (TTM) 74979, would also be provided. Consistent with County Code Title 21, Subdivisions and access requirements of the County Fire Code, the Project's roadways would meet all County access requirements for new residential development in a VHFHSZ. The on-site emergency access route would include a locked gate to prevent the public from obstructing the roadway and would also limit public access to adjacent wildland areas. The gate would comply with all regulations of the County Fire Code, including being operatable by one person if power fails, a Knox Box, and be made of non-combustible materials, as detailed in Section 4.20 of this Draft EIR. As further detailed in Section 4.20, the Project would implement MM-4.20-1, which would provide Project residents with potential egress route information and instructions for following the "Ready, Set, Go!" model of the County in the event of evacuation and include the requirements of the Project's Wildfire Evacuation Plan and the Fire Protection Plan (Appendix M-2). Furthermore, both means of ingress/egress from The Old Road have been analyzed to determine their ability to accommodate anticipated traffic levels. The analysis found that both roadways (Streets "A" and "B") are projected to operate at an acceptable Level of Service and would not substantially increase hazards related to queuing of vehicles

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
emergency scenarios, as determined by the County. Discourage new subdivisions in all other FHSZs.	entering or exiting the Project site. The proposed multiple vehicular access points, emergency vehicle access, interior street and circulation elements, and proximity of The Old Road/I-5 would ensure safe access for emergency responders under a range of emergency scenarios.
Policy S 4.2. New subdivisions shall provide adequate evacuation and emergency vehicle access to and from the subdivision on streets or street systems that are evaluated for their traffic access or flow limitations, including but not limited to weight or vertical clearance limitations, dead-end, one-way, or single lane conditions.	**No Conflict.** As discussed above in response to General Plan Policy S 4.1, the Project adequately addresses concerns related to emergency access and evacuation. The Project would provide on-site emergency vehicle access via proposed "A" Street and "B" Street, in addition to a private access road that would provide access for emergency evacuation as well as for maintenance vehicles. This private access road would include a locked gate to limit public access and prevent obstruction in the event of emergency evacuation. Furthermore, the Project's Wildfire Evacuation Plan (Appendix M-2) determined that the Project and existing land uses would be able to evacuate using the identified evacuation routes available to residents. As discussed under Policy S 4.1, the analysis found that both "A" Street and "B" Street are projected to operate at an acceptable Level of Service and would not substantially increase hazards related to queuing of vehicles entering or exiting the Project site. The Project also provides emergency preparedness resources to support situational awareness and household preparedness. The Project's comprehensive approach to emergency access and evacuation planning contributes to the overall safety and resilience of the Project.
Policy S 4.3. Coordinate with other County and public agencies, such as transportation agencies, and health care providers on emergency planning and response activities, and evacuation planning.	**No Conflict.** As described in Section 4.15, Public Services, of this Draft EIR, coordination and correspondence with the LACoFD indicated that LACoFD Fire Station 124, located at 25870 Hemingway Avenue, Stevenson Ranch, is the primary fire protection service provider to the Project site. Additionally, it is a County requirement for the County to coordinate with itself and other public agencies for emergency planning and response activities an evacuation planning, and therefore, the Project would not conflict with this policy.
Policy S 4.5. Ensure that there are adequate resources, such as sheriff and fire services, for emergency response.	**No Conflict.** The impact analysis on law enforcement and fire protection provided in Section 4.15, Public Services, of this Draft EIR indicate adequate police and fire resources are available to ensure the increase in demand from the Project can be met.
Public Services and Facilities Element	
Goal PS/F 1. A coordinated, reliable, and equitable network of public facilities that preserves resources, ensures public health and safety, and keeps pace with planned development.	
Policy PS/F 1.1. Discourage development in areas without adequate public services and facilities.	**No Conflict.** As detailed in Section 4.15, Public Services, of this Draft EIR, coordination and correspondence with the LACoFD, LASD, the Newhall School District and William S. Hart Union High School Districts, LACL, and the County Parks and Recreation Department indicated that there would be adequate public services and facilities to serve the Project. With regards to the fire department, according to the LACoFD, it is estimated that Fire Station 124 would serve the Project site within an acceptable response time. Regarding law enforcement, the LASD indicated that the average and/or anticipated response times for emergent and priority calls for service received at the Project site would be 7.7 minutes for emergent calls and 16.5 minutes for priority calls, which are within LASD's optimal average. Regarding schools, the payment of SB 50 fees by the Project

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

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	Applicant would be considered by the State to represent full mitigation to all potential impacts to school services and facilities. With regards to libraries, the Project would be required to pay developer fees to help mitigate the potential impact of the proposed residential development. Regarding parks and recreation, the Project is providing approximately 175 acres of open space, including approximately 150 acres of natural open space land and approximately 24 acres of improved open space land, as well as a community recreation area and other passive or active open space areas. As such, park requirements would be met by the multitude of recreational amenities provided by both recreational open space and conservational open space.
Policy PS/F 1.2. Ensure that adequate services and facilities are provided in conjunction with development through phasing or other mechanisms.	**No Conflict.** Project infrastructure would not be phased. As detailed above in the conflict analysis with Policy PS/F 1.1 and in Section 4.15, Public Services, of this Draft EIR the Project site would be adequately serviced by fire, sheriff, and other emergency services.
Goal PS/F 2. Increased water conservation efforts.	
Policy PS/F 2.1. Implement water conservation measures, such as drought tolerant landscaping and restrictions on water used for landscaping.	**No Conflict.** The Project would comply with applicable provisions of the CALGreen code to increase water efficiency through the installation of drought-tolerant landscaping and low-water consumption irrigation systems. Domestic water demand would be reduced with the installation of water efficient plumbing fixtures. In addition, implementation of water conservation measures such as those required by Title 24 of the California Code of Regulations would ultimately reduce water demand. As discussed in Section 4.10, Hydrology and Water Quality, of this Draft EIR, first flush rainwater runoff would be conveyed from the Project site through a proposed drainage channel to the Caltrans culvert under I-5. The runoff would be treated in one of Project's biofiltration basins in the proposed channel which would provide water quality treatment in order to meet the County's LID Ordinance.
Goal PS/F 5. Adequate disposal capacity and minimal waste and pollution.	
Policy PS/F 5.5. Reduce the County's waste stream by minimizing waste generation and enhancing diversion.	**No Conflict.** As discussed in Section 4.19, Utilities and Service Systems, of this Draft EIR, the Project would be subject to County and State requirements regarding the diversion of solid waste from landfills and would provide recycling containers and appropriate storage areas for residential use to decrease the Project's solid waste disposal demand. The Project would also recycle, reuse, and/or divert 70% of non-hazardous construction waste as required by the County's Green Building Program.
Policy PS/F 5.6. Encourage the use and procurement of recyclable and biodegradable materials.	**No Conflict.** The Project would incorporate the use of recyclable and biodegradable materials, where appropriate and economically feasible. Materials may include, but are not limited to, gypsum board, insulation, steel, ceramic tile, countertops, trim, and carpet/carpet padding.
Policy PS/F 5.7. Encourage the recycling of construction and demolition debris generated by public and private projects.	**No Conflict.** The Project would comply with applicable provisions of the CALGreen code to reduce resource consumption. The Project would also recycle, reuse, and/or divert 70% of non-hazardous construction waste as required by the County's Green Building Program.

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Policy PS/F 5.9. Encourage the availability of trash and recyclables containers in new developments, public streets, and large venues.	**No Conflict.** All of the residential lots would contain pockets of open space for active and passive use. These discreet pockets of open space areas would be located throughout the northeast corner of the Project site and would contain trash receptacles.
Goal PS/6. A County with adequate public facilities	
Policy PS/F 6.6. Encourage the construction of utilities underground, where feasible.	**No Conflict.** As detailed in Chapter 3, Project Description, all utilities would be undergrounded at the Project site.
Policy PS/F 6.8. Encourage projects that incorporate onsite renewable energy systems.	**No Conflict.** The Project would implement mitigation measure MM-4.8-3 (discussed in further detail in Section 4.8, Greenhouse Gas Emissions, of this Draft EIR), which requires installation of a 7-kW solar photovoltaic system at the recreation center.
Goal PS/F 8. A comprehensive public library system.	
Policy PS/F 8.1. Ensure a desired level of library service through coordinated land use and facilities planning.	**No Conflict.** As detailed in the analysis of potential conflict with Policy PS/F 8.2 below, the Project would be required to comply with the Developer Fee Program for the LACL.
Policy PS/F 8.2. Support library mitigation fees that adequately address the impacts of new development.	**No Conflict.** As discussed in 4.15, Public Services, of this Draft EIR, the Stevenson Ranch Library would serve the Project site. Correspondence with the LACL indicated that based on LACL's service level guidelines, the Stevenson Ranch Library does not currently meet service standards for the population of the service area. To ensure that the Project pays its fair share of costs, the Applicant would comply with the Developer Fee Program for the LACL, as provided in Chapter 22.248.050, Library Facilities Mitigation Fee, of the Zoning Code.
Housing Element	
Goal 3. A housing supply that ranges broadly in costs to enable all households, regardless of income, to secure adequate housing.	
Policy 3.1. Promote mixed-income neighborhoods and a diversity of housing types throughout the unincorporated Los Angeles County to increase housing choices for all economic segments of the population.	**No Conflict.** In addition to market-rate housing, the Project includes the development 71 deed-restricted, affordable units, representing 15% of the dwelling units on-site. Specifically, the Project would provide 47 very low-income senior housing units, one manager's unit, and 24 middle/moderate-income units, thus increasing a diversity of housing types in the Santa Clarita Valley.
Goal 11. Alignment of housing production with state and local sustainability goals in order to protect natural resources, reduce greenhouse gas emissions, and foster climate resilience.	
Policy 11.2. Ensure consistency with the County's Green Building Standards (Title 31) to enhance building design and construction and	**No Conflict.** As discussed in Section 4.6, Energy, of this Draft EIR, the Project would comply with standards in the CALGreen code by implementing energy efficient building designs, pre-wiring residences with electric vehicle charging ports, implementing solar-ready rooftops, reducing indoor and outdoor water demand, and installing energy-efficient appliances and equipment.

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
encourage sustainable construction practices.	

Source: County of Los Angeles 2015, 2022a, 2023.

As detailed in Table 4.11-1, above, the Project would not conflict with applicable goals and policies of the County's General Plan. Overall, with implementation of applicable mitigation measures from Draft EIR Sections and topics (i.e., Section 4.3, Air Quality; Section 4.4, Biological Resources; Section 4.5, Cultural Resources, Section 4.7, Geology and Soils; Section 4.8, Greenhouse Gas Emissions; Section 4.13, Noise; Section 4.17, Transportation, and Section 4.20, Wildfire, Project impacts due to a conflict with the County's General Plan adopted for the purpose of avoiding or mitigated an environmental effect would be less than significant with mitigation.

Santa Clarita Valley Area Plan ("OVOV") Analysis

Table 4.11-2, Potential to Conflict with OVOV, summarizes OVOV goals, policies and objectives that are relevant to the Project, and includes a conflict analysis with the applicable policies.

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
Land Use Element	
Policy LU-1.3.5. Encourage flexible siting and design techniques within hillside areas in order to preserve steep slopes or other unique physical features, including density controlled development (clustering) in accordance with the provisions of the Zoning Ordinance, provided that all residential lots meet the minimum lot size requirements of a Community Standards District, where applicable.	**No Conflict.** Through approval of the density-controlled development CUP, which is the County's mechanism for encouraging flexible siting and design techniques in hillside areas, the Project would designate approximately 150 acres of the approximately 233-acre Project site as natural open space, and 24 acres of improved open space. As such, the Project would encourage flexible siting and design techniques within hillside areas to preserve areas with steep slopes by clustering development in accordance with the provisions of the Zoning Ordinance.
Policy LU-1.3.6. Encourage retention of natural drainage patterns and the preservation of significant riparian areas, both of which are commonly located in hillside areas.	**No Conflict.** The Project's proposed clustering of development and preservation of open space would reduce impacts to wildlife, natural drainage courses, riparian woodland and oak woodlands, and protected trees, and would preserve significant ridgelines by avoiding development in these areas. The proposed debris basins would consist of a combined low flow water quality and peak flow conveyance system. The first-flush runoff will be treated in the biofiltration basins and would provide water quality treatment in order to meet the County's LID Ordinance. During large storm events the rainwater would be captured by the proposed on-site debris basins designed to retain and diffuse the flows to the existing system downstream. As detailed in Section 4.10, Hydrology and Water Quality, of this Draft EIR, water quality treatments across the Project site would use biofiltration units, including proposed modular wetlands to treat flow from building pads, proposed Filterra units to treat flows from

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
	the main streets. Finally, riparian woodland is located in the upland area of the Project site. As the Applicant is requesting approval of a density-controlled CUP to cluster development in the northeastern portion of the Project site, this riparian habitat would be preserved.
Objective LU-3.1. Provide for a diversity of housing types available to provide safe and suitable homes for all economic levels, household sizes, age groups, and special needs groups within the community.	
Policy LU-3.1.2. Provide a mix of housing types within neighborhoods that accommodates households with varied income levels.	**No Conflict.** The Project includes the development of 510 residential dwelling units, which include a combination of attached and detached dwelling units (24 would be dedicated to middle/moderate-income households, consistent with the County's inclusionary housing ordinance) and 47-unit very low-income senior housing units with one manager's unit. The Project would provide a diverse mix of housing units which would assist the County in obtaining their Regional Housing Needs Allocation (RHNA) goals.
Policy LU-3.1.5. Promote development of housing that is affordable to residents, including households with incomes in the very low, low, and moderate income classifications, through provision of adequate sites on the Land Use Map, allowance for density bonuses and other development incentives.	**No Conflict.** The Project includes the development of 47 very low-income senior housing units and one manager's unit. In addition, the Project includes the development of 24 middle/moderate-income units, for a total of 71 deed-restricted affordable housing units (or 15% of the dwelling units as onsite). As such, the Project would promote affordable housing through allowance for density bonuses.
Objective LU-3.3. Ensure that the design of residential neighborhoods considers and includes measures to reduce impacts from natural or man-made hazards.	
Policy LU-3.3.2. In areas subject to wildland fire danger, ensure that land uses have adequate setbacks, fuel modification areas, and emergency access routes.	**No Conflict.** As discussed in Section 4.20, Wildfire, of this Draft EIR, the Project site is located within a VHFHSZ that falls within the SRA. As such, the Applicant is required to prepare a conceptual fuel modification plan to be reviewed and approved by the Los Angeles County Fuel Modification Division of the LACoFD prior to approval of the Tentative Map. Final fuel modification plans will require approval from the same department prior to the issuance of building permits. Upon occupancy the Forestry Department of the LACoFD will conduct random, annual inspections for compliance with brush clearance regulations per the County's Fire Code. In addition, the Project would provide emergency vehicle access via proposed "A" Street and "B" Street, in addition to a private drive and fire lanes within the residential lots (see Section 4.9, Hazards and Hazardous Materials, and Section 4.17, Transportation, of this Draft EIR for further details). As such, the Project would ensure that land uses have adequate setbacks, fuel modification areas, and emergency access routes.
Policy LU-3.3.4. Evaluate service levels for law enforcement and fire protection as needed to ensure that adequate response times are maintained as new residential development is occupied.	**No Conflict.** As discussed in Section 4.15, Public Services, impacts related to law enforcement (Sheriff) and fire protection (LACoFD) would be less than significant with mitigation incorporated. Regarding fire protection services, compliance with applicable codes and fire safety standards, and with implementation of MM-4.17-1, MM-4.20-4, and MM-4.20-5, Project construction would not adversely impact firefighting and emergency services to maintain acceptable service ratios, response

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
	times or other performance objectives for fire protection. During operations, mandatory compliance with existing regulations (e.g., CFC, CBC, Fire Code, Title 21, etc.), LACoFD's participation in mutual aid agreements, requirements of local agencies to provide adequate fire protection and emergency response services, and implementation of MM-4.20-1 and MM-4.20-3 which would reduce the potential for wildfire hazards to occur during construction would reduce impacts to less than significant. Similarly, regarding police protection services, incorporation of MM-4.17-1 would reduce construction impacts to less than significant. During operations, impacts to Sheriff protection services would be less than significant.
Policy LU-3.3.5. Through the development review process, ensure that all new residential development is provided with adequate emergency access and that subdivision and site designs permit ready access by public safety personnel.	**No Conflict.** The Project would provide emergency vehicle access via "A" Street and "B" Street, in addition to a private drive and fire lanes within each residential lot, as detailed in Section 4.9, Hazards and Hazardous Materials, and Section 4.17, Transportation, of this Draft EIR. The private access road on-site, and removable emergency bollards within the residential development would facilitate emergency access on-site.
Objective LU-3.4. Encourage creation of pleasant neighborhoods that provide a high quality of life for residents.	
Policy LU-3.4.4. Within higher density housing developments, ensure provision of adequate recreational and open space amenities to ensure a high quality living environment.	**No Conflict.** The Project would include recreational amenities, trails, and open space improvements within the Project site. As required by Section 22.102.090, SEA Development Standards, of the County Code, the Project will preserve approximately 144 acres of contiguous, undisturbed open space on-site. The Project would also include approximately 24 acres of improved open space within the Project's development footprint. . This improved open space would include substantial amenities maintained by the Homeowners' Association for residents of the Project, including a community recreation center, dog park, and discreet pockets of passive or active open space.
Policy LU-3.4.5. Ensure compatibility between single family and multiple family residential developments through consideration of building height and massing, architectural treatment, connectivity, privacy, and other design considerations.	**No Conflict.** The proposed residential development is clustered on approximately 41 acres in the northeastern portion of the Project site. In total, the Project's on-site impact area, including the Project development footprint, fuel modification zones, and debris extents, would be approximately 83 acres in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space. The Project includes the development of 510 residential units with associated infrastructure, LACFCD lots, and preserved and improved open space within the approximately 233-acre Project site. The proposed dwelling units would include a combination of attached and detached dwelling units. The Project would be designed with a variety of styles, with typical building materials that would include stucco, with wooden trellises, awnings, and bay windows. The materials and architectural styles would be similar to those implemented in the existing, adjacent residential areas. The Project would ensure compatibility between single-family and multiple family residential developments through consideration of building height and massing, architectural treatment, connectivity, privacy, and other design considerations.

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
Objective LU-6.1. Maintain the natural beauty of the Santa Clarita Valley's hillsides, significant ridgelines, canyons, oak woodlands, rivers, and streams.	
Policy LU-6.1.3. Ensure that new development in hillside areas is designed to protect the scenic backdrop of foothills and canyons enjoyed by Santa Clarita Valley communities, through requiring compatible hillside management techniques that may include but are not limited to density-controlled development (clustering) subject to the limitations in Policy LU-1.3.5; contouring and landform grading; revegetation with native plants; limited site disturbance; avoidance of tall retaining and build-up walls; use of stepped pads; and other techniques as deemed appropriate.	**No Conflict.** The Project would require approval of a density-controlled development CUP, which would ensure that the Project would not conflict with this policy. Additionally, the final Project design, as required by the CBC, would require that all permanent cut-and-fill slopes on-site be seeded or planted with lightweight, deep-rooting, drought-resistant native vegetation. In addition, two of the cut-and-fill slopes would require a 10-foot retaining wall. As a result, the manufactured slopes would not standout against the natural hillside areas and the retaining walls would not dominate views of the hillsides.
Objective LU-6.2. Provide attractive public and open spaces in places visited by residents and visitors, where feasible and appropriate.	
Policy LU-6.2.2. Provide and enhance trail heads where appropriate with landscaping, seating, trash receptacles and information kiosks.	**No Conflict.** As described in Chapter 3 of this Draft EIR, the Project would provide a recreational center in the central portion of the Project site. The central recreation space includes an accessible loop path that would connect to the on-site trail system leading to naturalized trails that connect to the County trails system. Approximately 175 acres of natural open space and improved open space would be provided, and non-dedicated trails would be improved and remain on-site. Additionally, the Project would provide a private access road that would also be available for pedestrian/hiking/biking use. The access road would serve as a multi-use trail system and would have a reciprocal access easement to provide access to all residential lots, open spaces, County-maintained facilities, and adjacent properties. A new trailhead would be constructed near the gated connection with the access road to The Old Road at the northeastern corner of the Project site. In addition to dedicated natural and improved open space areas and the recreational facilities on the Project site, all of the residential lots would contain pockets of open space for active and passive use. These discreet pockets of open space areas would be located throughout the northeast corner of the Project site and would contain amenities such as: landscaping and shade trees, passive open space/lawn areas, seating, trash receptacles, picnic tables, activity spaces, and/or walking paths.
Objective LU-7.3. Protect surface and ground water quality through design of development sites and drainage improvements.	
Policy LU-7.3.1. Promote the use of permeable paving materials to allow infiltration of surface water into the water table.	**No Conflict.** The LID Report (Appendix G-1) and the Lyons Canyon Drainage Concept Report-Volume I Regional Flood Protection and Debris Management (Appendix G-3) have been developed for the Project as required under LARWQCB NPDES Municipal Separate Storm Sewer

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
	System (MS4) Permit for the Coastal Watersheds of Los Angeles County (Order No. R4-2012-0175 NPDES Permit No. CAS004001) and in accordance with Public Works' Low Impact Development Standards Manual. The LID Report includes biofiltration for water quality treatment across the Project, which would include a combination of above ground biofiltration basins and biofiltration filter units. The above ground biofiltration basins would be designed to treat 150% of the calculated Stormwater Quality Design Volume per the LID manual while the biofiltration filter units would be designed to treat 150% of the calculated Stormwater Quality Design Flow per the LID manual (Appendix G-1). The proposed residential development is clustered on approximately 41 acres in the northeastern portion of the Project site. In total, the Project's on-site impact area, including the Project development footprint, fuel modification zones, and debris extents, would be approximately 83 acres in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space. This preservation (for natural open space) and maintenance (for improved open space) of land would allow for natural infiltration of surface water into the water table, in addition to proposed detention, desilting, and debris basins on-site.
Policy LU-7.3.2. Maintain stormwater runoff onsite by directing drainage into rain gardens, natural landscaped swales, rain barrels, permeable areas and use of drainage areas as design elements, where feasible and reasonable.	**No Conflict.** As detailed in the analysis with Policy LU-7.3.1 above, the LID Report and the Lyons Canyon Drainage Concept Report-Volume I Regional Flood Protection and Debris Management have been developed for the Project as required under LARWQCB NPDES Municipal Separate Storm Sewer System (MS4) Permit for the Coastal Watersheds of Los Angeles County (Order No. R4-2012-0175 NPDES Permit No. CAS004001) and in accordance with the County's LID Standards Manual. The Project's LID Report includes biofiltration for water quality treatment across the Project site, which would include a combination of above ground biofiltration basins and biofiltration filter units. The above ground biofiltration basins and filter units would be designed to treat stormwater per the LID manual (Appendix G-1). Additionally, the Project would cluster on-site impacts to approximately 83 acres (which includes improved open space) and would result in 150 acres of natural open space over the remainder of the Project site. This preservation (for natural open space) and maintenance (for improved open space) of land would allow infiltration of surface water into the water table.
Policy LU-7.3.3. Seek methods to decrease impermeable site area where reasonable and feasible, in order to reduce stormwater runoff and increase groundwater infiltration, including use of shared parking and other means as appropriate.	**No Conflict.** The Project would cluster residential development on approximately 41 acres. In total, the Project's on-site impact area, including the Project development footprint, fuel modification zones, and debris extents, would be approximately 83 acres in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space. This preservation (for natural open space) and maintenance (for improved open space) of land would allow for increased groundwater infiltration with Project implementation. Additionally, as detailed in Section 4.10, Hydrology and Water Quality, water quality treatments across the Project site would use biofiltration units, including proposed modular wetlands to treat flow from building pads, proposed Filterra units to treat flows from the main streets.

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
Policy LU-7.3.4. Implement best management practices for erosion control throughout the construction and development process.	**No Conflict.** The Project would be required to comply with the Construction General Permit requiring preparation and implementation of a stormwater pollution prevention plan (SWPPP) to control runoff from construction work sites. Implementation of best management practices (BMPs) including physical barriers to prevent erosion and sedimentation, construction of sedimentation basins, limitations on work periods during storm events, protection of stockpiled materials, and a variety of other measures would substantially reduce the potential for impacts to surface water quality from occurring during construction. In addition, the Project would be required to comply with conditions identified in the LID Report and the Lyons Canyon Drainage Concept Report-Volume I Regional Flood Protection and Debris Management, Appendix G-1 and Appendix G-3, respectively, of this Draft EIR.
Policy LU-7.3.5. Limit development within flood-prone areas to minimize down-stream impacts.	**No Conflict.** The lowland areas in northeastern portion of the Project site are located within a 100-year flood zone (Zone A). To minimize risks of flood damage, the Project includes an engineered storm drainage system to collect and treat runoff from the developed portion of the site and provide flood control protection by constructing four new basins and a new flood control channel, which would reduce flows from the Project site and convey them to an existing culvert under I-5. The drainage system would be designed to meet the County's flood control standards to protect the development as well as the remaining floodplain that could be affected by the modification. Since the flood plain would be modified by the Project, a Letter of Map Revision (LOMR) would be prepared and submitted to Federal Emergency Management Agency (FEMA) to remove the northern portion of the Project site west of the Caltrans culvert from the FEMA Flood Zone A designation. The LOMR would ensure that when the Project site is removed from the flood plain it is designed to ensure that downstream flood impacts are not increased.
Policy LU-7.3.6. Support emerging methods and technologies for the on-site capture, treatment, and infiltration of stormwater and greywater, and amend the County Code to allow these methods and technologies when they are proven to be safe and feasible.	**No Conflict.** As illustrated in Figure 4.10-7, Proposed Drainage and Water Quality Infrastructure, in Draft EIR Section 4.10, Hydrology and Water Quality, the Project would construct seven primary flood control facilities. These facilities would be designed to intercept debris and stormwater runoff from the developed portion of the Project site for the purposes of flood control and would be conveyed to the LACFCD for ongoing maintenance. The Project would also contain detention basins, which would also retain water during storm events and would be maintained by the Homeowners' Association. Due to proximity to the major slopes, biofiltration would be developed for water quality treatment across the Project site. Biofiltration units and modular wetlands would be developed to treat stormwater flows from the developed pads. The treated flows would then be discharged to storm drainpipes and conveyed offsite.
Objective LU-7.5. Promote waste reduction through site and building design.	
Policy LU 7.5.1. Ensure that all new development provides adequate space for recycling receptacles and bins onsite.	**No Conflict.** The Project would include trash receptacles in common areas, including at the recreation center and throughout active, passive, and improved open space areas at the site. In addition, residential dwelling units would include trash and recycling receptacles and bins within garages and/or common areas. Three private solid waste haulers

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
	are permitted to collect residential, commercial, and industrial waste in the County. These haulers operate in franchise systems and would be responsible for refuse collection for the Project.
Policy LU 7.5.2. Promote the use of recycled building materials.	**No Conflict.** The Project would be required to comply with CALGreen code, which regulates energy and material conservation and resources efficiency for residential and nonresidential uses.
Objective LU-7.6. Protect natural habitats through site design where reasonable and feasible.	
Policy LU 7.6.4. Encourage site designs that protect oak trees, hillsides, and biological resources through creative solutions.	**No Conflict.** As described in Chapter 3, Project Description, the Project site is characterized by hillside and valley terrain with moderate to steep variations with a significant ridgeline designated in the southern portion of the site. In addition, SEA Protected Trees are located on the Project site. In order to protect oak trees, hillsides and biological resources on the Project site, the Applicant is requesting approval of a Density-Controlled Development CUP to cluster residential development on approximately 41 acres in the northeastern portion of the Project site. In total, the Project's on-site impact area, including the Project development footprint, fuel modification zones, and debris extents, would be approximately 83 acres in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space, thus preserving most of the oak trees, hillsides, and biological resources on the Project site. In addition, the Project would require the Applicant to obtain a CUP to remove SEA protected trees and would require the Project to provide replacement trees at a minimum 2:1 ratio (with a 10:1 ratio for heritage-sized oak trees), which would result in no net loss of SEA protected trees. As detailed further in Section 4.4, Biological Resources, mitigation measures MM-4.4-1 through MM-4.4-16 were incorporated to reduce impacts to less than significant.
Objective LU-7.8. Protect significant woodlands, heritage oak trees, and other biological resources from the impacts of development.	
Policy LU-7.8.2. Protect all designated Significant Ecological Areas (SEAs) from incompatible development.	**No Conflict.** As discussed in Section 4.4, Biological Resources, of this Draft EIR, the Project site is located entirely within the Los Angeles County SEA. The Draft EIR requires mitigation be included to would reduce impacts to federal and state listed species by providing for on-site habitat preservation, including approximately 144 acres of natural, undisturbed land that could support protected species through a Conservation Easement (MM-4.4-1). In addition, the Project would require the Applicant to obtain a CUP to remove SEA protected trees and would require the Project to provide replacement trees at a minimum 2:1 ratio (with a 10:1 ratio for heritage-sized oak trees), which would result in no net loss of SEA protected trees. The required replacement tree quantities and associated maintenance requirements are detailed in MM-4.4-16 (see Section 4.4 of this Draft EIR for further details). The Project includes several mitigation measures to reduce SEA impacts resulting from the project to less than significant. The Project is consistent with the SEA Ordinance as modified based on biological recommendations from SEATAC, and adequacy of the Biota Report (Appendix C). With implementation of mitigation to reduce impacts to the area's biological resources to less than significant, the Project would not conflict with this policy.

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
Objective LU-9.2. Coordination of County and City of Santa Clarita sewer master planning and sewer mitigation to support future development and avoid fiscal impacts to local government or the existing community.	
Policy LU-9.2.1. Ensure that the cost of extending new sewer infrastructure is fully borne by the development that is served, and is not passed on to the existing community.	**No Conflict.** The Project would be required to pay connection fees to offset impacts to existing wastewater infrastructure in accordance with the Los Angeles County Sanitation District (LACSD) connection fee program.
Policy LU-9.2.2. Require that all new development mitigates its impact on existing sewer capacity by upgrading facilities when warranted or payment of a fee to allow construction of new facilities when needed.	**No Conflict.** As discussed in Section 4.19, Utilities and Service Systems, of this Draft EIR, sufficient wastewater and sewer facility capacity exists to serve the Project. The Project would be required to pay connection fees to offset any impacts it may to existing wastewater infrastructure, including treatment capacity.
Circulation Element	
Objective C-1.1. Provide multi-modal circulation systems that move people and goods efficiently while protecting environmental resources and quality of life.	
Policy C-1.1.4. Promote public health through provision of safe, pleasant, and accessible walkways, bikeways, and multi-purpose trail systems for residents.	**No Conflict.** As described in Chapter 3 of this Draft EIR, the Project would provide a recreation center in the central portion of the Project site that would include an accessible loop path that connects to the on-site trail system leading to nature trails that connect to existing off-site trails. The recreation center would be connected via sidewalks to the proposed on-site multi-use trail system that would lead to on-site nature trails and to existing trails, as discussed below. In addition to dedicated natural and improved open space areas and the recreation center, all of the residential lots would contain pockets of open space for passive and active use. These areas would contain amenities such as: landscaping and shade trees, passive open space/lawn areas, picnic tables, activity space, and/or walking paths. In addition, the main interior streets, would include sidewalks to facilitate on-side walks to encourage pedestrian circulation.
Objective C-1.2. Coordinate land use and circulation planning to achieve greater accessibility and mobility for users of all travel modes.	
Policy C-1.2.2. Create walkable communities, with paseos and walkways connecting residential neighborhoods to multi-modal transportation services such as bus stops and rail stations.	**No Conflict.** The Project would support pedestrian infrastructure in the form of sidewalks and trails at the Project site, as discussed above under Policy C-1.1.4. Generally, sidewalks would be provided on one or both sides of streets “A” and “B”, and within internal driveways of the residential lots, and along most internal roadways. Internal driveways in the residential lots adjacent to private garages would not have adjacent sidewalks, but sidewalks would be provided leading to front doors of all ground-floor dwelling units. Additionally, as discussed below in Section 3.2.8, Off-Site Improvements, of Draft EIR Chapter 3, the Project would construct sidewalks along The Old Road fronting the Project site. This would connect the Project site with existing bicycle and pedestrian facilities within proximity to the Project site. The Project is also located near I-5 and Santa Clarita transit options (bus and rail).

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
Objective C-1.3. Ensure conformance of the Circulation Plan with regional transportation plans.	
Policy C-1.3.2. Through trip reduction strategies and emphasis on multi-modal transportation options, contribute to achieving the air quality goals of the South Coast Air Quality Management District Air Quality Management Plan.	**No Conflict.** As discussed in Section 4.17, Transportation, of this Draft EIR, the Project proposes to implement a TDM program (MM-4.17-2) that would reduce VMT generated by the Project. Strategies to reduce single-occupancy vehicle trips include, but are not limited to an e-bikeshare system, a Class III bicycle route on-site, locating the Project near a bike lane carpool/vanpool incentives, a school carpool program, and subsidized transit passes. The Class III bicycle route on-site shall facilitate mobility and connect to the County's future Class II bicycle route on The Old Road. As these measures would reduce single-occupancy vehicle trips, they in turn would reduce emissions from single-occupancy vehicles, thus helping the SCAQMD achieve its emissions reduction goals. The Project is located near I-5 and Santa Clarita transit options (bus and rail), which would provide easy access to jobs and other commercial areas in Santa Clarita and the greater Los Angeles area. As such, the Project would not conflict with this policy.
Objective C-2.2. Adopt and apply consistent standards throughout the Santa Clarita Valley for street design and service levels, which promote safety, convenience, and efficiency of travel.	
Policy C-2.2.6. Within residential neighborhoods, promote the design of "healthy streets" which may include reduced pavement width, shorter block length, provision of on-street parking, traffic-calming devices, bike routes and pedestrian connectivity, landscaped parkways, and canopy street trees.	**No Conflict.** The Project would promote "healthy streets" through street improvements and development of recreational uses. The Project's interior roadway system has been designed consistent with County roadway design criteria for private drives. With implementation of the Project, local public access to the Project site would be provided by two primary access points from The Old Road: "A" Street and "B" Street, public roads of 57- to 64-feet wide, including sidewalks on one or both sides of the street. A 28-foot-wide gated private access road would be provided along the northern and western Project development boundaries. The private access road would be available for pedestrian, hiking, and bicycling access, and bicycle parking would be located throughout the site. The Project would support pedestrian infrastructure in the form of sidewalks and trails at the Project site. Additionally, as discussed below in Section 3.2.8, Off-Site Improvements, the Project would construct sidewalks along The Old Road fronting the Project site. As discussed above, the proposed private access road would mostly be for pedestrian use (in addition to occasional maintenance/emergency vehicle use). The Project would also include on-street parking within Lots 4, 5, and 6. The residential lots would consist of housing connected with shorter internal driveways, which would promote pedestrian connectivity throughout the residential lots and Project site. Additionally, the Project would provide a recreation center with an accessible loop path that connects to the on-site trail system that connects to the County's offsite trails system. In addition, trees would line every street on the Project site, thus creating a canopy of street trees.
Policy C-2.2.15. Adopt consistent standards for implementation of Americans with Disabilities Act requirements such as curb ramp design and accessible pedestrian signals.	**No Conflict.** The Project would be improved consistent with ADA standards, including requirements for curb ramp design and accessible pedestrian signals.

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
Objective C-2.5. Consider the needs for emergency access in transportation planning.	
Policy C-2.5.2. Ensure that new development is provided with adequate emergency and/or secondary access for purposes of evacuation and emergency response; require two points of ingress and egress for every subdivision or phase thereof, except as otherwise approved for small subdivisions where physical constraints preclude a second access point.	**No Conflict.** The Project would provide emergency vehicle access via streets "A" Street and "B" Street, in addition to a private drive and fire lanes within the residential lots. See Section 4.9, Hazards and Hazardous Materials, and Section 4.17, Transportation, of this Draft EIR for additional analysis on emergency access.
Policy C-2.5.3. Require provision of visible street name signs and addresses on all development to aid in emergency response.	**No Conflict.** The Project would provide visible street name signs and addresses on all development on the Project site.
Objective C-7.1. A continuous, integrated system of safe and attractive pedestrian walkways, paseos and trails linking residents to parks, open space, schools, services, and transit.	
Policy C-7.1.10. Continue to expand and improve the Valley's multi-use trail system to provide additional routes for pedestrian travel.	**No Conflict.** As described in Chapter 3 of this Draft EIR, the Project would provide a recreation center in the central portion of the Project site that would include an accessible loop path that connects to the on-site trail system leading to nature trails that connect to existing off-site trails. In addition to dedicated natural and improved open space areas and the recreation center at the Project site, all of the residential lots would contain pockets of passive and active open space areas. These areas would contain amenities such as: landscaping and shade trees, passive open space/lawn areas, picnic tables, activity spaces, and/or walking paths. In addition, the main interior streets, "A" Street and "B" Street, would include sidewalks to enhance pedestrian circulation.
Conservation and Open Space Element	
Objective CO-2.2. Preserve the Santa Clarita Valley's prominent ridgelines and limit hillside development to protect the valuable aesthetic and visual qualities intrinsic to the Santa Clarita Valley landscape.	
Policy CO-2.2.2. Ensure that graded slopes in hillside areas are revegetated with native drought tolerant plants or other approved vegetation to blend manufactured slopes with adjacent natural hillsides, in consideration of fire safety and slope stability requirements.	**No Conflict.** As described in Chapter 3 of this Draft EIR, the Project would require some cut-and-fill slopes. All permanent cut-and-fill slopes on-site would be seeded or planted with lightweight, deep-rooting, drought-resistant native vegetation to stabilize slopes and blend in with adjacent natural hillsides. In addition, the Project would submit a conceptual fuel modification plan to the Los Angeles County Fuel Modification Division of the LACoFD and would incorporate a number of design and maintenance features to ensure fire safety, including but not limited to: fire road access, building offsets, planting setbacks, and native brush clearing to remove and thin combustible vegetation.
Policy CO-2.2.5. Promote the use of adequate erosion control measures for all development in hillside areas, including single family homes and	**No Conflict.** The Project would be required to comply with the Construction General Permit requiring preparation and implementation of a SWPPP to control runoff from construction work sites. Implementation of BMPs including physical barriers to prevent erosion

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
infrastructure improvements, both during and after construction.	and sedimentation, construction of sedimentation basins, limitations on work periods during storm events, protection of stockpiled materials, and a variety of other measures would substantially reduce the potential for impacts to surface water quality from occurring during construction. In addition, the Project would be required to comply with conditions identified in the LID Report (Appendix G-1) and the Lyons Canyon Drainage Concept Report-Volume I Regional Flood Protection and Debris Management (Appendix G-3).
Objective CO-3.1. In review of development plans and projects, encourage conservation of existing natural areas and restoration of damaged natural vegetation to provide for habitat and biodiversity.	
Policy CO-3.1.9. During construction, ensure preservation of habitat and trees designated to be protected through use of fencing and other means as appropriate, so as to prevent damage by grading, soil compaction, pollution, erosion or other adverse construction impacts.	**No Conflict.** The Project would follow standard avoidance and protective measures, such as fencing, consistent with the County's Oak Tree ordinance, as outlined in Chapter 22.174.010 of the Zoning Code, to preserve the long-term health of all protected oak trees during construction not directly impacted by the Project.
Objective CO-3.2. Identify and protect areas which have exceptional biological resource value due to a specific type of vegetation, habitat, ecosystem, or location.	
Policy CO-3.2.4. Protect biological resources in the designated Significant Ecological Areas (SEAs) through the siting and design of development which is highly compatible with the SEA resources. Specific development standards shall be identified to control the types of land use, density, building location and size, roadways and other infrastructure, landscape, drainage, and other elements to assure the protection of the critical and important plant and animal habitats of each SEA. In general, the principle shall be to minimize the intrusion and impacts of development in these areas with sufficient controls to adequately protect the resources. (Guiding Principle #10)	**No Conflict.** The Project site is located entirely within the Los Angeles County SEA. The Project would minimize development with the SEA by using controlled development (clustering) in accordance with the provisions of the Zoning Ordinance. As a result, approximately 150 acres of the Project site would be maintained as natural open space, of which 144.43 acres would be placed within a conservation easement (MM-4.4-1). County Code Chapter 22.102, Significant Ecological Areas, outlines the requirements for the preservation of natural open space. As stated in subsection 22.102.090(E)(3), Land Divisions, all land division projects are required to preserve at least 75 percent of the original undivided parcels as natural open space. The Project would preserve 61.9 percent of the property as natural open space (i.e., 233.49-acre Project site with a minimum of 144.43 acres of open space placed under conservation easement per MM-4.4-1). For projects that do not comply with Section 22.102.090, as outlined in subsection 22.102.100 D.2, Natural Open Space Preservation Mechanisms, natural open space must be provided within or contiguous with the same SEA through either dedication of land, conservation or mitigation bank, conservation easement, permanent on-site deed restriction, covenant between the County and property owner, or in-lieu fees. As required by MM-4.4-9, the Project's proposed off-site conservation area further preserves an additional 466.70 acres of natural open space adjacent to existing publicly owned lands within the same SEA as the Project. When considering the Project site (233.49 acres) and off-site conservation area (466.70 acres), totaling 700.19 acres, the Project would preserve 611.13 acres (including 144.43 acres of on-site Conservation Area and 466.70 acres of off-site Conservation Area), which would result in the preservation in perpetuity of 87.3 percent of natural open space on the combined properties. This would exceed the requirements of the County's requirement for the

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
	preservation of 75 percent of the original undivided parcels as natural open space. The Project includes several mitigation measures to mitigate impacts to SEA resources resulting from the Project to less than significant.
Policy CO-3.5.3. Pursuant to the requirements of the Zoning Ordinance, protect heritage oak trees that, due to their size and condition, are deemed to have exceptional value to the community.	**No Conflict.** The Project would preserve 29 of the 51 heritage-sized oak trees on the Project site, as discussed in Section 4.4, Biological Resources, of this Draft EIR. The Project would follow standard avoidance and protective measures, such as fencing, consistent with the County's Oak Tree ordinance, as outlined in Chapter 22.174.010 of the Zoning Code, to preserve the long-term health of all protected oak trees not directly impacted by the Project. In order to protect oak trees, hillsides and biological resources on the Project site, the Applicant is requesting approval of a Density-Controlled Development CUP to cluster residential development on approximately 41 acres in the northeastern portion of the Project site. In total, the Project's on-site impact area, including the Project development footprint, fuel modification zones, and debris extents, would be approximately 83 acres in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space, thus preserving most of the oak trees, hillsides, and biological resources on the site. As detailed in Section 4.4, Biological Resources, impact of heritage oak trees would be mitigated at a ratio deemed necessary to reduce impacts to less than significant for heritage oak trees. See mitigation measures MM-4.4-1 through MM-4.4-16 for more details.
Objective CO-3.5. Minimize impacts of human activity and the built environment on natural plant and wildlife communities.	
Policy CO-3.6.1. Minimize light trespass, sky-glow, glare, and other adverse impacts on the nocturnal ecosystem by limiting exterior lighting to the level needed for safety and comfort; reduce unnecessary lighting for landscaping and architectural purposes, and encourage reduction of lighting levels during non-business nighttime hours.	**No Conflict.** Project development would be situated toward the northeastern portion of the Project site, and as such, lighting would not be provided within most of the Project site (i.e., natural open space areas) on-site. The northeastern placement of Project development would be proximate to current light and glare sources from streetlights and vehicles traveling along The Old Road and I-5 to the east, the existing commercial lighting from the commercial building and parking lot to the north (which includes security lighting), and residential lighting from the residential development to the north. Project lighting would be downward directed and limited for security purposes. Pavement would not contain reflective surfaces. Additionally, Project buildings would not be constructed with glare-producing materials. All lighting would be required to comply with the CBC for exterior lighting and the sensitive hillside design measures found in the County's Hillside Design Guidelines (Chapter 22.104 of the Zoning Code), which include specific measures for residential streetlights and limits residential lighting for security purposes.
Objective CO-4.1. Promote water conservation as a critical component of ensuring adequate water supply for Santa Clarita Valley residents and businesses.	
Policy CO-4.1.3. Require low water use landscaping in new residential subdivisions and other private	**No Conflict.** As described in Chapter 3 of this Draft EIR, the overall planting palette would include low maintenance and low water use plants and trees, and plantings would be grouped and organized according to

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
development projects, including a reduction in the amount of turfgrass.	consistent seasonal maintenance practices, water use, and solar exposure.
Objective CO-6.1. Protect the scenic character of local topographic features.	
Policy CO-6.1.1. Protect scenic canyons from overdevelopment and environmental degradation.	**No Conflict.** The Project would minimize the degradation of canyons on the Project site by clustering development, including roads and associated infrastructure, within the northeastern portion of the Project site, thus retaining approximately 150 acres of the approximately 233-acre Project site as natural open space.
Policy CO-6.1.2. Preserve significant ridgelines as a scenic backdrop throughout the community by maintaining natural grades and vegetation.	**No Conflict.** As shown in Figure 2-5, Special Management Areas, of Chapter 2, Environmental Setting, a significant ridgeline is located in the southwest portion of the Project site. As development would be clustered within the northeastern portion of the Project site, this significant ridgeline would be preserved. The Project would maintain approximately 150 acres of natural, contiguous open space, which would allow for preservation of natural grades and vegetation within this portion of the Project site.
Objective CO-6.5. Maintain the scenic character of designated routes, gateways, and vista points along roadways.	
Policy CO-6.5.1. In approving new development projects, consider scenic views at major entry points to the Santa Clarita Valley, including gateways located at the Newhall Pass and along Lake Hughes Road, Route 126, Bouquet Canyon Road, Sierra Highway, State Route 14, and other locations as deemed appropriate by the reviewing authority.	**No Conflict.** The Project site is located adjacent to suburban residential and commercial uses on Sagecrest Circle in the Stevenson Ranch development on the north, and thus is not situated within the viewshed of the nearest major entry point to the Santa Clarita Valley, Newhall Pass, which is located approximately two miles to the south of the Project site.
Objective CO-6.6. Limit adverse impacts by humans on the scenic environment.	
Policy CO-6.6.1. Enhance views of the night sky by reducing light pollution through use of light screens, downward directed lights, minimized reflective paving surfaces, and reduced lighting levels, as deemed appropriate by the reviewing authority.	**No Conflict.** Project lighting would be downward directed and limited for security purposes pursuant to the sensitive hillside design measures found in the County's Hillside Design Guidelines, which include specific measures for residential street lights and residential lighting for security purposes. In addition, the Project would utilize a density-controlled development (clustered unit) program to minimize impacts associated with the Project footprint and would minimize light spillage on adjacent open space. The Project would consolidate light and glare sources toward the northeast portion of the Project site where there are currently light and glare sources from street lights and vehicles traveling along The Old Road and I-5 to the east. Pavement would not contain reflective surfaces. Project development would not be constructed with glare-producing materials.
Policy CO-6.6.4. Where appropriate, require new development to be sensitive to scenic viewpoints or viewsheds through building design, site layout and building heights.	**No Conflict.** The Project would minimize the disruption of views of the Project site by clustering development on in the northeastern portion of the property, thus retaining approximately a majority of the approximately 233-acre Project site as preserved open space open space.

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
Objective CO-7.1. Reduce air pollution from mobile sources.	
Policy CO-7.1.2. Support the use of alternative fuel vehicles.	**No Conflict.** Project design provides for the installation of conduit and panel capacity to accommodate future electric vehicle charging stations for all dwelling units, based on requirements of the 2022 Title 24 Building Energy Efficiency Standards and CALGreen Code. This would support the use of alternative fuel vehicles.
Policy CO-7.1.3. Support alternative travel modes and new technologies, including infrastructure to support alternative fuel vehicles, as they become commercially available.	**No Conflict.** The Project proposes to implement a TDM program, which includes strategies that emphasize the use of alternative travel modes, such as bicycle and transit.
Objective CO-7.2. Apply guidelines to protect sensitive receptors from sources of air pollution as developed by the California Air Resources Board (CARB), where appropriate.	
Policy CO-7.2.1. Ensure adequate spacing of sensitive land uses from the following sources of air pollution: high traffic freeways and roads; distribution centers; truck stops; chrome plating facilities; dry cleaners using perchloroethylene; and large gas stations, as recommended by CARB.	**No Conflict.** The Project site is not located within close proximity to distribution centers; truck stops; chrome plating facilities; dry cleaners; and large gas stations. However, the Project would place residential uses within 213 feet of I-5. As discussed in Section 4.3, Air Quality, implementation of MM-4.3-1, Construction Equipment, would reduce NOx emissions to below the SCAQMD's NOx threshold. With implementation of MM-4.3-1 during construction activities, impacts regarding cumulatively considerable net increases of any criteria pollutant for which the project region is in non-attainment would be less than significant with mitigation. Furthermore, the Project would implement mitigation measures MM-4.8-1 through MM-4.8-3, MM-4.8-5, and MM-4.8-8 to reduce GHG emissions below a level of significance (as detailed in Section 4.8, Greenhouse Gas Emissions, of this Draft EIR). These mitigation measures may also reduce criteria air pollutant emissions as a co-benefit during operation.
Objective CO-8.1. Comply with the requirements of State law, including AB 32, SB 375 and implementing regulations, to reach targeted reductions of greenhouse gas (GHG) emissions.	
Policy CO-8.1.3. Revise codes and ordinances as needed to address energy conservation, including but not limited to the following: a. Strengthen building codes for new construction and renovation to achieve a higher level of energy efficiency, with a goal of exceeding energy efficiency beyond that required by Title 24; b. Adopt a Green Building Program to encourage green building practices and materials, along with appropriate ordinances and incentives;	**No Conflict.** The Project would comply with the State and County's requirements to reduce GHG emissions through AB 32 and SB 375. The Project would meet or exceed the applicable requirements of Title 24, Part 6, as well as the California Green Building Standards Code in Title 24, Part 11, as well as the County's Green Building ordinance. In addition, the Project design provides for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations for all dwelling units as required by CALGreen. On-site energy demand would be offset by solar photovoltaic systems as required by 2019 Title 24. MM-4.8-2 through MM4.8-5 support the measures through onsite renewable energy, energy conservation, use of zero-carbon electricity, and EV charging stations. The Project's on-site impact area would be concentrated on approximately 83 acres of the approximately 233-acre Project site in order to preserve natural and improved open space. The Project includes a community recreation area and over 5,500 linear feet of nature trails connecting to the existing County trails system, which would provide local opportunities for recreation. The Project would include recycling and

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
c. Require orientation of buildings to maximize passive solar heating during cool seasons, avoid solar heat gain during hot periods, enhance natural ventilation, promote effective use of daylight, and optimize opportunities for on-site solar generation; d. Encourage mitigation of the "heat island" effect through use of cool roofs, light-colored paving, and shading to reduce energy consumption for air conditioning.	organic waste collection in accordance with SB 1383. During both construction and operation of the Project, the Project would comply with all state regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act. As such, the Project would not conflict with this policy.
Objective CO-8.3. Encourage green building and sustainable development practices on private development projects, to the extent reasonable and feasible.	
Policy CO-8.3.4. Encourage new residential development to include on-site solar photovoltaic systems, or pre-wiring, in at least 50% of the residential units, in concert with other significant energy conservation efforts.	**No Conflict.** The Project would comply with the State and County's requirements to reduce GHG emissions through AB 32 and SB 375. The Project would meet or exceed the applicable requirements of Title 24, Part 6, as well as the California Green Building Standards Code in Title 24, Part 11, as well as the County's Green Building ordinance. In addition, the Project design provides for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations for all dwelling units as required by CALGreen. On-site energy demand would be offset by solar photovoltaic systems as required by 2019 Title 24. MM-4.8-2 through MM4.8-5 support the measures through onsite renewable energy, energy conservation, use of zero-carbon electricity, and EV charging stations. The Project would implement density-controlled development to allow for clustering of residential uses on approximately 41 acres of the Project site. In total, the Project's on-site impact area, including the Project development footprint, fuel modification zones, and debris extents, would be approximately 83 acres in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space. The Project includes a community recreation area and over 5,500 linear feet of nature trails connecting to the existing County trails system, which would provide local opportunities for recreation. The Project would include recycling and organic waste collection in accordance with SB 1383. During both construction and operation of the Project, the Project would comply with all state regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act. As such, the Project would not conflict with this policy.
Objective CO-8.4. Reduce energy consumption for processing raw materials by promoting recycling and materials recovery by all residents and businesses throughout the community.	
Policy CO-8.4.2. Adopt mandatory residential recycling programs for all	**No Conflict.** As discussed in Section 4.15, Public Services, of this Draft EIR, the Project site is located within the service area of the Sunshine

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
residential units, including single-family and multi-family dwellings.	Canyon Landfill and Chiquita Canyon Landfill. The Project would comply with applicable provisions of the CALGreen code to reduce resource consumption by ensuring that trash and recyclable containers are provided to future residents, in accordance with County requirements.
Objective CO-9.1. Develop new parklands throughout the Santa Clarita Valley, with priority given to locations that are not now adequately served, and encompassing a diversity of park types and functions (including passive and active areas) in consideration of the recreational needs of residents to be served by each park.	
Policy CO-9.1.9. Ensure that new development projects provide a fair share towards park and recreational facilities, phased to meet needs of residents as dwelling units become occupied, pursuant to the Quimby Act (California Government Code Section 66477) and local ordinances as applicable.	**No Conflict.** Pursuant to the County's Quimby Code (Sections 21.24.340, 21.240.350, and 21.28.140 of the County Code), the Project would be required to pay an in-lieu fee. Pursuant to County parkland dedication requirements, the Project would require 4 acres of local parkland for every 1,000 people and 6 acres of regional parkland for every 1,000 people. With an estimated population of 1,764, the Project would be required to dedicate natural lands adjacent and near to the Project site, as well as Homeowners' Association -maintained open space, and active and passive open space areas located throughout the Project site (discussed further under Section 3.2.3, Open Space and Recreational Facilities, of Chapter 3, Project Description, of this Draft EIR). The Project would provide approximately 150 acres of preserved land and approximately 24 acres of improved open space onsite (175 acres total), and thus would exceed these requirements. In addition, the Project would include substantial amenities maintained by the Homeowners' Association for residents of the Project, including a community recreation center.
Objective CO-10.2. Ensure the inclusion of adequate open space within development projects.	
Policy CO-10.2.5. Where appropriate, allow density transfers and density-controlled development (clustering) in accordance with the provisions of the Zoning Ordinance to encourage retention of open space, provided that all residential lots meet the minimum lot size requirements of a Community Standards District, where applicable.	**No Conflict.** The Applicant is requesting approval of a density-controlled development CUP to retain approximately 175 acres of the approximately 233-acre Project site as conserved and improved open space, which would allow for an extensive trail system including approximately 1 mile of publicly accessible trails. Additionally, the Project site is not located within a Community Standards District, and as such, requirements for minimum lot size are not applicable to the Project.
Safety Element	
Policy S-1.2.2. Restrict the land use type and intensity of development in areas subject to fault rupture, landslides, or liquefaction, in order to limit exposure of people to seismic hazards.	**No Conflict.** As detailed in Section 4.7, Geology and Soils, of this Draft EIR no Holocene-active or pre-Holocene faults are known to exist within the Project site and the site is not located within an Alquist-Priolo Earthquake Fault Zone. The nearest Alquist-Priolo Earthquake Fault Zone to the site is an unnamed fault located approximately 1.5 miles northwest of the Project site (Appendix E-1). Therefore, the Project would not develop within land subject to fault rupture. Regarding landslides, the Project site includes existing landslides and remnant debris flow deposits. However, as detailed in Section 4.7, compliance and implementation of slope stability standards as required by the latest Standard Specifications for Public Works Construction

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
	(Greenbook) and the County's building Code (Title 26, Building Code, of the Los Angeles County Code of Ordinances) and the CBC would minimize potential for seismically-induced landslides to a less than significant impact. According to the Geotechnical Report prepared for the Project (Appendix E-1), the alluvial areas of the Project site are located within areas mapped as being potentially susceptible to liquefaction. However, the potential for liquefaction induced lateral spreading at the Project site was found to be low (Appendix E-1).
Policy S-1.2.3. Require soils and geotechnical reports for new construction in areas with potential hazards from faulting, landslides, liquefaction, or subsidence, and incorporate recommendations from these studies into the site design as appropriate.	**No Conflict.** Appendix E-1 (Geotechnical Report) of this Draft EIR, is a geotechnical report for new construction at the Project site. According to the County's Manual for Preparation of Geotechnical Reports, tentative subdivision maps and grading and building plan submittals that are required to have engineering geology and/or soils engineering reports shall include the relevant report recommendations on the maps and plans. As such, the Project would incorporate all recommendations from the Geotechnical report into the design of the Project.
Objective S-3.1. Provide adequate fire protection infrastructure to maintain acceptable service levels as established by the Los Angeles County Fire Department.	
Objective S-3.2. Provide for the specialized needs of fire protection services in both urban and wildland interface areas.	
Policy S-3.2.3. Establish landscape guidelines for fire-prone areas with recommended plant materials, and provide this information to builders and members of the public.	**No Conflict.** The Applicant would be required to prepare a conceptual fuel modification plan to be reviewed and approved by the Los Angeles County Fuel Modification Division of the LACoFD prior to approval of any tentative maps (LACoFD 2022). Final fuel modification plans will require approval from the same department prior to the issuance of building permits. Upon occupancy the Forestry Department of the LACoFD will conduct random, annual inspections for compliance with brush clearance regulations per the County's Fire Code (LACoFD 2022). All plant and tree species listed on the Project's landscape plan are listed in the LACoFD's plant selection guidelines.
Policy S-3.2.4. Require sprinkler systems, fire resistant building materials, and other construction measures deemed necessary to prevent loss of life and property from wildland fires.	**No Conflict.** See, Safety Element, Objective LU S–3.1, of the OVOV Plan, above. In addition, the Project would be required to provide adequate water supply, water pressure, fire hydrants and fire flow as determined by the LACoFD for residential development. As such, every structure would be designed per CBC requirements for very high fire severity zones, including fire sprinklers and ignition-resistant roofs. The Project would incorporate infrastructure to ensure fire safety, including a new water tank to assure a reliable fire flow water pressure for the new residential structures (discussed below), fire hydrants, and an emergency access road. The Project would be required to comply with Chapter 7 of the California Fire Code (CFC), which requires the use of ignition resistant building materials, smoke barriers, sprinkler systems, fire protection systems, and door and window designs to avoid ember intrusion.
Policy S-3.2.5. Ensure adequate secondary and emergency access for fire apparatus, which includes minimum requirements for road width, surface material, grade, and staging areas.	**No Conflict.** Within the development footprint, there would be emergency access points within internal driveways that would connect to the proposed private access road, which would meet The Old Road at the northeastern-most boundary of the Project site. The Project would provide emergency vehicle access via proposed "A" and "B" Streets, which would connect to private driveways within the residential lots. The

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
	residential development would contain 20-foot-wide fire lanes within private driveways, and would have emergency bollards throughout. Specifically, the residential development would contain removable emergency bollards to provide emergency access from internal roadways for emergency vehicles. These emergency access points would connect to the proposed private access road traversing the site. Lots 10 and 11, which would accommodate the senior housing apartments, would have a 26-foot-wide fire lane.
Objective S-3.3. Maintain acceptable emergency response times throughout the planning area.	
Policy S-3.3.1. Plan for fire response times of five minutes in urban areas, eight minutes in suburban areas, and 12 minutes in rural areas.	**No Conflict.** As described in Section 4.15, Public Services, of this Draft EIR, the LACoFD Fire Station 124, located at 25870 Hemingway Avenue, Stevenson Ranch, is the primary fire station to the Project site. The Project site is located within a suburban area. According to the LACoFD, the anticipated response time for fire incidents with or without the Project is "near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" (Appendix I-1).
Policy S-3.3.3. Require the posting of address numbers on all homes and businesses that are clearly visible from adjacent streets.	**No Conflict.** The Project would provide address numbers of all residences in compliance with County regulations.
Objective S-6.1. Reduce damage from high winds through effective urban forest management.	
Policy S-6.1.2. Promote the planting of tree types appropriate to the local climate, to avoid breakage by brittle, non-native trees.	**No Conflict.** The Project incorporates a landscape plan that uses native and appropriate non-native drought tolerant species. All species included in the Project's landscape plan are listed in the LACoFD's plant selection guidelines.
Noise Element	
Objective N-1.1. Protect the health and safety of the residents of the Santa Clarita Valley by the elimination, mitigation, and prevention of significant existing and future noise levels.	
Policy N-1.1.4. Control noise sources adjacent to residential, recreational, and community facilities, and those land uses classified as noise sensitive.	**No Conflict.** As described in Section 4.13, Noise, of this Draft EIR, short-term construction noise could affect nearby existing sensitive receptors (on Sagecrest Circle in the Stevenson Ranch development). Construction noise would cease to occur after completion of the Project. Regarding generation of substantial temporary increase in ambient noise levels in the vicinity of the Project, MM-4.13-1 through MM-4.13-4 would be required to reduce impacts from construction activity to less than significant. Upon implementation of these mitigation measures, impacts regarding generation of substantial temporary increases in ambient noise levels in the vicinity of the Project in excess of standards established in the County's General Plan and noise ordinance (Section 12.08.570 of the County Code) would be less than significant. Additionally, because the Project would be a compatible land use with respect to adjacent residential uses, long-term noise exposure impacts would not be significant.

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
Objective N-2.1. Prevent and mitigate adverse effects of noise generated from traffic on arterial streets and highways through implementing noise reduction standards and programs.	
Policy N-2.1.2. Encourage the use of noise absorbing barriers, where appropriate.	**No Conflict.** As detailed in Section 4.13, Noise, of the Draft EIR, the Project would implement mitigation measure MM-4.13-3, which would require erection of a noise barrier around individual stationary equipment that is located within 600 feet of the northern boundaries of Lots 2, 3, 8, 9, 10, and 11, as well as The Old Road Improvements construction zone. Construction noise would occlude the path of noise travel and reduce noise levels at the far side of the barrier (i.e., to off-site residences). Additionally, MM-4.13-4, Temporary Noise Barrier for On-site Phases, requires the use of temporary noise barriers to ensure impacts to on-site sensitive receptors (residences) would be less than significant during construction of the Project.
Policy N-2.1.4. Reduce significant noise levels related to through-traffic in residential areas by promoting subdivision circulation designs to contain a hierarchy of streets which efficiently direct traffic to highways.	**No Conflict.** As discussed in Section 4.13, Noise, of the Draft EIR, County Code Section 12.08.440 includes limits for mobile construction equipment, which also applies to off-site transport operations involving construction equipment, materials, and construction workers; off-site construction traffic noise in the hours between 7:00 AM to 8:00 PM Monday through Saturday must not exceed 75 dBA L_{eq} at single-family residences, 80 dBA L_{eq} at multi-family residences. Existing land uses are not located closer than 40 feet from the centerline of roadways anticipated for use by construction traffic, and therefore, construction traffic noise levels would not be anticipated to exceed the limits specified under County Code Section 12.08.440. Similarly, permanent increases in ambient noise levels at existing residences from Project operation, including on-site stationary noise sources and Project trip contributions to off-site traffic noise exposure levels, would have a less than significant impact regarding generation of substantial permanent increases in ambient noise levels in the vicinity of the Project.
Objective N-3.1. Prevent and mitigate significant noise levels in residential neighborhoods.	
Policy N-3.1.1. Require that developers of new single-family and multi-family residential neighborhoods in areas where the ambient noise levels exceed 60 CNEL provide mitigation measures for the new residences to reduce interior noise levels to 45 CNEL, based on future traffic and railroad noise levels.	**No Conflict.** As discussed in Section 4.13, Noise, of the Draft EIR, permanent increases in ambient noise levels at existing residences from Project operation, including on-site stationary noise sources and Project trip contributions to off-site traffic noise exposure levels, would have a less than significant impact regarding generation of substantial permanent increases in ambient noise levels in the vicinity of the Project.
Policy N-3.1.2. Require that developers of new single-family and multi-family residential neighborhoods in areas where the projected noise levels exceed 65 CNEL provide mitigation measures (which may include noise barriers, setbacks, and site design) for new residences to reduce outdoor noise	**No Conflict.** As discussed in Section 4.13, Noise, of the Draft EIR, comparing predicted Project operational noise levels against both the County's noise ordinance limits and ambient noise levels, a less-than-significant impact would occur for Project operational noise.

Table 4.11-2. Potential to Conflict with OVOV Policies and Objectives

Objective or Policy	Analysis of Project Conflict
levels to 65 CNEL, based on future traffic conditions. This requirement would apply to rear yard areas for single-family developments, and to private open space and common recreational and open space areas for multi-family developments.	
Policy N-3.1.3. Through enforcement of the applicable Noise Ordinance, protect residential neighborhoods from noise generated by machinery or activities that produce significant discernable noise exceeding recommended levels for residential uses.	**No Conflict.** As discussed in Section 4.13, Noise, of the Draft EIR, the most important stationary noise sources (i.e., noise generated by machinery) are Heating, Ventilation, and Air Conditioning (HVAC) units, resulting noise levels at off-site residences would also be subject to Section 12.08.530 of the County Code, which establishes limits of 55 dBA at any point on a neighboring residential property. As demonstrated in Section 4.13, modeled noise levels for combined HVAC units at the periphery of the Project site would not approach, much less exceed, the 45 dBA nighttime limit for stationary sources or the 55 dBA limit for HVAC equipment that would be applied at the property line for the closest adjacent residential parcels located to the north.
Policy N-3.1.6. Ensure that new residential buildings shall not be located within 150 feet of the centerline for Interstate 5.	**No Conflict.** No residential buildings would be located within 150 feet of the centerline of I-5. The nearest residential structures to I-5, would be approximately 300 feet from the centerline of I-5 at the northeastern portion of the Project site.

Source: County of Los Angeles 2012.

As demonstrated within Table 4.11-2, the Project would not conflict with all applicable OVOV policies. Overall, with implementation of mitigation measures from applicable Draft EIR Sections and topics (i.e., Section 4.3, Air Quality; Section 4.4, Biological Resources; Section 4.8, Greenhouse Gas Emissions; Section 4.13, Noise; Section 4.17, Transportation; Section 4.20, Wildfire), Project impacts due to a conflict with the OVOV adopted for the purpose of avoiding or mitigated an environmental effect would be less than significant with mitigation.

Potential to Conflict with Zoning Code

Applicable County regulations adopted for the purpose of avoiding or mitigating an environmental effect include the standards codified within Chapters 22.102 (Significant Ecological Areas), 22.104 (Hillside Management Areas), 22.172 (Oak Tree Permits), and 22.140.170 (Density-Controlled Developments) of the Zoning Code (County of Los Angeles 2022b). The Project's potential to conflict with these code standards is analyzed and discussed below.

Chapter 22.102, Significant Ecological Areas

County Code Chapter 22.102, Significant Ecological Areas, outlines the requirements for the preservation of natural open space. As stated in subsection 22.102.090(E)(3), Land Divisions, all land division projects are required to preserve at least 75 percent of the original undivided parcels as natural open space. The proposed Project would preserve 61.9 percent of the property as natural open space (i.e., 233.49-acre Project site with a minimum of 144.43 acres of open space placed under conservation easement). The SEA Program prioritizes avoidance of impacts to SEA resources and onsite mitigation, however the Program allows for offsite mitigation when avoidance and onsite mitigation is infeasible. However, for projects that do not comply with Section 22.102.090, as outlined in subsection 22.102.100 D.2, Natural Open Space Preservation Mechanisms, natural open space must be

provided within or contiguous with the same SEA through either dedication of land, conservation or mitigation bank, conservation easement, permanent on-site deed restriction, covenant between the County and property owner, or in-lieu fees. As required by MM-4.4-9, the Project's proposed off-site conservation area further preserves an additional 466.70 acres of natural open space adjacent to existing publicly owned lands within the same SEA as the Project. When considering the Project site (233.49 acres) and off-site conservation area (466.70 acres), totaling 700.19 acres, the Project would preserve 611.13 acres (including 144.43 acres of on-site Conservation Area and 466.70 acres of off-site Conservation Area), which would result in the preservation in perpetuity of 87.3 percent of natural open space on the combined properties. This would exceed the requirements of the County's requirement for the preservation of 75 percent of the original undivided parcels as natural open space.

Additionally, as shown on Figure 2-5, Special Management Areas, of Chapter 2, Environmental Setting, the Project site and surrounding adjacent area are within the SEA. Chapter 3 (SEA Protected Trees) of the Los Angeles County SEA Ordinance Implementation Guide (Implementation Guide; County of Los Angeles 2020) describes tree protection regulations. Protected Trees are designated by species and trunk diameter of a minimum listed size specific to each SEA, detailed further in Section 4.4, Biological Resources, of this Draft EIR. Per the requirements of Chapter 22.102 of the Zoning Code, since the Project would require removal of more than two Protected Trees and or Heritage Trees, and because proposed impacts of the Project would exceed the thresholds required for ministerial review, the Project would require discretionary SEA CUP review. For all listed native trees with multiple trunks, the tree is protected if the combined diameter of the two largest trunks equals eight inches or more. Furthermore, to be designated as a Heritage Tree, a SEA Protected Tree must have a single trunk that measures 36 inches or more in diameter, or two trunks that collectively measure 54 inches or more in diameter.

As detailed in the Sensitive Ecological Area Protected Tree Report (Appendix A of Appendix C of this Draft EIR), the Project site supports 612 oak trees, including 478 ordinance-sized oak trees and 51 heritage-sized oak trees (Appendix C). There are 585 coast live oak trees (*Quercus agrifolia*), 478 of which are ordinance-sized and 46 of which are heritage-sized trees; 19 valley oak trees (*Quercus lobata*), 13 of which are ordinance-sized and 5 of which are heritage-sized trees; and 8 scrub oaks (*Quercus berberidifolia*), 3 of which are ordinance-sized oak trees. In total, there are 545 SEA protected oak trees on site. In addition, there are 119 non-oak SEA protected trees for a Project site total of 664 SEA-protected trees. Of the 664 SEA-protected trees, 312 ordinance-sized trees and 22 heritage-sized trees would be impacted by the Project (Appendix C). The 312 protected non-heritage tree impacts consist of 251 removals, 11 encroachments (trees that are not removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds are anticipated), and 50 trees that are located within a debris basin (Appendix C). The 22 heritage tree impacts comprise 14 removals, 5 encroachments, and 3 trees that are located within debris basins (Appendix C).

As detailed further in Section 4.4, Biological Resources, of this Draft EIR, at a minimum and per County requirements, the removal of any SEA Protected Tree would require mitigation in the form of two replacement plantings for each tree removed (2:1 ratio) for non-heritage trees, while the removal of a heritage tree would require mitigation in the form of 10 replacement plantings for each heritage tree removed (10:1 ratio). Per the Sensitive Ecological Area Protected Tree Report, the County may require a minimum of 772 mitigation trees to be planted in an area of the Project site where there is suitable habitat and where the trees will be able to remain in perpetuity (Appendix C). As detailed in Section 4.4, Biological Resources, with the inclusion of mitigation measures (MM-4.4-1, On-Site Habitat Preservation; MM-4.4-2, Habitat Mitigation and Monitoring Plan; MM-4.4-6, Invasive Species Prevention; MM-4.4-9, Off-Site Habitat Preservation; and MM-4.4-16, SEA Protected Trees Replacement/Compensation), the Project would have a less than significant impact related to potential conflicts

with any local policies or ordinances protecting biological resources, the Significant Ecological Areas (SEAs) (L.A. County Code, Title 22, Ch. 102).

As highlighted above, the Project includes several mitigation measures to reduce SEA impacts resulting from the Project to less than significant. The Project is consistent with the SEA Ordinance as modified based on biological recommendations from SEATAC, and adequacy of the Biota Report (Appendix C).

Chapter 22.104, Hillside Management Areas

The Project site is within a HMA defined in the County's Zoning Code (Section 22.104) as having 25% or greater natural slopes. Specifically, the Project site consists of a number of natural areas containing slopes exceeding grades of 25% and 50%. The Project site is also designated as Residential 2 per the OVOV. Regarding the Residential 2 designation, the OVOV states: "density-controlled development (clustering), in accordance with the provisions of the Zoning Ordinance, is encouraged on lands with significant environmental and/or topographical features or resources, in order to preserve open space for protection of these natural features or resources, or to provide recreational amenities" (County of Los Angeles 2012). The Project is requesting approval of a density-controlled development CUP (per Chapter 22.140.170 of the Zoning Code, detailed below) to cluster development on approximately 83 acres in the northeastern portion of the Project site, which includes the Project's on-site impact area, such as the Project development footprint, debris extents, and fuel modification zones. Clustering also results in the development area to be largely contained in the lower-lying areas of the Project site, with most of the Project falling within the 0-24.99% slope range. This design approach also reduces the overall grading quantities that may have otherwise been generated by a more expansive design. As a result, the Project would dedicate 175 acres of the approximately 233-acre Project site as preserved open space (74.7%), including approximately 150 acres of preserved open space and approximately 24 acres of improved open space, thus fulfilling the requirement that at least that 25% of the net area of the development site be provided as required open space (Chapter 22.104.050.A.2 of Zoning Code). Furthermore, all of the natural open space would be contiguous, thus fulfilling the requirement that at least 51% of required natural open space be configured into one contiguous area (Chapter 22.104.050.B.2 of the Zoning Code).

The Project would also comply with the sensitive hillside design measures found in the County's Hillside Design Guidelines (Chapter 22.104 Appendix I of the Zoning Code). As detailed in Section 4.11.2, above, the Hillside Design Guidelines are required for development in HMAs, and the Project is required to comply these requirements in order to obtain approval of a CUP for development in an HMA. The Hillside Design Guidelines are contained in Chapter 22.104 Appendix I of the Zoning Code. The County's Hillside Design Guidelines are intended to implement the General Plan policies to preserve significant natural features in hillside areas. The Hillside Design Guidelines also help to ensure that hillside development projects are designed in a manner that allows projects to meet the findings of the HMA ordinance (i.e., Chapter 22.104 of the Zoning Code). According to the Hillside Design Guidelines, for substantial compliance with the HMA ordinance, projects must use the design measures contained in the Guidelines that reasonably can be implemented in the projects' design (County of Los Angeles 2019b). However, the guideline also states that, "due to the variety, size, geology, hydrology, and complexity of development projects, there is no set number of design measures required in a project to ensure that it, as stated in subsection B of Chapter 22.104.010 of Title 22, preserves and enhances the physical integrity and scenic values of HMAs, provides open space, and is compatible with and enhances community character. Staff and project applicants are advised that four design measures per category (Site Planning, Grading and Facilities, Road Circulation, Building Design, and Landscaping) is typically the appropriate number of design measures to be included in a project to allow the required Ordinance findings to be made for that project" (County of Los Angeles 2019b). Additionally, the guideline prefaces that the numbers (i.e., four design measures per category) are general recommendations and not absolute

requirements. County staff will use its discretion for whole or partial design measure "credit" towards satisfaction of the HMA ordinance's findings in instances where it may be unclear whether a design measure is being fully utilized.

The following examples are provided to demonstrate compliance with the Hillside Design Guidelines. For example, a slope analysis of the Project site was utilized to guide placement of residential development areas in locations that serve to minimize impacts to steep slopes and reduce impacts to hillside terrain while providing for a viable housing development. As such, development would be located on the flattest portion of the Project site (Design Measure 1.2). Another example is that the Project would comply with Design Measure 1.16, to provide private (connector) trails or pedestrian paseos that link together all of the Project's open space areas (one acre or larger) and connect to any on-site or off-site public trails. As shown on Figure 3-5, Conceptual Trail Map, of Chapter 3, of this Draft EIR the Project's existing on-site non-dedicated trails would be conserved within the southern portion of the Project site, and the Project would connect to off-site public trails, including a connection to the Taylor Trail Wilderness and Open Space Area and a connection to Rivendale Park and Open Space and Ed Davis Park at Towsley Canyon. Furthermore, all roadways are designed to follow existing natural slope contours (Design Measure 3.2) and all building exteriors are designed to include stonework and/or woodwork that matches nearby rock and tree varieties (Design Measure 4.8). Finally, the Project includes native and drought-tolerant trees, shrubs, and ground cover over all exposed graded areas (Design Measure 5.5). As such, the Project complies with the HMA ordinance. Impacts would be less than significant.

Chapter 22.174, Oak Tree Permits

The intent of Chapter 22.174.010, Oak Tree Permits, of the Zoning Code is to preserve the long-term health of all protected oak trees. As mentioned in Chapter 3 of this Draft EIR and detailed in the Sensitive Ecological Area Protected Tree Report, the Project site supports 612 oak trees, including 51 heritage-sized oak trees (Appendix C). There are 585 coast live oak trees (*Quercus agrifolia*), 478 of which are ordinance-sized and 46 of which are heritage-sized trees; 19 valley oak trees (*Quercus lobata*), 13 of which are ordinance-sized and 5 of which are heritage-sized trees; and 8 scrub oaks (*Quercus berberidifolia*), 3 of which are ordinance-sized oak trees. In total, there are 545 SEA protected oak trees on site.

Project construction would follow standard avoidance and protective measures consistent with the purpose as outlined in Chapter 22.174.010 of the Zoning Code. The Project would preserve oak trees and associated vegetation in large portions of the Project site through preserving open space areas in the southerly and westerly portions of the site. Although oak trees are proposed for removal, removal of oak trees is not contrary to the intent and purpose of the Oak Tree Permit procedure because the majority of the remaining oak trees would be preserved in dedicated in open space areas. The preserved oak trees are recognized as an ecological resource and will be established within preserved natural habitat proximate to existing open space areas. The removal of oak trees allows the clustered design in the northeastern portion of the Project site to be developed; thus, making the open space dedication in the southwestern portion possible. At a minimum, the removal of any non-heritage oak tree will require mitigation in the form of two replacement trees for each tree removed and ten replacement trees for each heritage oak tree removed. Replacement trees will be seedlings of the same species being removed and will be planted within an area of the Project site where suitable growing conditions are present and where the trees will be able to remain in perpetuity. As detailed in Section 4.4, Biological Resources, implementation of MM-4.4-1, Onsite Habitat Preservation, would conserve approximately 144 acres of open space within a conservation easement and includes preservation of approximately 10.28 acres of oak woodland. In addition, MM-4.4-2, Habitat Mitigation and Monitoring Plan is required, which shall detail the specific approach for each type of habitat restoration and establishment area, special-status species transplant location, and SEA protected tree transplant/planting. With

implementation of the Project, at least 772 native/mitigation trees would be planted, as described further in Section 4.4, Biological Resources. Figure 3-7, Landscape Plan, of Chapter 3, Project Description, depicts the existing and proposed vegetation on the northern portion of the Project site, proximate to proposed dwelling units. Additionally, MM-4.4-16, SEA Protected Trees Replacement/Compensation, addresses SEA guideline-recommended preservation making the Project compatible with SEA resources and reduces proposed impacts to less than significant, as detailed in Section 4.4. This details requirements of oak tree planting on and off the Project site. As such, the Project would not conflict with Chapter 22.174, Oak Tree Permits, of the Zoning Code. Impacts would be less than significant with mitigation from Section 4.4, Biological Resources.

Chapter 22.140.170, Density-Controlled Development

Consistent with OVOV's direction to avoid developing on open hillsides and other sensitive areas, the Project Applicant is requesting approval of a Density-Controlled Development CUP to allow the Project's attached and detached dwelling units, very low-income senior housing units, community recreation center, and all Project infrastructure to be clustered on the northeast portion of the Project site positioned proximate to the Project frontage on The Old Road. Through the Density-Controlled Development CUP, the Applicant will be able to designate approximately 175 acres of the 233-acre Project site as preserved and improved open space. This also allows the Applicant to provide for an on-site trail system.

Consistent with Density-Controlled Development CUP requirements (22.140.170, et seq. of the Zoning Code), the Project proposes to cluster residential development on approximately 41 acres of the 233-acre Project site. In total, the Project's on-site impact area, including the Project development footprint, fuel modification zones, and debris extents, would be approximately 83 acres in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space. As noted in Section 4.4, Biological Resources, as required by Section 22.102.090, SEA Development Standards, of the County Code, approximately 144 acres of preserved open space would be designated as permanent open space within a conservation easement (through implementation of MM-4.4-1) and will comply with density-controlled development requirements. Clustering Project development via the requested density-controlled development CUP will enable the Project to meet density-controlled development and OVOV goals by:

- Reducing the total amount of grading required on the Project site because the grading limits proposed are significantly pulled back from the grading limits authorized under existing entitlement approvals for the Project.
- Preserving oak trees and other native vegetation through preservation of large open space areas in the southerly and westerly portions of the Project site.
- Preserving the existing ridgeline located in the southeast portion of the Project site in its natural state.
- Preserving open space through the designation of approximately 175 acres of preserved open space and improved open space. Without clustering, construction of the same number of units would require substantially greater area and would significantly reduce land area available for open space.
- Creating substantial recreational areas available to the public. The Project provides approximately 1 mile of trails across the Project site. In addition, the Project would include substantial amenities maintained by the Homeowners' Association for residents of the Project, including a community recreation center.

As demonstrated, the Project would comply with the requirements of Chapter 22.140.170, Density-Controlled Development of the Zoning Code. Impacts would be less than significant, and no mitigation is required.

Threshold 4.11c: Would the project conflict with the goals and policies of the General Plan related to Hillside Management Areas or Significant Ecological Areas?

The Project site is located in a County-designated Hillside Management Area with topography characterized by hillside and valley terrain with moderate to steep variations. Additionally, the Project site is within the Santa Susana Mountains/Simi Hills SEA. A slope analysis of the site was performed to guide placement of residential development in locations that serve to minimize impacts to steep slopes and reduce impacts to hillside terrain while providing for a viable housing development. The Project site has a land use designation of Residential 2, which is considered an "urban" land use designation permitting development of a maximum of two dwelling units per acre. The OVOV states that density-controlled development (clustering), in accordance with the provisions of the Zoning Code, is encouraged on lands with significant environmental and/or topographical features or resources, such as HMAs and SEAs, in order to preserve open space for protection of these natural features or resources, or to provide recreational amenities (County of Los Angeles 2012). According to the OVOV, the Residential 2 designation provides for residential neighborhoods at densities that require urban services, providing a transition between higher density, urban development and rural communities throughout the planning area.

As detailed in response to Threshold 4.11b, above (Chapter 22.140.170, Density-Controlled Development), the Project would be required to obtain approval of a density-controlled development CUP, that requires the concentration of dwelling units on one or more portions of a lot resulting in the remainder of the lot being free of buildings or structures, as opposed to development spread throughout the entire lot. Clustering development would maximize open space preservation across the Project site. As a result, impacts to natural drainage courses, woodland areas, and biota that are within the southerly expanse of the Project site have been avoided; these lands would be designated as natural open space. As detailed in response to Threshold 4.11b above (specifically, Chapter 22.104, Hillside Management Area zoning analysis), the Project would designate 175 acres of the approximately 233-acre Project site as open space, including approximately 144 acres of preserved open space under a conservation easement (MM-4.4-1) and approximately 24 acres of improved open space, amounting to approximately 62 percent of natural open space, thus fulfilling the requirement that at least that 25% of the net area of the development site be provided as required open space (Chapter 22.104.050.A.2 of Zoning Code).

Furthermore, all of the proposed natural open space on-site would be contiguous, thus fulfilling the requirement that at least 51% of required natural open space must be configured into one contiguous area (Chapter 22.104.050.B.2 of the Zoning Code). Following the criteria provided in the County's Sensitive Hillside Design Guidelines Measures, the Project has been designed in a responsible way to create a comfortable, active and aesthetically pleasing community for the area. The Project applied four criteria from the Sensitive Hillside Design Measures checklist, which satisfied or exceeded the criteria necessary for each of the categories including Site Planning, Grading and Facilities, Road Circulation, and Building Design and Landscaping. Response to Threshold 4.11b details examples of Hillside Design Guidelines, such as locating development at the flattest potion of the Project site (Design Measure 1.2), providing private (connector) trails or pedestrian paseos that link together all of the Project's open space areas (one acre or larger) and connect to any on-site or off-site public trails. Additionally, as demonstrated in Table 4.11-1, Potential to Conflict with Applicable General Plan Goals and Policies, the Project would not conflict with all policies specifically citing development within an HMA, including Policies C/NR 13.8, C/NR 13.9, and S 1.3. Similarly, as detailed in Table 4.11-2, OVOV Conflict Analysis, the analysis demonstrates that the Project would not conflict with hillside and HMA-related Policies LU-1.3.5, LU-1.3.6, LU-6.1.3, LU 7.6.4, CO-2.2.2, and CO-2.2.5.

Additionally, as detailed in response to Threshold 4.11b (Chapter 22.102, Significant Ecological Area Zoning Code analysis), per the requirements of Chapter 22.102 of the Zoning Code, since the Project would require removal of

more than two Protected Trees and/or Heritage Trees, and because proposed impacts of the Project would exceed the thresholds required for ministerial review, the Project would require discretionary SEA CUP review. All projects that are located within an SEA must provide a Burden of Proof statement detailing how a project will meet each required SEA finding. Burden of Proof statements provide details as to how a project meets the findings, either through project design elements or mitigation measures. The Project would require approval of a CUP to remove SEA protected trees, which would require implementation of mitigation measures, as detailed in Section 4.4, Biological Resources. Specifically, Threshold 4.4f, details the mitigation requirements to reduce impacts to SEAs to less than significant. With implementation of MM-4.4-1 through MM-4.4-16, impacts to SEAs are determined to be less than significant. Please refer to Section 4.4 for more details. Implementation of mitigation measures would reduce impacts to federal- and State-listed species to less than significant. With approval of the SEA CUP, the Project would not conflict with the policies and goals of the General Plan related to SEAs. These goals and policies of the General Plan and OVOV (detailed in Tables 4.11-1 and 4.11-2, respectively) include Goals LU 3, C/NR 3, and Policies LU 3.1, C/NR 3.2, C/NR 3.6, C/NR 3.9, and C/NR 13.9 of the General Plan, and Objective LU-7.8.2 and Policies LU-7.6.4, LU-7.8.2, CO-3.2.4 of the OVOV.

Overall, the Project proposes to cluster development, including a diverse mix of residential types (including 47 very low-income senior housing rental units, one manager's unit, and 24 moderate/middle-income units) on 41 acres of the Project site. In total, the Project's on-site impact area, including the Project development footprint, fuel modification zones, and debris extents, would be approximately 83 acres in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space. This would reduce the number of HMA slopes and SEA Protected Trees that would be impacted. Clustering also results in the development area to be largely contained in the lower-lying or flatter areas of the site, with most of the development situated within the 0 to 24.99% slope range. This design approach also reduces the overall grading quantities that may have otherwise been generated by a more expansive design. Additionally, the Project does have one significant ridgeline on-site, as shown on Figure 2-5, Special Management Areas, of Chapter 2, Environmental Setting. However, the Project does not impact this ridgeline because development would be situated north of the ridgeline. Compliance with these design measures ensures the physical integrity of HMAs will be maintained. Therefore, the Project would not cause a significant environmental impact due to a conflict with the goals and policies of the General Plan related to Hillside Management Areas or Significant Ecological Areas, and impacts would be less than significant with implementation of mitigation measures (as detailed in Section 4.4, Biological Resources, of this Draft EIR).

4.11.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., cumulative projects) used for this analysis are presented in Table 2-2, List of Cumulative Projects, and on Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR. The geographic area of impacts is detailed by threshold, below.

Threshold 4.11a: Would the project physically divide an established community?

Regarding cumulative impacts from physically dividing an established community, cumulative land use impacts could occur if other related projects in the vicinity of the Project site would result in land use incompatibility impacts in conjunction with the impacts of the Project. Development of the Project would result in less than significant impacts regarding the physical divide of an established community. As such, the Project would not contribute to any

cumulative significant land use impacts as other projects are implemented in the area. Based on the list of cumulative projects presented in Chapter 2, Environmental Setting, development of Cumulative Projects LA1 through LA14 would be subject to all adopted County plans and regulations, while development of Cumulative Projects SC1 through SC26 would be subject to all adopted City of Santa Clarita plans and regulations, as these cumulative projects are within the jurisdiction of the City. Each project would be analyzed independent of other land uses and within the context of existing and planned developments to ensure that that goals, objectives, and polices of the applicable General Plan are consistently upheld. As such, the Project would not contribute to cumulative impacts resulting in the division of established communities. Therefore, development of the Project would not result in a significant cumulative land use impact.

Threshold 4.11b: Would the project cause a significant environmental impact due to a conflict with any County land use plan, policy, or regulation adopted for* the *purpose of avoiding or mitigating an environmental effect?

Cumulative land use impacts regarding conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigated an environmental impact could occur if other cumulative projects in unincorporated Los Angeles County would result in land use incompatibility impacts in conjunction with the impacts of the Project. As detailed in response to Threshold 4.11b in Section 4.11.5, above, with implementation of mitigation measures, the Project would result in less than significant impacts regarding a conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Cumulative Projects LA1 through LA14 would be subject to the County's land use plans, policies, and regulations, as these projects are located within unincorporated County land. All future projects that develop in unincorporated Los Angeles County would be subject to the General Plan, Zoning and County Code, and, if within the Santa Clarita Valley Planning Area, subject to the OVOV.

For example, Cumulative Project LA1 would develop within an SEA and HMA, and is required to obtain CUP approval to develop within an HMA and SEA, to develop a density-controlled development, and for grading over 100,000 cubic yards. Approximately 79 acres of open space is proposed for Cumulative Project LA1, leaving much of the site in its natural state, and ensuring that development is subordinate to the characteristic landscape. As detailed in its CEQA analysis, it would have less than significant impacts regarding conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and would be consistent with the General Plan goals, policies, and zoning designations for the site (County of Los Angeles 2019c). As another example, for Cumulative Project LA2, the Applicant would be required to obtain approval CUPs for the following: development within an HMA and SEA, grading over 100,000 cubic yards, and an oak tree permit. As such, Cumulative Project LA2 would also be required to demonstrate compliance with land use plans, policies, or regulations adopted to avoid or mitigate an environmental effect, such as demonstrating that it would not conflict the HMA- and SEA-related goals and policies of the General Plan and of the applicable Zoning Code chapters (including Chapter 22.102, Significant Ecological Areas, Chapter 22.104, Hillside Management Areas, and Chapter 22.174, Oak Tree Permits) (County of Los Angeles 2018). Therefore, Cumulative Projects LA 1 through LA14 are required to demonstrate "no conflict" with applicable General Plan policies, County ordinances, and zoning designations on-site to be approved. Based upon information available regarding the projected growth as forecasted in the County's General Plan, it is reasonable to assume that Cumulative Projects LA1 through LA14 would implement and conform to local and regional planning goals and policies.

Generally, land use conflicts would be related to noise, traffic, air quality, and hazards/human health and safety issues, which are discussed in the relevant sections of this Draft EIR. Land use conflicts are also typically site-specific and not cumulative in nature; in other words, despite the number of cumulative projects in a given area, they would not necessarily compound to create cumulative land use conflicts. Cumulative Projects SC1 through

SC26 are within the City of Santa Clarita, and as such, would not be subject to County land use plans, policies, or regulations and would not contribute to a cumulatively considerable impact. The cumulative environmental effects associated with implementation of the Project have been addressed in the technical sections of this Draft EIR. Therefore, the Project would not make a cumulatively considerable contribution to a cumulative impact related to land use conflicts with County land use plans, policies, or regulations for the purposes of avoiding or mitigating an environmental effect, and the cumulative impact would be less than significant.

Threshold 4.11c: Would the project conflict with the goals and policies of the General Plan related to Hillside Management Areas or Significant Ecological Areas?

The geographic area of cumulative impacts for this threshold would include cumulative projects within Unincorporated County lands that are within an HMA or SEA. For purposes of this analysis, these could include Cumulative Projects LA1 through LA14. More specifically, regarding SEAs, the following cumulative projects are also located within the same SEA: Cumulative Projects LA1, LA2, LA3, and LA13. Cumulative land use impacts regarding conflict with the goals and policies of the General Plan related to HMAs or SEAs could occur if these cumulative projects would result in land use incompatibility impacts in conjunction with the impacts of the Project. As detailed above, the Project would result in less than significant impacts regarding the potential to conflict with the goals and policies of the General Plan related to HMAs and SEAs.

Cumulative Projects LA1, LA2, LA3, and LA13 would also be subject to the County's HMA and SEA ordinances established within the Zoning Code and would be required to demonstrate that these projects would not conflict the HMA- and SEA-related goals and policies of the General Plan. Cumulative Project SC1 through SC23 are within the City of Santa Clarita and are therefore not within an HMA or SEA, as designated by the County. As such, the Project would not make a cumulatively considerable contribution related to conflicts with County's HMA and SEA-related goals and policies of the General and the cumulative impact would be less than significant.

4.11.7 Mitigation Measures

Mitigation measures from Sections 4.3, Air Quality, 4.4, Biological Resources, 4.5, Cultural Resources, 4.7, Geology and Soils, 4.8, Greenhouse Gas Emissions, 4.13, Noise, 4.17, Transportation, and 4.20, Wildfire, are applicable to this analysis.

4.11.8 Level of Significance After Mitigation

Impacts regarding physical division of an established community would be less than significant and no mitigation is required.

Impacts regarding potential to conflict with County plans, policies, or regulations would be less than significant with mitigation from other Draft EIR sections, as detailed above.

Impacts regarding conflict with HMA and SEA-related goals and policies would be less than significant with mitigation, as detailed in Section 4.4, Biological Resources, of this Draft EIR.

4.11.9 References

CEC (California Energy Commission). 2021. "2022 Building Energy Efficiency Standards Summary." August 2021. Accessed May 13, 2022. https://www.energy.ca.gov/sites/default/files/2021-08/CEC_2022_EnergyCodeUpdateSummary_ADA.pdf.

City of Santa Clarita. 2022a. Santa Clarita Municipal Code. Last accessed May 13, 2022. https://www.codepublishing.com/CA/SantaClarita/#!/SantaClarita17/SantaClarita17.html.

City of Santa Clarita. 2022b. "Mapping Your City." Last accessed May 26, 2022. https://maps.santa-clarita.com/portal/apps/webappviewer/index.html?id=4b3cfb271314475db6518999b4747876.

City of Santa Clarita. 2024. Rivendale Park and Open Space. Last accessed February 8, 2024. https://hikesantaclarita.com/where-to-go/rivendale-park-and-open-space/.

County of Los Angeles. 2012. *Santa Clarita Valley Area Plan – One Valley One Vision*. Accessed May 12, 2022. https://planning.lacounty.gov/wp-content/uploads/2022/10/Santa-Clarita-Valley-Area-Plan.pdf.

County of Los Angeles. 2015. *Los Angeles County General Plan 2035*. Adopted October 6, 2015. Accessed May 12, 2022. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

County of Los Angeles. 2018. *Subdivision Committee Report for Project Number 2017-005165-(5)*. May 17, 2018. Accessed May 30, 2022. https://case.planning.lacounty.gov/assets/upl/case/2017-005165_scm-report.pdf.

County of Los Angeles. 2019a. "Significant Ecological Areas and Coastal Resource Areas Policy Map." https://planning.lacounty.gov/wp-content/uploads/2023/02/gp_2035_2014-FIG_9-3_significant_ecological_areas.pdf.

County of Los Angeles. 2019b. *Hillside Design Guidelines*. Revised March 2019. Accessed May 16, 2022. https://planning.lacounty.gov/wp-content/uploads/2022/10/hma_sensitive-design-guidelines.pdf.

County of Los Angeles. 2019c. *Environmental Checklist Form (Initial Study) County of Los Angeles, Department of Regional Planning. Project title: Canyon View Estates/Project No. 2016-002179; Tract Map No. 74650; Conditional Use Permit No. 2016004409; Oak Tree Permit No. RPPL2017009209; and Environmental Assessment No. 20160044100*. Revised February 27, 2022. Accessed May 30, 2022. https://files.ceqanet.opr.ca.gov/254740-2/attachment/ipA1dV8BsKDWvH3jLJCGOad1ZYE9tU66A4Emy6qrgsnaYbzaU8-tcKwCl1Qy2OVHgOkITQlSGNVBenHe0.

County of Los Angeles. 2020. *Significant Ecological Areas (SEA) Ordinance Implementation Guide*. Updated June 30, 2020. Accessed May 15, 2022. https://planning.lacounty.gov/long-range-planning/significant-ecological-areas-program/implementation-guide/.

County of Los Angeles. 2021a. "Hillside Management Areas and Ridgeline Management Map." Last accessed May 13, 2022. https://planning.lacounty.gov/wp-content/uploads/2023/06/Exhibit-D-gp_2035_2021-FIG_9-8_hillside_management_areas-REFERENCE.pdf.

County of Los Angeles. 2021b. “Fire Hazard Severity Zones Policy Map.” Last accessed May 13, 2022. https://planning.lacounty.gov/wp-content/uploads/2023/06/Exhibit-D-gp_2035_2021-FIG_12-5_Fire_Hazard_Severity_Zones_Policy_Map_Responsibility-REFERENCE.pdf.

County of Los Angeles. 2022a. *Revised County of Los Angeles Housing Element (2021-2029)*. Accessed May 12, 2022. https://planning.lacounty.gov/assets/upl/project/housing_revised_housing-element-20220517.pdf.

County of Los Angeles. 2022b. Los Angeles County Code. Last accessed May 13, 2022. https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances?nodeId=LOS_ANGELES_CO_CODE.

County of Los Angeles. 2023. “Chapter 12: Safety Element.” November 2022. Accessed October 2023. https://planning.lacounty.gov/wp-content/uploads/2022/11/12.1_gp_final-general-plan-ch12_updated_2022.pdf.

LAA (Los Angeles Almanac). 2022. “Population of Unincorporated Communities Los Angeles County.” Last accessed May 13, 2022. http://www.laalmanac.com/population/po28.php.

LACoFD (Los Angeles County Fire Department). 2022. “Forestry Fuel Modification.” Accessed May 30, 2022. https://fire.lacounty.gov/forestry-fuel-modification/.

4.12 Mineral Resources

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to mineral resources, identifies associated regulatory requirements, thresholds of significance, methodology, project level and cumulative impact analyses, mitigation measures, level of significance before and after mitigation, and references. Information contained in this section is based on publicly available data and reports from the California Department of Conservation (DOC) and the County of Los Angeles, and the following report prepared for the Project:

Appendix F Revised Phase I Environmental Site Assessment (Phase I ESA), prepared by Stantec, dated April 2023.

Other sources consulted are listed in Section 4.12.9, References.

4.12.1 Existing Conditions

This section describes the existing conditions at the Project site and vicinity related to mineral resources and identifies the mineral resources that could be affected by Project implementation.

Regional Setting

Mineral Resource Potential

As mandated by the Surface Mining and Reclamation Act of 1975 (SMARA), the California State Mining and Geology Board classifies California mineral resources with the Mineral Resource Zones (MRZs) system. These zones were established based on the presence or absence of significant sand and gravel deposits and crushed rock source areas (i.e., products used in the production of cement). The classification system emphasizes Portland Cement Concrete aggregate, which is subject to a series of specifications to ensure the manufacture of strong, durable concrete. The following guidelines are presented in SMARA's mineral land classification for the region (DOC 2021a):

- **MRZ-1 –** Areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence
- **MRZ-2 –** Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that there is a high likelihood for their presence
- **MRZ-3 –** Areas containing mineral deposits, the significance of which cannot be evaluated from available data
- **MRZ-4 –** Areas where available information is inadequate for assignment to any other MRZ zone

Saugus-Newhall Production-Consumption (P-C) Region

The Project site is located within the Saugus-Newhall Production-Consumption (P-C) Region. The Saugus-Newhall P-C Region boundaries are based on identification of active aggregate operations (Production) and the market area served (Consumption). The Saugus-Newhall P-C Region is situated in the northern part of Los Angeles County and includes the upper Santa Clara River Valley and a large area in the hills to the north of the valley, a total of 651 square miles (DOC 1984). The following areas within this Region, listed below, contain information indicating if

significant mineral deposits are present, or where it is judged that there is a high likelihood for mineral deposits to be present (DOC 1984).

Santa Clara River Valley

The Santa Clara River flows from near Soledad Pass, east of the Saugus-Newhall P-C Region into Ventura County. A number of tributary streams join the Santa Clara River within the Region; the most significant of these are Castaic Creek, Newhall Creek, Bouquet Canyon, and Sand Canyon. Detritus that has been transported by the river and its tributaries has been deposited along the Santa Clara River channel and on the adjacent floodplain to form a 15-mile-long linear deposit ranging from 500 to 6,000 feet wide and up to 80 feet in thickness. A total area of about 10 square miles of the river channel has been classified as MRZ-2 (DOC 1984).

Mint Canyon Formation

The Miocene Mint Canyon Formation, which consists of fine- to coarse-grained, well-consolidated, non-marine sediments is widely distributed in the Saugus-Newhall P-C Region, covering approximately 45 square miles; 4 square miles are classified as MRZ-2. The Mint Canyon Formation extends from one mile east of Agua Dulce Canyon to the San Gabriel fault on the west and is bounded on the north by Sierra Pelona and the south by the anorthosite-gabbro and granitic rocks of the San Gabriel Mountains (DOC 1984).

The lower fluvial portion of the Mint Canyon Formation, which is about 3,100 feet thick, consists of coarse-grained sediments derived chiefly from the local mountainous areas of Sierra Pelona and the western San Gabriel Mountains. This lower portion grades upward (south and west of Soledad Canyon) into finer grained sediments of lacustrine (derived from lakes) origin. The lower portion of the Mint Canyon Formation is currently actively mined and produces relatively durable coarse particles (pebbles, cobbles, and bounders) of granite, anorthosite, gabbro, and fragments of volcanic rocks which are suitable for Portland cement aggregate (DOC 1984).

The parts of the Mint Canyon Formation that have been classified as MRZ-3 due to lack of data may offer a high potential for yielding material suitable for concrete aggregate. Several parts of the area designated MRZ-3, especially the fluvial section, contain beds or lenses of sandstone or conglomerate that could possibly yield aggregate. The finer grained lacustrine sections of this unit are generally unacceptable for Portland Cement Concrete–grade aggregate (DOC 1984).

Anorthosite-Gabbro Group

The San Gabriel Mountains south and southeast of Lang Station (historical landmark in Canyon Country, previously referred to as Lang Siding) contain 6 square miles of ground underlain by anorthosite and gabbro, classified as MRZ-2 for its crushed stone aggregate resource.

The principal rock types of the anorthosite-gabbro group are andesine anorthosite, gabbroic anorthosite, anorthositic gabbro and gabbro, which show sharp to gradational contacts and vary only in the proportion of feldspar to ferromagnesian (mafic) minerals. The anorthosite is composed of 0 to 18 percent mafic minerals, the gabbroic anorthosite is 10 to 22 1/2 percent mafic mineral, the anorthositic gabbro is 22 1/2 percent to 35 percent mafic minerals and the gabbro ranges from 35 percent to 65 percent mafic minerals.

The anorthosite and gabbro crop out along the southwestern portion of the Saugus-Newhall P-C Region forming rugged mountains of moderate to high relief (DOC 1984).

MRZs within the Saugus-Newhall P-C Region

The MRZ-1 areas in the Saugus-Newhall P-C Region include parts of the Santa Susana Mountains, hills adjacent to the San Martinez Grande Canyon (west of Castaic Junction), hills both to the east and west of Castaic Lagoon, hills adjacent to Dry Canyon Reservoir, and hills bounding Bouquet Canyon just south of Del Sur Ridge. The sedimentary rocks which are classified as MRZ-1 are siltstones, mudstones, and siliceous shales with minor amounts of sandstone and limestone of the Modelo Formation (upper Miocene); siltstones and very fine sandstones of the Pico Formation; and siltstones and mudstones of the Towsley Formation (upper Miocene and lower Pliocene) (DOC 1984).

The deposits within the Saugus Newhall P-C Region that satisfy the MRZ-2 criteria are certain bedrock units of the Mint Canyon Formation, the Precambrian anorthosite-gabbro group, and portions of the Santa Clara River Valley floodplain. Portions of these deposits are currently being mined and processed for aggregate uses (DOC 1984).

Approximately 110 square miles of the Saugus-Newhall P-C Region have been classified as MRZ-3. MRZ-3 areas located in valley and flatland regions are generally underlain by Quaternary alluvial deposits containing sand and gravel of unknown quality. MRZ-3 areas located in hilly or mountainous areas within the Saugus-Newhall P-C Region are generally underlain by Tertiary sedimentary and volcanic deposits. Portions of the anorthosite-gabbro group and Mint Canyon Formation that have been designated as MRZ-3, due to a lack of data, may offer a high potential for yielding material suitable for Portland Cement Concrete aggregate. Parts of these two bedrock units are currently being mined for aggregate within the Saugus-Newhall P-C Region (DOC 1984).

Within the Saugus-Newhall P-C Region, the only area classified as MRZ-4 is in the Santa Clara River floodplain, a 0.1 square-mile area at the western edge of the region. Well-log data for this area is lacking (DOC 1984).

Local Setting

Current Site Uses

The Project site is currently undeveloped, and there are no habitable buildings or structures onsite; however, some remaining structures include fencing, foundation footings, and other minor features associated with a former water tank, water wells, irrigation lines, and Southern California Edison (SCE) electrical distribution lines. According to the California Geologic Energy Management Division (CalGEM) Well Finder map, the northern portion of the Project site is within the Lyon Canyon (ABD) Oil/Gas Field, but there are no on-site oil wells located within the Lyon Canyon (ABD) Oil/Gas Field (CalGEM 2022). Additionally, there is one plugged and abandoned subsurface oil well (Ayers 1 – API 03706017) previously constructed by the Sun Drilling Company, located in the center of the Project site. The approximate location of this plugged well is shown on Figure 4.12-1. A California Division of Oil, Gas, and Geothermal Resources (DOGGR) Well Summary Report prepared in 1961 obtained by CalGEM indicated that drilling of the well was completed on March 10, 1961. The total well depth reached 9,785 feet below ground surface (bgs) and was plugged and formally abandoned one day later, on March 11, 1961 (CalGEM 2022). The well has been inactive since March 1961.

Mineral Resource Potential of Project Site

According to the Mineral Land Classification of the Greater Los Angeles Area, Part V - Special Report 143, prepared by the California Department of Conservation (DOC), Division of Mines and Geology, the Project site is identified as a mix of MRZ-1 and MRZ-3, as shown in Figure 4.12-1, Mineral Resource Zones (DOC 1984). The classification of

the Project site has not changed in the latest update to the Mineral Land Classification Report prepared in 2021 (DOC 2021b).

4.12.2 Regulatory Requirements

Federal

There are no applicable federal policies or regulations related to mineral resources.

State

Surface Mining and Reclamation Act (SMARA): California Public Resources Code, Sections 2710 et seq.

SMARA is the primary regulator of onshore surface mining in the state. SMARA delegates specific regulatory authority to local jurisdictions. The act requires the State Geologist (California Geological Survey [CGS]) to identify all mineral deposits within the state and to identify any MRZs (i.e., MRZ-1 through MRZ-4) present. The distinctions between MRZs 1 through 4 are detailed in Section 4.12.1, above. Local jurisdictions are required to enact specific procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans. A particular concern of state legislators in enacting SMARA was the premature loss of minerals and protection of sites threatened by development practices that might preclude future mineral extraction.

California Geological Survey Mineral Resources Project

The CGS Mineral Resources Project provides information about California's nonfuel mineral resources. The Mineral Resources Project classifies lands throughout the state that contain regionally significant mineral resources as mandated by SMARA. Nonfuel mineral resources include metals such as gold, silver, iron, and copper; industrial metals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt, and dimension stone; and construction aggregate including sand, gravel, and crushed stone. Development generally results in a demand for minerals, especially construction aggregate. SMARA requires all cities and counties in the state to incorporate in their general plans the mapped MRZ designations approved by the State Mining and Geology Board. The classification process involves the determination of P-C region boundaries based on identification of active aggregate operations (Production) and the market area served (Consumption). The P-C regional boundaries are modified to include only those portions of the region that are urbanized or urbanizing and are classified for their aggregate content.

California Geologic Energy Management Division

CalGEM, formerly the Division of Oil, Gas, and Geothermal Resources (DOGGR), oversees the drilling, operation, maintenance, and plugging and abandonment of oil, natural gas, and geothermal wells, while working to help California achieve its climate change and clean energy goals. CalGEM regulates the drilling, operation, and permanent closure of energy resource wells (DOC 2019).

California Department of Conservation Idle Well Program

Inactive and deserted oil and gas wells that are not maintained (i.e., "idle wells") can pose threats to groundwater and public safety (DOC 2022).[1] In April 2019, CalGEM revised its idle well regulations to create more stringent testing requirements that better protect public safety and the environment from the potential threats posed by idle wells. The regulations require idle wells to be tested and, if necessary, repaired, or permanently sealed and closed. If an operator becomes insolvent or deserts their idle wells, responsibility for permanently sealing and closing these wells may fall to the state. Since 1977, CalGEM has plugged and abandoned about 1,400 wells at a cost of $29.5 million (DOC 2022). To reduce the number of idle wells for which the state may become responsible, legislative and regulatory changes have been made to create incentives for operators to manage and eliminate their idle wells by entering into Idle Well Management Plans (IWMPs). If an operator does not have an IWMP, the operator must pay annual idle well fees. In 2018, CalGEM collected approximately $4.3 million in idle well fees (DOC 2022). These fees are deposited into the Hazardous and Idle-Deserted Well Abatement Fund to help fund the permanent sealing and closure of deserted wells (DOC 2022).

Regional and Local

Los Angeles County 2035 General Plan

The Los Angeles County 2035 General Plan (General Plan) Conservation and Natural Resources Element guides the long-term conservation of natural resources and preservation of available open space areas. Mineral and energy resources are addressed within the Conservation and Natural Resources Element. The following provides a summary of the most applicable goals and policies that pertain to the Project (County of Los Angeles 2015):

Conservation and Natural Resources Element

Goal C/NR 10. Locally available mineral resources to meet the needs of construction, transportation, and industry.

Policy C/NR 10.1. Protect MRZ-2s and access to MRZ-2s from development and discourage incompatible adjacent land uses.

Policy C/NR 10.5. Manage mineral resources in a manner that effectively plans for access to development and conservation of mineral resources for existing and future generations.

Santa Clarita Valley Area Plan; One Valley, One Vision (OVOV)

The OVOV is a component of the County's General Plan and is intended to provide focused goals, policies, and maps to guide the regulation of development within the unincorporated portions of the Santa Clarita Valley. The OVOV establishes goals and policies related to public services for areas within the Santa Clarita Valley. The following mineral resource-related OVOV objectives and policies within the Conservation and Open Space Element are relevant to the Project (County of Los Angeles 2012):

[1] According to the California Public Resources Code, an idle well is defined as "…any well that for a period of 24 consecutive months has not either produced oil or natural gas, produced water to be used in production stimulation, or been used for enhanced oil recovery, reservoir pressure management, or injection. For the purpose of determining whether a well is an idle well, production or injection is subject to verification by the division" (DOC 2022).

Goal CO-2. Conserve the Santa Clarita Valley's hillsides, canyons, ridgelines, soils, and minerals, which provide the physical setting for the natural and built environments.

Objective CO-2.3. Conserve areas with significant mineral resources, and provide for extraction and processing of such resources in accordance with applicable laws and land use policies.

Policy CO-2.3.1. Identify areas with significant mineral resources that are available for extraction pursuant to Zoning Ordinance requirements.

Policy CO-2.3.2. Consider appropriate buffers near mineral resource areas that are planned for extraction, to provide for land use compatibility and prevent the encroachment of incompatible land uses.

Discussions regarding the potential for the Project to conflict with the above-referenced goals and policies are detailed in Section 4.11, Land Use and Planning.

Los Angeles County Code, Title 22, Planning and Zoning

The following subsection of Title 22, Planning and Zoning (Zoning Code) of the Los Angeles County Code, including Section 22.140.400, Oil Wells is applicable to mineral resources within the Project site (due to the existing plugged oil well on the Project site) and discussed in further detail, below.

Section 22.140.400, Oil Well. Section 22.140.400, Oil Wells, regulates oil wells in the unincorporated County areas, including the installation and use of equipment, structures, and facilities for oil drilling and producing operations. Within Light Manufacturing (M-1), Restricted Heavy Manufacturing (M-1.5), and Heavy Manufacturing (M-2), a Ministerial Site Plan Review (Chapter 22.186) application is required. A Conditional Use Permit (Chapter 22.158) application is required for all oil wells outside established oil fields, or, if located in Zone M-2, if located within 300 feet of any public school or park, or any Residential Zone or Light Agricultural (A-1) zones. Oil drilling is not permitted within 300 feet of any residence, except for a residence on the same land that is owned or leased by the person drilling the well.

4.12.3 Thresholds of Significance

In accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to mineral resources are listed below. A project may have a significant impact if it would:

Threshold 4.12a: 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; or

Threshold 4.12b: 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.

4.12.4 Methodology

Analysis of mineral resource impacts regarding known mineral resources that would be of value to the region and the residents of the state was based on the Mineral Land Classification reports and figures developed by the DOC. This analysis assumes that a potentially significant impact would occur if the Project site is identified as MRZ-2 by

the DOC, and whether the Project would result in a loss of known mineral resources of statewide importance. MRZ-2 are important in this analysis because they contain known mineral resources, while MRZ-1, MRZ-3, and MRZ-4 either do not contain these resources or there is not enough information available to determine whether resources are present. Therefore, impacts to areas identified as MRZ-2 are more likely to be significant to mineral resources than impacts in areas that are not identified as MRZ-2. The geographic scope of impacts associated with mineral resources generally encompasses the Project site and a 0.25-mile radius around the Project site (see Figure 4.12-1).

Analysis of mineral resource impacts regarding locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan was based on the Mineral Land Classification reports and figures developed by the DOC, existing and past uses on the Project site, and mineral resource information from the County's General Plan and the OVOV. Mineral resource information from the City of Santa Clarita General Plan, Conservation and Open Space Element, was also taken into account for this analysis, due to the close proximity of the Project site to the City's boundaries. This analysis assumes that a potentially significant impact would occur if the Project site is identified as MRZ-2 by the DOC, or if the General Plan, OVOV, or the City of Santa Clarita's General Plan identified existing mineral extraction areas within the Project site or vicinity. The analysis would then consider whether the Project would result in a loss of known mineral resources of local importance.

4.12.5 Impact Analysis

Threshold 4.12a: 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?

As described in Section 4.12.1 and depicted on Figure 4.12-1, Mineral Resource Zones, the Project site contains areas designated as MRZ-1 and MRZ-3. The Project site does not contain an MRZ-2 zone. MRZ-1 is defined as areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence, and MRZ-3 is defined as areas containing mineral deposits, the significance of which cannot be evaluated from available data.

According to the CalGEM Well Finder map, the northern portion of the Project site is within the Lyon Canyon (ABD) Oil/Gas Field, but there are no on-site oil wells located within the Lyon Canyon (ABD) Oil/Gas Field (CalGEM 2022). There is one identified plugged subsurface oil well at the site (Ayers 1 – API 03706017), south of the Lyon Canyon (ABD) Oil/Gas Field, which was previously owned by the Sun Drilling Company, that could be considered a source of a mineral resource recovery site. The oil well was plugged and abandoned on March 11, 1961 and has been inactive since it was plugged. As shown on Figure 4.12-1, Mineral Resource Zones, the oil well is located within the center of the Project site (CalGEM 2022). Reportedly, the well did not produce and was subsequently plugged. Therefore, the Project would not result in a loss of availability in a resource recovery site (Appendix F). Because the Project site contains an inactive oil well even though it never produced oil, the Applicant must consult with CalGEM to confirm that the well has been adequately abandoned, as discussed in Section 4.9, Hazards and Hazardous Materials of this Draft EIR.

As discussed within Chapter 1, Introduction, CalGEM provided a comment letter in response to the Project's NOP on July 27, 2022. The letter states that operators must obtain CalGEM approval and permits to perform any well work. The comment notes that there is one known plugged and abandoned oil well within the Lyon Canyons Oil Field and there is the possibility that others could be present. CalGEM requests to be notified in case other oil wells are found during development. Additionally, CalGEM advises against building over or impeding access to oil, gas, or

geothermal wells. The commenter also recommends that information regarding identified wells be communicated to the appropriate County department and that soils containing hydrocarbons be disposed of in accordance with appropriate laws. As discussed in Section 4.9, Hazards and Hazardous Materials, implementation of MM-4.9-3 requires the Project Applicant to coordinate with CalGEM and the Los Angeles County Department of Public Works to ensure compliance with the proper abandonment standards and necessary approvals from CalGEM regarding the appropriate well abandonment, prior to construction of the Project and implement all remedial and grading activity recommendations to the satisfaction of CalGEM and the Public Works Building Official prior to commencement of construction grading.

Therefore, due to the lack of any known significant mineral resources that would be of value to the region and the residents of the state, the Project would not result in the loss of availability of a known mineral resource and there would be no impact.

Threshold 4.12b: 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?

As described in Section 4.12.1, the DOC identified the Project site as containing a combination of MRZ-1 and MRZ-3. The County of Los Angeles General Plan's Mineral Resources Figure (Figure 9.6) did not identify the Project site as a Mineral Resource Zone. The County defines the "Mineral Resource Zone" as MRZ-2 zones only (County of Los Angeles 2015). For a more detailed view of the Project area, the City of Santa Clarita's General Plan was referenced due to the close proximity of the Project site to the City limit. The City of Santa Clarita General Plan's Conservation and Open Space Element does not identify the Project site as located within an existing mineral extraction area nor as a mineral resource zone (City of Santa Clarita 2011). Additionally, the OVOV does not identify the Project site as a Mineral Resources Zone (County of Los Angeles 2012). The Project site is not located in a specific plan area, and the County's General Plan relies on the DOC's Mineral Land Classification reports to determine the presence of any mineral resources (County of Los Angeles 2015). Therefore, it can be concluded that the Project site does not contain any locally-important mineral resource recovery sites.

Additionally, as described in Section 4.12.1 and in response to Threshold 4.12a, above, there is one identified plugged subsurface oil well (Ayers 1 – API 03706017), previously owned by the Sun Drilling Company. Oil wells could be considered a source of a mineral resource recovery site. The plugged oil well is located within the center of the Project site and has been identified on the CalGEM Well Finder map, which has been compiled pursuant to Government Code Section 65962.5 (discussed in Section 4.9, Hazards and Hazardous Materials of this Draft EIR). Please refer to Figure 4.12-1 for the approximate location of this plugged well. Reportedly, the well did not produce and was subsequently plugged, therefore, the Project would not result in a loss of availability of a locally-important mineral resource recovery site (Appendix F). Because the Project site contains an inactive oil well, the Applicant must consult with CalGEM to confirm that the well has been adequately abandoned, as detailed in Section 4.9, Hazards and Hazardous Materials, of this Draft EIR. However, implementation of the Project would not 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, as the onsite oil well was not productive, and do not currently and have not historically contributed to important mineral resource recovery.

There are no known significant mineral resources present on the Project site; the Project site is not within an MRZ-2 zone. In addition, there are no producing oil resources on the Project site. Therefore, the Project would not result in a loss of availability of locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plans, and there would be no impact.

4.12.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts associated with the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The geographic context of the past, present, and reasonably foreseeable future projects (i.e., cumulative projects) used for this analysis are presented in Table 2-2, List of Cumulative Projects and on Figure 2-8, Cumulative Projects Location Map, in Chapter 2, Environmental Setting, of this Draft EIR.

Threshold 4.12a: 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?

The geographic scope of impacts associated with mineral resources generally encompasses the Project site and a 0.25-mile radius around the Project site. As shown in Figure 2-8, Cumulative Projects Location Map, in Chapter 2, the following projects are within a 0.25-mile radius of the Project site: Cumulative Projects LA2 and SC1. This scope is appropriate because of the localized nature of mineral resource impacts. Development of the Cumulative Projects LA 2 and SC1 would not interfere with the Project as it relates to mineral resources because it would not result in the loss of availability of a known mineral resource nor prevent any other current or future mining projects. The EIR for the County's General Plan evaluated cumulative impacts to known mineral resources that would be considered to have value to the region and/or residents of the state associated with future buildout of the County and concluded the impact would be less than significant. The Project site, along with Cumulative Projects LA2 and SC1, are located in an area of the County designated by the DOC as MRZ-1 or MRZ-3 with little likelihood for the presence of significant mineral resources and/or in an area with unknown mineral deposits. Therefore, the Project, combined with Cumulative Projects LA2 and SC1, would not 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. Because the Project does not contain any mineral resources that would be considered to have value to the region and/or residents of the State the Project would not have a cumulatively considerable contribution when viewed in connection with the effects of other closely related past, present and reasonably foreseeable projects thus, there would be no cumulative impact and no mitigation would be required.

Threshold 4.12b: 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?

The geographic scope of impacts associated with mineral resources generally encompasses the Project site and a 0.25-mile radius around the Project site. This scope is appropriate because of the localized nature of mineral resource impacts. As shown in Figure 2-8, Cumulative Projects Location Map, in Chapter 2, the following projects are within a 0.25-mile radius of the Project site: Cumulative Projects LA2 and SC1. Development of Cumulative Projects LA2 and SC1 would not interfere with this expansion nor prevent any other current or future mining projects. The EIR for the County's General Plan evaluated cumulative impacts to the loss of availability of locally-important mineral resource recovery sites associated with future buildout of the County and concluded the impact would be less than significant. The Project site and Cumulative Projects LA2 and SC1 are located in an area of the County designated by the DOC as MRZ-1 or MRZ-3 with little likelihood for the presence of significant mineral resources and/or in an area with unknown mineral deposits. Additionally, the County's General Plan, and the City of Santa Clarita General Plan, does not identify the Project site or Cumulative Projects LA2 and SC1 as containing an existing mineral extraction area nor as a mineral resource zone (County of Los Angeles 2012, 2015; City of Santa Clarita 2011). Because the Project would not 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, the Project would not have a

cumulatively considerable contribution when viewed in combination with Cumulative Projects LA2 and SC1. Thus, there would be no cumulative impact, and no mitigation would be required.

4.12.7 Mitigation Measures

No mitigation measures are required to reduce impacts to mineral resources to less than significant.

4.12.8 Level of Significance After Mitigation

No impacts related to known mineral resource that would be of value to the region and the residents of the state would occur.

There would be no impacts related to locally-important mineral resource recovery sites delineated on a local general plan, specific plan, or other land use plans.

4.12.9 References

CalGEM (California Geologic Energy Management Division). 2022. "Well Finder, Ayers Well Report." Accessed May 11, 2022. https://maps.conservation.ca.gov/doggr/wellfinder/.

City of Santa Clarita. 2011. "Conservation and Open Space Element." In *City of Santa Clarita General Plan*. June 2011. Accessed June 15, 2022. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/6%20-%20Conservation%20and%20Open%20Space%20Element.pdf.

County of Los Angeles. 2012. *Santa Clarita Valley Area Plan – One Valley One Vision (OVOV)*. Accessed May 12, 2022. https://planning.lacounty.gov/wp-content/uploads/2022/10/Santa-Clarita-Valley-Area-Plan.pdf.

County of Los Angeles. 2015. *Los Angeles County General Plan*. Adopted October 6, 2015. Accessed on June 16, 2022. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

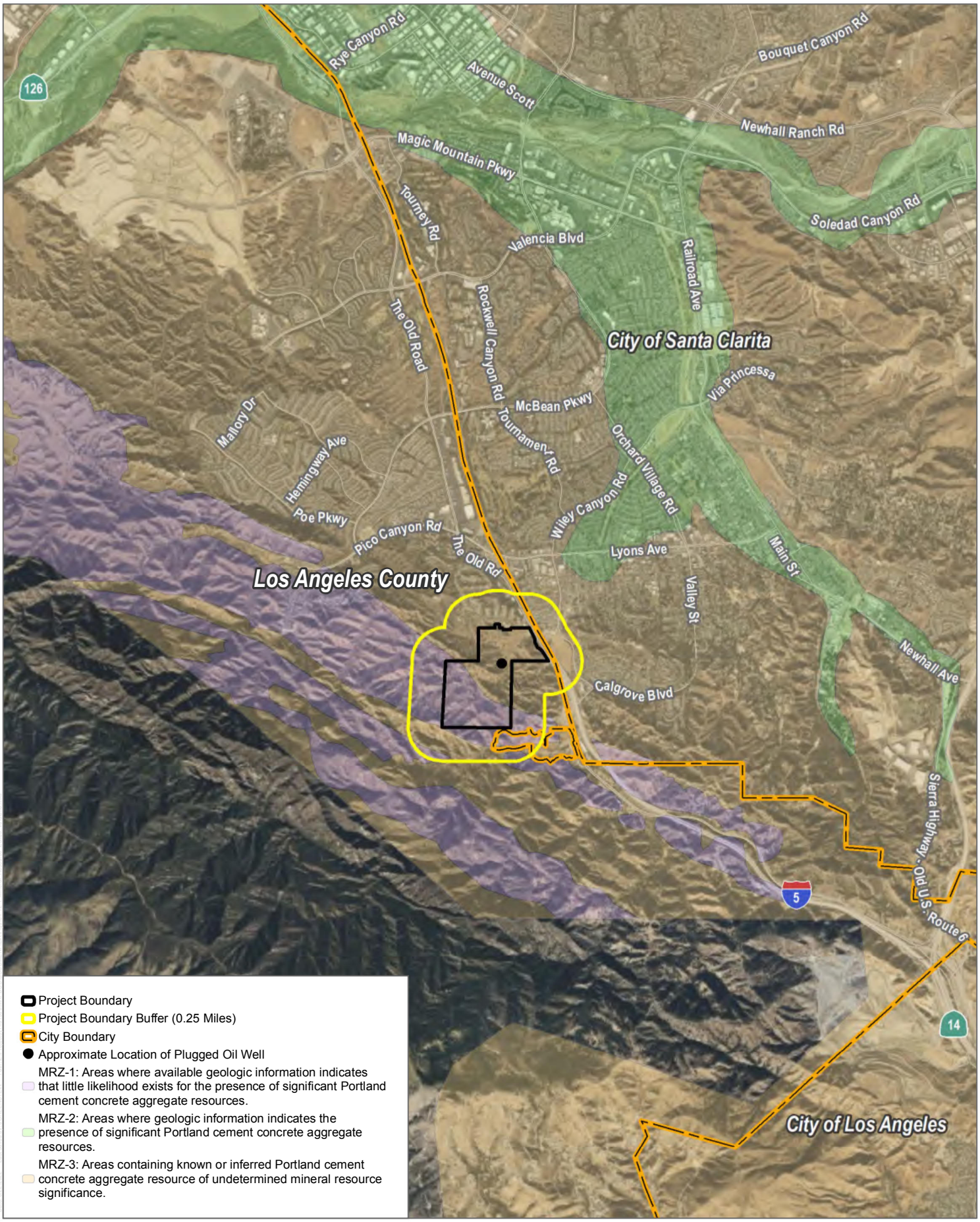
DOC (Department of Conservation). 1984. *Mineral Land Classification of the Greater Los Angeles Area, Part V*. Special Report 143. Division of Mines and Geology. Accessed on June 15, 2022.

DOC. 2019. "Geologic Energy Management Division." Accessed on June 16, 2022. https://www.conservation.ca.gov/calgem.

DOC. 2021a. *Update of the Mineral Land Classification for Portland Cement Concrete Aggregate Resources in the San Fernando Valley and Saugus-Newhall Production-Consumption Regions*. Special Report 254. Accessed on June 15, 2022. https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_254-MLC-SanFernandoValleySaugusNewhallPCR-2021-Report-a11y.pdf.

DOC. 2021b. "Updated Mineral Resource Zones for Portland Concrete Aggregate in the San Fernando Valley and Saugus-Newhall Production-Consumption Regions." SR 254 Plate 1. Accessed on June 15, 2022. https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_254-MLC-SanFernandoValleySaugusNewhallPCR-2021-Plate01-MRZs-a11y.pdf.

DOC. 2022. "Idle Well Program." Accessed June 16, 2022. https://www.conservation.ca.gov/calgem/idle_well.



SOURCE: Bing Maps 2021, Open Street Map 2019, State of California - Department of Conservation 2007

DUDEK

0 2,500 5,000 Feet

FIGURE 4.12-1

Mineral Resource Zones

Trails at Lyons Canyon Project

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4.13 Noise

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to noise, and identifies regulatory requirements associated with noise and vibration, thresholds of significance, methodology, impact analysis, cumulative impacts analysis, mitigation measures, level of significance after mitigation, and references. Dudek completed on-site short-term and long-term sound measurements to describe the ambient noise environment and used noise predictive models to quantify noise levels from Project construction, on-site mechanical equipment operation, and off-site Project-related traffic noise contributions. Information contained in this section is based on publicly available data and reports as well as the following:

Appendix H Ambient Noise Measurement Data and Noise Modeling Worksheets for Construction, Off-Site Traffic and Stationary Sources, prepared by Dudek, dated March 2024

Appendix J Transportation Impact Analysis, prepared by Fehr and Peers, dated November 2023

Other sources consulted are listed in Section 4.13.9, References.

4.13.1 Existing Conditions

This section provides background information on acoustics and vibration to assist the reader with the analysis presented, describes the existing conditions in the Project area and identifies the resources that could be affected by the Project.

Acoustic & Vibration Fundamentals—Noise Terminology and Characteristics

Sound, Noise, and Acoustics

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound. In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receptor determine the sound level and characteristics of the noise perceived by the receptor. The field of acoustics deals primarily with the propagation and control of sound.

Frequency

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz, or thousands of hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

Sound Pressure Levels and Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth

(0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this huge range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe Sound Pressure Level (SPL) in terms of decibels (dB). The threshold of hearing for young people is about 0 dB, which corresponds to 20 mPa.

Addition of Decibels

Because decibels are logarithmic units, SPL cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a receptor equidistant to each sound source would be 3 dB higher than one source under the same conditions. For example, if one automobile produces an SPL of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB—rather, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dB louder than one source.

A-Weighted Decibels

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz, and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an "A-weighted" sound level (expressed in units of dBA) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special problems (e.g., B-, C-, D-, and G-scales), but these scales are rarely used in conjunction with highway traffic noise. Noise levels for traffic noise reports are typically reported in terms of A-weighted decibels (dBA). Table 4.13-1, Typical Noise Levels Associated with Common Activities, arranges typical outdoor and indoor noise sources against a decreasing linear scale of A-weighted sound levels, and provides examples of common noise levels in the indoor and outdoor environment.

Table 4.13-1. Typical Noise Levels Associated with Common Activities

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
—	110	Rock Band
Jet Flyover at 1,000 feet	105	—
Gas Lawn Mower at three feet	95	—
Diesel Truck at 50 feet, 50 mph	85	Food Blender at 3 feet
—	80	Garbage Disposal at 3 feet

Table 4.13-1. Typical Noise Levels Associated with Common Activities

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Noisy Urban Area, Daytime	75	—
—	70	Vacuum Cleaner at 10 feet
Commercial Area	65	Normal speech at 3 feet
Heavy Traffic at 300 feet	60	—
—	55	Large Business Office
Quiet Urban Daytime	50	Dishwasher (in next room)
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime	35	—
—	30	Library
Quiet Rural Nighttime	25	Bedroom at Night, Concert Hall (background)
—	15	Broadcast/Recording Studio
Lowest Threshold of Human Hearing (Healthy)	0	Lowest Threshold of Human Hearing (Healthy)

Source: Caltrans 2013.
Notes: dBA = A-weighted decibel; mph = miles per hour.

Several descriptors of noise (noise metrics) exist to help predict average community reactions to the adverse effects of environmental noise, including traffic-generated noise. These descriptors include the equivalent noise level over a given period (L_{eq}), the day–night average noise level (L_{dn}), and the Community Noise Equivalent Level (CNEL). Each of these descriptors uses units of dBA.

L_{eq} is a decibel quantity that represents the constant or energy-averaged value equivalent to the amount of variable sound energy received by a receptor during a time interval. For example, a one-hour L_{eq} measurement of 60 dBA would represent the average amount of energy contained in all the noise that occurred in that hour. L_{eq} is an effective noise descriptor because of its ability to assess the total time-varying effects of noise on sensitive receptors, which can then be compared to an established L_{eq} standard or threshold of the same duration. Another descriptor is maximum sound level (L_{max}), which is the greatest sound level measured during a designated time interval or event. The minimum sound level (L_{min}) is often called the floor of a measurement period. L_n represents a statistical or percentile noise level, where 'n' is the percent exceeded noise level over a designated time interval or event. For example, L_{50} is the level exceeded for 50% of the time; it is statistically the mid-point of the noise readings, or the median noise level during the designated period.

Unlike the L_{eq}, L_{max}, and L_{min} metrics, L_{dn} and CNEL descriptors always represent 24-hour periods and differ from a 24-hour L_{eq} value because they apply a time-weighted factor designed to emphasize noise events that occur during the non-daytime hours (when speech and sleep disturbance is of more concern). *Time weighted* refers to the fact that L_{dn} and CNEL penalize noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 AM to 7:00 PM) receives no penalty. Noise during the evening (7:00 PM to 10:00 PM) is penalized by adding five dB, and nighttime (10:00 PM to 7:00 AM) noise is penalized by adding 10 dB. L_{dn} differs from CNEL in that the daytime period is longer (defined instead as 7:00 AM to 10:00 PM), thus eliminating the dB adjustment for the evening period. L_{dn} and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5 to one dB and are often considered or actually defined as being essentially equivalent by many jurisdictions.

Regarding increases or decreases to the outdoor ambient noise environment, changes in a community noise level of less than 3 dBA are not typically noticed by the human ear, while changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise; a 5 dBA increase is readily noticeable (Caltrans 2013). The human ear perceives a 10 dBA increase in sound level as a doubling of the sound level (i.e., 65 dBA sounds twice as loud as 55 dBA to a human ear). The Federal Interagency Committee on Noise (FICON) developed guidance to be used for the assessment of project-generated permanent increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such CNEL and L_{eq}. Per FICON, in areas where the without project noise levels range from 60 to 70 dBA, a 3 dBA *barely perceptible* noise level increase appears to be appropriate for most people, and for this EIR, the County has chosen to apply this increase as the significance threshold for permanent increases to community noise levels resulting from the Project, including on-site noise sources and Project contributions to off-site traffic noise in the community.

Exterior Noise Distance Attenuation

Noise sources are classified in two forms: (1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time, and (2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically “hard” sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically “soft” sites. Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling distance, for hard and soft sites, respectively. Sound levels can also be attenuated by man-made or natural barriers. For the purpose of sound attenuation discussion, a “hard” or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete ground surfaces, as well as very hard-packed soils. An acoustically “soft” or absorptive site is characteristic of unpaved loose soil or vegetated ground.

Health Effects of Noise

Excessively noisy conditions can affect an individual’s quality of life, health, and well-being. The effects of noise can be organized into six broad categories: sleep disturbance, permanent hearing loss, human performance and behavior, social interaction or communication, extra-auditory health effects, and general annoyance. An individual’s reaction to noise and its level of disturbance depends on many factors such as the source of the noise, its loudness relative to the background noise level, time of day, whether the noise is temporary or permanent, and subjective sensitivity.

Vibration Terminology and Characteristics

Vibration is oscillatory movement of mass (typically a solid) over time. It is described in terms of frequency and amplitude and, unlike sound, can be expressed as displacement, velocity, or acceleration. For environmental studies, vibration is often studied as a velocity that, akin to the discussion of SPLs, can also be expressed in dB as a way to cast a large range of quantities into a more convenient scale. Vibration impacts to buildings are generally discussed in terms of inches per second (ips) peak particle velocity (PPV), which will be used herein to discuss vibration levels for ease of reading and comparison with relevant standards. Vibration can also be annoying and thereby impact occupants of structures, and vibration of sufficient amplitude can disrupt sensitive equipment and

processes, such as those involving the use of electron microscopes and lithography equipment. Consequently, land uses that are considered to be vibration sensitive include residences (due to the potential for annoyance), medical and research (due to the potential for interference with surgical procedures or high precision analytical equipment), and historic structures that are constructed of fragile materials (due to the potential for structural damage). Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities where sudden releases of subterranean energy or powerful impacts of tools on hard materials occur. Depending on their distances to a sensitive receptor, operation of large bulldozers, graders, loaded dump trucks, or other heavy construction equipment and vehicles on a construction site also have the potential to cause high vibration amplitudes. As with travel of sound waves through air, vibration waves traveling through the ground attenuate with increasing distance from the source.; however, the energy associated with a vibration wave in the ground dissipates more quickly with distance, as compared to sound waves in the air. The maximum vibration level standard used by the California Department of Transportation (Caltrans) (Caltrans 2020) for the prevention of structural damage to typical residential buildings is 0.3 ips PPV, whereas the Federal Transit Administration (FTA) uses a more conservative threshold of 0.2 ips PPV (FTA 2006). The more conservative FTA threshold will be used for the vibration assessment in this EIR.

Local Setting

Sensitive Receptors. The area surrounding the Project site includes residential uses with limited commercial enterprises on Sagecrest Circle and the Stevenson Ranch residential community to the north; The Old Road, Interstate (I) 5, and Mulberry Mobile Home Park to the east; Ed Davis Park in Towsley Canyon, the City of Santa Clarita's Rivendale Park, and open space to the south; and vacant open space to the west. With respect to noise, sensitive receptors are defined as any land use where exposure to elevated noise levels would cause disruption of normal activities or interfere with enjoyment of the property; noise-sensitive uses are generally defined to include residences, schools, hospitals, and places of assembly (County of Los Angeles 2015). The residences along the south side of Sagecrest Circle represent the closest noise-sensitive receivers to the Project site; these residences are located no closer than approximately 110 feet from the Project site boundary (and construction limits).

Ambient Noise Survey

Sound-pressure level measurements were conducted within and adjacent to the Project site on June 13th and 14th, 2022 to quantify and characterize the existing outdoor noise levels. Measurements employed two different durations; short-term measurements refer to those with a duration of less than one hour, while long-term measurements include a duration of at least 24-hours. Table 4.13-2, Measured Short-Term Baseline Outdoor Noise Levels, and Table 4.13-3, Measured Long-Term Baseline Outdoor Noise Levels, provide the location, date, and time at which these baseline noise level measurements were taken. The sound-pressure level measurements were performed by an attending Dudek field investigator using a SoftdB Piccolo model sound level meter equipped with a 0.5-inch, pre-polarized condenser microphone with pre-amplifier. The sound level meter meets the current American National Standards Institute standard for a Type 2 (general purpose) sound level meter. The accuracy of the sound level meter was verified using a field calibrator before and after the measurements, and the measurements were conducted with the microphone positioned approximately five feet above the ground.

As detailed in Table 4.13-2, four short-term noise level measurement locations (R1–R4) that represent existing or future sensitive receivers and/or roadway facilities to which the Project would principally contribute trips were selected within and adjacent to the Project site boundaries. These noise measurement locations, including short-term and long-term measurements, are depicted on Figure 4.13-1, Ambient Noise Monitoring and Modeled Receiver

Locations. The "R" designation for locations depicted on Figure 4.13-1 indicates a location where Dudek recorded an ambient noise level. As discussed in greater detail later in this section, the "M" designation for locations depicted on Figure 4.13-1 indicate a location where Dudek modeled operational noise from the Project. A location depicted on Figure 4.13-1 with "R" and "M" indicates that both an ambient noise level was recorded and operational noise was modeled.

The L_{eq} and L_{max} noise levels measured at these locations are provided in Table 4.13-2. The primary noise sources at the sites identified in Table 4.13-2 consisted of traffic along adjacent roadways. As shown in Table 4.13-2, the measured existing ambient sound levels at R1–R4 ranged from approximately 58.7 dBA L_{eq} at R4 to 65.6 dBA L_{eq} at R1 and R3. Noise measurement data is also included in Appendix H.

Sensitive Receptors – Occupied Project Phases. Future occupants of on-site residences are considered sensitive receptors with regard to Project construction noise, due to construction phasing over the course of approximately 4 and a half years and the assumption that some Lots would become operational before overall Project construction is complete. The distance between residential structures in adjacent Lot areas varies from approximately 50 to 150 feet, and therefore the closest distance from construction activity in a given phase and completed (occupied) residences in an adjacent phase would average approximately 100 feet, but is no closer than 50 feet.

Table 4.13-2. Measured Short-Term Baseline Outdoor Noise Levels

Receptor	Location/Address	Date	Time	Leq (dBA)	Lmax (dBA)
R1	Eastern Boundary of Lot 8 Adjacent to The Old Road	June 13, 2022	10:55 AM to 11:10 AM	65.6	71.3
R2	Hawkbryn Avenue in Mulberry Mobile Home Park		12:10 PM to 12:25 PM	59.7	67.9
R3	Southeastern Boundary of Lot 5 Adjacent to The Old Road		11:25 AM to 11:40 AM	65.6	72.8
R4	Foxtail Court & Sagecrest Circle		10:11 AM to 10:26 AM	58.7	65.6

Source: Appendix H.
Notes: L_{eq} = equivalent continuous sound level (time-averaged sound level); L_{max} = maximum sound level during the measurement interval; dBA = A-weighted decibels; R = short-term noise measurement locations.

Two long-term noise level measurement locations (R5 and R6) were selected to capture 24-hour ambient noise level ranges at existing residences adjacent to the Project site, one location from a residence location relatively close to The Old Road/I-5 (R5) and one location from a residence relatively removed from these transportation noise sources (R6). These long-term measurement locations are also depicted on Figure 4.13-1. Table 4.13-3 summarizes the dates and start/stop times for each 24-hour measurement, the range of hourly average noise levels for the daytime and nighttime periods, as well as the calculated 24-hour weighted average noise level (CNEL). See Appendix H for data logs for each of the 24-hour measurement periods and the calculation of CNEL from the recorded hourly average values. In comparing the measured ambient noise levels between R5 and R6, it is evident the primary noise sources affecting the ambient noise levels at the sites identified in Table 4.13-3 consisted of traffic along adjacent roadways.

Table 4.13-3. Measured Long-Term Baseline Outdoor Noise Levels

Receptor	Dates	Start/ Stop	Daytime (7 AM -10 PM) Hourly Leq Range (dBA)	Nighttime (10 PM – 7 AM) Hourly Leq Range (dBA)	CNEL dBA
R5	June 13th and 14th, 2022	June 13th at 10:00 AM – June 14th at 11:00 AM; 25 hours total	58.0 – 67.9	61.1 – 64.7	68.6
R6			36.1 – 45.5	35.4 – 43.9	47.8

Source: Appendix H.
Notes: CNEL: Community Noise Equivalent Level; L_{eq} = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels.

Existing Roadway Traffic Noise Exposure

The Project Transportation Impact Assessment (TIA) quantified existing average daily traffic on roadways serving the Project (Appendix J), and Dudek modeled existing traffic noise exposure along these roadway segments using worksheets based upon the FHWA's Traffic Noise Model version 2.5. Information used in the model included the roadway geometry, posted traffic speeds, and traffic volumes broken down by vehicle mix (97% auto, 2% medium truck, and 1% heavy truck; total volumes were further segmented into 77% during the day, 13 4% in the evening, and 9.6% in the nighttime, consistent with the TIA). Noise levels for each roadway segment were modeled at a distance of 40 feet from the centerline of the road. Table 4.13-4, Modeled Existing Traffic Noise Along Selected Roadway Segments, lists the roadway segments from Appendix J, identifies noise-sensitive land uses adjacent to each roadway segment, and identifies the modeled existing traffic noise for the selected segment.

Table 4.13-4. Modeled Existing Traffic Noise Along Selected Roadway Segments

Existing Noise Level (dBA CNEL)	Description	Noise Sensitive Land Uses
73	Pico Canyon Road – West of The Old Road	Motel, Multi-Family Residences, Single Family Residences, Elementary School
71	Pico Canyon Road – East of The Old Road	Senior Living Facilities
68	The Old Road[1]– South of Pico Canyon Rd.	Motels, Multi-Family Residences, Single Family Residences/Project Eastern Frontage
69	The Old Road[1] –North of Calgrove Blvd	Residences/Project Eastern Frontage
71	Calgrove Blvd. – East of The Old Road	Single Family Residences

Source: Appendix H.
Notes: CNEL: Community Noise Equivalent Level; dBA = A-weighted decibels.
[1] With respect to measured noise levels adjacent to The Old Road, I-5 is the dominant traffic source in this area and The Old Road runs parallel/adjacent to I-5 for much of the Project frontage.

4.13.2 Regulatory Requirements

Federal

Federal Transit Administration (FTA)

In its Transit Noise and Vibration Impact Assessment Guidance Manual (FTA 2006), the FTA recommends 0.2 ips PPV as the structural damage threshold for typical residential buildings. Although this FTA guidance is not a regulation, it can serve as a quantified standard in the absence of such limits at the state and local jurisdictional levels.

State

California Noise Control Act of 1973

Sections 46000 through 46080 of the California Health and Safety Code, known as the California Noise Control Act of 1973, declares 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. It also identifies a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by 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.

California Department of Health Services

The California Department of Health Services has developed guidelines of community noise acceptability for use by local agencies, which have been published by the Governor's Office of Planning and Research (OPR 2017) as the Land Use Compatibility for Community Noise Environments Matrix. Selected relevant levels are listed here:

- Below 60 dBA CNEL: normally acceptable for low-density residential use
- 50 to 70 dBA: conditionally acceptable for low-density residential use
- Below 65 dBA CNEL: normally acceptable for high-density residential use and transient lodging
- 60 to 70 dBA CNEL: conditionally acceptable for high-density residential, transient lodging, churches, educational, and medical facilities

California Code of Regulations – Title 24

California Code of Regulations (CCR) Title 24 establishes the California Building Code (CBC). The most recent building standard adopted by the legislature and used throughout the State is the 2019 version, which took effect on January 1, 2020. The State's noise insulation standards are codified in the CBC (Title 24, Part 2, Chapter 12). These noise standards are for new construction in California for the purposes of interior compatibility with exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residences, or hospitals, are near major transportation noises, and where such noise sources create an exterior noise level of 60 dBA CNEL, or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the CCR Title 24, Part 2, Chapter 12 acceptable interior noise limit for new construction is 45 dBA CNEL.

Local

Los Angeles County

Los Angeles County Code of Ordinances

Construction Noise

Section 12.08.440, Construction Noise, of the County of Los Angeles Code of Ordinances (County Code) addresses construction noise and vibration restrictions. Table 4.13-5, Los Angeles County Construction Noise Limits, presents a summary of construction noise limits found in County Code Section 12.08.440 for construction projects lasting more than 10 days.

Table 4.13-5. Los Angeles County Construction Noise Limits

	Single-family Residential	Multi-Family Residential	Semi-Residential and Commercial	Business Structures
Mobile Equipment – Less Than 10 Days				
Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM	75 dBA	80 dBA	85 dBA	85 dBA
Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays	60 dBA	64 dBA	70 dBA	85 dBA
Stationary Equipment – 10 Days or More				
Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM	60 dBA	65 dBA	70 dBA	N/A
Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays	50 dBA	55 dBA	60 dBA	N/A

Source: County of Los Angeles Code, Section 12.08.440.
Notes: dBA = A-weighted decibels; N/A= not applicable.

As presented in Table 4.13-5, construction activity is prohibited between the hours of 8:00 PM and 7:00 AM Monday through Saturday and all day on Sundays, where the noise would create a disturbance across a residential property line, except by variance issued by a health officer. The most stringent standard applies to single-family residences, which is used in this analysis to address the most conservative case, and because single-family residences are the closest noise sensitive use to the Project site. For single-family residences, the disturbance noise level limit between 8:00 PM to 7:00 AM is defined as greater than 50 dBA for construction equipment at a static location for a duration greater than 10 days (i.e. "stationary equipment," Section 12.08.440[B][1][b], Construction Noise of the County Code). The 7:00 AM to 8:00 PM limit for noise exposure at any single-family residential property affected by stationary construction noise is 60 dBA (Section 12.08.440[B][1][b], Construction Noise of the County Code). For mobile construction equipment, the 7:00 AM to 8:00 PM limit for noise exposure at any single-family residential property affected by construction noise is 75 dBA (Section 12.08.440[B][1][b], Construction Noise of the County Code).

For the purposes of interpreting the standards presented in Table 4.13-5, "stationary equipment" would be equipment that is set at a given location and would remain at that location over the course of the construction

phase. Equipment, such as generators for electrical power, air compressors, and mixers for cement or mortar represent the primary examples of stationary equipment. "Mobile equipment" refers to dozers, scrapers, front-end loaders, and similar equipment that moves within multiple on-site locations to perform work, and to trucks used to transport equipment and materials to and from the Project site. Hence, mobile-equipment-use and off-site construction traffic noise must not exceed 75 dBA L_{eq} at single-family residences, 80 dBA L_{eq} at multi-family residences, or 85 dBA L_{eq} at commercial properties between 7:00 AM to 8:00 PM, Monday through Saturday.

Construction Vibration

Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source is prohibited (County Code Section 12.08.560). The perception threshold is defined to be a motion velocity of 0.01 in/sec (interpreted as root mean squared velocity, with an equivalent of approximately 80 vibration decibels [VdB]) over the range of 1 to 100 Hz.

Exterior Noise Standards

Section 12.08.390, Exterior Noise Standards, of the County Code establishes the maximum exterior noise level that may be generated within each of the designated noise zones, as generated by on-site (stationary) noise sources and activities. The noise zone descriptions and allowable exterior noise limits from Section 12.08.390 are translated into the County Noise Element as Table 11.2 (reproduced as Table 4.13-6, Los Angeles County Community Noise Criteria, below).

Table 4.13-6. Los Angeles County Community Noise Criteria

Noise Zone	Land Use of Receptor Property	Time	Std 1 L50 (30 min/hr)	Std 2 L25 (15 min/hr)	Std 3 L8.3 (5 min/hr)	Std 4 L1.7 (1 min/hr)	Std 5 L0 (at no time)
I	Noise Sensitive[a]	Anytime	45	50	55	60	65
II	Residential[b]	10 PM to 7 AM	45	50	55	60	65
		7 AM to 10 PM	50	55	60	65	70
III	Commercial	10 PM to 7 AM	55	60	65	70	75
		7 AM to 10 PM	60	65	70	75	80
IV	Industrial	Anytime	70	75	80	85	90

Source: Section 12.08.390 of the Los Angeles County Code (a portion of the Noise Control Ordinance).
Notes:
L50 Equates to the statistical noise level which is exceeded during 50% of the designated time period, which if an hour is the designated period equates to an allowable 30 minutes at the identified limit level.
L25 Equates to 12.5 minutes per hour during which the identified limit level is allowed.
L8.3 Equates to 5 minutes per hour during which the identified limit level is allowed.
L1.7 Equates to 1 minute per hour during which the identified limit level is allowed.
[a] Noise sensitive zones are designated by the County Health Officer and are required to be clearly identified with posted signs; the County does not define noise sensitive zones but typically these zones would be established for uses such as hospitals, schools, and day care facilities.
[b] Residential includes single family and multiple family dwellings but excludes transient lodging.

Section 12.08.460 of the County Code prohibits the loading, unloading, opening, closing, or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects between the hours of 10:00 PM and 6:00 AM in such a manner as to cause a noise disturbance.

Section 12.08.530 of the County Code prohibits the operation of any air conditioning or refrigeration equipment that exceeds 55 dBA at any point on a neighboring property; 50 dBA at the center of a neighboring patio; and 50 dBA outside the neighboring living area window nearest the equipment location.

Interior Noise Standards

County Code, Section 12.08.400 – Interior noise standards, sets an allowable interior noise level of 45 dBA for the period from 7:00 AM to 10:00 PM and 40 dBA for the period from 10:00 PM to 7:00 AM for all multifamily residential uses.

Exemptions

Section 12.08.570, Activities Exempt from Chapter Restrictions of the County Code, identifies activities that are exempt from noise regulation under the County Code; importantly, the emission of sound for the purposes of alerting persons to the existence of an emergency, and the use of warning devices necessary for the protection of public safety, as for example police, fire and ambulance sirens, are exempt from regulation under the County Code. In addition, Section 12.08.570 exempts activities conducted on public playgrounds and public or private school grounds, including but not limited to school athletic and school entertainment events; all legal vehicles operating in a legal manner within the public right-of-way or on private property are similarly exempted. Also, Section 12.08.570D states that construction is exclusively regulated by the prohibitions of Part 4, Specific Noise Restrictions (Section 12.08.440, Construction Noise), and therefore construction noise is exempt from noise levels from Part 3, Community Noise Criteria (Section 12.08.390, Exterior Noise Standards).

Los Angeles County General Plan

The Los Angeles County General Plan was adopted by the Board of Supervisors on October 6, 2015. The Noise Element establishes noise generation limits for each land use type and provides noise management policies to protect residents from excessive noise exposure. According to the General Plan, the County adapted the Governor's Office of Planning and Research Land Use Compatibility for Community Noise Environments Matrix to develop the County's exterior noise standards, which are illustrated in Table 4.13-6. In other words, the General Plan references the County Code exterior noise standards, rather than establishing separate exterior noise limits. By controlling the noise generation from individual properties within a given land use designation (or zone district), all uses should be afforded protection against excessive noise exposure. Section 12.08.390 of the County Code stipulates that if the ambient noise level (as defined by the L_{50} value from an ambient noise measurement) exceeds the Standard 1 noise level allowance, the measured L_{50} becomes the Standard 1 allowance.

The following policies from the County's General Plan Noise Element may be applicable to the Project (County of Los Angeles 2015), and the Project's potential to conflict with these policies is also discussed in Section 4.11, Land Use and Planning:

> Policy N 1.1. Utilize land uses to buffer noise-sensitive uses from sources of adverse noise impacts.
>
> Policy N 1.2. Reduce exposure to noise impacts by promoting land use compatibility.

Policy N 1.3. Minimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering controls through Best Available Technologies (BAT).

Policy N 1.5. Ensure compliance with the jurisdictions of State Noise Insulation Standards (Title 24, California Code of Regulations and Chapter 35 of the Uniform Building Code), such as noise insulation of new multifamily dwellings constructed within the 60 dB (CNEL or L_{dn}) noise exposure contours.

Policy N 1.6. Ensure cumulative impacts related to noise do not exceed health-based safety margins.

Policy N 1.9. Require construction of suitable noise attenuation barriers on noise sensitive uses that would be exposed to exterior noise levels of 65 dBA CNEL and above, when unavoidable impacts are identified.

Policy N 1.10. Orient residential units away from major noise sources (in conjunction with applicable building codes).

Policy N 1.12. Decisions on land adjacent to transportation facilities, such as the airports, freeways and other major highways, must consider both existing and future noise levels of these transportation facilities to assure the compatibility of proposed uses.

City of Santa Clarita

With respect to the City of Santa Clarita noise standards, the closest noise-sensitive uses to the Project site in the City of Santa Clarita are residents at the Mulberry Mobile Home Park, located on the east side of I-5. Given the elevated noise levels associated with I-5, Project operational noise would not be anticipated to be audible at the Mulberry Mobile Home Park. However, the City of Santa Clarita's noise ordinance is provided below for informational purposes.

Santa Clarita Municipal Code

The Chapter 11.44 of the Santa Clarita Municipal Code, the Noise Limits Code, specifies the City shall prohibit unnecessary, excessive, and annoying noises from all sources subject to its police power. At certain levels noises are detrimental to the health and welfare of the citizenry, and, in the public interests, such noise levels shall be systematically proscribed (Section 11.44.010 of the Municipal Code).

Residential zones are subject to a daytime (7:00 a.m. to 9:00 p.m.) noise limit of 65 dBA and a nighttime (9:00 p.m. to 7:00 a.m.) noise limit of 55 dBA. Commercial and manufacturing zones are subject to a noise limit of 80 dBA for daytime operations and 70 dBA for nighttime operations. Where a boundary line between a commercial and manufacturing property and a residential property exists, the noise level of the quieter zone shall be used.

Construction activities are limited to the hours between 7:00 a.m. and 7:00 p.m. Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday. Construction is not allowed on Sundays or on the following public holidays: New Year's Day, Independence Day, Thanksgiving, Christmas, Memorial Day, and Labor Day.

4.13.3 Thresholds of Significance

In accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to noise and vibration are listed below. A project may have a significant impact if it would:

Threshold 4.13a: Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the County General Plan or noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08), or applicable standards of other agencies.

Threshold 4.13b: Generation of excessive groundborne vibration or groundborne noise levels.

Threshold 4.13c: 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, expose people residing or working in the project area to excessive noise levels.

County of Los Angeles Noise & Vibration Significance Criteria

Based on the County of Los Angeles CEQA Guidelines, General Plan Noise Element and Noise Ordinance, the Project would have a significant impact on noise and vibration if it would result in:

1. Erection, construction, demolition, or excavation activities involving stationary construction equipment that produce sound levels of greater than 60 dBA L_{eq} during the day (7:00 AM to 8:00 PM), or in excess of 50 dBA L_{eq} during the night-time (8:00 PM to 7:00 AM), or on a legal holiday or Sunday, at the property line for any existing single-family residential properties in the Project vicinity; OR mobile construction equipment that produce sound levels of greater than 75 dBA L_{eq} during the day (7:00 AM to 8:00 PM), or in excess of 60 dBA L_{eq} during the night-time (8:00 PM to 7:00 AM), or on a legal holiday or Sunday, at the property line for any existing single-family residential properties in the Project vicinity; OR the same sources that produce sound levels of greater than 85 dBA L_{eq} anytime at a commercial property. Also, construction-related trucking activities off-site that produce sound levels of greater than 75 dBA L_{max} during the day (7:00 AM to 8:00 PM), or in excess of 60 dBA L_{max} during the night-time (8:00 PM to 7:00 AM), or on a legal holiday or Sunday, at the property line for any existing single-family residential properties adjacent to construction transport routes.
2. With respect to avoidance of damage to structurers, the exposure of structures to or generation of excessive ground-borne vibration equal to or in excess of 0.2 inches/second PPV during construction (based upon adopted FTA Standards).
3. The generation of noise in excess of 50 dBA L_{eq} during the day (7:00 AM to 7:00 PM), or in excess of 45 dBA L_{eq} during the night-time (7:00 PM to 7:00 AM), at the property line for any existing residential properties in the Project vicinity, during operations; specifically for air conditioner units, the generation of noise in excess of 55 dBA L_{eq} at the property line for any existing residential properties in the Project vicinity; Or an increase in ambient noise levels of greater than 3 dBA CNEL as a result of Project operations, at existing residential property boundaries.
4. Vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source during operations. The perception threshold is defined to be a motion velocity of 0.01 in/sec RMS over the range of 1 to 100 Hz, which is equivalent to 80 VdB.

5. From project operation, an increase of 3 dBA CNEL or more in existing roadway traffic noise levels, as a result of the addition of project generated traffic on vicinity roadways.

City of Santa Clarita Noise Significance Criteria

Based on the City of Santa Clarita Municipal Code, the Project would have a significant impact on noise if it would result in:

1. Construction activities between 7:00 p.m. and 7:00 a.m. Monday through Friday, and 6:00 p.m. to 8:00 a.m. on Saturday, or on Sunday or on the following public holidays: New Year's Day, Independence Day, Thanksgiving, Christmas, Memorial Day, and Labor Day.
2. The generation of daytime (7:00 a.m. to 9:00 p.m.) noise in excess of 65 dBA or nighttime (9:00 p.m. to 7:00 a.m.) noise in excess of the limit of 55 dBA. at the property line for any existing residential properties in the Project vicinity located within the City of Santa Clarita, during operations.

4.13.4 Methodology

To describe the ambient noise environment, on-site short-term (15 minute) and long-term (24-hour) SPL measurements were taken, as described above in Section 4.13.1, Existing Conditions.

Construction Noise and Vibration

Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the Project applicant and CalEEMod default values when Project specifics were not known. Construction of the Project is anticipated to begin in the second quarter of 2025 and end in the fourth quarter of 2029, for a total duration of approximately 4 years and 6 months. It is anticipated that Project construction activities would take place within the allowable construction hours of the County (between 7:00 AM and 8:00 PM, Monday through Saturday), per Section 12.08.440 of the County Code. Construction and operations of the Project would overlap. For example, dwelling units in Lots 7, 8, and 9 (first residential Lots to be constructed) would be operational during the construction of other phases. Section 4.3.4, Methodology, of Section 4.3, Air Quality, details the construction assumptions, including durations of phases, equipment mix, and construction-related trips. Specifically, Table 4.3-5, Construction Scenario Assumptions, of Section 4.3, Air Quality, provides the construction phasing, vehicle trips, and equipment count for the Project.

The typical maximum noise levels for various pieces of construction equipment at a distance of 50 feet are presented in Table 4.13-7, Typical Construction Equipment Maximum Noise Levels. Note that the equipment noise levels presented in Table 4.13-7 are maximum noise levels. Usually, construction equipment operates in alternating cycles of full power and low power, producing average noise levels over time that are less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time.

Table 4.13-7. Typical Construction Equipment Maximum Noise Levels

Equipment Type	Typical Equipment (Lmax, dBA at 50 Feet)
Air compressor	78
Backhoe	78
Concrete pump truck	81

Table 4.13-7. Typical Construction Equipment Maximum Noise Levels

Equipment Type	Typical Equipment (Lmax, dBA at 50 Feet)
Grader	85
Crane	81
Dump Truck	76
Dozer	82
Generator	72
Front End Loader	79
Paver	77
Pneumatic tools	85
Water pump	77

Source: FTA 2006.
Note: L_{max} = maximum sound level; dBA = A-weighted decibels.

A Microsoft Excel–based noise prediction model emulating and using reference data from the Federal Highway Administration Roadway Construction Noise Model was used to estimate construction noise levels at the nearest noise-sensitive land use. Aggregate noise emission from Project construction activities, broken down by individual Lot area and sequential phase, was predicted at two distances to the nearest existing noise-sensitive receptor: 1) from the nearest position of the construction site boundary and 2) from the geographic center of the Lot, which serves as the time-averaged location or geographic acoustical centroid of active construction equipment for the phase under study. The intent of the former distance is to help evaluate anticipated construction noise from a limited quantity of equipment or vehicle activity expected to be at the construction site boundary for some period of time, which would be most appropriate for phases such as site preparation, grading, and paving. The latter distance is used in a manner similar to the general assessment technique as described in the FTA guidance for construction noise assessment, when the location of individual equipment for a given construction phase is uncertain over some extent of (or the entirety of) the construction site area. Because of this uncertainty, the assessment is done based on all the equipment for a construction phase operating—on average—from the acoustical centroid. The shortest distance analysis (at the construction boundary) represents the worst-case noise exposure for adjacent noise-sensitive receptors, the centroid distance analysis is considered to represent a reasonable average noise level that receptors would be exposed to over the entire construction period for a given phase. Dudek compared predicted construction noise levels to applicable construction noise limits of the County Code and to measured ambient noise levels.

The vibration levels generated by common construction equipment are provided in Table 4.13-8, Vibration Source Levels for Construction Equipment.

Table 4.13-8. Vibration Source Levels for Construction Equipment

Equipment	PPV (ips) at 25 feet	Approximate VdB at 25 feet
Small Bulldozer	0.003	58
Jackhammer	0.035	79
Loaded Trucks	0.076	86
Large Bulldozer	0.089	87
Vibratory Roller	0.210	94

Source: Caltrans 2020.

Dudek evaluated vibration generated by site preparation and construction activities using data and methods recommended by FTA (FTA 2006). The assessment involves use of the vibration generation levels in Table 4,13-9 (as reported at 25 feet from the equipment), and use of an appropriate equation (FTA 2006) to calculate the vibration level at the distance of the closest sensitive receiver to the operating construction equipment.

The equation used for determining attenuation of vibration with distance (FTA 2006) is:

$$PPV_{Equipment} = PPV_{Ref} (25/D)^{n} \text{ (in/sec)}$$

Where:

PPV_{Ref} = reference PPV at 25 ft.

D = distance from equipment to the receiver in ft.

n = 1.1 (the value related to the attenuation rate through ground)

With respect to vibration levels expressed in VdB, the VdB at any distance is calculated using the following formula:

$$VdB(D) = VdB(25 \text{ ft}) - 30\log(D/25)$$

Where:

VdB(D) = Vibration level at distance D

D = distance from equipment to the receiver in feet

VdB(25 ft) = reference vibration level at 25 feet from source

Operational Noise and Vibration

Off-site Traffic Noise Contributions

Dudek used a spreadsheet based upon the FHWA Traffic Noise Model to calculate the increases in roadway traffic noise levels from Project trip contributions. Dudek used peak hour traffic volume data for Existing (2022), Existing Plus Project, Future Base (2029) and Future Base (2029) Plus Project from Appendix A of the Transportation Impact Analysis to inform the operational traffic noise impacts (Appendix J).

On-site Stationary Noise Source Modeling

Dudek used a proprietary predictive noise model (NoisePro) to assess noise levels at nearby off-site residences from Project on-site mechanical equipment operation and compared these noise levels to applicable limits of the County Code and to measured ambient noise levels. Dudek NoisePro is used for calculation, presentation, assessment, and prediction of environmental noise. Dudek used NoisePro to calculate the combined sound emission from anticipated Project air conditioner condensers and to predict sound levels at receiver points placed in the model. The outdoor noise propagation formulas in NoisePro follow the International Organization of Standardization Standard 9613-2, “Attenuation of Sound During Propagation Outdoors, Part 2: General Method of Calculation” (ISO 1996).

Sensitive Receptors for Noise and Vibration

Sensitive receptors for noise include residences, schools, hospitals, and places of assembly (Los Angeles County 2015) and on-site occupied residences during phased construction; sensitive receptors for vibration include

residences and facilities that use precision equipment, such as analytical labs and medical facilities where surgical procedures or radiation therapy are administered (FTA 2006). With regard to the Project site, existing residences to the north and northwest represent the principal sensitive receptors for noise and vibration, with area parks representing a secondary noise sensitive land use.

4.13.5 Impact Analysis

Threshold 4.13a: 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 County General Plan or noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08), or applicable standards of other agencies?

Construction Noise

On-site and Off-site Construction Activities

Construction noise is a temporary phenomenon. Construction noise levels vary from hour to hour and day to day, depending on the equipment in use, the operations performed, and the distance between the source and receptor. As stated above in Section 4.13.4, Methodology, Project-specific construction information is detailed in Section 4.3, Air Quality. Data presented in Table 4.3-5, Construction Scenario Assumptions, of Section 4.3, Air Quality, was then used to quantify construction noise levels, using typical construction equipment noise levels as provided in Table 4.13-5, above.

Construction of proposed development on Lots along the northern and eastern edge of the Project site would be the closest to off-site adjacent noise-sensitive residences. Lot 2 (attached 3-story dwelling units), Lot 3 (detached 3-story dwelling units, Lots 8 and 9 (two-story condominiums), Lots 10 and 11 (affordable senior dwelling units), and Lot 22 (landscaped open space) are the Lots nearest the off-site sensitive receptors that would also have the potential to temporarily increase ambient noise levels in the vicinity during construction of the Project. This is because construction would involve multiple pieces of heavy-duty equipment for each of these phases, and the distance between the construction zone and existing off-site residences would be the shortest when reviewing all of the Lots. Given that outdoor sound attenuates with increasing distance from the source, receptors at farther distances from construction activities would experience lower relative noise exposure levels. Other adjacent Lots between the proposed developed uses (i.e., residential and recreational) would include preserved natural open space, improved open space, and debris basins. Construction activities for these uses would be minimal, if at all, and would be expected to use of a small amount of powered equipment, operating at greater distance from existing residences than the aforementioned Lots.

Construction activity from each of these Lots (i.e., Lots 2, 3, 8, 9, 10, 11, and 22), as shown on Figure 3-2, Vesting Tentative Tract Map No. 83301 in Chapter 3, Project Description of this Draft EIR, were modeled first, and it was determined construction activities on the other Lots would not need to be modeled, due to increased distance from off-site residences and the lower noise levels that would be heard by the sensitive receptors. Also, construction noise from proposed off-site improvements to The Old Road were modeled for the closest boundary of the construction zone to the residences north of the Project site and off-site improvements at Pump Stations 4 and 5 were modeled for their proximity to the nearest residences. Table 4.13-9, Estimated Distances between Construction Activities and the Nearest Noise-Sensitive Receptors, summarizes the two distances (i.e., distance from the closest construction boundary and distance from the geographic center of the Lot, or acoustic centroid) to the closest noise-sensitive receptor for each of the Project activities. Figure 4.13-2, Locations of Receptors for

Construction Noise Modeling, illustrates the receptors for construction noise modeling for each of the Lots evaluated.

Table 4.13-9. Estimated Distances between Construction Activities and the Nearest Noise-Sensitive Receptors

Lot # and Proposed Land Use	Distance from Nearest Noise-Sensitive Receptor (Residences North of Project) to Closest Construction Site Boundary (Feet)	Distance from Nearest Noise-Sensitive Receptor (Residences North of Project) to Furthest Construction Site Boundary (Feet)
Lot 2 (3-Story Attached Residences)	205	510
Lot 3 (3-Story Detached Residences)	425	850
Lots 10, 11 (4-Story Senior Living Units and associated surface parking Lot)	225	500
Lots 8, 9 (2-Story Attached Residences)	245	460
Lot 22 (Landscaped Open Space)	110	545
The Old Road Improvements (off-site)	435	N/A
Pump Station 4 and Pump Station 5 Upgrade Improvements[1] (off-site)	35	N/A

Source: Appendix H.
Notes:
[1] Distance from pump station to nearest adjacent developed residential property.

As indicated in the Project Description, Project construction activities would take place within the allowable construction hours of the County (between 7:00 AM and 8:00 PM, Monday through Saturday), per Section 12.08.440 of the County Code, as nearby residences could be disturbed by overnight construction noise (which is prohibited). The Project construction schedule is also anticipated to comply with the City of Santa Clarita allowable construction windows (the hours between 7:00 a.m. and 7:00 p.m. Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday). Conservatively, no topographical or structural shielding was assumed in the construction noise modeling. The predicted mobile equipment construction noise levels for the loudest construction phase per Lot are displayed in Table 4.13-10, Predicted Mobile Construction Equipment Noise Levels (Unmitigated), based on the Project construction information input into the Roadway Construction Noise Model. Refer to Appendix H for the complete worksheets addressing the construction noise analysis.

Table 4.13-10. Predicted Mobile Equipment Construction Noise Levels (Unmitigated)

Project Area and Proposed Land Use	L_{eq} at Nearest Noise-Sensitive Receptor to Closest Construction Site Boundary (dBA)	L_{eq} at Nearest Noise-Sensitive Receptor to Construction Centroid for Land Use (dBA)	Construction Noise Limit L_{eq}dBA
Lot 2 (3-Story Attached Residences)	75	67	**75**
Lot 3 (3-Story Detached Residences)	69	63	
Lots 10, 11 (4-Story Senior Living Units and associated surface parking Lot)	74	67	

Table 4.13-10. Predicted Mobile Equipment Construction Noise Levels (Unmitigated)

Project Area and Proposed Land Use	L_{eq} at Nearest Noise-Sensitive Receptor to Closest Construction Site Boundary (dBA)	L_{eq} at Nearest Noise-Sensitive Receptor to Construction Centroid for Land Use (dBA)	Construction Noise Limit L_{eq}dBA
Lots 8, 9 (2-Story Attached Residences)	74	68	
Lot 22 (Landscaped Open Space)	**80**	67	
The Old Road Improvements (off-site)	68	N/A	
Pump Station 4 and Pump Station 5 Upgrade Improvements (off-site)	84	N/A	**N/A**

Source: Appendix H.
Notes: L_{eq} = equivalent noise level; dBA = A-weighted decibels. **Bolded** values exceed limits.

As presented in Table 4.13-10, the estimated unmitigated construction noise levels are predicted to be 69 to 84 dBA L_{eq} at the nearest existing residences (as close as 110 feet away) when site preparation activities take place near the northern end of each of the studied Lots, for the northern end of The Old Road improvements construction zone, and for the Pump Station 4 or Pump Station 5 construction zones. Note that these estimated noise levels at the closest distances between source-to-receiver would only occur when noted pieces of heavy equipment would each operate for a cumulative period of one hour directly along the northern boundary of each studied Lot. Using the distance from the construction activity centroid, construction noise levels are predicted to be as high as 63 to 68 dBA L_{eq} at the nearest existing residences. By way of example, a grader might make multiple passes on site that are at the closest distance to a receiver; but, for the remaining time during the day, the grader is sufficiently farther away, performing work at a more distant location, or simply not operating; the second scenario is addressed with the centroid distance analysis. According to the results in Table 4.13-10, the Project would potentially exceed the mobile construction noise limit of 75 dBA L_{eq} for mobile sources at residential receivers when earthwork is occurring at the northernmost portion of Lot 22 and would therefore result in a potentially significant impact, for which mitigation would be required. Pump Station 4 and Pump Station 5 improvements are located within the City of Santa Clarita, which does not have an adopted maximum limit for daytime construction noise levels.

For construction activities occurring across the entire Lot area (represented by the centroid distance values), if construction within more than one Lot were to occur simultaneously, construction noise exposure at a given receptor could be higher; with simultaneous construction on two Lots, the levels could be up to 3 dBA higher than shown in Table 4.13-10, with construction on three Lots, the construction noise levels could be up to 5 dBA higher. However, construction noise levels from simultaneous construction activity on up to three of the closest Lots (Lots 2, 3, 8, 9, 10, and 11) would result in combined noise levels that remain below the 75 dBA L_{eq} threshold.

Regarding stationary construction equipment noise, using the distance from the construction zone boundary to the adjacent residences for each of the closest Lots (Lots 2, 3, 8, 9, 10, 11, and 22) and for The Old Road Improvements, construction noise from stationary construction equipment for each construction phase for each Project area was quantified for comparison to the 60 dBA L_{eq} limit at the adjacent single family residences (between 7:00 AM and 8:00 PM, Monday through Saturday). This quantification is shown in Table 4.13-11, Predicted Stationary Equipment Construction Noise Levels (Unmitigated). Station 4 and Pump Station 5 improvements are

not anticipated to employ stationary noise sources, and the City of Santa Clara does not have adopted daytime limits for stationary (or mobile) construction equipment.

Table 4.13-11. Predicted Stationary Equipment Construction Noise Levels (Unmitigated)

Lot # and Proposed Land Use	1-Hour L_{eq} at Nearest Noise-Sensitive Receptor to Construction Site Boundary (dBA)	Construction Noise Limit L_{eq} dBA
Lot 2 (3-Story Attached Residences)	**70**	60
Lot 3 (3-Story Detached Residences)	**63**	
Lots 10 and 11 (4-Story Senior Living Units and associated surface parking Lot)	**69**	
Lots 8, 9 (2-Story Attached Residences)	**67**	
Lot 22 (Landscaped Open Space)	**70**	
The Old Road Improvements (off-site)	**63**	

Source: Appendix H.
Notes: L_{eq} = equivalent noise level; dBA = A-weighted decibels. Reported construction noise level is for the loudest construction phase for each Lot. **Bolded** values exceed limits.

As presented in Table 4.13-11, the estimated unmitigated stationary equipment construction noise levels are predicted to be 63 to 70 dBA L_{eq} at the nearest existing residences (as close as 110 feet away) when stationary equipment is placed close to the northern construction boundary in any of the studied Lots (i.e., Lots 2, 3, 8, 9, 10, 11, and 22) and for the northern end of The Old Road Improvements construction zone. Therefore, unmitigated noise levels from stationary construction equipment at Lots 2, 3, 8, 9, 10, 11, and 22 and for the northern end of the Old Road improvements would exceed the 60-dBA-L_{eq}-noise limit for stationary equipment and would result in a potentially significant impact at the nearest existing sensitive receptors to the Project site (i.e., residences to the north) prior to mitigation.

Commercial offices are not considered noise-sensitive under the County Noise Element or County Code. However, the County Code does establish a construction noise threshold of 85 dBA L_{eq} at all times for commercial land uses. Using the methodology described above, the noise levels from construction activities within Lots 8 and 9 (closest to the commercial office located near the Project's northeastern corner), a maximum noise exposure of 84 dBA L_{eq} was determined for earthwork activities (refer to Appendix H). Therefore, construction activities within Lots 8 and 9 would result in a less than significant construction noise impact at the adjacent commercial office use.

As detailed above, operation of construction equipment would have the potential to exceed applicable noise limits at neighboring residential properties to the north during construction activities toward the northernmost portions of the site, adjacent to existing off-site residential uses. Mitigation measures are therefore required to reduce construction noise impacts to less than significant.

As detailed in Table 4.3-10, above, noise levels from construction activity nearest sensitive receptors to Lot 22 (Landscaped Open Space) would exceed the 75-dBA L_{eq} noise limit for mobile equipment. Implementation of Mitigation Measure (MM) 4.13-1, Simultaneous Equipment Operation Limit for Portion of Lot 22, would restrict the use of more than one piece of equipment within the portion of Lot 22 designated on Figure 4.13-3, Area of Lot 22 in which Construction Noise Mitigation is Required. MM-4.13-2, Staging Areas and Stationary Equipment, shall require that stationary construction equipment not be located in Lot 22, and requires other best practices for

reducing construction noise. Table 4.13-12, Predicted Mobile Construction Equipment Noise Levels (Mitigated), shows the mitigated mobile equipment construction noise levels with implementation of MM-4.13-1 and MM-4.13-2.

As shown in Table 4.13-12, with implementation of MM-4.13-1, and MM-4.13-2, noise levels nearest the existing off-site residences to Lot 22 and the northern end of the Old Road Improvements would not exceed the 75-dBA L_{eq} noise limit for mobile construction equipment, and as such, construction noise impacts from mobile construction equipment would be less than significant with mitigation.

Table 4.13-12. Predicted Mobile Construction Equipment Noise Levels (Mitigated)

Proposed Land Use	1-Hour L_{eq} at Nearest Noise-Sensitive Receptor to Construction Site Boundary (dBA)	1-Hour Leq at Nearest Noise-Sensitive Receptor to Acoustical Centroid of Site (dBA)	Construction Noise Limit L_{eq} dBA
Lot 22 (Landscaped Open Space)	74	53	75

Source: Appendix H.
Notes: L_{eq} = equivalent noise level; dBA = A-weighted decibels. Reported construction noise level is for the loudest construction phase at Lot 19. **Bolded** values exceed limits.

As detailed in above Table 4.13-11, noise levels from stationary construction equipment would exceed the 60-dBA L_{eq} noise limit at the construction site boundary at Lots 2, 3, 8, 9, 10, 11, and 22, and within the northern end of the Old Road Improvements construction zone, and impacts would be potentially significant. Therefore, implementation of MM-4.13-2, Staging Areas and Stationary Equipment, and MM-4.13-3, Stationary Equipment Construction Noise Barrier, shall be required. MM-4.13-2 requires that no stationary construction equipment (i.e., generators, air compressors, cement mixers) and/or construction staging areas be located within Lot 22, which is the nearest Lot (to be developed with implementation of the Project) to off-site sensitive receptors, and that all construction equipment shall be equipped with properly-operating and maintained noise mufflers. Stationary construction equipment and construction staging areas further away (i.e., in all other Lots at the Project site) would result in less noise due to noise attenuating with distance. Additionally, implementation of MM-4.13-3 shall require erection of a 10-foot-tall noise barrier around individual stationary equipment that is located within 600 feet of the northern boundaries of Lots 2, 3, 8, 9, 10, and 11, as well as The Old Road Improvements construction zone which would occlude the path of noise travel and reduce noise levels at the far side of the barrier (i.e., to off-site residences). Table 4.13-13, Predicted Stationary Construction Equipment Noise Levels (Mitigated), shows the mitigated construction noise levels with implementation of MM-4.13-1, MM-4.13-2, and MM-4.13-3. As shown in Table 4.13-3, implementation of MM-4.13-1, MM-4.13-2 and MM-4.13-3 would reduce noise levels from stationary construction equipment to below the 60-dBA-L_{eq} construction noise limit for stationary noise sources. As such, construction noise levels from stationary construction equipment would be less than significant with mitigation.

As demonstrated in Tables 4.13-12 and 4.13.13, implementation of MM-4.13-1 through MM-4.13-3 would reduce Project construction impacts regarding generation of substantial temporary increases in ambient noise levels in the vicinity of the Project in excess of standards established in the County's General Plan and Chapter 12.08 of the County Code to a level of less than significant.

Table 4.13-13. Predicted Stationary Equipment Construction Noise Levels (Mitigated)

Lot # and Proposed Land Use	L_{eq} at Nearest Noise-Sensitive Receptor to Construction Site Boundary (dBA)	Construction Noise Limit L_{eq} dBA
Lot 2 (3-Story Attached Residences)	58	60
Lot 3 (3-Story Detached Residences)	51	
Lots 10, 11 (4-Story Senior Living Units and associated surface parking Lot)	56	
Lots 8, 9 (2-story Attached Residences)	55	
Lot 22 (Landscaped Open Space)	58	
The Old Road Improvements (off-site)	51	

Source: Appendix H.
Notes: L_{eq} = equivalent noise level; dBA = A-weighted decibels. Reported construction noise level is for the loudest construction phase for each Lot.

Music played by workers at construction sites has been the source of noise complaints in some instances. However, with the advent of inexpensive earphones and proliferation of smart phones capable of storing and playing music for individual phone users, music played through amplified sound systems no longer typically occurs at construction sites. In addition, Los Angeles County Code Municipal Code Section 17.12.310 prohibits the playing, causing, or producing any unduly loud music or any boisterous or unusual noise, including amplified sound exceeding exterior levels specified for residential areas under the Noise Ordinance of the Los Angeles County Code (Section 12.08.430 et seq.). Consequently, enforcement of this ordinance would avoid potential impacts associated with amplified music within Project construction zones. Consequently, there would be less than significant construction noise impacts associated with amplified music for or by construction workers.

Predicted Construction Noise Levels Compared to Ambient Noise Levels

The King & Gardiner Farms versus Kern County lawsuit established a requirement for construction noise analyses to disclose the relative increase of construction noise over ambient noise levels, in addition to comparing the construction noise levels against adopted standards governing the absolute level of allowable construction noise. Table 4.13-14, Predicted Construction Noise Levels (Unmitigated) Compared to Ambient Noise Levels, compares the predicted construction noise levels per phase (for both stationary equipment and mobile equipment) to measured ambient noise levels for the identified closest residential receivers.

Table 4.13-14. Predicted Construction Noise Levels (Unmitigated) Compared to Ambient Noise Levels

Lot # and Proposed Land Use	Stationary Equipment 1-Hour L_{eq} at Nearest Noise-Sensitive Receptor to Construction Site Boundary (dBA)	Mobile Equipment 1-Hour L_{eq} at Nearest Noise-Sensitive Receptor to Construction Site Boundary (dBA)	Ambient Noise Level	Amount of Largest Increase (dBA)
Lot 2 (3-Story Attached Residences)	70	75	59	16
Lot 3 (3-Story Detached Residences)	63	69	41	28
Lots 10 and 11 (4-Story Senior Living Units)	69	74	53	21
Lots 8, 9 (2-Story Attached Residences)	67	74	53	21
Lot 22 (Landscaped Open Space)	70	80	41	39
The Old Road Improvements (off-site)	63	68	66	2
Pump Station 4 and 5 Upgrade Improvements (off-site)	N/A	84	53 [1]	31

Source: Appendix H.
Notes: L_{eq} = equivalent noise level; dBA = A-weighted decibels. [1] Based on ambient noise measured at R5, a similar residential neighborhood to those in the vicinity of the pump stations.

As illustrated in Table 4.13-14, construction noise levels would range from 2 to 39 dBA L_{eq} over existing ambient noise levels; construction noise levels greater than 20 dBA over ambient would be considered a temporary, significant noise impact. Refer to mitigation measures to minimize construction noise levels at the nearest receivers. In comparison to ambient levels, construction noise levels for each of the studied construction phases except The Old Road Improvements would be clearly noticeable to vicinity residential receivers and could be expected to result in some annoyance with respect to the enjoyment of outdoor yard areas by residents. However, noise levels in exterior areas of the worst-case modeled residential receivers would not exceed the OSHA standard of 85 dB averaged over an eight-hour period wherein ear protection would be required; therefore, exterior daytime construction noise exposure levels would not be considered harmful for residents electing to use their yard area during construction of the Project. Existing residents in the area would also have the option to remain indoors during construction hours to avoid annoyance from the construction noise. Indoors, the construction noise levels would not be anticipated to exceed 60 dBA L_{eq} which should not interfere with conversations or other daytime indoor activities.

Off-Site Mobile Construction Equipment Noise

County Code Section 12.08.440 includes limits for mobile construction equipment, which also applies to off-site transport operations involving construction equipment, materials, and construction workers; off-site construction traffic noise in the hours between 7:00 AM to 8:00 PM Monday through Saturday must not exceed 75 dBA at single-family residences, or 85 dBA at commercial properties. During peak construction activities at the Project site (refer

to Table 4.3-5, Construction Scenario Assumptions, of Section 4.3, Air Quality), a total of 148 daily worker trips and 30 daily vendor trips are anticipated to occur. Using these trip quantities, and assuming a worst-case scenario where all of the trips would be concentrated within one peak hour, construction traffic would generate a noise level of 67.9 dBA L_{eq} at 40 feet from the centerline of roadways used for construction traffic routing (refer to Appendix H for the worksheet addressing construction traffic noise). Existing land uses are not located closer than 40 feet from the centerline of roadways anticipated for use by construction traffic, and therefore, construction traffic noise levels would not be anticipated to exceed the limits specified under County Code Section 12.08.440. Consequently, construction traffic noise would result in a less than significant impact regarding generation of substantial temporary increases in ambient noise levels in the vicinity of the Project in excess of standards established in the County's General Plan and Chapter 12.08 of the County Code, and no mitigation would be required.

Construction Noise Exposure – Occupied Project Phases

As construction is completed for all residences within a given Project Lot, such residences could become occupied. With construction commencing on an adjacent Project Lot, these occupied residences would be exposed to construction noise. Average distances of 100 feet from the closest occupied residences to the potential active construction on an adjacent Project Lot are expected to be representative for this potential situation involving active construction adjacent to an occupied Project Lot. The nearest occupied residence to a Lot would be no closer than 50 feet. To evaluate construction noise exposure for potential residents of a completed Project Lot, the same construction noise modeling was performed as for off-site receivers. As shown in Table 4.13-15, the modeling concluded that for the anticipated mobile construction equipment employed in the construction of a typical Project Lot, noise exposure for an adjacent residence would exceed the 75 dBA L_{eq} threshold at distances less than 250 feet. For stationary construction equipment, noise exposure for an adjacent residence would exceed the 60 dBA L_{eq} threshold at distances less than 300 feet (Appendix H). Additional modeling was performed to evaluate residents at distances of 50 feet and 100 feet from the active construction boundary and to completed Project residential structures, as these cases are expected to be representative of typical conditions for residents within occupied Project Lots that are immediately adjacent to a Project Lot under active construction. Short-term construction noise exposure for future occupied residences is therefore considered a potentially significant impact prior to mitigation.

To reduce noise levels below the Los Angeles County mobile equipment thresholds, implementation of MM-4.13-4, Temporary Noise Barrier for On-site Phases, is required. Per MM-4.13-4, for mobile equipment, a temporary noise barrier shall be erected along the boundary between each Project Lot under active construction and immediately adjacent Project Lots with occupied residences. To reduce noise levels associated with stationary construction equipment below the Los Angeles County stationary equipment thresholds, a surrounding barrier or enclosure shall be constructed between the stationary equipment and adjacent Lots with occupied residences; these barriers are further detailed in MM-4.13-4, Temporary Noise Barrier for On-Site Phases.

As detailed in MM-4.13-4, with regard to mobile construction equipment, a noise barrier shall be required when the distance between the construction zone and occupied on-site residences is less than 250 feet. MM-4.13-4 details the specific heights of the temporary noise barriers, depending on the distance of construction to residences, and type of equipment, and addresses the worst-case scenario of a receptor located on the third floor (the specified barrier would mitigate noise levels for first, second, or third floor receivers). For example, if a receptor was located on the third floor of an occupied residence from 50 to 99 feet from active Project construction, MM-4.13-4 requires that a temporary noise barrier of 14 feet shall be erected and maintained along the boundary between the Project Lot under construction and the Project Lot with occupied residence(s). Refer to Appendix H for worksheets modeling of mobile construction equipment noise for on-site receptors, and mitigation effectiveness of proposed barrier heights.

As detailed in MM-4.13-4, regarding stationary construction equipment, a noise barrier shall be required when the distance between the construction zone and occupied on-site residences is less than 300 feet. Using the expected average separation distance, for residences, at 50 feet from a piece of stationary equipment, a barrier erected within 5 feet of the stationary equipment (and encompassing the three sides of the equipment not facing the adjacent residences) would have a minimum required height of the required barrier would be 11 feet to protect receivers up to the third level of an occupied residence.

Table 4.13-15 details the noise levels during construction activity near occupied residential Lots, before and after implementation of MM-4.13-4.

Table 4.13-15. Predicted Construction Noise Levels to On-site Residential Receptors (Unmitigated and Mitigated)

Distance from Construction to On-site, Occupied Residence	Type of Equipment	Noise Barrier Height for up to 3-Story Receptors	Construction Noise without Mitigation	Construction Noise with Mitigation (MM-4.13-4)	Threshold dBA L_{eq}	Exceeds Threshold with Mitigation (MM-4.13-4)?
50 feet	Mobile	14 feet	85	75	75	No
100 feet	Mobile	12 feet	79	69		No
Beyond 250 feet	Mobile	None	71	N/A		No
50 feet	Stationary	11 feet	74	60	60	No
100 feet	Stationary	11 feet	68	54		No
Beyond 300 feet	Stationary	None	58	N/A		No

Source: Appendix H.
Notes: dBA = A-weighted decibel; L_{eq} = Noise Equivalent Level (Average Noise Level); MM = Mitigation Measure

As shown in Table 4.13-15, these modeled noise barrier heights, as implemented through MM-4.13-4, would reduce construction noise exposure for residents of occupied Project Lots to within the Los Angeles County mobile and stationary equipment thresholds of 75 dBA L_{eq} and 60 dBA L_{eq}, respectively. Refer to Appendix H for worksheets modeling of stationary construction equipment noise for on-site receptors. As such, with implementation of MM-4.13-4, construction noise for on-site residences would be less than significant.

Operational Noise

On-Site Equipment Noise

The proposed new residences and recreational amenity uses would add a variety of operational noise-producing activities and mechanical equipment. The primary noise generating equipment for the new development would consist of heating, ventilation, and air conditioning (HVAC) package units that would be installed outdoors; such sources are-considered stationary and are evaluated below.

Heating, Ventilation, and Air Conditioning Noise

The Project would include an air conditioning system with a refrigeration condenser unit outside for each residential unit, and the recreation center buildings. Based on the Conceptual Site Plan (Figure 3-1), Vesting Tentative Tract Map (Figure 3-2), Recreation Building Plan (Figure 3-4), and Circulation Plan (Figure 3-7), exterior components of HVAC systems would be mounted on the ground adjacent to the residence served by the equipment, with a retaining wall or screen wall provided between the HVAC location and neighboring Lot that would provide a partial barrier for noise propagation to adjacent Lots and off-site (see Appendix H for site plan). Air conditioner condenser units for the recreation center (Lots 12 and 13), and senior residences (Lot 10) would be installed on the roof of the structures. Two condenser units were assumed for the recreation center building, while 40 condenser units are assumed for the senior residential building (separate condenser for each residential unit and for each common area). A roof parapet of approximately 3.5 feet would be present around the area of the condenser installations, which would provide a partial barrier for noise propagation. For noise modeling, Dudek used the reference sound level for a 4-ton residential unit (Carrier 16NA, sound power level of 76 dBA L_W).

Stationary Noise and Residential Activities

As proposed, residential structures would be arranged to create a relatively continuous building block along the exterior Lot boundary (i.e., Lot boundary facing an adjacent property outside the Project site) for each Lot. The gaps between structures would be minor compared to the length of connected structures and therefore the first row of buildings along the exterior Lot boundary of each Lot would present an effective sound barrier for stationary noise sources more internal to the Project site. The noise model therefore includes air conditioner condenser units for the first row of building closest to the exterior perimeter for each Lot, as well as for the dwelling units of Lot 10, and recreation center buildings (Lots 12 and 13), since these latter units would be roof mounted.

For development consisting primarily of new residential uses, which are proposed to be introduced into an area with established residential neighborhoods, noise levels associated with routine outdoor activities by future residents are not customarily assessed, because they would be similar in nature and magnitude to the sound levels already existing in such established residential neighborhoods. Thus, conversations conducted outdoors, while enjoying yard areas or while walking on sidewalks or trails, represent negligible additions to the noise environment produced by stationary noise sources. Consequently, even passive recreational use of connected trails on and off-site by future residents would not be anticipated to result in noise levels that would be discernible from ambient noise levels, or to contribute to noise levels from stationary noise sources that would increase such levels by even 1 dBA. The on-site recreation center is located internal to the site, with multiple rows of structures between this location and any of the exterior Project site boundaries. Consequently, noise associated with groups enjoying the recreation center, recreational noise at the outdoor pool, and noise from the dog park would be effectively blocked from propagation off-site by the surrounding on-site structures. Thus, future on-site operational noise levels based upon assessment of major stationary noise sources essentially also accounts for anticipated residential and recreational activities on-site.

Table 4.13-16, Stationary Noise Source Levels Compared to Noise Ordinance, presents the results of the Project operational noise prediction modeling at the 7 modeled receptor locations (M1-M7) in the NoisePro model space. Note a modeled receptor location is included which corresponds to each of the off-site noise measurements Dudek conducted to characterize the ambient noise environment near existing sensitive receptors. Refer to Figure 4.13-1 for the locations of M1-M7. These modeled receptor positions are intended to represent Project operational sound levels at residences closest to the Project site property boundaries for comparison to the County's noise ordinance limits. As indicated in Table 4.13-16, Project operational noise levels at each modeled location would fall below the

more stringent nighttime limit, indicating that even if all equipment is operating in the overnight period, the Project noise levels would comply. NoisePro also generates an exhibit with noise contours depicting the noise levels resulting from Project operations, that illustrates noise levels extending several hundred feet from the site. Figure 4.13-4, Aggregate Stationary Sources Operational Sound Level Prediction--Noise Contours, depicts the noise contour map from the NoisePro modeling.

Table 4.13-16. Stationary Noise Source Levels Compared to Noise Ordinance

Road Segment ID	Description	Predicted Noise Level (dBA L_{eq})	Applicable Sound Level Limit (dBA L_{eq})[a]	Limit Exceeded?
M1	Closest Residence North of Project	34	45[a]	NO
M2	Closest Residence Northwest of Project	36	45[a]	NO
M3	Second Closest Residence Northwest of Project	31	45[a]	NO
M4	Third Closest Residence Northwest of Project	28	45[a]	NO
M5	Fourth Closest Residence Northwest of Project	26	45[a]	NO
M6	Fifth Closest Residence Northwest of Project	24	45[a]	NO
M7	Closest Residence East of Project	30	55[b]	NO

Source: Appendix H.
Notes: dBA = A-weighted decibel; L_{eq} = Noise Equivalent Level (Average Noise Level)
[a] The residential nighttime limit under Section 12.08.390 of the Los Angeles County Code.
[b] The residential nighttime limit under Section 11.44.010 of the Santa Clarita Municipal Code.

Because the most important stationary noise sources are HVAC units, resulting noise levels at off-site residences would also be subject to Section 12.08.530 of the County Code, which establishes limits of 55 dBA at any point on a neighboring residential property. As demonstrated by the data in Table 4.13-16, modeled noise levels for combined HVAC units at the periphery of the Project site would not approach, much less exceed, the 45 dBA nighttime limit for stationary sources or the 55 dBA limit for HVAC equipment that would be applied at the property line for the closest adjacent residential parcels located to the north.

In addition to comparing Project operational noise to noise ordinance limits, the predicted operational noise is compared to ambient noise levels documented during the ambient noise survey, as reported for locations M1/R5, M2/R4, M6/R6 and M7/R2. Table 4.13-17, Stationary Noise Source Modeling Results Compared to Ambient Noise Levels, presents the predicted Project operational noise levels to the measured ambient noise levels. As indicated in Table 4,13-17, Project operational noise levels at each modeled location along the property boundary would fall below the measured ambient noise level. Adding the Project's operational noise level to the ambient noise level would in each case result in less than a 3 dB increase.

Table 4.13-17. Stationary Noise Source Modeling Results Compared to Ambient Noise Levels

Road Segment ID	Description	Predicted Noise Level (dBA L_{eq})	Ambient Noise Level (dBA L_{eq})	Ambient Plus Project Noise Level (dBA L_{eq})	Increase Greater Than 3 dBA?
M1/R5	Closest Residence North of Project	34	58	58	NO
M2/R4	Closest Residence Northeast of Project	36	59	59	NO
M6/R6	Fifth Closest Residence NE of Project	24	35	35	NO
M7/R2	Closest Residence East of Project	30	60	60	NO

Source: Appendix H.

With respect to the noise level values presented in Table 4.13-17, two factors should be noted. First, the ambient noise measurements were conducted during the daytime, whereas the minimum ambient noise levels probably occur at night. However, the operational noise levels assume that all HVAC systems are running simultaneously among the peripheral Lots of the development, a phenomenon unlikely to occur, especially during nighttime hours. In addition, R2, R4, and R5 are heavily influenced by traffic along I-5; as such nighttime noise levels would not be anticipated to less than approximately 5 dBA L_{eq} below daytime noise levels outside of peak transportation hours (when the ambient measurements were performed). Consequently, the relative difference between ambient and project operational noise levels in Table 4.13-17 is considered representative for existing and anticipated noise levels in the Project vicinity. Based on comparing predicted Project operational noise levels against both the County's noise ordinance limits and ambient noise levels, a less-than-significant impact would occur for Project operational noise.

Off-Site Roadway Traffic Noise

The Project would result in additional vehicle trips on local arterial roadways (i.e., The Old Road, Pico Canyon Boulevard, Calgrove Boulevard), which could result in increased traffic noise levels at adjacent noise-sensitive land uses. The Project's TIA (Appendix J) quantified the number of Project-added average daily traffic on roadways serving the Project, compared to average daily traffic levels without the Project. Table 4.13-18, Roadway Segments Analyzed for Traffic Noise, lists the roadway segments in the TIA and identifies noise-sensitive land uses adjacent to each roadway segment.

Table 4.13-18. Roadway Segments Analyzed for Traffic Noise

Segment ID	Description	Noise Sensitive Land Uses
1	Pico Canyon Road – West of The Old Road	Motel, Multi-Family Residences, Single Family Residences, Elementary School
2	Pico Canyon Road – East of The Old Road	Senior Living Facilities
3	The Old Road – South of Pico Canyon Rd.	Motels, Multi-Family Residences, Single Family Residences / Project Eastern Frontage
4	The Old Road – North of Calgrove Blvd	Residences/Project Eastern Frontage
5	Calgrove Blvd. – East of The Old Road	Single Family Residences

Table 4.13-18. Roadway Segments Analyzed for Traffic Noise

Segment ID	Description	Noise Sensitive Land Uses
6	The Old Road – South of Project South Entrance	Project Future Multi-Family Residences
7	The Old Road – North of Project North Entrance	Project Future Multi-Family Residences

Source: Appendix H, Appendix J.

Potential noise effects from vehicular traffic were assessed using worksheets based upon the FHWA's Traffic Noise Model version 2.5. Information used in the model included the roadway geometry, posted traffic speeds, and traffic volumes for the following scenarios: existing, existing plus Project, future base (2029), and future base plus Project. Noise levels for each roadway segment were modeled at a distance of 40 feet from the centerline of the road.

The Los Angeles County Noise Element establishes a policy for exterior sensitive areas to be protected from high noise levels (Policy N-1.9). The Noise Element generally sets 65 dBA CNEL as the "normally acceptable" limit for outdoor areas associated with residential use. However, existing noise levels from traffic along the studied roadway segments already exceed this threshold. For the purposes of this noise analysis, increases in traffic noise levels caused by the Project are considered significant when they would cause an increase of at least 3 dBA from existing noise levels. Based on the limits of human hearing, an increase or decrease in noise level of at least 3 dBA is required before any noticeable change in community response would be expected.

As is standard for this type of modeling, and appropriate for this Project, the receivers were modeled to be five feet above the local ground elevation, which is considered the average height of a person. The noise model results are summarized in Table 4.13-19, Roadway Traffic Noise Modeling Results. As shown in Table 4.13-19, the addition of Project traffic to the roadway network would result in a CNEL increase of less than 1 dBA CNEL along 5 of the 7 studied roadway segments and less than 2 dBA CNEL at the remaining two segments, which are each below the discernible level of change for the average healthy human ear. Thus, a less-than-significant impact would occur for Project–related off-site traffic noise increases affecting existing off-site residences, senior living facilities, motels, and schools in the vicinity of the Project site.

Table 4.13-19. Roadway Traffic Noise Modeling Results

Road Segment ID	Existing Noise Level (dBA CNEL)	Existing Plus Project Noise Level (dBA CNEL)	Future Base (2029) Noise Level (dBA CNEL)	Future Base (2029) Plus Project Noise Level (dBA CNEL)	Maximum Project-Related Noise Level Increase (dB)
1	73.1	73.3	73.6	73.7	0.1
2	70.7	70.8	70.7	70.8	0.1
3	68.0	68.6	68.1	68.7	0.6
4	68.9	70.1	70.0	70.0	0.2
5	70.9	71.3	70.9	71.9	0.9
6	N/A	N/A	67.8	69.1	1.3
7	N/A	N/A	67.8	69.7	1.9

Source: Appendix H.
Notes: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; dB = decibel.

Overall, permanent increases in ambient noise levels at existing residences from Project operation, including on-site stationary noise sources and Project trip contributions to off-site traffic noise exposure levels, would have a less than significant impact regarding generation of substantial permanent increases in ambient noise levels in the vicinity of the Project.

Noise Element Policy Discussion

The applicable noise-related policies and goals of the General Plan are detailed in Section 4.13.2, Regulatory Setting, above. The potential for the Project to conflict with the applicable noise policies of the General Plan is included herein and within Section 4.11, Land Use and Planning. As proposed, the land use zones of the Project site would juxtapose residential land uses adjacent to existing residential neighborhoods, promoting land use compatibility between the Project and residential neighbors and also creating a buffer between a higher noise generator (the on-site recreation center) and adjacent uses. As such, the Project would not conflict with Policy N 1.1 and N 1.2 of the General Plan.

MM-4.13-1 through MM-4.13-4 would reduce Project-specific construction noise levels to be in compliance with applicable standards, and avoid substantial Project-related contributions to cumulative construction noise in the Project vicinity. Thus, the Project, with implementation of MM-4.13-1 through MM-4.13-4, would not conflict with Policy N 1.6.

Policy N 1.10 and N.1 12 require that residences be oriented away from major noise sources, and that decisions for land use adjacent to transportation facilities employ future transportation forecasts to assess noise exposure. Residences in Lot 5 would have rear yards oriented toward I-5, which maximizes the separation distance between transportation noise sources and interior living spaces, and also makes erection of a noise barrier to protect the yard areas more feasible. The transportation noise exposure analysis does employ 2030 Year traffic forecasting to assess future traffic noise exposure for Project residents. Therefore, the Project would not conflict with Policy N 1.10 and N 1.12.

Threshold 4.13b: Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction Vibration

During construction activities, off-road equipment has the potential to generate groundborne vibration or groundborne noise levels (these terms are interchangeable, and both simply refer to a pressure wave traveling through earth materials that comprise the “ground” (Caltrans 2020). Caltrans and FTA have collected groundborne vibration information related to construction activities.

Construction vibration, at sufficiently high levels, can present a building damage risk; the FTA guidance limit for avoidance of damage to residential structures is 0.2 ips (FTA 2006). County Code (Section 12.08.560) establishes a limit of 0.01 ips RMS for construction vibration at residences nearest to a construction site (which is approximately 80 VdB). Given adjacent existing off-site residences would be no closer than approximately 110 feet from construction activities on the Project, Dudek calculated the maximum vibration levels from construction activities at the closest residences. A vibratory roller (which has the greatest vibration generation potential for any equipment anticipated to be used for Project construction) would generate a vibration level of 0.022 ips PPV at the closest off-site structures (residences), which is below the 0.2 ips PPV threshold for damage to residential buildings (FTA 2006), Dudek also calculated the vibration expressed in VdB at the closest residence from a vibratory roller, which

would be approximately 76 VdB and which would not exceed the 0.01 ips RMS limit (equating to 80 VdB) set under County Code Section 12.08.560. Therefore, potential impacts associated with construction-related vibration levels for both risk of human annoyance and vibration damage to nearby structures would be less than significant with implementation of the Project.

Operational Vibration

Once operational, the Project would not be expected to feature major producers of groundborne vibration. Anticipated mechanical systems like HVAC units are designed and manufactured to feature rotating (fans, motors) and reciprocating (compressors) components that are well-balanced with isolated vibration within or external to the equipment casings. Vibration levels from these sources would be an order of magnitude less than that of any of the construction equipment listed in Table 4.13-8, and the minimum separation distance between new stationary equipment and off-site residences would be no less than 450 feet (four times greater than the distance used for construction equipment vibration analysis). On this basis, generation of excessive groundborne vibration impacts due to Project operation would be less than significant and no mitigation is required.

Threshold 4.13c: 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 expose people residing or working in the Project area to excessive noise levels?

There are no private airstrips within the vicinity of the Project site. The closest airport to the Project site is the Whiteman Municipal Airport, located approximately 12 miles southeast of the Project site. According to the Airport Land Use Compatibility Plan (Los Angeles County Airport Land Use Commission 2004), the Project site is not located within the Whiteman airport noise contour of 60-65 dB CNEL and the Project would therefore not expose people residing or working in the Project area to excessive noise levels (i.e., airport noise exposure less than 60 dB CNEL is compatible with aforementioned State noise insulation standards). Therefore, no impacts associated with aviation overflight noise exposure would occur.

4.13.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects (i.e., related or cumulative projects), as required by Section 15130 of the State CEQA Guidelines. The cumulative projects used for this analysis are presented in Section 2.6, Cumulative Impacts, and on Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR. For purposes of noise and vibration, the geographical area of cumulative impacts varies by threshold, further detailed below.

Threshold 4.13a: 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 County General Plan or noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08), or applicable standards of other agencies?

As shown on Figure 2-8, the cumulative projects in the immediate vicinity of the Project site that could contribute to substantial temporary or permanent increases in ambient noise levels in the vicinity of the Project consist of Cumulative Project LA1, LA2, and SC1. With regard to short-term construction noise, the Project and Cumulative Projects LA1 and LA2 would be required to reduce construction noise levels at the closest residences to 60 dBA $L_{eq,}$ as these projects are within the jurisdiction of the County and are subject to its noise ordinance (Section 12.08.570). Cumulative Projects LA1 and LA2, each would appear to be within no more than 200 feet from existing residences

at the Project site and would therefore need to employ controls to reduce their construction noise to 60 dBA L_{eq} at 200 feet. Existing residences are located as close as 110 feet from the Project site boundary, but these residences would be located at approximately 2,000 feet (from Cumulative Project LA2) and 5,000 feet (from Cumulative Project LA1) as measured from the approximate project boundaries to the Project site. At these distances, the construction noise contribution from Cumulative Project LA1 at the residence closest to the Project site would be reduced to approximately 32 dBA L_{eq} while contributions from Project LA2 would be reduced to approximately 40 dBA (Appendix H). Adding together 32 dBA, 40 dBA, and 60 dBA yields a sum of effectively 60 dBA. Therefore, even if Cumulative Projects LA1 and LA2 were constructed at the same time as the Project, the Project would not contribute to a cumulatively considerable impact regarding substantial temporary increase in ambient noise levels in the vicinity of the Project.

Cumulative Project SC1 is in the City of Santa Clarita and would be held to the construction noise limit of 80 dBA L_{eq} during construction activities, which would be applied at the closest residences to Cumulative Project SC1, which are approximately 400 feet to the north of Cumulative Project SC1 and approximately 440 feet east of the Project site. Cumulative Project SC1 is located on the opposite side of I-5 from the Project. At this distance, the construction noise contribution from Cumulative Project SC1 at the residence closest to the Project site would be reduced to approximately 69 dBA L_{eq}. However, a continuous retaining wall between the north and south lanes of I-5, and existing commercial buildings along the west side of I-5/The Old Road would be expected to reduce these sound levels to no more than 57 dBA at the closest residence to the Project site. Adding 57 dBA and 60 dBA together, the sum would be 61 (a one dBA increase), which would not be discernable to the human ear.

Additionally, as the construction schedules of the Cumulative Projects are not currently known, there is a possibility that Cumulative Projects LA1, LA2, and SC1 and the Project would not be constructed simultaneously, and therefore, examination of noise exposure from the closest construction project to that resident represents a reasonable analysis of construction noise exposure on a cumulative basis. Therefore, the Project would not contribute to a cumulatively considerable impact regarding substantial temporary increase in ambient noise levels in the vicinity of the Project with respect to Cumulative Projects LA1, LA2, and SC1.

Project operational noise levels at off-site residences closest to the Project site would be well below ambient levels and would not approach limits under Section 12.08.390 of the County Code. Cumulative Projects LA1, LA2, and SC1 are at distances from the Project site that would negate the potential for their operational noise to combine with Project operational noise levels at receptors close to the Project. For example, assuming the Cumulative Project LA1 and LA2 would be required to comply with the CCR Title 24, Part 2, Chapter 12 acceptable overnight interior noise limits for new construction at 45 dBA L_{eq} at residences as close as 200 feet from their boundaries, operational noise contributions at the residence closest to the Project site would be reduced to 17 dBA (Cumulative Project LA1) and 25 dBA (Cumulative Project LA2) which, when added to Project contributions, would not increase the total noise exposure at the residence closest to the Project site. Therefore, the Project would not contribute to a cumulatively considerable impact regarding substantial permanent increases in ambient noise levels in the vicinity of the Project with respect to Cumulative Projects LA1, LA2, and SC1.

With regard to traffic noise impacts from cumulative projects, the traffic impact assessment (Appendix J) evaluated roadway traffic trips on key roadway segments to which the project would contribute trips, under scenarios including existing conditions and future base 2029 (which includes cumulative developments traffic contributions). Table 4.13-20 compares existing traffic noise levels to those from cumulative developments, including the Project.

Table 4.13-20. Roadway Cumulative Traffic Noise Modeling Results

Road Segment ID	Existing Noise Level (dBA CNEL)	Future Base (2029) Plus Project Noise Level (dBA CNEL)	Noise Level Increase (dB)
1	73.1	73.7	0.6
2	70.7	70.8	0.1
3	68.0	68.7	0.7
4	68.9	70.0	1.1
5	70.9	71.9	1.0
6	N/A	69.1	1.3
7	N/A	69.7	1.9

Source: Appendix H.
Notes: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; dB = decibel.

As illustrated by the data in Table 4.13-20, roadway segment increases from current conditions to the Future Base 2029 Plus Project would in all cases be well below the significance level of a 3 dB increase. Consequently, the Project would not contribute to a cumulatively significant traffic noise impact.

Threshold 4.13b: Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Groundborne vibration attenuates very rapidly with distance. For example, at 25 feet from an operating heavy dozer the reported vibration level is 0.08p ips PPV; at a distance of 50 feet the vibration level would be 0.03 ips PPV; at 200 feet the vibration level would be 0.004 ips PPV. No portion of the Project construction limits would be closer than approximately 200 feet from any of the cumulative projects. With a Project construction-related vibration contribution of no greater than 0.004 ips PPV to construction vibration levels occurring at one of the cumulative project sites, there would be a less than significant impact and the Project would not result in a cumulatively considerable contribution regarding generation of excessive groundborne vibration or groundborne noise levels.

Threshold 4.13c: 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 expose people residing or working in the project area to excessive noise levels?

Neither the Project nor any of the cumulative list projects is located within the vicinity of a private airstrip or within 2 miles of a public airport. The 60-65 dBA CNEL noise contour associated with the closest public airport (Whiteman Municipal Airport, located approximately 12-13 miles southeast of the cumulative list projects) does not extend into the vicinity, and therefore noise associated with aircraft overflights for any of the cumulative projects would be less than significant, and the Project would not result in a cumulatively considerable impact.

4.13.7 Mitigation Measures

MM-4.13-1 Simultaneous Equipment Operation Limit for Portion of Lot 22. Within the area of Lot 22 designated on Figure 4.13-3, Area of Lot 22 In Which Construction Noise Mitigation is Required of the Draft Environmental Impact Report (EIR), the total quantity of mobile construction equipment allowed to operate simultaneously shall not exceed one.

MM-4.13-2 Staging Areas & Stationary Equipment. Prior to issuance of grading permits, the County/Project applicant shall incorporate the following measures as a note on the grading plan cover sheet to ensure that the greatest distance between noise sources and sensitive receptors during construction activities have been achieved.

- Neither stationary construction equipment (i.e., generator, air compressor, cement mixer) nor construction staging areas shall be located within Lot 22.
- Construction equipment, fixed or mobile, shall be equipped with properly operating and maintained noise mufflers consistent with manufacturers' standards.
- Construction staging areas shall be located away from off-site sensitive uses during Project construction.
- The Project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the Project site, whenever feasible.

MM-4.13-3 Stationary Equipment Construction Noise Barrier. Stationary construction equipment located within 600 feet of the northern Project site property boundary in Lots 2, 3, 8, 9, 10, and 11 and within The Old Road Improvements construction zone shall each be enclosed within a sound barrier of 10-foot minimum height.

MM-4.13-4 Temporary Noise Barrier for On-Site Phases.

For mobile equipment (as defined by the Section 12.08.440 of the Los Angeles County Code) construction activities within a Project Lot that is adjacent to an occupied, on-site residence, a temporary noise barrier shall be erected and maintained along the boundary between the Project Lot under construction and the Project Lot with occupied residence(s). The noise barrier for mobile construction equipment operation shall either: (1) extend along the entire common boundary between the construction zone and adjacent occupied Project Lot; or (2) extend from either end of the construction zone a length that is twice the separation distance between the construction zone and closest residence. For stationary construction equipment (as defined by the Section 12.08.440 of the Los Angeles County Code), temporary sound barriers surrounding three sides of the equipment (with the remaining open side facing the opposite direction from the adjacent occupied residences) shall be erected and maintained.

The temporary sound barriers shall remain in place throughout the duration of the applicable construction activity. To determine the appropriate height and length of the temporary noise barrier, prior to construction activities for each phase of development, the construction contractor shall determine the nearest occupied residence to the phased construction activity and abide by the below requirements:

Distance from Construction to On-site, Occupied Residence	Type of Equipment	Noise Barrier Height	Location for Barrier
50 to 99 feet	Mobile	14 feet	Along boundary between construction zone and adjacent Lot.
50 to 99 feet	Stationary	11 feet	Within 5 feet of stationary equipment, 3 sides

Distance from Construction to On-site, Occupied Residence	Type of Equipment	Noise Barrier Height	Location for Barrier
100 to 250 feet	Mobile	12 feet	Along boundary between construction zone and adjacent Lot.
100 to 300 feet	Stationary	11 feet	Within 5 feet of stationary equipment, 3 sides
Beyond 250 feet	Mobile	None	None
Beyond 300 feet	Stationary	None	None

4.13.8 Level of Significance After Mitigation

Regarding generation of substantial temporary increase in ambient noise levels in the vicinity of the Project, MM-4.13-1 through MM-4.13-4 would be required to reduce impacts from construction activity to less than significant. Upon implementation of these mitigation measures, impacts regarding generation of substantial temporary increases in ambient noise levels in the vicinity of the Project in excess of standards established in the County's General Plan and noise ordinance would be less than significant.

The Project would result in less than significant impacts regarding generation of excessive groundborne vibration or groundborne noise levels.

The Project would result in no impacts regarding excessive noise levels due to proximity to a private airstrip, airport land use plan, public airport, or public use airport.

4.13.9 References

Caltrans (California Department of Transportation). 2013. *Technical Noise Supplement – A Technical Supplement to the Traffic Noise Analysis Protocol*. Sacramento, California. September 2013.

Caltrans. 2020. *Transportation and Construction Vibration Guidance Manual*. September 2020.

County of Los Angeles. 1987. *Environmental Document Reporting Procedures and Guidelines (CEQA Guidelines)*. Adopted by the Board of Supervisors in 1987.

County of Los Angeles. 2015. *Los Angeles County General Plan 2035*. Adopted October 6, 2015. Accessed June 30, 2022. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

FTA (U.S. Department of Transportation, Federal Transit Authority). 2006. *Transit Noise and Vibration Impact Assessment*. May 2006. Last accessed February 8, 2024. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf.

ISO (International Organization of Standardization). 1996. *Attenuation of Sound During Propagation Outdoors, Part 2: General Method of Calculation*. Last accessed February 8, 2024. https://www.iso.org/standard/20649.html.

Los Angeles County Airport Land Use Commission. 2004. *Los Angeles County Airport Land Use Plan*.

OPR (California Governor's Office of Planning and Research). 2017. *State of California General Plan Guidelines*.

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SOURCE: Bing Maps 2020, Open Street Map 2019

DUDEK

0 500 1,000 Feet

FIGURE 4.13-1

Locations of Ambient Noise Measurements and Receivers for Noise Modeling

Trails at Lyons Canyon Project

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SOURCE: Bing Maps 2020, Open Street Map 2019, Dudek 2022

DUDEK

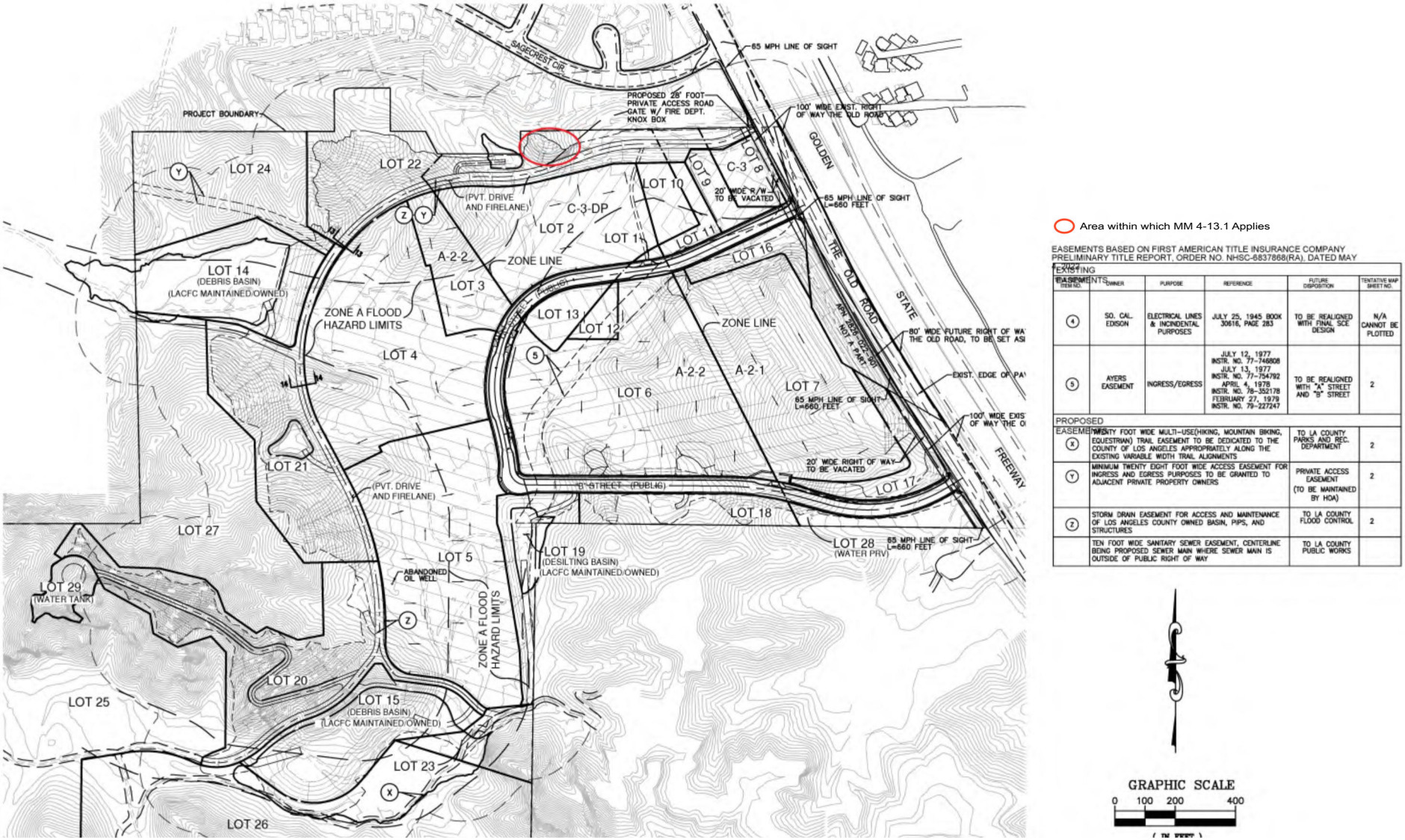
0 150 300 Feet

FIGURE 4.13-2

Locations of Receptors for Construction Noise Modeling

Trails at Lyons Canyon Project

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ITEM NO.	OWNER	PURPOSE	REFERENCE	FUTURE DISPOSITION	TENTATIVE MAP SHEET NO.
EXISTING EASEMENTS					
(4)	SO. CAL. EDISON	ELECTRICAL LINES & INCIDENTAL PURPOSES	JULY 25, 1945 BOOK 30616, PAGE 283	TO BE REALIGNED WITH FINAL SCE DESIGN	N/A CANNOT BE PLOTTED
(5)	AYERS EASEMENT	INGRESS/EGRESS	JULY 12, 1977 INSTR. NO. 77-746808 JULY 13, 1977 INSTR. NO. 77-754792 APRIL 4, 1978 INSTR. NO. 78-352178 FEBRUARY 27, 1979 INSTR. NO. 79-227247	TO BE REALIGNED WITH "A" STREET AND "B" STREET	2
PROPOSED EASEMENTS					
(X)	TWENTY FOOT WIDE MULTI-USE(HIKING, MOUNTAIN BIKING, EQUESTRIAN) TRAIL EASEMENT TO BE DEDICATED TO THE COUNTY OF LOS ANGELES APPROPRIATELY ALONG THE EXISTING VARIABLE WIDTH TRAIL ALIGNMENTS		TO LA COUNTY PARKS AND REC. DEPARTMENT	2
(Y)	MINIMUM TWENTY EIGHT FOOT WIDE ACCESS EASEMENT FOR INGRESS AND EGRESS PURPOSES TO BE GRANTED TO ADJACENT PRIVATE PROPERTY OWNERS		PRIVATE ACCESS EASEMENT (TO BE MAINTAINED BY HOA)		2
(Z)	STORM DRAIN EASEMENT FOR ACCESS AND MAINTENANCE OF LOS ANGELES COUNTY OWNED BASIN, PIPS, AND STRUCTURES		TO LA COUNTY FLOOD CONTROL		2
	TEN FOOT WIDE SANITARY SEWER EASEMENT, CENTERLINE BEING PROPOSED SEWER MAIN WHERE SEWER MAIN IS OUTSIDE OF PUBLIC RIGHT OF WAY		TO LA COUNTY PUBLIC WORKS		

SOURCE: United Civil, Inc., 2023

FIGURE 4.13-3

Area of Lot 22 In Which Mobile Construction Equipment Noise Mitigation is Required

Trails at Lyons Canyon Project

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SOURCE: Dudek 2023

FIGURE 4.13-4

Aggregate Stationary Sources Operational Sound Level Prediction - Noise Contours

Trails at Lyons Canyon Project

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4.14 Population and Housing

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to population and housing, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts, level of significance, and references. A discussion of the existing conditions in the Project site is also included in this section to present an environmental baseline for the Project. The analysis is based, in part, on County of Los Angeles documents and information provided in the following sources: the United States Census Bureau, the Southern California Association of Governments (SCAG), and the County of Los Angeles Department of Regional Planning. Other sources consulted are listed in Section 4.14.9, References.

4.14.1 Existing Conditions

Existing Population, Housing, and Employment

The Project site is located within unincorporated Los Angeles County (County) and adjacent to the City of Santa Clarita (City), as shown in Figure 2-1, Regional Location and Vicinity Map in Section 2, Environmental Setting of this Draft EIR. Currently, the Project site is vacant and does not include any dwelling units, population, or employment.

Southern California Association of Governments Region Overview

SCAG is the nation's largest metropolitan planning organization, representing six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura), 191 cities, and approximately 19 million residents. SCAG completes a comprehensive update of the plan every 4 years to update the growth forecast, integrate new projects and programs funded by the six county transportation commissions, confirm alignment with federal and state performance standards and environmental requirements, and to review and refine regional strategies to address gaps in achieving the region's vision for greater mobility, sustainability and economic prosperity. The plan is a "living" document that can be amended and refined in between the 4-year cycles, as necessary, to address regionally significant changes in transportation programs and funding.

At the time of the issuance of the NOP, the applicable regional growth forecasts were included in SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also referred to as Connect SoCal. Connect SoCal is a long-range planning document that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable regional growth pattern. Over 4,000 individual transportation capital projects and programs through 2045, advanced through local and countywide plans, form the foundation of Connect SoCal. The implementation of the plan is anticipated to generate and support 168,400 annual jobs stemming from direct transportation investments and 264,500 jobs annually from the enhanced economic competitiveness that infrastructural improvements will provide (SCAG 2020a).

According to SCAG, for the purpose of determining consistency with Connect SoCal for California Environmental Quality Act (CEQA), lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency; consistency should be evaluated utilizing the goals and policies of Connect SoCal and its associated Program PEIR. Connect SoCal does not supersede or otherwise affect local jurisdiction authority or decisions on future development, including entitlements and development agreements. There is no obligation by a jurisdiction to change its land use policies, General Plan, or regulations to be consistent with Connect SoCal (SCAG 2020a).

A combination of forecasts for population, households, and employment within the SCAG region and Los Angeles County is presented below in Table 4.14-1.

Table 4.14-1. SCAG Population, Households, and Employment Forecasts

	2016	2045	Total Change	Average Annual Growth
SCAG Region				
Population	19,518,000	22,504,000	3,672,000	126,621 or 0.67%
Households	6,333,000	7,633,000	1,621,000	55,897 or 0.93%
Employment	8,695,000	10,049,000	1,660,000	57,241 or 0.68%
Los Angeles County				
Population	10,111,000	11,674,000	1,563,000	53,897 or 0.53%
Households	3,319,000	4,119,000	800,000	27,586 or 0.83%
Employment	4,743,000	5,382,000	639,000	22,034 or 0.46%
Unincorporated Los Angeles County				
Population	1,044,500	1,258,000	213,500	7,362 or 0.70%
Households	294,800	419,300	124,500	4,293 or 1.46%
Employment	269,100	320,100	51,000	1,759 or 0.65%

Source: SCAG 2020a; Table 13 and Table 14.

SCAG projects that the region will add 3,672,000 people, 1,621,000 households and 1,660,000 jobs over the RTP/SCS planning horizon (2016-2045). Annual household growth (0.83 percent) is expected to outpace both population growth (0.61 percent) and employment growth (0.62 percent). Population growth rates are expected to be slower than the previous period of 2000-2016 (0.82 percent) and substantially slower than historical growth for the region from 1970-2000 (1.65 percent). This projection is slightly below the 2016-2045 anticipated growth rates for the state of California (0.66 percent). As shown in Table 4.14-1, the population, housing, and employment annual growth rate for Los Angeles County between 2020 and 2035 is estimated to be slower than the annual growth rate for the SCAG region as a whole over this period of time. However, the population and housing annual growth rate for unincorporated Los Angeles County between 2020 and 2035 is estimated to exceed the annual growth rate for the SCAG region as a whole over this period of time, as well as exceed the population, housing, and employment annual growth rate for Los Angeles County.

Other Demographic Data Sources

County of Los Angeles Housing Element Update. The Housing Element is one of the required elements of the General Plan and the Sixth Revision to the County of Los Angeles Housing Element covers the planning period of October 15, 2021 through October 15, 2029. The Housing Element serves as a policy guide to address the comprehensive housing needs of the unincorporated Los Angeles County. The primary focus of the Housing Element is to ensure decent, safe, sanitary, and affordable housing for current and future residents, including those with special needs (County of Los Angeles 2020a). The Housing Element provides demographic projections for the unincorporated County.

Santa Clarita Valley Planning Area. The Santa Clarita Valley Planning Area is one of 11 Planning Areas that make up Chapter 5, Planning Areas framework of the County General Plan. The Santa Clarita Planning Area is bordered to the west by the Ventura County line, to the north by the Los Padres National Forest and Angeles National Forest,

to the east by the Angeles National Forest, and to the south by a major ridgeline that separates the Santa Clarita Valley from the San Fernando Valley. The Planning Area includes over 480 square miles, of which about 195 square miles are unincorporated Los Angeles County. The Planning Area is located approximately 30 to 40 miles northwest of Downtown Los Angeles. According to the General Plan, the Planning Area is one of the fastest growing areas in Los Angeles County. Due to this rapid growth, the Planning Area faces multiple challenges related to infrastructure planning, preservation of open space and biological diversity, jobs-housing balance, reducing vehicle miles traveled, and coordination of public services and facilities (County of Los Angeles 2015).

Newhall Census County Division (CCD). The Newhall CCD includes 480.9 square miles and includes the mountainous areas of the western County and the City of Santa Clarita, Castaic Lake, and surrounding areas. The southerly portion of the Newhall CCD begins near the intersection of the Interstate (I) 5 and the State Route (SR) 14, extends westerly to the County border with Ventura County, extends northerly past Castaic Lake (excluding Pyramid Lake) to approximately SR-138, extends southeasterly generally along Pine Canyon Road to Bouquet Canyon Road in Leona Valley, and continues southerly generally between Bouquet Canyon Road (within CCD) and SR-14 (outside of CCD). The Newhall CCD includes the following areas: Castaic, Green Valley, Hasley Canyon, Stevenson Ranch, and Valverde Census Designated Places (CDPs), a portion of the Leona Valley CDP, and a portion of the City of Santa Clarita (U.S. Census 2010).

Demographic Forecasts

As shown below, various sources of data are available for population, housing, and employment that include the Project site. These data points include differing geographic areas and were compiled within different years and, the most recent and applicable data sources are provided to inform the baseline conditions and buildout conditions for population, housing, and employment.

Population

The Newhall CCD data from 2010 had a population of 254,330 people. In 2020, the Newhall CCD had a population of 273,466, which represents a growth of 19,136 people over 10 years, resulting in an annual growth rate of approximately 0.75%. This rate (2010 to 2020) represents a greater annual population growth rate than anticipated by SCAG through 2045 for the unincorporated County (average annual growth rate of 0.70%), the County as a whole (average annual growth rate of 0.53%), and the SCAG region (average annual growth rate of 0.67%), as shown in Table 4.14-1.

As shown in Table 4.14-2, Population Estimates and Forecasts, the County's General Plan estimated approximately 104,116 residents lived in the Santa Clarita Valley Planning Area in 2013. By 2035, approximately 237,638 residents were projected to live within the Santa Clarita Valley Planning Area, which represents approximately 6,069 new residents each year (133,522 total new residents) over the 22-year planning period.

Table 4.14-2. Population Estimates and Forecasts

Location	2013	2020	2035	2045	Average Annual Growth from 2013 to 2035	Average Annual Growth from 2020 to 2045
Santa Clarita Valley Planning Area [a]	104,116	--	237,638	--	6,069 or 5.83%	--

Table 4.14-2. Population Estimates and Forecasts

Location	2013	2020	2035	2045	Average Annual Growth from 2013 to 2035	Average Annual Growth from 2020 to 2045
Unincorporated County [b]	--	1,034,689	--	1,258,000	--	8,932 or 0.86%
Total County [c]	--	10,407,000 [1]	11,174,000	11,674,000	--	50,680 or 0.49%

Sources:
[a] County of Los Angeles 2014; [b] County Housing Element/SCAG 2020; [c] SCAG 2020a.
Notes:
"--" = data was not available;
[1] U.S. Census data for the County in 2020 includes a population of 10,014,009, which is a difference of (-392,991) fewer people than were anticipated through the SCAG Connect SoCal. (U.S. Census 2020b).

Regarding existing population data, as shown in Table 4.14-2 above, there is not a discrete data source for population that can be comparable to the latest 2020 Census data for the Newhall CCD or the Santa Clarita Valley Planning Area given that the geographic areas are different and include different baseline years and projections. As such, for the purposes of comparison, a straight-line extrapolation of the General Plan population for the Santa Clarita Valley Planning Area between 2013 and 2035 was used to inform what the current population of the Santa Clarita Valley Planning Area would be in 2022, (assuming a population growth of 6,069 persons per year), which results in a 2022 population of 158,739 persons.

The expected annual population growth over these years of 5.83%, as anticipated in the General Plan for the Santa Clarita Valley Planning Area, far exceeds the annual growth rate for the County or the SCAG region, as anticipated by SCAG, as shown in Table 4.14-1.

Housing

The Newhall CCD data from 2010 had a total of 85,458 housing units. In 2020, the Newhall CCD had a total of 91,857 housing units, which represents a growth of 6,399 units over 10 years, resulting in an annual growth rate of approximately 0.75%. This previous rate (2010 to 2020) represents a slower annual housing growth rate than anticipated by SCAG through 2045 for the unincorporated County (average annual growth rate of 1.46%), the County as a whole (average annual growth rate of 0.83%), and the SCAG region (average annual growth rate of 0.93%), as shown in Table 4.14-1.

As shown in Table 4.14-3, Housing Estimates and Forecasts, the County's General Plan estimated approximately 28,501 households in the Santa Clarita Valley Planning Area in 2013. By 2035, approximately 77,155 households are projected to be within the Santa Clarita Valley Planning Area, which represents approximately 2,210 new households each year (48,654 total new households) over the 22-year planning period.

Additionally, for informational purposes, the U.S. Census Bureau reported the Newhall CCD's vacancy rate was 3.5%, or 2,368 vacant units, as compared to the 4.8% vacancy rate (171,353 vacant units) for Los Angeles County

in 2020. Both vacancy rates for the Newhall CCD and Los Angeles County are lower than the national vacancy rate of 9.7% (U.S. Census 2020a). [1, 2]

Table 4.14-3. Housing Estimates and Forecasts

Location	2013	2020	2035	2045	Average Annual Growth from 2013 to 2035	Average Annual Growth from 2020 to 2045
Santa Clarita Valley Planning Area [a]	28,501	--	77,155	--	2,210 or 7.75%	--
Unincorporated County [b]	--	311,204	--	320,100	--	356 or 0.11%
Total County [c]	--	4,838,000 [1]	5,172,000	5,382,000	--	21,880 or 0.45%

Sources:
[a] County of Los Angeles 2014; [b] County Housing Element/ SCAG 2020; [c] SCAG 2020a.
Notes:
"--" = data was not available;
[1] U.S. Census data for the County in 2020 includes a total of 3,591,981 housing units, which is a difference of (-1,246,019) fewer units than were anticipated through the SCAG Connect SoCal (DOF 2022).

Regarding existing housing data, as shown in Table 4.14-3 above, there is not a discrete data source for housing that can be comparable to the latest 2020 Census data for the Newhall CCD or the Santa Clarita Valley Planning Area given that the geographic areas are different and include different baseline years and projections. As such, for the purposes of comparison, a straight-line extrapolation of the General Plan population for the Santa Clarita Valley Planning Area between 2013 and 2035 was used to inform what the current housing of the Santa Clarita Valley Planning Area would be in 2022, (assuming a housing growth of 2,210 units per year), which results in 48,389 units in 2022.

The expected annual housing unit growth over these years of 7.75%, as anticipated in the General Plan for the Santa Clarita Valley Planning Area, far exceeds the annual growth rate for the County or the SCAG region, as anticipated by SCAG, as shown in Table 4.14-1.

Employment

At the time of drafting this Draft EIR, the total number of jobs from the 2020 Census was not published by the U.S. Census Bureau, instead, 2020 5-year estimates from the American Community Survey are presented. In 2020, the Newhall CCD had a labor force estimate of 129,437 employees. Comparable data from the 2010 Census for the Newhall CCD is not available.

As shown in Table 4.14-4, Employment Estimates and Forecasts, the County's General Plan estimated approximately 21,770 jobs were located in the Santa Clarita Valley Planning Area in 2013. By 2035, approximately

[1] 171,353 / 3,591,981 = 0.0477043169214982 x 100 = 4.77 or 4.8%
[2] 13,681,156 / 140,498,736 = 0.09737 x 100 = 9.737 or 9.7%

105,881 jobs are projected to be within the Santa Clarita Valley Planning Area, which represents approximately 3,837 new jobs each year (84,411 total new jobs) over the 22-year planning period.

Additionally, and for informational purposes, the 2020 unemployment rate for the Newhall CCD was estimated at 3.6% whereas Los Angeles County had an estimated unemployment rate of 4.2% (U.S. Census 2020b). For comparison, the U.S. Census Bureau estimates the national unemployment rate was at 3.4% (U.S. Census 2020b).

Table 4.14-4. Employment Estimates and Forecasts

Location	2013	2020	2035	2045	Average Annual Growth from 2013 to 2035	Average Annual Growth from 2013 or 2020 to 2045
Santa Clarita Valley Planning Area[a]	21,470	--	105,881	--	3,837 or 17.87%	--
Unincorporated County	252,659 [a]	--	--	320,100 [b]	--	2,044 or 0.81%
Total County [b]	--	4,838,000[1]	5,172,000	5,382,000	--	21,760 or 0.45%

Sources:
[a] County of Los Angeles 2014; [b] SCAG 2020a.
Notes:
"--" = data was not available;
[1] The American Community survey 5-Year Estimates for the County in 2020 includes a total of 5,525,938 jobs, which is a difference of 687,938 more jobs than were anticipated through the SCAG Connect SoCal (Census Reporter 2020).

Regarding existing employment data, as shown in Table 4.14-3 above, there is not a discrete data source for population that can be comparable to the latest 2020 Census data for the Newhall CCD or the Santa Clarita Valley Planning Area given that the geographic areas are different and include different baseline years and projections. As such, for the purposes of comparison, a straight-line extrapolation of the General Plan employment for the Santa Clarita Valley Planning Area between 2013 and 2035 was used to inform what the current employment in the Santa Clarita Valley Planning Area would be in 2022, (assuming job growth of 3,837 jobs per year), which results in 56,002 jobs in 2022.

4.14.2 Regulatory Requirements

Federal

There are no federal programs, policies, or regulations related to population or housing that are applicable to the Project.

State

Section 65580 of the Government Code (State Housing Element Law)

Pursuant to Section 65580 of the Government Code, a housing element of a general plan must contain local commitments to the following:

- Provide sites with appropriate zoning and development standards and with services and facilities to accommodate the jurisdiction's Regional Housing Needs Allocation (RHNA) for each income level. The RHNA is the only population and/or housing requirement that applies to the General Plan Update.
- Assist in the development of adequate housing to meet the needs of lower and moderate-income households.
- Address, and where appropriate and legally possible, remove governmental constraints to the maintenance, improvement, and development of housing, including housing for all income levels and housing for persons with disabilities.
- Conserve and improve the condition of the existing affordable housing stock.
- Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status or disability.
- Preserve assisted housing developments for lower income households.

Department of Housing and Community Development

State law requires that jurisdictions provide their fair share of regional housing needs. The California Department of Housing and Community Development (HCD) is mandated to determine the statewide housing need. The HCD, in cooperation with local governments and councils of governments, are charged with making a determination of the existing and projected housing need as a share of the statewide housing need of their city or region. The housing construction need is determined for four broad household income categories: very low (households making less than 50% of area median family income), low (50% to 80% of area median family income), moderate (80% to 120% of area median family income), and above moderate (more than 120% of area median family income).

The "fair share" allocation process begins with the California Department of Finance's projection of statewide housing demand for an 8-year period, which is then apportioned by the HCD among each of the state's official regions, which are represented by councils of government. A local jurisdiction's fair share of regional housing need is the number of additional dwelling units that will need to be constructed during a given 8-year planning period. Once a local government has received its final RHNA, it must revise its housing element to show how it plans to accommodate its portion of the region's housing need.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties. SCAG is mandated to research and develop plans for transportation, growth management, hazardous waste management, and air quality. SCAG is responsible for planning efforts that result in the Regional Transportation Plan (RTP) and the Federal Transportation Improvement Program; SCAG also develops the Sustainable Communities Strategy (SCS) to reduce

greenhouse gas emissions as required by the Sustainable Communities and Climate Protection Act (Senate Bill 375).

SCAG is responsible for developing demographic projections; developing land use, housing, employment, transportation programs and strategies for South Coast Air Quality Management District; ensuring that the RTP and the Federal Transportation Improvement Program conform to the State Implementation Plans for transportation-related criteria pollutants, per the Clean Air Act; preparing the Regional Housing Needs Assessment, including planning for future population, housing, and employment growth throughout the SCAG region; and preparing the Southern California Hazardous Waste Management Plan. SCAG is the responsible agency for developing and adopting regional housing, population, and employment growth forecasts within the SCAG region. SCAG's demographic data is developed to enable the proper planning of infrastructure and facilities to adequately meet the needs of the anticipated growth. Growth forecasts contained in the RTP/SCS for Los Angeles County are used in this section to analyze population, housing, and employment forecasts as demonstrated above.

Regional Transportation Plan/Sustainable Communities Strategy

The RTP is a long-range transportation plan that is developed and updated by SCAG every 4 years to guide transportation investments throughout the region. The SCS is a required element of the RTP that integrates land use and transportation strategies to achieve California Air Resources Board emissions reduction targets pursuant to Senate Bill 375. On September 3, 2020, the SCAG Regional Council adopted the 2020-2045 RTP/SCS (Connect SoCal). Connect SoCal includes goals to increase mobility and enhance sustainability for the region's residents and visitors and encompasses three principles to improve the region's future: mobility, economy, and sustainability. In addition, Connect SoCal provides a regional investment framework to address the region's transportation and related challenges, while enhancing the existing transportation system and integrating land use into transportation planning (SCAG 2020b).

To address the mobility challenge of the region's continuing roadway congestion, Connect SoCal proposes transportation investments in transit; passenger and high-speed rail; active transportation; transportation demand management; transportation systems management; highways; arterials; goods movement; aviation and airport ground access; and operations and maintenance projects. Connect SoCal recommends local jurisdictions accommodate future growth within existing urbanized areas, particularly near existing transit, to reduce VMT, congestion, and greenhouse gas emissions. The Connect SoCal approach to sustainably manage growth and transportation demand would reduce the distance and barriers between new housing, jobs, and services and would reduce vehicle travel and greenhouse gas emissions. As mentioned previously, as part of Connect SoCal, SCAG developed population and housing forecasts for the SCAG region and for the jurisdictions that make up the SCAG region.

Regional Housing Needs Allocation

The RHNA is mandated by State Housing Law as part of a periodic process of updating local housing elements in city and county general plans. The RHNA is produced by SCAG and contains a forecast of housing needs within each jurisdiction within the SCAG region for eight-year periods. The RHNA provides an allocation of the existing and future housing needs by jurisdiction that represents the jurisdiction's fair share allocation of the projected regional population growth. The future housing needs allocations are broken down by income level so that each jurisdiction is responsible for the development of affordable housing units to meet future housing needs.

SCAG was required to develop a RHNA methodology to distribute existing and projected housing need for each jurisdiction for the 6th Cycle, which covers the planning period between October 2021 and October 2029. On

October 15, 2019, HCD provided SCAG a final regional determination of 1,341,827 units for the 6th Cycle. Following the formal distribution of draft RHNA allocations based on the Final RHNA methodology and a separate appeals phase described in Government Code 65584.05 et seq., RHNA allocations were adopted on March 4, 2021 by the SCAG Regional Council and approved by HCD on March 22, 2021, and later modified on July 1, 2021. Based on SCAG's determination of existing need and projected needs, which considers anticipated vacancies and projected household growth, the regional existing need for additional housing units has been determined to be 836,857 units, and the regional projected need is 504,970 units (SCAG 2020c). HCD's regional determination of 1,341,827 exceeds SCAG's 2020–2045 household growth forecast of 1,297,000 by 3.68% (SCAG 2020c). This is due to the fact that RHNA goals were established and allocated after the adoption of the Connect SoCal.

SCAG's 6th Cycle RHNA allocation to local jurisdictions based on the Regional Council-approved Final RHNA Methodology described above includes the allocations shown in the table, below. Table 4.14-5, SCAG's 6th and 5th Cycle RHNA, details the housing need allocation for unincorporated Los Angeles County. In addition, Table 4.14-5 not only demonstrates a substantial change between the two planning periods but also provides 5th Cycle production and attainment from HCD (HCD 2021).

Table 4.14-5. SCAG's 5th and 6th Cycle RHNA

Income	5th Cycle RHNA	5th Cycle Production (2021)	5th Cycle RHNA Attainment (%)	6th Cycle RHNA
Unincorporated Los Angeles County				
Very-Low	7,359	734	9.97%	25,648
Low	4,251	457	10.75%	13,691
Moderate	4,898	19	0.39%	14,180
Above Moderate	10,749	5,906	54.9%	36,533
Total	**27,257**	**7,116**	**26.1%**	**90,052**

Source: HCD 2021; SCAG 2020d.
Note: Data represents the 5th Cycle Annual Progress Report received as of July 8, 2021.

Local

Los Angeles County 2035 General Plan

The Los Angeles County General Plan guides policy for land use across unincorporated Los Angeles County. The Project site is located within the Santa Clarita Valley Planning Area, which is one of 11 Planning Areas identified in the General Plan. The General Plan Draft Program EIR, prepared in June 2014, provided baseline conditions for 2013 and projections for the General Plan's buildout in 2035. Estimates and projections for the Santa Clarita Valley Planning Area are shown in Tables 4.14-1 through 4.14-3, above.

The following provides a summary of the most applicable goals and policies focused on population and housing across applicable General Plan Elements that pertain to the Project (County of Los Angeles 2015):

Land Use Element

Policy LU 5.10. Encourage employment opportunities and housing to be developed in proximity to one another.

Economic Development Element

Goal ED 2. Land use practices and regulations that foster economic development and growth.

Policy ED 2.5. Encourage employment opportunities to be located in proximity to housing.

Housing Element

The Housing Element is one of the seven required General Plan elements mandated by state law. State law requires that each jurisdiction's Housing Element consist of "identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled program actions for the preservation, improvement and development of housing." The Housing Element must analyze and plan for housing for all segments of the community. On November 30, 2021, the County Board of Supervisors adopted the 2021-2029 Housing Element (County of Los Angeles 2022). On February 28, 2022, HCD required revisions to the Housing Element (HCD 2022a). On April 25, 2022, HCD completed the review of the revised draft Housing Element and provided a letter indicating that the revised draft Housing Element meets the statutory requirements described in HCD's February 28, 2022 review (HCD 2022b). Pursuant to Government Code section 65585(b)(1), the revised draft Housing Element was posted on the County's website and available for public review at least seven days before submittal to HCD for review on April 8, 2022. The revised Housing Element will also be presented to the Los Angeles County Board of Supervisors for re-adoption on May 17, 2022 prior to certification (County of Los Angeles 2022). The following represent goals and policies from the Revised 2021-2029 Housing Element:

Strategy 1.

Ensure Housing Availability. The State recognizes that housing availability is an issue of "vital State-wide importance." The County places particular emphasis on providing housing opportunities to extremely low, very low, low, and moderate income households, and those with special needs. Accordingly, the following policies are designed to guide future development toward the production of a diverse housing supply to meet the varied needs of the population as a whole.

Goal 1. A wide range of housing types in sufficient supply to meet the needs of current and future residents, particularly for persons with special needs, including but not limited to: extremely low, very low and low income households, seniors, persons with disabilities (including those with developmental disabilities), large households, female-headed households, people experiencing homelessness and at risk of homelessness, and farmworkers.

Policy 1.1. Identify and maintain an adequate inventory of sites to accommodate the County's RHNA.

Policy 1.2. Remove regulatory barriers that constrain the provision and preservation of housing for acutely low, extremely low, very low, low, and moderate income households and those with special needs.

Policy 1.3. Coordinate with the private sector in the development of housing for acutely low, extremely low, very low, low, and moderate income households and those with special needs. Where appropriate, promote such development through incentives, Development Agreements, specific plans, and/or inclusionary housing requirements.

Goal 2. Communities with equitable access to employment opportunities, community facilities and services, and amenities.

Policy 2.1. Support the development of housing for acutely low, extremely low, very low, low, and moderate income households and those with special needs near employment, transit, services, and other community amenities and facilities such as parks.

Strategy 2

Ensure Housing Affordability. To accommodate the housing needs of all economic segments of the population, the County must ensure a housing supply that offers a range of choices. A variety of mechanisms should be explored to enhance affordability.

Goal 3. A housing supply that ranges broadly in costs to enable all households, regardless of income, to secure adequate housing.

Policy 3.1. Promote mixed-income neighborhoods and a diversity of housing types throughout the unincorporated Los Angeles County to increase housing choices for all economic segments of the population.

Goal 5. Opportunities for acutely low, extremely low, very low, low, and moderate income households and those with special needs to attain and maintain affordable and adequate housing.

Goal 6. Neighborhoods with a stable supply of housing that is affordable to residents of all income levels and facilitates aging in place.

Policy 6.1. Conserve existing deed-restricted affordable housing that is at risk of converting to market-rate housing.

Policy 6.2. Ensure no net loss of affordable housing when new development occurs.

Goal 7. Protection against residential displacement.

Policy 7.5. Facilitate the replacement of units damaged or destroyed in a disaster, and the health and safety of residents displaced by the disaster.

Strategy 5

Affirmatively Further Fair Housing and Ensure Equity. The opportunity to obtain adequate housing without discrimination is not only an integral part of creating and maintaining a diverse housing supply, but also an important strategy for equitable development.

Goal 10. Accessibility to adequate housing for all persons without discrimination in accordance with state and federal fair housing laws.

Policy 10.1. Support the distribution of affordable housing, shelters, and transitional housing in geographically and economically diverse locations throughout unincorporated Los Angeles County, and when possible, locate near support services and facilities.

Policy 10.4. Encourage housing design to accommodate special needs. Designs may include: units with multiple bedrooms; shared facilities; universal design; visitability; onsite child care; health clinics; or onsite job training services.

Strategy 6

Ensure Sustainability in Housing Production. To meet state, regional, and local sustainability goals, the County must minimize the negative impacts of housing production on the environment. The Housing Element, however, encourages planned housing in areas covered by a County-approved area plan or specific plan that has been analyzed by the County under the California Environmental Quality Act and that plans for housing, affordable housing, natural resource protection, open space preservation, adequate water supplies, necessary infrastructure, wildfire protection, energy conservation, and other sustainable development features.

Goal 11. Alignment of housing production with state and local sustainability goals in order to protect natural resources, reduce greenhouse gas emissions, and foster climate resilience.

Policy 11.1. Ensure consistency with the Our County Sustainability Plan through equitable and sustainable land use policy.

Policy 11.2. Ensure consistency with the County's Green Building Standards (Title 31) to enhance building design and construction and encourage sustainable construction practices.

Policy 11.3. Support policies and programs that aim to reduce resource consumption, such as solar panel installation, cool roof installation, back-up battery power, and incentivization of housing near transit.

Policy 11.4. Prioritize and concentrate new housing developments in areas intended to reduce environmental impacts and with adequate existing and planned infrastructure, such as road networks and water supply, including any areas covered by a County-approved specific plan or area plan that plans for housing, affordable housing, natural resource protection, open space preservation, adequate water supplies, necessary infrastructure, wildfire protection, energy conservation, and other sustainable development features.

Santa Clarita Valley Area Plan

The Santa Clarita Valley Area Plan (One Valley, One Vision [OVOV]) is a component of the Los Angeles County General Plan and is intended to provide focused goals, policies, and maps to guide the regulation of development within the unincorporated portions of the Santa Clarita Valley for over the next approximately 20 years. The Santa Clarita Valley Area Plan Update was adopted by the Board of Supervisors on November 27, 2012. A plan amendment and related zone changes took effect on December 27, 2012 (OVOV 2012).

Management of Growth

Guiding Principle 1

Growth in the Santa Clarita Valley shall account for the visions and objectives for each community and must be consistent with principles, as subsequently defined in this document, for the protection of the Valley's significant environmental resources. It must also be based on the availability of or ability to provide adequate infrastructure, schools, and public services, and must be carefully planned to benefit the community's economy, lifestyles and needs.

Management of Growth
Guiding Principle 3
Development shall be prioritized in areas for infill and redevelopment sites within currently developed areas consistent with community character objectives and those for which the City and County have approved entitlements. Commitments for new development outside of these areas shall be made in accordance with the other principles defined in this document.

Residential Neighborhoods
Guiding Principle 16
The Valley shall contain a mix of housing types that meet the diverse needs of residents, and offer choices for the Valley's population and lifestyles (e.g., ages, education, income, etc.) that are appropriate and consistent with their community character. This shall include a combination of single- and multi-family, owner occupied and rental units within each community, and mixed-use (i.e., integrated housing with commercial or office uses) development in key activity centers.

Residential Neighborhoods
Guiding Principle 17
The Valley is committed to providing affordable work force housing to meet the needs of individuals employed in the Santa Clarita Valley.

4.14.3 Thresholds of Significance

The thresholds used for the analysis of population and housing impacts are based on the County's adopted California Environmental Quality Act (CEQA) Guidelines, which incorporates Appendix G of the State CEQA Guidelines as well as County-specific thresholds of significance. A project would have a significant impact with respect to 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).
B. Displace substantial numbers of existing people or housing, especially affordable housing, necessitating the construction of replacement housing elsewhere.

4.14.4 Methodology

The focus of environmental analysis prepared under CEQA is a project's potential to cause effects on the physical environment. Accordingly, State CEQA Guidelines Section 15064(e) states "economic and social changes resulting from a project shall not be treated as significant effects on the environment." While economic or social information may be included in an EIR, the State CEQA Guidelines make clear that there must be a physical change resulting from a project directly or indirectly for an impact to be considered significant.

Social and economic effects, including employment, are relevant CEQA issues to the extent that a chain of cause and effect can be traced from a project through anticipated social and economic changes resulting from that project to physical changes caused in turn by the economic and social changes (CEQA Guidelines, Sections 15131[a] and 15064[f]). If a project's physical impacts would cause social or economic effects, the magnitude of the social or economic effects may be relevant in determining whether a physical impact is "significant" (CEQA Guidelines Section 15131[b]). If the physical change causes adverse economic or social effects on people, those adverse

effects may be used as the basis for determining that the physical change is significant (CEQA Guidelines, Section 15064[f]).

Population growth impacts are based on an analysis of the number of people anticipated during construction of, and at buildout of the Project. The scale of population during construction and at buildout is then compared with anticipated population growth forecasts for a specified area (i.e., unincorporated portion of Los Angeles County). The population and housing growth that would result from Project implementation is examined in the context of existing and projected population for the unincorporated Los Angeles County. If build out of the Project exceeds projections, the resulting unplanned population growth would be determined to be "substantial." However, the determination of whether the Project represents a significant impact, is whether the Project would induce additional growth that would result in significant impacts to the environment.

4.14.5 Impact Analysis

Threshold 4.14a: 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)?

As further described in Chapter 3, Project Description, of this Draft EIR, the Project includes the development of 510 dwelling units with a mix of attached and detached dwelling units, and affordable senior housing, as well as a recreational center, and natural and improved open space. Project infrastructure would include internal roadways, trails and a new trailhead, a new water tank, and seven Los Angeles County Flood Control District (LACFCD) lots with debris and desilting basins. Off-site improvements of the Project include development of a sidewalk along The Old Road and widening The Old Road along the Project site's frontage. In addition to improvements to The Old Road, the Project includes off-site utility infrastructure components. Thus, the Project would have the potential to directly (in the form of proposing new housing) and indirectly (by installing internal roadways and other infrastructure on site) induce population growth on the Project site.

Construction

Construction activities at the Project site would lead to the temporary need for construction workers, which may come from the Santa Clarita Valley, other areas of Los Angeles County, or elsewhere within the SCAG region. It is possible that workers/crews may be local to the Project site area, and that not all construction workers would have to drive long distances to work at the Project site. The Project involves fairly common construction requirements that would not require a highly specialized labor force to permanently relocate from other regions. Construction activities would include site preparation, grading, building construction, paving, and architectural coating, as stated in Chapter 3 of this Draft EIR. Further, construction of the Project is anticipated to begin in the first quarter of 2024 and end in the third quarter of 2029. The different construction activities require specific skill sets for a much shorter duration than the overall construction schedule. Because construction workers would not be needed continuously and only for varying portions of the Project phases, it is reasonable to assume that workers/crews would work at the Project site on a temporary basis only, and thus, are not likely to relocate their households as a consequence of the construction job opportunities presented by the Project. Because the demand for construction workers would be short-term, and because the Project site is within an urban metropolitan region with a high diversity of skilled labor, a permanent need for new workers to relocate in order to accommodate the Project's temporary construction workforce is not anticipated. As such, any changes in population, housing, or employment

due to short-term construction activities would be less than significant and no additional mitigation would be required.

Operation

The Project would result in residential uses on a site designated as Residential 2 (H2) by the County's General Plan and zoned A-2-2 and A-2-1. The Residential 2 (H2) designation allows for a maximum of two dwelling units per acre. Additionally, within this designation, density-controlled development (clustering) is encouraged on lands with significant environmental and or topographical features or resources, in order to preserve open space for protection of these natural features or resources. As such, the General Plan anticipated residential growth within the Project site's vicinity. Furthermore, as detailed in Chapter 3 of this Draft EIR, the Project would require the approval of several Conditional Use Permits (CUPs) for implementation. For example, the Project proposes a "density-controlled development" as defined in Section 22.140.170 of the County's Zoning Code. This provision of the Zoning Code allows for residential development on the Project site with dwelling units concentrated within a portion of the site. In addition, the Project would include an adult residential facility (i.e., senior housing), which according to Zoning Code Section 22.14.010(A), allows for the proposed residential uses on land zoned A-2-1. Finally, a CUP is proposed for the development of townhomes within the Project site that is zoned A-2-1 and A-2-2. Given this, the Project does not require a General Plan Amendment or a Zone Change.

In summary, the combination of land use designation assumptions and CUPs, allows for the development of housing on the Project site, which is consistent with the Project site's General Plan designation of Residential 2 (H2). Moreover, the approval of the aforementioned CUPs allowed under Section 22.16.30, Land Use Regulations for Zones A-1, A-2, O-S, R-R, and W of the County's Zoning Code would be consistent with the proposed uses on the Project site (see Section 4.11, Land Use and Planning, of this Draft EIR for more discussion). Therefore, the development of the Project site is consistent with the allowable development under the County's General Plan and existing zoning. As such, implementation of the Project would not induce unplanned population growth in the Project site's local vicinity. The following discussion demonstrates the Project's potential population, housing, and employment growth is not considered substantial.

Population Projections

Based on the data presented in Section 4.14-1, Existing Conditions, above, the Newhall CCD currently has an average persons per household of 2.98.[3] However, the County's Housing Element Update assumes an average person per household in the unincorporated County to be 3.5. Therefore, in order to provide a more conservative analysis, the population generated by the Project based on 510 housing units would result in approximately 1,785 new residents.[4] The Project's proposed population growth would represent 1.33% of the anticipated population growth for the Santa Clarita Valley Planning Area in 2035.[5] As detailed in Table 4.14-2, the Santa Clarita Valley Planning Area is expected to have an annual population growth of 5.83%, which far exceeds the annual growth rate anticipated for the County and the SCAG region. As such, the Project's anticipated population growth of 1.33% is nominal and would not exceed the County's population growth projections for the Santa Clarita Valley Planning Area. Therefore, the Project would not result in substantial unplanned population growth, thus, less than significant impacts would occur and no mitigation would be required.

[3] 273,466 persons / 91,857 housing units = 2.977 or 2.98 persons per household
[4] 510 x 3.5 = 1,785 residents
[5] 1,785 / (237,638 - 104,116) = 0.0133 x 100 = 1.33%

Table 4.14-6. Project Population Projections

Location	Existing Conditions (2013 & 2020)	Project-related Growth (2029)	Future Years 2035 & 2045	Percentage of Growth at Buildout
Santa Clarita Valley Planning Area	104,116	1,785	237,638	1.33%
Unincorporated County	1,034,689	1,785	1,258,000	0.79%
Total County	**10,407,000**	**1,785**	**11,674,000**	**0.14%**

Source: Table 4.14-2.

Housing Projections

As mentioned above, the Project is proposed on an existing undeveloped site and would result in the development of residential units, a recreation center, LACFCD lots, open space, internal roadways and trails, and a water tank. Specifically, the Project would result in 510 dwelling units with a mix of attached and detached dwelling units, and affordable senior housing.

Table 4.14-2, above, provides the County's housing estimates for the Santa Clarita Valley Planning Area, of which approximately 28,501 housing units were accounted for in 2013. By 2035, the County projects the Santa Clarita Valley Planning Area's buildout would result in approximately 77,155 units. Thus, the Santa Clarita Valley Planning Area is anticipated to add approximately 48,654 new housing units by 2035. The Project would contribute approximately 1.05% of the projected housing growth between 2013 and 2035.[6] As detailed in Table 4.14-3, the Santa Clarita Valley Planning Area is expected to have an annual housing growth of 7.75%, which far exceeds the annual growth rate anticipated for the County and the SCAG region. As such, the Project's anticipated housing growth of 1.05% is nominal and would not exceed the County's General Plan housing growth projections for the Santa Clarita Valley Planning Area.

Additionally, due to recent changes to the Los Angeles County Housing Element Update as a result of RHNA's 6th Cycle determination, unincorporated Los Angeles County has been allocated a total of 90,052 housing units for the planning period between 2021 and 2029. Only 7,116 (26.1%) of the County's 5th Cycle RHNA goals were attained through housing production between 2013 and 2021. The Project's construction schedule is anticipated to be completed by 2029, thus, housing units would be available to be occupied within the timeframe of the 6th Cycle (2021-2029). Therefore, the Project would help the County achieve its regional housing needs and not represent substantial unplanned population growth.

In conclusion, the Project would not result in substantial unplanned housing growth, thus, less than significant impacts would occur and no mitigation would be required.

Table 4.14-7. Project Housing Projections

Location	Existing Conditions (2013 & 2020)	Project-related Growth (2029)	Future Years 2035 & 2045	Percentage of Growth at Buildout
Santa Clarita Valley Planning Area	28,501	510	77,155	1.05%

[6] 510 / (77,155 – 28,501) = 0.01048 x 100 = 1.048 or 1.05%

Table 4.14-7. Project Housing Projections

Location	Existing Conditions (2013 & 2020)	Project-related Growth (2029)	Future Years 2035 & 2045	Percentage of Growth at Buildout
Unincorporated County	311,204	510	320,100	5.73%
Total County	**4,838,000**	**510**	**5,382,000**	**0.09%**

Source: Table 4.14-3.

Employment Projections

At buildout, approximately 10 employees are anticipated to be employed to operate the Project's recreational center. The anticipated employees are conservatively estimated based on a ratio of 424 square feet per employee for the "Other Retail/Services" land use category (SCAG 2001). As described in Chapter 3 of this EIR, the recreation center would include one building of approximately 4,540 square feet, including the following: a club room, fitness center, restrooms, conference room, study room, kitchen space, and entertainment/sitting areas. Thus, approximately 10 employees are anticipated.[7] Table 4.14-4, above, projects approximately 84,411 new employees (an annual employment growth of 17.87%) will be employed in the Santa Clarita Valley Planning Area by 2035, which far exceeds the annual growth rate anticipated for the County and the SCAG region.[8] Overall, the Project's 10 employees would result in a nominal contribution to the Project site's vicinity's employment growth projections. Therefore, the Project would not result in substantial unplanned employment growth, thus, less than significant impacts would occur and no mitigation would be required.

Table 4.14-8. Project Employment Projections

Location	Existing Conditions (2013 & 2020)	Project-related Growth (2029)	Future Years 2035 & 2045	Percentage of Growth at Buildout
Santa Clarita Valley Planning Area	21,470	10	105,881	0.02%
Unincorporated County	252,659	10	320,100	0.01%
Total County	**4,838,000**	**10**	**5,382,000**	**0.002%**

Source: Table 4.14-4.

Infrastructure Improvements

As mentioned previously, the Project would include infrastructure improvements such as internal roadways, trails and a new trailhead, a new water tank, and seven Los Angeles County Flood Control District (LACFCD) lots with debris and desilting basins. In addition, off-site improvements are planned to include development of a sidewalk along The Old Road and widening The Old Road along the Project site's frontage. Between the proposed sidewalk and the portion of the Project site's eastern boundary (adjacent to The Old Road), the Project proposes a retaining wall. Improvements to The Old Road also includes off-site utility infrastructure components. These Project components would not result in indirect impacts resulting in substantial unplanned population growth. Instead, these improvements are proposed to only support the Project as described in Chapter 3 of this Draft EIR.

[7] 4,540 square feet x 1/(424 square feet per employee) = 10.7 (10) employees
[8] 105,881 – 21,470 = 84,411

Additionally, as shown on Figure 3-1, Conceptual Site Plan and Figure 3-2, Vesting Tentative Tract Map No. 83301 included in Chapter 3, Project Description of this Draft EIR, the Project would provide an easement for and construct a roadway extension of the Project's access road to connect to Cumulative Project #2, TTM 74979 (See Table 4.16-6 below), which would develop seven dwelling units. An indirect impact would occur if a project proposed a road or other infrastructure improvements would create the potential and/or facilitate future development of housing or jobs resulting in substantial unplanned population growth. In this instance, the Project's roadway extension would allow for secondary emergency access for the TTM 74979 property, which would facilitate the development of the property, thereby resulting in indirect facilitation of additional housing through the extension of infrastructure. However, the addition of seven dwelling units (approximately 21 people) would not be considered substantial unplanned growth as this is within the growth projections for the Santa Clarita Valley Planning Area, as no General Plan Amendment is required. Therefore, although the extension of the Project's access road would indirectly facilitate the development of TTM 74979, the indirect growth would not be considered substantial, and impacts would be less than significant.

Threshold 4.14b: Would the project displace substantial numbers of existing people or housing, especially affordable housing, necessitating the construction of replacement housing elsewhere?

The Project is proposed on an existing undeveloped site with no known habitable structures and would result in residential units, a recreation center, LACFCD lots, open space, internal roadways, and a water tank. Given the Project site's existing conditions, the Project would not result in the displacement of existing people or housing. Thus, the Project would not result in the need for the construction of replacement housing outside of the Project site's boundaries. No impact would occur.

4.14.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts as a result of the construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. For purposes of population and housing, the geographical area of cumulative impacts is based on regional and County projections.

Threshold 4.14a: 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)?

As previously described, the Project would contribute to approximately 1.05% of the projected housing growth and 1.33% of the anticipated population growth for the Santa Clarita Valley Planning Area in 2035. As such, the Project's contribution to population and housing projections is nominal. Moreover, implementation of the proposed Project is an allowable use, conditionally permitted under the County's Zoning Code. As detailed in Section 3.6.1, Project Approvals, the Project would not require a General Plan Amendment or Zone Change. As such, the proposed Project is an assumed land use for the site, which would have been accounted for in County-wide and regional forecasts. Additionally, given the nominal representation of the County's regional projections, the Project would not exceed the Santa Clarita Valley Planning Area's approximately 77,155 housing units or 237,638 population buildout projections. Therefore, the Project would not result in substantial unplanned population growth. Additionally, the Project is anticipated to result in a nominal addition of jobs relative to the County's buildout projections for the Santa Clarita Valley Planning Area. Given this, the Project would not result in a cumulatively considerable impact relative to substantial unplanned growth.

Threshold 4.14b: Would the project displace substantial numbers of existing people or housing, especially affordable housing, necessitating the construction of replacement housing elsewhere?

The Project would result in no impacts regarding the potential to displace existing people or housing. As such, the Project would not result in a cumulatively considerable impact. No cumulative impact would occur.

4.14.7 Mitigation Measures

No mitigation measures are required.

4.14.8 Level of Significance After Mitigation

The Project would result in less than significant impacts regarding the potential to 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).

The Project would result in no impacts regarding displacement of substantial numbers of existing people or housing, especially affordable housing, necessitating the construction of replacement housing elsewhere.

4.14.9 References

Census Reporter. 2020. "American Community Survey 5-Year Estimates." Retrieved from *Census Reporter Profile page for Newhall CCD, Los Angeles County, CA*. <http://censusreporter.org/profiles/06000US0603792110-newhall-ccd-los-angeles-county-ca/.>

CEQAnet. 2022. "Wiley Canyon Project, Notice of Completion." State Clearinghouse No. 2022030626. Governor's Office of Planning and Research. https://ceqanet.opr.ca.gov/2022030626.

County of Los Angeles. 2014. *Los Angeles County General Plan Update Draft Environmental Impact Report*. State Clearinghouse No. 2011081042. Department of Regional Planning. June 2014. Accessed February 13, 2024. https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

County of Los Angeles. 2015. *Los Angeles County General Plan 2035*. Department of Regional Planning. Adopted October 6, 2015. Accessed May 2022. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

County of Los Angeles. 2022. *Revised County of Los Angeles Housing Element (2021-2029)*. Last accessed February 8, 2024. https://planning.lacounty.gov/wp-content/uploads/2022/11/housing-element-20220517.pdf.

DOF (California Department of Finance). 2022. Demographic Research Unit. Report E-4: Population Estimates for Cities, Counties, and the State, 2021-2023, with 2020 Benchmark. Accessed February 13, 2024. https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fdof.ca.gov%2Fwp-content%2Fuploads%2Fsites%2F352%2FForecasting%2FDemographics%2FDocuments%2FE-4_2023_InternetVersion.xlsx&wdOrigin=BROWSELINK.

HCD (California Department of Housing and Community Development). 2021. "Annual Progress Reports - Data Dashboard and Downloads: Housing Element Implementation and APR Dashboard." July 2021. Accessed May 2022. https://www.hcd.ca.gov/planning-and-community-development/housing-open-data-tools/housing-element-implementation-and-apr-dashboard.

HCD. 2022a. "RE: County of Los Angeles 6th Cycle (2021-2029) Adopted Housing Element." Division of Housing Policy Development. February 28, 2022. https://www.hcd.ca.gov/community-development/housing-element/docs/lanlacountyadopted022822.pdf.

HCD. 2022b. "RE: County of Los Angeles 6th Cycle (2021-2029) Draft Housing Element." Division of Housing Policy Development. April 25, 2022. https://www.hcd.ca.gov/community-development/housing-element/docs/LanLACountyDraftIn042522.pdf.

One Valley One Vision (OVOV). 2012. *Santa Clarita Valley Area Plan Update*. Los Angeles County Department of Regional Planning. 2012. https://planning.lacounty.gov/wp-content/uploads/2022/10/Santa-Clarita-Valley-Area-Plan.pdf.

Public Works (Los Angeles County Public Works). 2020. *Los Angeles County Public Works Transportation Impact Analysis Guidelines*. July 23, 2020. Accessed May 10, 2022. https://dpw.lacounty.gov/traffic/docs/Transportation-Impact-Analysis-Guidelines-July-2020-v1.1.pdf.

SCAG (Southern California Association of Governments). 2001. "Table 4A." In *Employment Density Study Summary Report*. Prepared by Natelson Company in association with Terry A. Hayes Associates. October 31, 2001. Accessed May 2022.

SCAG. 2020a. *Current Context: Demographics and Growth Forecast Technical Report*. Connect SoCal. Adopted September 3, 2020. Accessed May 2022. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579.

SCAG. 2020b. *The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments (Connect SoCal).* https://scag.ca.gov/connect-socal.

SCAG. 2020c. "Final RHNA Allocation Methodology." Updated March 5, 2020. https://scag.ca.gov/sites/main/files/file-attachments/scag-final-rhna-methodology-030520.pdf?1602189316.

SCAG. 2020d. "SCAG 6th Cycle Final RHNA Allocation Plan." Approved by HCD on March 22, 2021; modified on July 1, 2021. https://scag.ca.gov/sites/main/files/file-attachments/6th-cycle-rhna-final-allocation-plan.pdf?1625161899.

U.S. Census (United States Census Bureau). 2010. 2010 Census Block Map: Newhall CCD CA. Last accessed February 8, 2024. https://www2.census.gov/geo/maps/dc10map/GUBlock/st06_ca/cousub/cs0603792110_newhall/DC10BLK_CS0603792110_011.pdf.

U.S. Census. 2020a. "H1: Occupancy Status. 2020 Decennial Census Redistricting Data (PL 94-171)." Accessed February 13, 2024. https://data.census.gov/cedsci/table?t=Occupancy%20Characteristics&g=0100000US_0500000US06037_0600000US0603792110&tid=DECENNIALPL2020.H1.

U.S. Census. 2020b. "Newhall CCD." Accessed February 13, 2024. https://data.census.gov/cedsci/profile?g=0600000US0603792110.

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4.15 Public Services

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to public services, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts analysis, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data and reports from the Los Angeles County Fire Department, Los Angeles County Sheriff's Department, Los Angeles County Department of Parks and Recreation, Los Angeles County Library, Los Angeles County Department of Regional Planning, the City of Santa Clarita Department of Parks, Recreation and Community Services, as well as the following:

Appendix A-2 Notice of Preparation Comment Letters, dated June/July 2022

Appendix I-1 Los Angeles County Fire Department Request for Information Letter, dated July 2021

Appendix I-2 Los Angeles County Sheriff's Department Request for Information Letter, dated June 2021

Appendix I-3 William S. Hart Union High School District Request for Information Letter, dated July 2021

Appendix I-4 Newhall School District Request for Information Letter, dated June 2021

Appendix I-5 Los Angeles County Department of Parks and Recreation Request for Information Letter, dated July 2021

Appendix I-6 Los Angeles County Library Request for Information Letter, dated September 2021

Appendix M-1 Fire Protection Plan, prepared by Dudek, dated November 2023

Other sources consulted are listed in Section 4.15.9, References.

4.15.1 Existing Conditions

This section describes the existing conditions in the Project site and surrounding areas and identifies the resources that could be affected by the Project.

Regional Setting

Fire Protection

The Los Angeles County Fire Department (LACoFD) provides 24-hour, all-risk emergency services (including fire protection/suppression and emergency medical response services) to unincorporated areas of the County of Los Angeles (County) as well as 60 incorporated cities within the County that have contracted with the department (LACoFD 2022a). The LACoFD's service area totals approximately 2,311 square miles and serves a population of approximately 4.1 million people. The LACoFD provides emergency services in response to a wide range of incidents including structure fires, wildfires, commercial fires, hazardous materials incidents, urban search and rescue, and swift water rescue. The LACoFD is comprised of the Emergency Operations Bureau, the Business Operations Bureau, and the Leadership and Professional Standards Bureau. The emergency operations field divisions are

comprised of the North Region, the Central Region, and the East Region within the LACoFD service area, which are divided into nine divisions and 22 battalions (LACoFD 2021a, 2022a).

The LACoFD consists of approximately 5,028 personnel including chief officers, captains, firefighter specialists, firefighter paramedics, firefighters, call firefighters, fire suppression aids, pilots, seasonal and year-round lifeguards, dispatchers, foresters, hazardous materials specialists, and administrative support. The LACoFD is comprised of 177 fire stations with 228 engine companies (i.e., type I, type III, and type VI), 33 truck companies, 112 paramedic units (i.e., air squads, assessment engines, air squads, and assessment quint/light force), and reserve equipment. The health hazardous materials division has 3 response teams and responded to 1,569 incidents in 2021. The air and wildland division includes 10 helicopters, 9 fire suppression camps, 13 fire suppression crews, and 49 pieces of heavy equipment (i.e., excavators, heavy dump trucks, track loaders, and rubber tire loaders) (LACoFD 2022a).

The LACoFD participates in the California Fire Service and Rescue Emergency Mutual Aid System, as managed by the California Governor's Office of Emergency Services (Cal OES). The Cal OES Mutual Aid Plan outlines procedures for establishing mutual aid agreements at the local, operational, regional, and state levels, and divides the State into six mutual aid regions to facilitate the coordination of mutual aid. LACoFD is located in Region I, which includes San Luis Obispo, Santa Barbara, Ventura, Los Angeles, and Orange counties (Cal OES 2017).

The Project site is located within a State Responsibility Area (SRA). In most cases, SRAs are protected directly by the California Department of Forestry and Fire Protection (CAL FIRE); however, the County is one of six counties in which SRA fire protection is provided by the individual counties under contract with CAL FIRE (such counties are referred to as "Contract Counties"). Contract Counties are responsible for providing initial attack response to fires in SRAs within their counties. CAL FIRE provides funding to the County (and by extension, the LACoFD) for prevention and suppression of wildland fires in SRAs. This funding provides fire protection services, including salary and wages of suppression crews, maintenance of firefighting facilities, pre-fire management positions, special repairs, and administrative services. In addition, the County's Fire Protection District Fund is used to fund LACoFD fire prevention and suppression, rescue service, management of hazardous materials incidents, and acquisition and maintenance of LACoFD property and equipment (County of Los Angeles 2021). Funding comes primarily from the LACoFD's statutory share of the Countywide tax levy, voter-approved taxes, and charges for services (County of Los Angeles 2021).

Using CAL FIRE recommendations, LACoFD has designated lands in the County based on the potential for wildland fires (County of Los Angeles 2014). The LACoFD uses CAL FIRE's three wildland fire hazard designations used to identify Fire Hazard Severity Zones (FHSZs): Moderate, High, and Very High. These designations are based on an area's accessibility, amount and type of vegetative cover, water availability, and topography (County of Los Angeles 2014). Highly combustible natural vegetation types include chaparral, coastal sage, riparian, and oak woodlands (County of Los Angeles 2014). Plant communities within these vegetation types pose the greatest threat to expanding development due to their high combustibility and their dense biomass (County of Los Angeles 2014). In the areas where these plant communities border urban development—often referred to as the wildland–urban interface (WUI) (USFA 2022)—the frequency of fire events may be diminished as a result of proactive fire prevention measures such as vegetation thinning/removal and the creation of fuel modification zones (County of Los Angles 2014).

Sheriff Protection

The Los Angeles County Sheriff's Department (LASD) provides general-service law enforcement to unincorporated areas of the County as well as cities within the County that have contracted with the department. The LASD's service area totals approximately 4,084 square miles and serves a population of approximately 10 million people (LASD 2021c). The LASD employs approximately 18,000 employees (LASD 2021c). According to the County's General Plan Safety Element, the LASD is divided into 10 divisions (County of Los Angeles 2015). The LASD provides law enforcement services to 141 unincorporated communities, 216 facilities (hospitals and clinics), and 42 contract cities. In addition, LASD provides law enforcement services to nine community colleges, the Los Angeles County Metropolitan Transit Authority (Metro), and 37 superior courts (LASD 2024a; LASD 2024b). In addition to proactive enforcement of criminal laws, the LASD also provides investigative, traffic enforcement, and community education functions. The County also maintains mutual aid agreements across jurisdictional boundaries for emergency response needs that exceed local resources (LASD 2017).

According to the Los Angeles County General Plan 2035 (General Plan) EIR, the LASD has established an optimal service response time of 10 minutes or less for emergency response incidents, which is a crime that is presently occurring and is a life or death situation; 20 minutes or less for priority response incidents, which is a crime or incident that is currently occurring but which is not a life or death situation; and 60 minutes or less for routine response incidents, which is a crime that has already occurred and is not a life or death situation (County of Los Angeles 2014). These response times represent the range of time required to handle a service call, which is measured from the time a call is received until the time a patrol car arrives at the incident scene. Response time is variable, particularly because the nearest responding patrol car may be located anywhere within the station's patrol area and may not necessarily respond directly from the station itself. The LASD does not maintain a service ratio, such as an officer-to-resident ratio, rather, staffing and deployment are based on the needs of a particular contract (e.g., with a city, unincorporated area, private entity, etc.) and are dependent upon on call volume, crime rates, and a variety of other factors (Appendix I-2).

The LASD is funded through the County's General Fund, which includes revenues collected from the Countywide tax levy, voter approved taxes, and charges for services, as well as through a special law enforcement capital facilities fund (County Code Title 22 Chapter 22.266 [Law Enforcement Facilities Fee]), and other State and federal funds (County of Los Angeles 2021). However, this funding is not guaranteed. Annual evaluations are conducted, and funding is allocated to the LASD upon approval by the County Board of Supervisors based upon recommendations by the Chief Executive Officer.

Park Services

Federal and State Parks

The Los Padres and Angeles National Forests are located to the northeast, north, and southeast of the Santa Clarita Valley.[1] This land is located approximately 5 miles southeast and about 8 miles northeast from the Project site, respectively. There are three State parks located within the Santa Clarita Valley: Placerita Canyon State Park (6 miles east), Santa Susana Pass State Historic Park (9 miles southwest), and Castaic Lake Recreation Area (10 miles northeast). While park-like amenities are supported on National Forest lands (including trails, picnic areas, visitor centers, etc.) and are accessible to residents of Santa Clarita Valley Planning Area and elsewhere in the County, the

[1] The Angeles National Forest includes separate areas to the north and southeast of the Santa Clarita Valley, while the Los Padres National Forest is located to the northwest.

Los Angeles County Department of Parks and Recreation (DPR) does not typically incorporate National Forest land into its analysis of "park needs," as discussed in further detail in Section 4.14.1, Regulatory Requirements. State parks appear to be included in the DPR's 2016 Parks Needs Assessment (PNA) for certain study areas depending upon size and the types of amenities supported (DPR 2016a, 2016b, 2016c).

County Parks

The DPR oversees the development, operation, and maintenance of County parks (DPR 2022a). There are 181 County parks, ranging from local neighborhood parks to regional recreational centers (DPR 2022b). The County's park system is composed of approximately 70,000 acres of land located within cities and unincorporated areas in the County (County of Los Angeles 2015). The County has an adopted standard of 4 acres of local parkland for every 1,000 people and 6 acres of regional parkland for every 1,000 people (County of Los Angeles 2015). According to the Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment, which provides the most recent and comprehensive analysis of County parkland status, as of 2016, the County had an average of 3.3 acres of local and regional parkland per 1,000 people and approximately 86.2 acres of regional open space and natural areas per 1,000 people (DRP 2016a).

Santa Clarita Valley Planning Area

The Santa Clarita Valley Planning Area contains approximately 71 acres of local parkland, which consists of parks of varying sizes (parks less than 20 acres) that meet local needs, including community parks, neighborhood parks, pocket parks, and park nodes, as well as 14,425 acres of regional parkland (County of Los Angeles 2015). These local and regional facilities are owned and/or operated by the State, County, City of Santa Clarita (City), and conservancies such as the Santa Monica Mountains Conservancy (SMMC) and the Mountains Recreation and Conservation Authority (MRCA). According to the General Plan, a given service area is considered to have a "deficit" or "surplus" of parkland if the park acreage per 1,000 persons is less than or greater than (respectively) the County's objectives of 4 acres per 1,000 residents for local parkland and/or 6 acres of regional parkland per 1,000 persons (County of Los Angeles 2015). As of 2014, the Santa Clarita Valley Planning Area had a deficit of 346 acres of local parkland (less than one acre per 1,000 residents) and a surplus of 12,798 acres of regional parkland (53 acres per 1,000 persons) to support its population (County of Los Angeles 2015).[2]

As detailed below in Section 4.15.2, Regulatory Requirements, the Project site is in the Unincorporated Stevenson-Newhall Ranch-Castaic-Val Verde Study Area (Study Area #49) of DPR's PNA (DPR 2016b). Study Area #49 had a population of 20,030 and 197.5 acres of parkland in 2016, which resulted in a ratio of 9.9 acres of parkland per 1000 residents (DPR 2016b).

City of Santa Clarita Parks

The City's Department of Parks, Recreation and Community Services currently maintains 35 parks (City of Santa Clarita 2022a). The parks range in size from slightly more than 0.5 acre to 80 acres and include numerous recreational facilities (City of Santa Clarita 2011). DPR's PNA analyzed the parks to service population ratio for two study areas in the City: North Santa Clarita Study Area and South Santa Clarita Study Area. In 2016, the North Santa Clarita Study Area had a local parkland to service population ratio of 1.8 acres per 1,000 residents, and a regional ratio of 2 regional park acres per 1,000 residents (DPR 2016a). The South Santa Clarita Study Area had a total

[2] 2014 is the most recent year for which relative "park need" is quantified for the Santa Clarita Valley Planning Area, per the County General Plan.

parkland to service population ratio of 4.8 park acres per 1,000 residents (DPR 2016b). The Project site is adjacent to the South Santa Clarita PNA Study Area (DPR 2016b).

Conservancy Lands

The unincorporated areas of the County house scenic areas and diverse topographic, geologic and vegetative features that provide important habitat for wildlife, but also hold recreational value. Publicly-created and non-profit conservancies play a critical role in preserving many of these areas through the acquisition and preservation of available open space areas. The County partners with a number of conservancies and other non-state agencies to manage and preserve open-space lands (County of Los Angeles 2015). Within the Santa Clarita Valley Planning Area, conservancies include MRCA and the Santa Monica Mountains Conservancy (SMMC). The MRCA is a local government public entity established in 1985 pursuant to the Joint Powers Act. The MRCA is a partnership between the SMMC, the Conejo Recreation and Park District, and the Rancho Simi Recreation and Park District.[3] The MRCA manages more than 75,000 acres of parkland that it owns or that is owned by the SMMC (MRCA 2022).

Private Open Space

Open space dedications in the County are defined as privately-owned lands that have been set aside for permanent open space as part of a larger land development proposal (County of Los Angeles 2015). The California Open Space Easement Act of 1969 sets forth general conditions governing the creation of recognized open space easements (County of Los Angeles 2015). Agreements or contracts establishing such easements specify the standards and conditions for uses and activities permitted within the area covered, which can include amenities such as publicly accessible multi-use trails providing connectivity to adjacent public parks and/or trail systems. Commitment of such lands to open space use in perpetuity is typically assured through deed-restrictions or dedication of construction rights secured at the time of development permit approval. Within dedicated open space areas, standards and conditions for use are specifically set forth as conditions of the zoning permit or subdivision tract map (County of Los Angeles 2015). Private spaces can support publicly managed and/or maintained trail facilities, which are available for public use.

Public Schools

The County's role in developing and managing educational facilities and programs is limited. However, the Los Angeles County Office of Education (LACOE), which is the country's largest regional education agency, serves as an intermediary between the local school districts and the California Department of Education. The LACOE is guided by a seven-member County Board of Education, which is appointed by the County Board of Supervisors. The LACOE provides a vision statement and strategic opportunities for educational facility development to coordinate the assessment of facility needs and the construction of schools that fall to individual school districts. Another role that the County plays in coordinating public school facilities is through the County subdivision approval process, in which developers are required to assess the need for, and in some cases provide, land for the construction of public schools within their developments. Development impact fees, based on the size of a development, are distributed to the appropriate school district for the construction of school facilities before the County issues any building permits (County of Los Angeles 2014). Issues associated with educational facilities involve: (1) the effective coordination between land use planning and school facilities planning—providing the benefit of joint-use

[3] SMMC is a state agency while the Conejo Recreation and Park District and the Rancho Simi Recreation and Park District are local park agencies.

agreements to benefit communities and create operational and economic efficiencies; and (2) the shortage of early care and education facilities in the unincorporated areas.

The Santa Clarita Valley is served by 6 Santa Clarita school districts. This includes the Castaic Union School District, Newhall School District, Sulphur-Springs School District, Acton-Agua Dulce School District, and Saugus Union School District for elementary schools as well as the William S. Hart High School District, responsible for Santa Clarita Junior High Schools (Middle Schools) and Santa Clarita High Schools. The Project site is located within the Newhall School District for elementary schools and the William S. Hart High School District for Middle School and High School. There are 10 elementary schools (K-6 grade) within the Newhall School District that served a total of approximately 5,831 students during the 2024 academic year (Public School Review 2024). The William S. Hart Union High School District serves grades 7 through 12. The William S. Hart Union High School District had approximately 22,228 students enrolled in their schools during the 2020/2021 academic year, including seven comprehensive high schools, a continuation school, middle college high school, independent study school, six junior high schools, an adult school, and a Regional Occupational Program (HUHSD 2022; NCES 2022).

Libraries

The Los Angeles County Library (LACL) system was established in 1912 and provides library services to over 3.4 million residents living in the unincorporated County and to residents of 44 cities within the County (LACL 2022a). The LACL has a service area of over 3,000 square miles (LACL 2022a). The LACL system is a special fund County department (LACL Fund) operating under the direction of the Board of Supervisors (County of Los Angeles 2021). Funding comes primarily from the Library's statutory share of the Countywide tax levy and voter-approved taxes (County of Los Angeles 2021). The County applies a library facilities mitigation fee to new residential developments in the unincorporated areas. This fee is intended to mitigate the significant adverse impacts of increased residential development on the LACL system (County of Los Angeles 2014). The LACL operates community libraries serving unincorporated areas of the County, including the communities of Santa Clarita Valley, as well as 49 incorporated cities (Appendix A-2). The LACL uses the following library service level guidelines to determine adequacy of community library services (Appendix A-2):

- Library Facility Space: 0.5 gross square foot per capita
- Land: 4:1 land to building ratio
- Collection Items: 2.75 items (e.g., books and other library material) per capita
- Public Access Computers: 1 computer per 1,000 capita

Other Public Facilities

Regional Trails

According to DPR, "regional trails extend over large expanses of land, providing a continuous route around or through areas such as mountain ranges, or around the rim of a valley" (County of Los Angeles 2013). The Santa Susana Mountains Trails Master Plan, a comprehensive trails planning document incorporating portions of the Santa Clarita Valley Planning Area east of I-5 and south of the Newhall Ranch Specific Plan Area, identifies two regional riding, hiking, and/or multi-use trails: the Santa Clara River Trail, located approximately 3.8 miles north of the Project site and the Rim of the Valley Trail, approximately 2.5 miles south (DPR 2018; HMDB 2022). Figure 4.1-1, Regional Trails Map, of Section 4.1, Aesthetics, shows the segments of these regional trails closest to the Project site.

Local Setting

Fire Protection

The Project site is located within Division 3 of the LACoFD's North Regional Operations Bureau. This Bureau includes Divisions 3 and 5, representing 45 fire stations serving communities in the Antelope and Santa Clarita Valleys. Division 3 serves the communities of La Canada Flintridge and Santa Clarita. The Project site is susceptible to wildland fire hazards and is located within a VHFHSZ in an SRA (CAL FIRE 2022). The LACoFD Fire Station 124, located at 25870 Hemingway Avenue, Stevenson Ranch, is the primary fire protection service provider to the Project site. Fire Station 124 is located approximately 2.6 miles northwest of the Project site. Fire Station 124 has a jurisdictional service boundary of 33.61 square miles with a service population area of 25,947. The second nearest fire station is LACoFD Fire Station 73 located approximately 3.4 miles northeast of the Project site and has a jurisdictional service boundary of 18.70 square miles with a service population area of 14,161 (LACoFD 2021b). The locations of these facilities are depicted on Figure 4.15-1, Existing Fire Stations, Sheriff Station, and Schools.

The LACoFD operates under a regional concept in its approach to providing fire protection and emergency medical services, wherein emergency response units are dispatched as needed to an incident anywhere in the LACoFD's service territory based on distance and availability, without regard to jurisdictional or municipal boundaries (LACoFD 2019). Although Fire Stations 124 and 73 are the nearest stations to the Project site, resources may be provided from other adjacent fire stations, if needed. Fire Station 124 is staffed with a three-person engine company (one captain, one fire fighter specialist and one fire fighter) and a two-person paramedic squad (two fire fighter/paramedics) for each twenty-four-hour shift. Fire Station 73 is staffed with a four-person engine company (one captain, one fire fighter specialist, one fire fighter/paramedic and one fire fighter) and a two-person paramedic squad (two fire fighter/paramedics) for each twenty-four-hour shift (Appendix I-1).

For suburban areas, which would include the Project site, the LACoFD uses national guidelines of an eight-minute response time for the first arriving unit for fire and emergency medical services and 12 minutes for the paramedic units (Appendix I-1). During 2020, Fire Station 124 responded to 2,057 incidents and Fire Station 73 responded to 2,401 incidents (Appendix I-1). According to the LACoFD, it is estimated that Fire Station 124 would have a response time of eight minutes and thirty-six seconds and Fire Station 73 would have a response time of eleven minutes and twenty seconds (Appendix I-1).

The County's 2022 Developer Fee Detailed Fire Station Plan also identifies a new operational helispot located at Fire Station D, at Needham Ranch parkway near Eternal Valley Memorial Park located approximately 2.8 miles to the east of the Project site. Additionally, Fire Stations #46, #113, #109 are all anticipated to be constructed within the Newhall Ranch Specific Plan area, including Mission Village (Tract No. 53108), Landmark Village (Tract No. 60678), and Potreros Homestead (Tract No. 60678) respectively, which would add to the LACoFD resources in the Santa Clarita Valley area to the northwest of the Project site (LACoFD 2022b).

Sheriff Protection

According to LASD Staff, there are 23 Sheriff stations that are dispersed throughout the County and the Project site is located within the Santa Clarita Valley Sheriff Station's service area. The recently constructed Santa Clarita Valley Sheriff Station is located at 26201 Golden Valley Road in Santa Clarita, approximately 3.4 miles northeast of the Project site (Appendix I-2). The new station is located on approximately 11.8 acres, the main station building is 46,552 square feet, the vehicle maintenance building is 4,165 square feet, and the helipad is approximately 3,800 square feet (Appendix I-2). Santa Clarita Valley Sheriff Station currently has a dispatch center staffed 24-hours per

day/7-days a week by one watch deputy, one dispatcher, two complaint personnel, and one front counter deputy, as needed (Appendix I-2). The location of the Santa Clarita Valley Sheriff Station is depicted on Figure 4.15-1.

The Santa Clarita Valley Sheriff Station serves an estimated resident population of 220,495 in the City of Santa Clarita and 67,006 in the unincorporated area. The Santa Clarita Valley Sheriff Station serves the areas of: Angeles National Forest, Bouquet Canyon, Canyon Country, Castaic, City of Santa Clarita, Gorman, Hasley Canyon, Newhall, Neenach, Sand Canyon, Santa Clarita, Saugus, Six Flags Magic Mountain, Sleepy Valley, Southern Oaks, Stevenson Ranch, Sunset Point, Tesoro del Valle, Valencia, Val Verde, West Hills, and Westridge. (LASD 2021a)

The Santa Clarita Valley Sheriff Station is currently staffed by 82 sworn full-time law enforcement and 15 reserve Deputy Sheriffs. The Sheriff Station currently has 56 patrol cars and the average and/or anticipated response times for emergent, priority, and routine calls for service received at the Project site are as follows (Appendix I-2):

- Emergent (crime in progress and life threatening) – 7.7 minutes
- Priority (crime in progress that is not life threatening) – 16.5 minutes
- Routine (crime already occurred and is not life threatening) – 81.3 minutes

According to crime data provided by LASD Staff for 2021 (January 1 to December 31), a total of 3,064 Part I crimes (i.e., homicide, rape, robbery, assault, burglary, larceny, motor vehicle theft, and arson) were reported within the Santa Clarita Valley Sheriff Station's service area (LASD 2021b, 2022). In comparison, a total of 63,945 Part I crimes were reported throughout the entire LASD service area during this same reporting period (LASD 2021b).

The Project site is also located within the service area for the California Highway Patrol (CHP), which provides traffic enforcement and traffic collision investigative responsibilities for all State highways in the County. According to LASD staff, the CHP office is located at 28648 The Old Road in Valencia, approximately 5.9 miles northeast of the Project site (Appendix I-2). The Newhall CHP Station patrols a service area of approximately 772 square miles that includes I-5, SR-126, SR-14, and unincorporated areas and roadways. This service area extends westerly to the Ventura County line, east to Agua Dulce, north to SR-138 (and along SR-138 to Avenue 220th Street West), and south to SR-118 (CHP 2024). In the Santa Clarita Valley area, the CHP maintains a Mutual Aid Agreement with the LASD to be able to provide better protection for the area's residences (Cal OES 2019a).

Public Schools

The nearest school to the Project site is Pico Canyon Elementary School, located at 25255 Pico Canyon Road in Stevenson Ranch, approximately 0.9 miles north of the Project site. According to Newhall School District Staff, the Pico Canyon Elementary School had an enrollment of 790 students during the 2020/2021 academic year with a capacity of 850 students (Appendix I-4). According to William S. Hart Union High School District Staff, Rancho Pico Junior High School and West Rancho High School are the schools that would serve the Project site. Rancho Pico Junior High School (grades 7-8) is located approximately 2.5 miles north of the Project site at 26250 Valencia Boulevard in Stevenson Ranch. Rancho Pico Junior High School had an enrollment of 853 students for the 2020/2021 academic year with a capacity of 1,200 students (Appendix I-3). West Rancho High School is located approximately 2.8 miles northeast of the Project site at 26255 Valencia Boulevard in Stevenson Ranch. West Rancho High School had an enrollment 2,212 students for the 2020/2021 academic year with a capacity of 2,600 students (Appendix I-3). The three schools serving the Project area are depicted on Figure 4.15-1.

Public Parks

A wide variety of parks are located within the vicinity of the Project site. The nearest parks are located adjacent and south/southeast of the Project site, including the Rivendale Park and Open Space and Ed Davis Park at Towsley Canyon. Santa Clarita Woodlands Park consists of four main areas, including the Ed Davis Park in Towsley Canyon, East and Rice Canyon, Pico Canyon, and Mentryville. Parks within a two-mile radius of the Project site are depicted on Figure 4.15-2, Existing Parks and Dedicated Trails.

Descriptions of these facilities, including the facilities discussed above, are provided below in Table 4.15-1, Parks Within Two Miles of the Project Site, organized by the local government entity managing the facility, including the County, the City, SMMC, and MRCA.

Table 4.15-1. Parks within Two Miles of the Project Site

Facility Name	Address	Distance from Project site (Direction)	Park Classification	Acres
County of Los Angeles				
Jake Kuredijan Park	25265 Pico Canyon Road Stevenson Ranch, CA 91381	1 mile (NW)	Local Park	5.74
Pico Canyon Park	25600 Pico Canyon Road Stevenson Ranch, CA 91381	1.2 miles (NW)	Local Park	15.55
William S. Hart Regional Park	24151 North Newhall Avenue Newhall, CA 91321	2 miles (E)	Regional Park	265
Dr. Richard H. Rioux Memorial Park	26233 West Faulkner Drive Stevenson Ranch, CA 91381	2 miles (NW)	Local Park	17
City of Santa Clarita				
Rivendale Park and Open Space	Towsley Canyon Rd Santa Clarita, CA 91381	Adjacent (S)	Regional Park	358
Old Orchard Park	25023 Avenida Rotella Santa Clarita, CA 91355	1.2 miles (NE)	Local Park	—
Valencia Meadows Park	25671 Fedala Road Santa Clarita, CA 91355	1.5 miles (NE)	Local Park	6.1
Almendra Park	23420 Alta Madera Drive Santa Clarita, CA 91355	2 miles (NE)	Local Park	4.3
Newhall Park	24923 Newhall Ave	2 miles (NE)	Local Park	14.3

Table 4.15-1. Parks within Two Miles of the Project Site

Facility Name	Address	Distance from Project site (Direction)	Park Classification	Acres
	Santa Clarita, CA 91321			
Valencia Glen Park	23750 Via Gavola Santa Clarita, CA 91355	2 miles (NE)	Local Park	7.3
MRCA				
Santa Clarita Woodlands Parks (County; MRCA; SMMC)	The Old Road and Towsley Canyon Road, Newhall	Adjacent (S)	Regional Park and Open Space	4,000
Mentryville	27201 Pico Canyon Road Stevenson Ranch, CA 91381	2.5 miles (NW)	Local (Historic) Park	69
SMCC				
Ed Davis Park in Towsley Canyon	24335 The Old Road Santa Clarita, CA 91321	Adjacent (S)	Regional Park	175

Source: DPR 2018, 2022b; City of Santa Clarita 2024.
Notes: S = south; SE = southeast; N = north; NE = northeast; NW = northwest; SMMC: Park acreages not available for all parks.

Libraries

The nearest LACL to the Project site is the Stevenson Ranch Library located at 25950 The Old Road in Stevenson Ranch. The Stevenson Ranch Library is approximately 1.7 miles north of the Project site and includes 11,551 sf of space, a collection of 52,662 books, magazines, and media, and 21 public computers as of July 2022 (Appendix A-2). The Stevenson Ranch Library is open five days per week, Monday through Friday, and is staffed by 3 full time staff (2 Librarians and 1 Library Assistant) and 10 part-time staff (6 Library Associates and 4 Library Pages) (Appendix I-6). Amenities include a study room and meeting room, free printing, laptop/hotspot kits available for checkout, and self-checkout kiosks (Appendix I-6).

Castaic Library, located at 27971 Sloan Canyon Road in the City of Castaic, is 10.6 miles from the project site and is the next closest library. Castaic Library has a facility size of 12,232 sf, a collection of 42,515 books and other library materials, and 26 public access computers. Castaic Library serves the residents of unincorporated Castaic area of the County of Los Angeles (County), a population of 29,232. Castaic Library staffing includes 3 full time staff (2 Librarians and 1 Library Assistant) and 4 part-time staff (3 Library Associates and 1 Library Pages). Amenities include a study room and meeting room, printing, laptop/hotspot kits and Kindle eReaders available for checkout, a self-service homework center, and self-checkout kiosk (Appendix I-6).

Based on LACL's service level guidelines and according to LAPCL staff, the Stevenson Ranch Library does not currently meet service standards for the population of the service area and has a 5,275 collection items deficit (Appendix A-2). However, a new library is planned within FivePoint Valencia, formerly referred to as Newhall Ranch, located in the Santa Clarita Valley Planning Area approximately 3.4 miles from the Project site. This project would be implemented over the course of the next 20 to 30 years and would be accessible to residents of the County

(Appendix I-6). Further, in efforts to minimize the impact of residential projects on library services in the County, the LACL collects a one-time Library Facilitates Mitigation Fee at the time building permits are requested for all new residential dwellings located within unincorporated areas of the County. The mitigation fee for Planning Area 1 (Santa Clarita Valley) for Fiscal Year 2022-23 is $1,096 per dwelling unit (Appendix A-2). The LACL also collects an annual special tax levied upon parcels within the unincorporated areas of the County. The LACL's special tax rate for Fiscal Year 2022-23 is $33.20 per parcel (Appendix A-2).

Other Public Facilities

Trails

Figure 4.15-2 illustrates the dedicated trails adjacent to and/or near the Project site, including the following: Taylor Trail (adjacent) to the southeast; the Towsley Trail (adjacent) and Wiley Canyon Trail (approximately 0.46 mile) to the southeast; the Don Mullally Trail (approximately 916 feet) to the south; and the Pico Canyon Trail (approximately 1.2 miles) to the northwest. There are also non-dedicated trails on and adjacent to the Project site, including Lyons Ranch Road, an unpaved road traversing through the Project site from the northeastern end, traveling south and eventually west, and continuing off-site. Other non-dedicated trails are located throughout the Project site's hillsides, generally meandering between Lyons Ranch and Towsley Canyon Road. The unmanaged non-dedicated trails on and adjacent to the Project site are often located on privately held land. Non-dedicated trails on private property do not constitute public and/or governmental facilities.

4.15.2 Regulatory Requirements

Federal

Fire Protection and Emergency Services

Occupational Safety and Health Administration

The federal Occupational Safety and Health Administration (OSHA) enforces provisions of the federal occupational safety and health act, which requires safety and health regulations for construction under Part No. 1926 of Title 29 Code of Federal Regulations (CFR). The fire related requirements of OSHA are specifically contained in Subpart F, Fire Protection and Prevention. Examples of general requirements related to fire protection and prevention include maintaining fire suppression equipment specific to construction on-site, providing a temporary or permanent water supply of sufficient volume, duration, and pressure, properly operate on-site firefighting equipment, and keeping storage sites free from accumulation of unnecessary combustible materials.

State

Fire Protection and Emergency Services

California Constitution

Section 35 of Article XIII of the California Constitution at Subdivision (a)(2) provides: "The protection of public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services." Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a 0.50-percent sales tax to be expended

exclusively on local public safety services. California Government Code Sections 30051-30056 provide rules to implement Proposition 172. Public safety services include fire protection. California Government Code Section 30056 mandates that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year. Therefore, an agency is required to use Proposition 172 to supplement its local funds used on fire protection services, as well as other public safety services. In *City of Hayward v. Board of Trustee of California State University* (2015) 242 Cal. App. 4th 833, the court found that Section 35 of Article XIII of the California Constitution requires local agencies to provide public safety services, including fire protection and emergency medical services, and that it is reasonable to conclude that the County would comply to ensure that public safety services are provided.

Standardized Emergency Management System (SEMS) and State Emergency Plan

Cal OES is responsible for the coordination of overall state agency response to major disasters in support of local government. The agency is responsible for ensuring the state's readiness to respond to and recover from all hazards—natural, man-made, emergencies, and disasters—and for assisting local governments in their emergency preparedness, response, recovery, and hazard mitigation efforts. Cal OES coordinates the overall response of State agencies to major disasters in support of local government. The office is responsible for (1) assuring the State's readiness to respond to and recover from natural, manmade, and war-caused emergencies; and (2) assisting local governments in their emergency preparedness, response, and recovery efforts. Accordingly, the Cal OES maintains the State Emergency Plan, which outlines the organizational structure for the State's response to natural and manmade disasters.

The Cal OES also assists local governments and other state agencies in developing their own emergency preparedness and response plans, in accordance with the Standardized Emergency Management System (SEMS) and State Emergency Plan, for earthquakes, floods, fires, hazardous material incidents, nuclear power plant emergencies, and dam breaks. Each jurisdiction is required to show the Cal OES that it follows SEMS through several measures, including preparation and maintenance of an up-to-date emergency management plan, which incorporates an emergency evacuation plan. Non-compliance with SEMS can result in the state withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

The Cal OES also coordinates an emergency organizational network, comprised of the Cal OES, local Emergency Operations Centers (EOCs) in the State, cities, and regional EOCs within each county. Cal OES Fire and Rescue Division coordinates statewide response of fire and rescue mutual aid resources to all types of emergencies, including hazardous materials incidents. The Operations Section under the Fire and Rescue Division coordinates the California Fire and Rescue Mutual Aid System and coordinated response through the Mutual Aid System includes responses to major fires, earthquakes, tsunamis, hazardous materials, and other disasters.

In accordance with SEMS and the State Emergency Plan, the County EOC is responsible for emergency operations in the unincorporated areas of Los Angeles. Should an emergency occur, the LASD and LACoFD would provide the first response, as well as the initial contact with other agencies that may need to be involved, such as the Red Cross. Funding for the County's EOC is primarily from the County General Fund, with a small percentage coming from federal funds, which are funneled through Cal OES to the County's EOC.

California Disaster and Civil Defense Master Mutual Aid Agreement

The California Disaster and Civil Defense Master Mutual Aid Agreement, as provided by the California Emergency Services Act (California Government Code, Divisions 1, Chapter 7), provides statewide mutual aid between and

among local jurisdictions and the state. The statewide mutual aid system exists to ensure that adequate resources, facilities, and other supports are provided to jurisdictions whenever resources prove to be inadequate for a given situation. Each jurisdiction controls its own personnel and facilities but can give and receive help whenever needed. The County participates in these mutual aid, automatic aid, and other agreements with other agencies and jurisdictions, as outlined in the Los Angeles County Operational Area Emergency Response Plan (County of Los Angeles 2012).

California Strategic Fire Plan

The 2018 Strategic Fire Plan for California provides broad, strategic guidance for CAL FIRE and its partners to prevent, prepare for, and respond to wildland fire. The report reflects CAL FIRE's focus on fire prevention and suppression activities to protect lives, property, and ecosystem services, and natural resource management to maintain the state's forests as a resilient carbon sink and habitat for adaptation and mitigation. The report also outlines the vision, goals, objectives, and actions of the plan, as well as the roles and responsibilities of various stakeholders, the implementation and evaluation process, and the appendices with additional information. The report is based on the 2010 Strategic Fire Plan, which changed the previous plan structure to provide more flexibility and adaptability for CAL FIRE and its partners. The report emphasizes the importance of collaboration, coordination, and communication among local, state, federal, tribal, and private entities, as well as public education and engagement, to achieve a more fire-resilient and fire-adapted California. The report also identifies the current and future needs and resources for fire management, and the potential benefits and impacts of the plan (CAL FIRE 2018). The LACoFD annually prepares and implements the Los Angeles County Strategic Fire Plan, a parallel document to the State Fire Plan (discussed in further detail below under "Regional and Local" regulatory requirements) (County of Los Angeles 2022a).

California Fire Service and Rescue Emergency Mutual Aid Plan

The California Fire Service and Rescue Emergency Mutual Aid Plan provides a framework for the orderly development and operation of mutual aid on a voluntary basis between cities, cities and counties, fire districts, special districts, county fire departments, and applicable state agencies (Cal OES 2019b). Normal fire department operating procedures are utilized, including day-to-day mutual aid agreements, and plans which have been developed by local fire and rescue officials (Cal OES 2019b). The LACoFD participates in the California Fire Service and Rescue Emergency Mutual Aid System, as managed by Cal OES.

Fire Hazard Severity Zones

California Public Resources Code (PRC) Sections 4201 through 4204 and Government Code Sections 51175 through 511789 direct CAL FIRE to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as Fire Hazard Severity Zones (FHSZs), define the application of various mitigation strategies to reduce the risk associated with wildland fires. Geographic areas of the state are classified as either Very High, High, or Moderate FHSZs (CAL FIRE 2022).

PRC Section 4290 requires minimum fire safety standards related to defensible space that apply to residential, commercial, and industrial building construction in lands classified and designated as SRAs. As the Project is located within a Very High FHSZ (or VHFHSZ) in an SRA, regulations applicable to the Project include road standards for fire apparatus access, standards for signs identifying roads and buildings, fuel breaks and green belts, and minimum water supply requirements, as codified in PRC 4290, as well as applicable sections of Title 24, Part 9, California Fire Code of the California Code of Regulations (CCR) and Title 32, Fire Code, of the Los Angeles County

Code (discussed further below). PRC 4290 further requires a reduction of fire hazards around buildings located in a FHSZ that are also adjacent to a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with inflammable material. It should be noted that these regulations do not supersede local regulations which equal or exceed minimum regulations required by the State.

California Code of Regulations

California Division of Occupational Safety and Health Administration (Cal/OSHA) Title 8 Regulations. Title 8 includes the occupational safety and health standards set forth in Chapter 4 (Safety Orders) and Subchapter 4 (Construction safety Orders) of the California Code of Regulations (CCR) that are enforced by the California Division of Occupational Safety and Health (Cal/OSHA). In accordance with CCR Title 8, Section 1270, Fire Prevention, and Section 6773, Fire Protection and Fire Equipment, Cal/OSHA has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose size requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance and use of all firefighting and emergency medical equipment. Article 36 (Sections 1920–1938) sets forth fire protection and prevention regulations specific to construction sites and construction activities, including provisions related to portable (Section 1922) and fixed (Section 1923) fire suppression equipment, such as fire extinguishers, hoses, sprinklers, and connections, as well as fire alarm devices, indoor and outdoor storage, flammable and combustible liquids, service and refueling areas, and other general construction site provisions related to fire safety. These standards are enforced by Cal/OSHA.

Title 14, Natural Resources, Division 1.5, Department of Forestry and Fire Protection. Title 14, Natural Resources, Division 1.5, Department of Forestry and Fire Protection, of the CCR, constitutes the basic wildland fire protection standards of the California Board of Forestry. They have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction, and development in SRAs. Title 14 mandates that the future design and construction of structures, subdivisions, and developments in an SRA provide for basic emergency access and perimeter wildfire protection measures.

Title 24, Part 2, California Building Code, and Part 9, California Fire Code. Title 24 (California Building Standards Code [CBSC]) of the CCR is a compilation of building standards. Part 2 of Title 24 of the CCR refers to the California Building Code (CBC), which is based on building standards that have been adopted by State agencies without change from a national model code; building standards based on a national model code that have been changed to address particular California conditions; and building standards authorized by the California legislature, not covered by the national model code. Part 9 refers to the California Fire Code (CFC), which contains fire-safety-related building standards referenced in other parts of Title 24. Typical fire safety requirements of the CFC include: the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. The CFC applies to all occupancies in California, except where more stringent standards have been adopted by local agencies. Specific International Fire Code and CFC regulations have been incorporated by reference with amendments, in the Los Angeles County Code (County Code). Title 32, Fire Code (Fire Code).

California Vehicle Code, Section 2180

Section 21806 of the California Vehicle Code allows drivers of emergency vehicles to have a variety of options for avoiding traffic, such as using sirens to clear a path of travel and driving in the lanes of opposing traffic, and required

drivers and pedestrians to yield or otherwise proceed to a curb or other place of safety until the authorized emergency vehicle has passed (California Vehicle Code Section 21806).

Sheriff Protection

California Code of Regulation, Title 24, Part 1 – California Building Code / Title 24, Part 3 – California Electrical Code

The California Building Code (Title 24, Part 1) and the California Electrical Code (Title 24, Part 3) stipulate minimum light intensities for pedestrian pathways, circulation ways, parking lots, and paths of egress.

Public Schools

Senate Bill 50

Senate Bill 50 (SB 50, also known as Proposition 1A, codified in California Government Code Section 65995 et seq.) was enacted in 1988 to address how schools are financed and how development projects may be assessed for associated school impacts (County of Los Angeles 2014). SB 50 sets forth the "exclusive methods of considering and mitigating impacts on school facilities" resulting from any state or local planning and/or development project, regardless of whether its character is legislative, adjudicative, or both (California Government Code Section 65996[a]). Section 65995 provides that "[t]he payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995 … are hereby 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… on the provision of adequate school facilities." (California Government Code Section 65995[h]). The reference in Section 65995(h) to fees "imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995" is a reference to per-square-foot school fees (generally referred to as "developer fees") that can be imposed by school districts on new residential, commercial, and industrial construction at three levels, as follows:

Level 1 Fee: Education Code Section 17620 provides the basic authority for school districts to levy fees against construction for purposes of funding construction or reconstruction of school facilities, subject to limits set forth in Government Code Section 65995. Fees are charged based on "assessable space," which includes all of the square footage within the perimeter of a structure (County of Los Angeles 2014). The State Allocation Board determines the maximum Level 1 fees a district may charge and adjusts these rates for inflation every two years (SchoolWorks 2022). The current State Allocation Board rates (adopted February 23, 2022) are $4.79 per square foot for residential construction and $0.78 per square foot for commercial/industrial construction (SchoolWorks 2022).

Level 2 Fee: Level 2 fees are an alternative school fee that may be collected pursuant to Government Code Section 65995.5. Certain requirements in accordance with Government Code Section 65995.5 have to be met to collect this level of fees (County of Los Angeles 2014). To qualify for Level 2 fees the school districts must meet at least two of the following four requirements (SchoolWorks 2022):

- 30% of students on Multi-Track Year Round
- Capital facility debt at 15% of bonding capacity
- Held a bond election in the last four years and received at least 50% plus one vote yes
- At least 20% of the district's classrooms are portables

Level 3 Fee: The Level 3 fee is an alternative school fee that may be collected pursuant to Government Code Section 65995.7. This fee is collected only when the State Allocation Board is no longer approving apportionments for new construction funding (County of Los Angeles 2014).

Although, for purposes of CEQA, SB 50 states that payment of developer fees is "deemed to be complete and full mitigation" of the impacts of new development on school overcrowding, fees and State funding do not fully fund new school facilities. Pursuant to California Government Code Section 65996, the payment of these fees by a developer serves to mitigate potential impacts of increased enrollment that may result from implementation of a project to a less-than-significant level.

To accommodate students generated by the Project, both the Newhall School District and William S. Hart Unified High School District may establish School Facilities Funding and Mitigation Agreements with a project developer. These special resolutions and agreements allow school districts to collect school mitigation funds in excess of developer fees allowed under SB 50 for the purposes of funding permanent school facilities to service the additional elementary and secondary school students generated by a proposed project.

Park Services

Assembly Bill 1191, "Quimby Act"

The Quimby Act (Government Code Section 66477), enacted in 1975, creates a framework that allows cities and counties to provide parks for growing communities. The Quimby Act authorizes jurisdictions to adopt ordinances that require parkland dedication or payment of in-lieu fees as a condition of approval of residential subdivisions. The Quimby Act also specifies acceptable uses and expenditures of the funds, such as allowing developers to set aside land, donate conservation easements, or pay direct fees for park improvements.

Regional and Local

Fire Protection and Emergency Services

Los Angeles County Operational Area Emergency Response Plan

The Los Angeles County Operational Area Emergency Response Plan (OAERP) addresses the Operational Area's (i.e., the County's) coordinated response to emergency situations associated with natural, man-made, and technological incidents (County of Los Angeles 2012). The OAERP does not address normal day-to-day emergencies; the operational concepts reflected in the OAERP focus on potential large-scale disasters which can generate unique situations requiring an unusual or extraordinary emergency response. The OAERP establishes the coordinated emergency management system, which includes prevention, protection, response, recovery, and mitigation within the County, and describes the County's emergency organization, including authorities and responsibilities, as well as the mutual aid process during emergencies to ensure effective coordination of needed resources (County of Los Angeles 2012). The OAERP is not meant to be a stand-alone document, rather, it is intended to be used in conjunction with other agencies/jurisdictions emergency response plans, standard operating procedures (SOPs) and other pertinent documents (County of Los Angeles 2012).

County of Los Angeles All-Hazard Mitigation Plan

The OEM's 2020 County of Los Angeles All-Hazards Mitigation Plan (AHMP) replaces and updates the 2014 version (County of Los Angeles 2020). The AHMP's goal is to assess the risk posed by natural hazards and develop

mitigation action for reducing those risks in Los Angeles County. The plan identifies, assesses, and provides mitigation actions for climate change, dam failure, earthquake, flooding, landslides, wildfires, and tsunamis (County of Los Angeles 2020). Per the AHMP, the 2020 AHMP Project Manager will work with the Los Angeles County Department of Regional Planning to ensure that the 2020 AHMP's hazard profiles, mitigation goals, and mitigation projects align with those addressed in the General Plan's Safety Element.[4] The 2020 AHMP Project Manager will also work with the County OEM to ensure that the hazard profiles are included in the County's Operational Area Emergency Response Plans and Annexes as they are updated (County of Los Angeles 2020).

Los Angeles County Strategic Fire Plan

The LACoFD annually prepares and implements the Los Angeles County Strategic Fire Plan, a parallel document to the State Fire Plan. The planning process defines a level of service measurement, considers assets at risk, incorporates the cooperative inter-dependent relationships of wildland fire protection providers, provides for public stakeholder involvement, and creates a fiscal framework for policy analysis (County of Los Angeles 2022a).

The LACoFD is one of six contract counties that maintain a contractual relationship with CAL FIRE and implements the State Fire Plan within the unincorporated County through the Strategic Fire Plan. The Strategic Fire Plan identifies and prioritizes pre- and post-fire management strategies and tactics to reduce loss of life, property, and natural resources. It also includes a map of existing LACoFD heli-spots fuel reduction projects, water resources, motorway maintenance maps, and a description of the road and fuel maintenance functions of the LACoFD (County of Los Angeles 2022a).

County of Los Angeles Fire Facility Developer Fee Program

On July 12, 1990, the County Board of Supervisors adopted a resolution establishing a County of Los Angeles Developer Fee Program (Fire Facility Fee) for the benefit of the LACoFD (LACoFD 2020). The Fire Facility Fee was implemented on August 1, 1990, to fund the acquisition, construction, improvement, and equipping of fire station facilities in the high-growth, urban-expansion areas of the County (referred to as "Areas of Benefit") (LACoFD 2020). The resolution provides that the LACoFD will conduct annual evaluations of the Fire Facility Fee and make appropriate recommendations to the Board of Supervisors (LACoFD 2020).

The Fire Facility Fee funds the purchase of station sites, construction of new stations and facility improvements, and funding of capital equipment. The Fire Facility Fee for the Santa Clarita Valley (i.e., Area of Benefit 2) is $1.4316 per square foot of new construction (for all land uses), payable at the time of building permit issuance (LACoFD 2021c). The Fire Facility Fee is adjusted annually and is charged on all new development, including residential buildings, new detached residential accessory structures, new commercial buildings, and new additions over 2,000 square feet prior to building permit issuance (County of Los Angeles 2014).

The LACoFD's share of local property taxes and a voter-approved Special Tax, not the Fire Facility Fee, fund staffing and operations. The Fire Facility Fee allows for funding and land dedication in lieu of fees, meaning the developer can choose to fund the construction of a new fire station instead of paying the fee. Also, credit can be applied toward unpaid Fire Facility Fee obligations for in-lieu or in-kind considerations. Every year, the LACoFD prepares a Five-Year Capital Plan that identifies anticipated facilities needed in urban expansion areas during a 5-year planning horizon. The Five-Year Capital Plan aids the Fire Facility Fee Program by identifying sites where the fees can be directed. As illustrated in the General Plan EIR, payment of the Fire Facility Fee obligation typically constitutes full

[4] At the time of NOP publication for this Draft EIR, the General Plan Safety Element was in the process of being updated by the DRP (DRP 2024).

mitigation for development impacts associated with the need for additional fire protection services or facilities (County of Los Angeles 2014).

Los Angeles County Fire Department Developer Fee Detailed Fire Station Plan

Pursuant to Government Code Section 66000 et seq, the LACoFD prepares and updates annually a Developer Fee Detailed Fire Station Plan (Fire Station Plan) which reflects the LACoFD's fire service requirements based upon growth projections in three developer fee Areas of Benefit, including the Santa Clarita Valley. The 2021 Fire Station Plan identified 17 additional fire stations, one replacement station, one station expansion, two heli-spots, and the necessary capital equipment that will be required in the Areas of Benefit as well as the anticipated costs and time frames provided that development occurs as expected. LACoFD's 2022 Developer Fee Detailed Fire Station Plan identified 6 completed fire stations, 13 proposed fire stations, 1 expansion station, 3 helispots, and the necessary capital equipment that will be required for the Area of Benefit as well as the anticipated costs and time frames provided that development occurs as expected. The anticipated costs identified in the Fire Station Plan will be funded by developer fee revenues or funds which the LACoFD has advanced from other sources. These advances will be repaid to the LACoFD when sufficient developer fee revenue is generated (LACoFD 2021b, 2022c).

Los Angeles County Code, Title 20, Utilities

Division 1, Water, of Title 20 of the County Code includes minimum requirements for water infrastructure, including minimum fire flow and fire hydrant requirements (Sections 20.16.060 and 20.16.140). With respect to fire flows, water pressure, and hydrant spacing, County Code Title 32 (Fire Code) requirements vary based on land use, building size, density, and terrain, as discussed in further details below. Per the Fire Protection Plan prepared for the Project and provided as Appendix M-1 of this Draft EIR, the water supply for the Project must meet a 2-hour fire flow requirement of 2,500 gallons per minute (gpm) with 20 pounds per square inch (psi) residual pressure, which must be over and above the daily maximum water requirements for this development.

Los Angeles County Code, Title 21, Subdivisions

Section 21.24, Design Standards, Part 1, Access, and Part 3, Local Streets and Ways.

Pursuant to County Code Section 22.24.010 (General Requirements – Determination of adequacy), in determining the adequacy of a route of access, the advisory agency shall consider the potential for blockage of the route by flood, fire or landslide and the effect of such blockage on the safe evacuation of future users and occupants of the division and on the deployment of fire equipment or other services under emergency conditions. The advisory agency may disapprove a design which makes use of a residential street as a route of access to industrial, commercial or other divisions of land generating traffic which would conflict with the residential character of the street. Further, pursuant to County Code Section 21,24,090 [Right-of-Way and Roadway Width Requirements – Cross-section Diagrams), each alley and street shall have a width of right-of-way, vehicular pavement, and sidewalk, where a sidewalk is required, to conform to the cross-sections, as shown in Section 21.24.090 of County Code.

Section 21.24.400, Division of Land Adjacent to Existing Roads.

If the advisory agency finds that the proposed division of land abuts an existing road which has improvements insufficient for the general use of the lot owners in the division of land and local neighborhood and drainage needs, it may disapprove the design of the division unless the subdivider improves or agrees to improve such road to the same standards required of roads within all divisions of land by County Code Chapter 21.32.

Los Angeles County Code, Title 26, Building Code

Title 26 of the County Code contains the Building Code, which establishes minimum standards to preserve public health, safety, and general welfare by regulating the construction, design, installation, quality of materials, use, occupancy, location, and maintenance of development activities. Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure) of Title 26 contains requirements for building materials, systems, and/or assemblies used in the exterior design and construction of new buildings (and additions, alterations, or repairs to existing buildings) within a FHSZ. Chapter 7A sets forth specific regulations, such as requirements for ignition-resistant construction, vents, and roofing materials. Building Code provisions applicable to fire safety that the Project shall implement to ensure compliance are further detailed in the Fire Protection Plan, provided as Appendix M-1 of this Draft EIR.

Los Angeles County Code, Title 32, Fire Code

The Los Angeles County Fire Code (Fire Code) (Title 32) establishes standards for building construction and the design and distribution of fire prevention and suppression facilities. The requirements address a variety of issues related to fire protection and prevention, such as fire flow, public and private fire hydrants, the provision of roadway clearance (Title 32, Section 325.10), access roads (Title 32, Section 503.2), adequate road widths, and clearance of brush around structures located on or adjoining any mountainous or forest- or brush-covered land, or land covered with flammable growth (Title 32, Section 325.2.1).

The Project site is located within a VHFHSZ, as mapped by CAL FIRE and the County (County of Los Angeles 2015; CAL FIRE 2022). To comply with the Fire Code, new development within VHFHSZs, must show proof through certification with the LACoFD that new development is located within a designated distance of a water source, such as water supply tanks or retention basins, for emergency firefighting purposes. The Project Applicant is also required to prepare a Fuel Modification Plan (Title 32, Section 4908). The Fuel Modification Plan would consist of a set of scaled plans, including a plot plan that shows fuel modification zones, a detailed landscape plan, and an irrigation plan, in accordance with the County Fire Department's Fuel Modification Plan Guidelines. Per Section 4908, the Fuel Modification Plan must be submitted to the Fire Department's Forestry Division for review and approval prior to the issuance of building permits. Furthermore, based on Fire Code requirements, the Project also must comply with applicable regulations related to specific fire and life safety requirements during construction, and ingress/egress, which includes specifications for streets and driveways, all-weather access, access for road maintenance, maximum allowable grades, turning radii, building access, fire sprinkler systems, and fire hydrant installations. Additionally, all access devices/gates must meet requirements related to width, positioning, and type. Specific Fire Code provisions that the Project shall implement to ensure compliance are further detailed in the Fire Protection Plan, provided as Appendix M-1 of this Draft EIR.

Sheriff Protection

Los Angeles County Code, Title 22, Planning and Zoning

Chapter 22.266. Law Enforcement Facilities Fee.

The LASD budget is approved by the Board of Supervisors through the utilization of state and local tax dollars. These funds are augmented by revenue generating contracts and grant allowances (County of Los Angeles 2022a). The Mitigation Fee Act, contained in Section 66000 et seq. of the California Government Code, provides legal authority for imposing fees on development projects for the purpose of defraying the cost of public facilities related to new

development. The LASD partnered with the City of Santa Clarita and the County to establish the Law Enforcement Facilities Mitigation Fee (Title 22 Section 22.266.050) (County of Los Angeles 2022a). In accordance with the Mitigation Fee Act, the Law Enforcement Facilities Mitigation Fee provides sufficient revenues to pay for land acquisition, engineering, construction, installation, purchasing, or any other direct cost providing capital law enforcement facilities needed to serve the new development in the unincorporated urban expansion areas of Santa Clarita, Newhall, and Gorman (County of Los Angeles 2008, 2022a).

Pursuant to Zoning Code Section 22.266.030(B), no tract map, parcel map, discretionary permit, building permit, other land use permit, or other entitlement, for a new development project, may be approved unless payment of the Law Enforcement Facilities Mitigation Fee is made a condition of approval for any such entitlement. The Law Enforcement Facilities Mitigation Fee is a uniform fee within each law enforcement facilities fee zone, based on the estimated cost of providing the projected law enforcement facility needs in each such zone, as identified in Table 22.266.050-A of Zoning Code Chapter 22.266. For Zone 1 (Santa Clarita Zone), the Law Enforcement Facilities Mitigation Fee is $467 per single family dwelling unit and $337 per multi-family dwelling unit (County of Los Angeles 2022b). The funds collected from the Law Enforcement Facilities Mitigation Fee must be used exclusively for the purpose of land acquisition, engineering, construction, installation, purchasing, or any other direct cost of providing law enforcement facilities, as defined in Zoning Code Section 22.266.020 (Definitions), and for no other purpose (Zoning Code Section 22.266.080 [Deposit and Use of Fees Collected]).

Park Services

Los Angeles Countywide Parks and Recreation Needs Assessment

Adopted by the Board of Supervisors on July 5, 2016, the Countywide Comprehensive Parks and Recreation Needs Assessment (also known as the Parks Needs Assessment or PNA) engaged communities within the County in a collaborative process to gather data and input for future decision-making on parks and recreation (DPR 2016a). The primary goal of the PNA was to quantify the magnitude of need for parks and determine the potential costs of meeting that need. The PNA final report uses a transparent, best-practices approach to evaluate park and recreation needs and is the product of an engagement process that involved the public, cities, unincorporated communities, community-based organizations, and other stakeholders. Specifically, the PNA:

- Uses a set of metrics to measure and document park needs for each study area;
- Establishes a framework to determine the overall level of park need for each study area;
- Offers a list of priority park projects for each study area;
- Details estimated costs for the priority park projects by study area;
- Builds a constituency of support and understanding of the park and recreational needs and opportunities; and
- Informs future decision-making regarding planning and funding for parks and recreation.

To categorize the facilities inventoried during the PNA, four types of parks and open spaces were identified: local parks, regional recreation parks, regional open space, and natural areas. These categories are defined below (DPR 2016a):

> Local Parks. Pursuant to the DPR, local parks include all parks under 5 acres as well as all parks under 100 acres that contain active amenities such as athletic courts and fields, playgrounds, and swimming pools; and schools with joint-use agreements. County and City-owned tot lots, pocket

parks, neighborhood parks, and community parks, as well as special-use facilities such as aquatic centers and community recreation centers, are also included in this category. The PNA inventoried 1,602 local parks in the County.

Regional Recreation Parks. The regional park system is intended to meet the park and recreation needs of residents and visitors throughout the County, and consists of community regional parks, regional parks, and special use facilities. These parks are over 100 acres and contain at least three active amenity types such as athletic courts and fields, playgrounds, and swimming pools. The PNA inventoried 17 regional recreation parks in the County.

Regional Open Spaces. Regional open space, include facilities that are more than 5 acres and generally contain only passive amenities such as visitor centers, trails, picnic shelters, or restrooms. Facilities in this category include, but are not limited to, State parks, State Recreation Areas, Habitat Conservation Lands, State Ecological Reserves, and National Park Service. The PNA inventoried 329 regional open spaces in the County.

Natural Areas. These areas are generally larger than 100 acres and contain no reported amenities. These facilities were not included in any of the needs analyses of the PNA. Types of open space in this category include, but are not limited to, agricultural land, habitat conservation lands, ecological reserves, military lands, flood control channels, tribal lands, and BLM public land. The PNA inventoried 1,057 natural areas in the County.

The Project site is in the Unincorporated Stevenson-Newhall Ranch-Castaic-Val Verde Study Area (Study Area #49). According to the PNA, Study Area #49 had a population of 20,030 and 197.5 acres of parkland in 2016, which resulted in a ratio of 9.9 acres of parkland per 1,000 residents in Study Area #49. Of the total population, 31% live within one half mile of a park (DPR 2016b). This metric does not include the additional 4,987.8 acres of regional open space, nature preserves, or State and National Forest land in Study Area #49 (DPR 2016b).

Los Angeles County Code, Title 21, Subdivisions

Section 21.24.340, Residential Subdivisions, Local Park Space Obligation, Formula

The subdivider of a residential subdivision shall provide local park space to serve the subdivision, pay an in-lieu fee (in accordance with provisions of Section 21.28.140, Park Fees Required When, Computation and Use, provide local park space containing less than the required obligation but developed with amenities equal in value to the park fee), or do a combination of the above in accordance with the requirements of this section. Section 4.15, Public Services, of this Draft EIR, provides the local park space obligation.

Section 21.24.350, Residential Subdivisions, Provisions of Local Park Sites

Upon ascertaining the local park space obligation to be fulfilled by the subdivider of a residential subdivision pursuant to Section 21.24.340, the advisory agency shall review the proposed subdivision, the park and recreational needs of the future inhabitants of the subdivision, and existing or potential neighboring park and recreational facilities to determine whether all or any portion of the local park space obligation should be satisfied by the provision of park space to serve the subdivision. If the advisory agency determines that park space should be provided, the advisory agency shall advise the subdivider of the design and location of such space. If the subdivision contains more than 50 lots, the subdivider shall provide the necessary park space as determined by

the advisory agency. If such park space is less than the total park space obligation required by the provisions of Section 21.24.340, the subdivider shall pay the park fees, in accordance with the provisions of Section 21.28.140, Park Fees Required When, Computation and Use, provide amenities to the park space equal in value to park fees, or do a combination of both.

Section 21.28.140, Park Fees Required When, Computation and Use

If all or any portion of the local park space obligation for a residential subdivision is not satisfied by the provision of local park space designated by the advisory agency pursuant to Section 21.24.350, this section provides park fees to be paid as a condition precedent to final approval of the subdivision.

Libraries

Los Angeles County Code, Title 22, Planning and Zoning

Chapter 22.264, Library Facilities Mitigation Fee

The purpose of this Chapter is to:

A. Implement goals and policies of the General Plan, which: (1) promote an equitable distribution of the costs and benefits of governmental actions (2) promote a distribution of population consistent with service system capacity and resource availability; (3) seek to maintain a balance between increased intensity of development and the capacity of needed public facilities; and (4) give priority to upgrading existing public facilities in areas lacking adequate facilities
B. Mitigate any significant adverse impacts of increased residential development upon public library facilities as required by the CEQA; and
C. Implement the Mitigation Fee Act

Pursuant to Section 22.264.030(B), no tract map, parcel map, Conditional Use Permit, other land use permit, or other entitlement, shall be approved unless payment of the Library Facilities Mitigation Fee is made a condition of approval for any such entitlement. The fee is a uniform fee within each library planning area, based on the estimated cost of providing the projected library facility needs in each library planning area, as identified in Table 22.264.050-A of Chapter 22.264. Within Planning Area 1 (Santa Clarita Valley), where the Project site is located, the Library Facilitates Mitigation Fee is $1,096 per dwelling unit (Appendix A-2).

Other Public Facilities

County of Los Angeles Trails Manual

The County of Los Angeles Trails Manual (Trails Manual) provides guidance to County departments that interface with trail planning, design, development and maintenance of hiking, equestrian, and mountain biking trails. The Trails Manual was adopted by the Board of Supervisors on May 17, 2011, and was revised in June 2013 (County of Los Angeles 2013). The Trails Manual provides guidelines for implementation of multi-use trails within the unincorporated communities of the County and recognizes the existence of the broader regional trail network in the County and surrounding counties that provides access to recreational resources operated by federal, State, and local agencies. The Trails Manual sets the guidelines for reviewing plans and specifications for trails that are provided in conjunction with land use planning and the entitlement process for projects proposed for development

within the County. Proposed developments are reviewed for consistency with the Trails Manual. The goal of the Trails Manual is to establish well-defined trail types, guidelines, and priorities to facilitate the development of high-quality trails that benefit the public (County of Los Angeles 2013).

Santa Susana Mountains Trails Master Plan

The Santa Susana Mountains Trails Master Plan is a two-part, comprehensive trails planning document incorporating portions of the Santa Clarita Valley Planning Area west and southwest of the I-5 corridor within its 22-square-mile study area (which also includes the Project site). The Santa Susana Mountains Trails Master Plan seeks to respect sensitive resources within its study area while reducing unmet demand for recreation opportunities in the Santa Clarita Valley Planning Area and throughout the County's Fifth Supervisorial District (DPR 2018). Recommendations included in the Santa Susana Mountains Trails Master Plan are consistent with the adopted Trails Manual (discussed above). Objectives of the Santa Susana Mountains Trails Master Plan include increased trail connectivity and provision of additional trail facilities for public use (DPR 2018).

Los Angeles County 2035 General Plan

Safety Element

The purpose of the Safety Element is to reduce the potential risk of death, injuries, and economic damage resulting from natural and man-made hazards (County of Los Angeles 2015). The following public services goals and policies from the Safety Element are relevant to the Project (County of Los Angeles 2015):

Goal S 3. An effective regulatory system that prevents or minimizes personal injury, loss of life, and property damage due to fire hazards.

Policy S 3.1. Discourage high density and intensity development in VHFHSZs.

Policy S 3.2. Consider climate change implications in fire hazard reduction planning for FHSZs.

Policy S 3.3. Ensure that the mitigation of fire related property damage and loss in FHSZs limits impacts to biological and other resources.

Policy S 3.4. Reduce the risk of wildland fire hazards through the use of regulations and performance standards, such as fire resistant building materials, vegetation management, fuel modification and other fire hazard reduction programs.

Policy S 3.5. Encourage the use of low-volume and well-maintained vegetation that is compatible with the area's natural vegetative habitats.

Policy S 3.6. Ensure adequate infrastructure, including ingress, egress, and peak load water supply availability for all projects located in FHSZs.

Policy S 3.7. Site and design developments located within FHSZs, such as in areas located near ridgelines and on hilltops, in a sensitive manner to reduce the wildlife risk.

Policy S 3.9. Adopt by reference the County of Los Angeles Fire Department Strategic Fire Plan, as amended.

Policy S 3.12. Support efforts to incorporate systematic fire protection improvements for open space, including facilitation of safe fire suppression tactics, standards for adequate access for firefighting, fire mitigation planning with landowners and other stakeholders, and water sources for fire suppression.

Goal S 4. Effective County emergency response management capabilities.

Policy S 4.5. Ensure that there are adequate resources, such as sheriff and fire services, for emergency response.

Parks and Recreation Element

The Los Angeles County 2035 General Plan (General Plan) Parks and Recreation Element guides policy for the maintenance and expansion of Los Angeles County's parks and recreation system. The purpose of the Parks and Recreation Element is to plan and provide for an integrated parks and recreation system that meets the needs of residents. The following goals and policies pertaining to parks and trail facilities are relevant to the Project (County of Los Angeles 2015):

Goal P/R 1. Enhanced active and passive park and recreation opportunities for all users.

Policy P/R 1.2. Provide additional active and passive recreation opportunities based on a community's setting, and recreational needs and preferences.

Policy P/R 1.3. Consider emerging trends in parks and recreation when planning for new parks and recreation programs.

Goal P/R 3. Acquisition and development of additional parkland.

Policy P/R 3.1. Acquire and develop local and regional parkland to meet the following County goals: 4 acres of local parkland per 1,000 residents in the unincorporated areas and 6 acres of regional parkland per 1,000 residents of the total population of Los Angeles County.

Policy P/R 3.2. For projects that require zone change approvals, general plan amendments, specific plans, or development agreements, work with developers to provide for local and regional parkland above and beyond their Quimby obligations.

Goal P/R 4. Improved accessibility and connectivity to a comprehensive trail system including rivers, greenways, and community linkages.

Policy P/R 4.1. Create multi-use trails to accommodate all users.

Policy P/R 4.2. Develop staging areas and trail heads at strategic locations to accommodate multi-use trail users.

Policy P/R 4.3. Develop a network of feeder trails into regional trails.

Policy P/R 4.4. Maintain and design multi-purpose trails in ways that minimize circulation conflicts among trail users.

Policy P/R 4.6. Create new multi-use trails that link community destinations including parks, schools, and libraries.

Public Services and Facilities Element

The Public Services and Facilities Element promotes the orderly and efficient planning of public facilities and infrastructure in conjunction with land use development and growth. This Public Services and Facilities Element focuses on services and facilities that are affected the most by growth and development, including education and libraries. The following goals and policies pertaining to libraries and schools are relevant to the Project (County of Los Angeles 2015):

Goal PS/F 7. A County with adequate facilities.

Policy PS/F 7.1. Encourage the joint-use of school sites for community activities and other appropriate uses.

Policy PS/F 7.2. Proactively work with school facilities and education providers to coordinate land use and facilities planning.

Policy PS/F 7.3. Encourage adequate facilities for early care and education.

Goal PS/F 8. A comprehensive public library system.

Policy PS/F 8.1. Ensure a desired level of library service through coordinated land use and facilities planning.

Policy PS/F 8.2. Support library mitigation fees that adequately address the impacts of new development.

Project compatibility with General Plan goals and policies is discussed within Section 4.11, Land Use and Planning, of this Draft EIR.

Santa Clarita Valley Area Plan, One Valley, One Vision (OVOV)

The OVOV is a component of the County's General Plan and is intended to provide focused goals, policies, and maps to guide the regulation of development within the unincorporated portions of the Santa Clarita Valley. The OVOV establishes goals and policies related to public services for areas within the Santa Clarita Valley. The following OVOV objectives and policies, within the Land Use Element, Safety Element, Circulation Element, and the Conservation and Open Space Element, are relevant to the Project:

Objective LU-3.3. Ensure that the design of residential neighborhoods considers and includes measures to reduce impacts from natural or man-made hazards.

Policy LU-3.3.4. Evaluate service levels for law enforcement and fire protection as needed to ensure that adequate response times are maintained as new residential development is occupied.

Objective LU-6.2. Provide attractive public and open spaces in places visited by residents and visitors, where feasible and appropriate.

Policy LU-6.2.2. Provide and enhance trail heads where appropriate with landscaping, seating, trash receptacles and information kiosks.

Objective S-3.1. Provide adequate fire protection infrastructure to maintain acceptable service levels as established by the Los Angeles County Fire Department.

Policy S-3.1.1. Coordinate on planning for new fire stations to meet current and projected needs.

Objective S-3.2. Provide for the specialized needs of fire protection services in both urban and wildland interface areas.

Policy S-3.2.5. Ensure adequate secondary and emergency access for fire apparatus, which includes minimum requirements for road width, surface material, grade, and staging areas.

Objective C-1.1. Provide multi-modal circulation systems that move people and goods efficiently while protecting environmental resources and quality of life.

Policy C-1.1.4. Promote public health through provision of safe, pleasant, and accessible walkways, bikeways, and multi-purpose trail systems for residents.

Objective C-2.2. Adopt and apply consistent standards throughout the Santa Clarita Valley for street design and service levels, which promote safety, convenience, and efficiency of travel

Policy C-2.2.6. Within residential neighborhoods, promote the design of “healthy streets” which may include reduced pavement width, shorter block length, provision of on street parking, traffic-calming devices, bike routes and pedestrian connectivity, landscaped parkways, and canopy street trees.

Objective C-7.1. A continuous, integrated system of safe and attractive pedestrian walkways, paseos and trails linking residents to parks, open space, schools, services, and transit.

Policy C-7.1.10. Continue to expand and improve the Valley’s multi-use trail system to provide additional routes for pedestrian travel.

Objective CO-9.1. Develop new parklands throughout the Santa Clarita Valley, with priority given to locations that are not now adequately served, and encompassing a diversity of park types and functions (including passive and active areas) in consideration of the recreational needs of residents to be served by each park, based on the following guidelines: (Guiding Principle #36)

Policy CO-9.1.9. Ensure that new development projects provide a fair share towards park and recreational facilities, phased to meet needs of residents as dwelling units become occupied, pursuant to the Quimby Act (California Government Code Section 66477) and local ordinances as applicable.

Project compatibility with OVOV goals and policies is discussed within Section 4.11, Land Use and Planning, of this Draft EIR.

4.15.3 Thresholds of Significance

In accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to public services are listed below. A project may have a significant impact if it would:

Threshold 4.15a: Create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:

i. Fire protection

ii. Sheriff protection

iii. Schools

iv. Parks

v. Libraries

vi. Other public facilities

4.15.4 Methodology

Fire Protection

Fire protection and emergency medical service needs relate to the size of the population and geographic area served, the number and types of calls for service, and the physical characteristics of the County's built environment and infrastructure. Changes in these factors resulting from construction and operation of the Project may increase demand for or delivery of public services. As reflected in the correspondence with the LACoFD, the department evaluates the demand for fire protection and emergency medical services on a project-by-project basis, including review of a project's emergency features and/or design features, to determine if a project would require additional equipment, personnel, new facilities, or alterations to existing facilities (LACoFD 2021b). Beyond the standards included in the County's Fire Code, the 2022 CFC, and the 2022 CBC, consideration is given to the size (height, quantity, and physical configuration) of a project, uses proposed, fire flow necessary to accommodate a project, distance to the site for engine and truck companies, response time, fire hydrant sizing and placement standards, access, and the project's potential to use or store hazardous materials.

The LACoFD, which would provide fire protection and emergency medical services to the Project site and future residents, was consulted for this analysis, as provided in Appendix I-1 of this Draft EIR, and the responses provided regarding the Project were incorporated into the analysis below. In addition, the LACoFD website and applicable provisions of the County's Fire Code, the 2022 CFC, and the 2022 CBC were reviewed. Based on this information and consultation with the LACoFD, a determination was made as to whether the LACoFD would require new or physically altered facilities for the provision of fire protection and emergency medical services in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection. If such facilities would

be required, the analysis considers whether the LACoFD's construction of such facilities would reasonably be expected to cause significant environmental impacts.

Sheriff Protection

Sheriff protection needs relate to the size of the population and geographic area served, the number and types of calls for service, and the physical characteristics of the area served. The LASD was consulted for this analysis and the responses provided regarding the Project were incorporated. Based on this information and in consultation with the LASD, a determination was made as to whether the LASD would require new or physically altered facilities for the provision of sheriff protection in order to maintain acceptable response times or other performance objectives for sheriff protection services. If such facilities would be required, the analysis considers whether the LASD's construction of such facilities would reasonably be expected to cause significant environmental impacts.

Schools

The analysis of enrollment effects on schools is based on the ability of the Newhall School District and William S. Hart Union High School District school facilities and services to accommodate the potential increase in students generated from the Project. The analysis estimates the number of students that would be generated by the Project by using Newhall School District and William S. Hart Union High School District student generation factors, and focuses on whether Newhall School District and William S. Hart Union High School District school facilities expected to serve the Project and would have sufficient available capacity to accommodate these students. The Newhall School District and William S. Hart Union High School District student generation factors were provided by the Newhall School District and William S. Hart Union High School District. Current and projected enrollment/capacities use the 2020/2021 academic school year as representative of existing conditions. The student enrollments were obtained from the Newhall School District and William S. Hart Union High School District.

The analysis addresses all levels of education facilities operated by public schools (i.e., elementary school, junior high school, and high school), and focuses on the schools that would serve the Project. It also addresses state regulations (e.g., SB 50) as a mechanism for providing new school facilities and addressing school impacts of the Project. A determination is then made as to whether the Newhall School District and William S. Hart Union High School District would require new or physically altered facilities for schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for public schools.

Parks

DPR was consulted on this analysis and the responses provided regarding the Project are incorporated into the impact analysis below. Further, DPR's 2016 PNA provides a determination of "park need" for Study Area #49 (which includes the Project site) based on five metrics: park land, park access, park pressure, park amenities, and park condition. These metrics are used to help determine the Project's potential impacts related to increased use of existing neighborhood or regional parks such that the Project would create capacity or service level problems, thereby resulting in the need for provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts. If it is determined that additional park facilities would be required, the analysis considers whether the construction of such facilities would reasonably be expected to cause significant environmental impacts.

Libraries

Analysis of libraries is typically based by identifying the primary library that would serve the Project, projecting the future service population for the library that would serve the Project, and determining whether the Project's contribution to the future service population would cause the library to operate beyond its service capacity. The County was consulted on this analysis, and their responses regarding the Project are incorporated into the analysis below.

Other Public Facilities

For the purposes of this analysis, "other public facilities" are regional and dedicated trails. Analysis of trail needs is based on a review of the Santa Susana Mountains Trails Master Plan, prepared by DPR in 2018, which provides a comprehensive assessment of existing trails within the study area, which includes the Project site. The conditions and objectives detailed in the Santa Susana Mountains Trails Master Plan are used to help determine the Project's potential impacts related to increased use of existing regional and dedicated trails such that the Project would create capacity or service level problems, thereby resulting in the need for provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts. If it is determined that additional trail facilities would be required, the analysis considers whether the construction of such facilities would reasonably be expected to cause significant environmental impacts.

4.15.5 Impact Analysis

Threshold 4.15a(i): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:

Fire protection?

The LACoFD Fire Station 124 is the primary fire protection service provider to the Project site. Fire Station 124 is located at 25870 Hemingway Avenue, Stevenson Ranch, approximately 2.6 miles northwest of the Project site (LACoFD 2021b). Fire Station 73, located as 24875 Railroad Avenue (approximately 3.4-miles northwest of the Project site), would provide back-up services (Appendix I-1).

Construction

Construction activities associated with the Project may temporarily increase demand for fire protection and emergency medical services. Construction worker accidents could result from the occasional exposure to combustible materials such as wood, plastics, sawdust, coverings and coatings, heat sources including machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings. Given the nature of construction activities, OSHA has developed safety and health provisions for implementation during construction as set forth in Title 29, Part No. 1926 of the CFR. In compliance with State and federal standards, and as enforced locally by Cal/OSHA, construction managers and personnel would be trained in fire prevention and emergency response. Per Title 8, Subchapter 4, Construction Safety Orders (CSO), of the CCR, construction managers would be responsible for ensuring availability of and connections to a reliable water supply of sufficient volume, duration, and pressure, as well as the development of a fire protection program and the provision and placement of fire safety and suppression equipment, including but not limited to fire

extinguishers, hoses, and an alarm system (or systems), as specified in CSO Article 36, that would be followed and/or required throughout all phases of construction work (CSO Section 1920). The provisions of CSO Article 36 further require maintenance for on-site fire safety and/or suppression equipment, such as fire extinguishers, and implementation of proper procedures for storage and handling of flammable materials. Operators of any construction vehicles or related equipment powered by internal combustion engines would be required to ensure that exhausts are faced away from combustible materials (CSO Section 1938). When the exhausts are piped to outside the building under construction, a clearance of at least 6 inches shall be maintained between such piping and combustible material (CSO Section 1938[a]). Thus, compliance with regulatory requirements would reduce the potential for construction activities to expose people to the risk of fire explosion related to hazardous materials. As previously discussed, the Project site is susceptible to wildland fire hazards and is located within a VHFHSZ (CAL FIRE 2022). Construction activities may increase the likelihood for wildfire hazards to occur on the Project site. Effects due to wildfire are addressed in Section 4.20 of this Draft EIR. In accordance with Mitigation Measure (MM)-4.20-4, the Applicant has prepared a Fire Prevention Plan (FPP) (provided as Appendix M-1 of this Draft EIR) which requires the training of construction personnel and provides details related to fire-suppression procedures and equipment to be used on-site during construction. In addition, MM-4.20-5 includes a number of fire prevention measures that would be required to be implemented during Project construction. These measures include the implementation of fuel modification (per the LACoFD's Fuel Modifications Guidelines) during construction, developing utility improvements prior to bringing lumber onto the Project site, and vegetation clearing in areas where temporary construction power lines would be placed. According to the FPP, the fuel modification zones (FMZs) proposed for the Project range between 35 and 200 feet wide onsite; however, as required by LACoFD, where less than 200 feet of FMZ can be provided onsite, brush thinning would be required to achieve the full 200 feet of FMZ. The implementation of MM-4.20-4 and MM-4.20-5 would reduce the potential for wildfire hazards to occur during Project construction activities to less than significant.

Project construction could temporarily affect the ability of LACoFD emergency vehicles and/or services to be provided in the Project vicinity because of construction activities, including along a segment of The Old Road where a new sidewalk and retaining wall would be installed. In addition, utility connections to existing water infrastructure are proposed along The Old Road and Calgrove Road within the public right-of-way (discussed in further detail in Section 3.2.8, Off-Site Improvements, of Chapter 3, Project Description of the Draft EIR). Temporary lane closures along The Old Road and Calgrove Road associated with these off-site improvements may be expected. These construction activities have the potential to temporarily impact emergency vehicle access to the Project site. As discussed in Section 4.17, Transportation, of this Draft EIR, to ensure adequate safeguards for pedestrian, bicycle and vehicular circulation and emergency vehicle access during short-term construction activities, MM-4.17-1 (Construction Traffic Management Plan) is required. MM-4.17-1 requires preparation of a Construction Traffic Management Plan, prepared in accordance with the County's Traffic Control Requirements, to provide temporary traffic controls and access within the County public rights-of-way when temporary disruption of traffic is anticipated. The Construction Traffic Management Plan would require notifications in advance of closing, or partial closing and reopening of public throughways and traffic lanes, as well as facilitations for clearances, pedestrian access, and other emergency traffic controls, such as the provision of flagmen, which may also be required pursuant to Section 15.76.170 (Flagmen at construction and maintenance areas) of the County Code. With implementation of MM-4.17-1 to address pedestrian, bicycle, and vehicular circulation during construction activities, potential impacts related to emergency access would be reduced to less than significant levels.

Section 21806 of the California Vehicle Code allows drivers of emergency vehicles to have a variety of options for avoiding traffic, such as using sirens to clear a path of travel and driving in the lanes of opposing traffic. Based on these considerations, construction of the Project would not be considered a high-risk activity. Further, as indicated

by the LACoFD in their response to a "Request for Information Letter" dated July 7, 2021, the staffing and facilities serving the Project site are equipped and prepared to deal with construction-related traffic and fires, should they occur (Appendix I-1). As such, due to compliance with applicable codes and fire safety standards, and with implementation of MM-4.17-1, MM-4.20-4, and MM-4.20-5, Project construction would not adversely impact firefighting and emergency services to maintain acceptable service ratios, response times or other performance objectives for fire protection. Therefore, impacts would be less than significant with mitigation incorporated.

Operation

Operational activities associated with the Project would increase the demand for fire protection and emergency medical services. The Project includes the development of 510 dwelling units with a mix of attached and detached dwelling units, and affordable senior housing, resulting in approximately 1,785 new residents and 10 employees (refer to Section 4.14, Population and Housing, for further discussion of general impacts associated with the Project's future population and employees). In suburban areas such as the Project site, the LACoFD response standard is eight minutes for the first arriving unit and emergency medical services and 12 minutes for paramedic units. In correspondence with the LACoFD, the department indicated that "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is the nearest to the Project site (with an average response time of 8 minutes and 36 seconds) (Appendix I-1). The LACoFD indicated that, as additional development creates greater demands on resources, the Project may result in level of service impacts related to fire protection and/or associated provision of LACoFD services (Appendix I-1).

As discussed in Section 4.20, Wildfire of this Draft EIR, a Fire Protection Plan was prepared for the proposed Project that assessed response time from LACoFD Station 124. As detailed in Table 7 of the FPP (Appendix M-1), the Project would meet the County's response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from the closest fire station (Station 124) (Appendix M-1).[5] Therefore, this Project-specific analysis determined that there would be a response time of less than eight minutes, which would be consistent with the LACoFD response standard. Further, as stated in the LACoFD response letter included in Appendix I-1, additional information and coordination with the LACoFD was requested in order to determine whether development of the Project would require additional staffing, equipment, or new or expanded facilities. Subsequent to the LACoFD letter included in Appendix I-1, the LACoFD has determined that a new fire station is not required for the proposed Project. As discussed in Section 4.15.2, Regulatory Setting, within the area's emergency services system, fire and emergency medical services are also provided by other agencies. Mutual aid agreements enable non-lead fire agencies to respond to fire emergencies outside their district boundaries. In the Project site vicinity and surrounding areas, fire agencies cooperate under a statewide master mutual aid agreement for wildland fires. There are also mutual aid agreements in place with neighboring fire agencies and typically include interdependencies that exist among the region's fire protection agencies for structural and medical responses but are primarily associated with the peripheral "edges" of each agency's boundary. Provision of fire protection mutual aid in the event of a fire or medical emergency on the Project site or within the surrounding areas would help ensure that acceptable service ratios and/or response times are maintained under Project conditions.

As discussed in Section 4.15.2, Regulatory Requirements, and in further detail in the Fire Protection Plan (Appendix M-1), the Project is required to comply with all applicable building safety codes and regulations pertaining to fire prevention and suppression for projects located within a VHFHSZ. Chapter 7A of the CBC addresses structural

ignition resistance and reducing ember penetration into homes, a leading cause of structure loss from wildfires (California Building Standards Commission 2022). Projects situated in VHFHSZ require fire hazard analysis and the application of fire protection measures to create ignition-resistant structures and defensible communities within these locations, as required by Title 32, Section 4908.1 (Fuel Modification Plan in Fire Hazard Severity Zones) of the County Code. VHFHSZ designations do not, in and of themselves, indicate that it is unsafe to build in these areas. As described in the Fire Protection Plan, the Project would meet applicable code requirements for building in these higher fire hazard areas. These codes have been developed through decades of wildfire structure save and loss evaluations to determine the causes of building losses and saves during wildfires. The resulting fire codes now focus on mitigating former structural vulnerabilities through construction techniques and materials so that the buildings are resistant to ignitions from direct flames, heat, and embers, as indicated in the 2022 CBC (Chapter 7-A, Section 701A Scope, Purpose, and application).

Project site access, including road widths and connectivity, would be consistent with the County's roadway standards (Title 21, Chapter 21.24. Part 1 [Access] and Part 3 [Local Streets and Ways], and Section 21.24.400 [Division of land adjacent to existing roads), IFC Appendix D (Fire Apparatus Access Roads), and CFC Section 503. The primary and secondary access to the Project would be provided via The Old Road, which satisfies secondary access requirements detailed in Title 21, Section 21.24 (Design Standards), Part 1, of the County Code. All roads would comply with applicable LACoFD and Fire Code requirements regarding sizing, condition, maintenance, and secured access.

As detailed in the Fire Protection Plan, applicable provisions of the Fire Code, CCR Title 14, and the LACoFD's Fuel Modifications Guidelines require that the Project incorporate a number of design and maintenance features to ensure fire safety, including but not limited to: fire road access, building offsets, planting setbacks, and native brush clearing to remove and thin combustible vegetation. Section 4908 of the Fire Code requires that fuel modification zones be provided around every building that is designed primarily for human habitation or use within a VHFHSZ. To ensure compliance, the Project would be required to submit a Fuel Modification Plan to the LACoFD Fuel Modification Division prior to approval of the Tentative Map (Fire Code Section 4908.1 [Fuel Modification Plan in Fire Hazard Severity Zones]). The Fire Protection Plan (included as Appendix M-1 of this Draft EIR) is prepared to meet the requirements of Fire Code Section 4908.1 and incorporates the Project's Fuel Modification Plan, including defensible space and fuel modification zone requirements. Compliance with these standards, as detailed in Section 4.20 and in further detail in the Fire Projection Plan (Appendix M-1), would reduce the level of exposure to wildland fire hazards, ensure optimal access for fire engines and crews, and reduce the potential level of damage to structures in the event of fires. The Project would also be subject to CCR Title 14 Article 1, Subdivision Map Findings, which requires that the subdivision be consistent with regulations adopted by the state Board of Forestry and Fire Protection or be consistent with local ordinances certified by the State Board of Forestry and Fire Protection and must ensure that structural fire protection services will be available through the LACoFD. Please refer to Section 4.20 and the Fire Protection Plan (Appendix M-1) for further details concerning the Project's design features relative to compliance with applicable regulations governing development in a VHFHSZ.

As the Project is located within a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements (LACoFD 2021b, 2021c). The Fire Facility Fee allows for funding and land dedication in lieu of fees, meaning the developer can choose to fund the construction of a new fire station instead of paying the fee.

LACoFD's 2022 Developer Fee Detailed Fire Station Plan identified 6 completed fire stations, 13 proposed fire stations, 1 expansion station, 3 helispots, and the necessary capital equipment that will be required for the Area of Benefit as well as the anticipated costs and time frames provided that development occurs as expected. The anticipated costs identified in the Plan will be funded by Developer Fee revenues or funds which the Consolidated Fire Protection District of Los Angeles County has advanced from other sources (LACoFD 2022b). The 2022 Developer Fee Detailed Fire Station Plan identified a Fire Station A located at the Project site within Tract No. 88301. As stated in the LACoFD response letter included in Appendix I-1, additional information and coordination with the LACoFD was requested in order to determine whether development of the Project would require additional staffing, equipment, or new or expanded facilities. Subsequent to the LACoFD letter included in Appendix I-1, the LACoFD has determined that a new fire station is not required for the proposed Project. A new operational helispot is located at Fire Station D, at Needham Ranch parkway near Eternal Valley Memorial Park located approximately 2.8 miles to the east of the Project site. Additionally, Fire Stations #46, #113, #109 are all anticipated to be constructed within the Newhall Ranch Specific Plan area, including Mission Village (Tract No. 53108), Landmark Village (Tract No. 60678), and Potreros Homestead (Tract No. 60678) respectively, which would add to the LACoFD resources in the Santa Clarita Valley area.

The Project Applicant would pay the Fire Facility Fee, which, as detailed in the General Plan EIR, typically constitutes full mitigation for development impacts associated with the need for additional fire protection services or facilities (County of Los Angeles 2014). Consistent with the requirements of CEQA, as articulated in the California First District Court of Appeal decision in *City of Hayward v. Trustees of California State University* (2015) 242 Cal. App. 4th 833, significant impacts under CEQA involve adverse physical changes in the environment as a result of implementation of a project. Pursuant to this case, "the city has a constitutional obligation to provide adequate fire protection services," and potential effects on public safety services are not in and of themselves an environmental impact that CEQA requires a project applicant to mitigate. The Court stated that "[T]he obligation to provide adequate fire and emergency medical services is the responsibility of the city." (Cal. Const., Art. XIII, Section 35, Subd. (a)(2) ["The protection of the public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services."].) Thus, the California Constitution requires local agencies to provide public safety services, including fire protection and emergency medical services, and that it is reasonable to conclude that the County will comply with that provision to ensure that public services are provided. In addition, and as discussed above, the LACoFD participates in the California Fire Service and Rescue Emergency Mutual Aid System and thus, mutual aid agreements would ensure that the Project site would receive supplemental personnel and resources during a major emergency.

The Project would implement a number of wildfire-related mitigation measures (discussed in further detail in Draft EIR Section 4.20) to reduce the potential for on-site ignition and wildfire spread, and to ensure safe evacuation procedures in the event of a wildfire-related emergency. MM-4.20-1 outlines a comprehensive Wildfire Education Program to be implemented by the HOA to increase residents' wildfire awareness and preparedness. The program includes bi-annual email and mailers, a dedicated community website, new resident packets, an emergency alert campaign, trail signage, and an HOA fire safety committee. MM-4.20-2 requires integration of specific fire prevention, protection, and suppression features into the Project's built environment. These features include dual-pane tempered windows facing open space, minimum one-hour fire-rated exterior walls and doors, ember-resistant exterior vents, and a solid 6-foot-tall concrete masonry wall between structures and off-site open space. Finally, MM-4.20-3 requires annual inspections of the Project's FMZs be conducted by the HOA to confirm compliance with FMZ requirements.

In summary, the Project would not create capacity or service level problems or result in substantial adverse physical impacts associated with the provision of 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 fire protection services for the following reasons: (1) mandatory compliance with existing CFC, CBC, Fire Code, Title 21, and other applicable State and local regulations pertaining to fire safety and emergency response; (2) LACoFD's participation in mutual aid agreements; (3) payment of the Fire Facility Fee; (4) the requirement that local agencies must provide adequate fire protection and emergency response services; and (5) the required implementation of MM-4.20-1 and MM-4.20-3 which would reduce the potential for wildfire hazards to occur during construction. For these reasons, the impact of the Project with respect to fire protection and emergency medical services during operation would be less than significant with mitigation incorporated.

Threshold 4.15a(ii): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:

Sheriff protection?

As indicated by LASD (Appendix I-2), the Santa Clarita Valley Sheriff Station, located approximately 3.2 miles northeast of the Project site, would provide the primary sheriff protection services to the Project site. Since the Project site is in the unincorporated County, CHP would provide traffic enforcement and traffic investigative responsibility. The CHP office is located at 28648 The Old Road in Valencia, approximately 5.9 miles from the Project site.

Construction

The LASD would be responsible for providing general law enforcement services to the Project site during construction, including response to calls for service in the cases of trespassing, theft, and vandalism that can occasionally occur at construction sites. During construction activities, fencing (via implementation of MM-4.1-1, Visual Shielding Plan, discussed in Section 4.1, Aesthetics of this Draft EIR) would be placed at the Project site proximate to publicly-accessible areas, such as along the Project's eastern boundary near The Old Road and at existing trail connections to the site. This fencing would reduce opportunities for criminal activities, in line with the principles of Crime Prevention though Environmental Design (CPTED). As discussed above, temporary lane closures may be required for right-of-way frontage improvements and/or utility construction. However, these closures would be temporary in nature and in the event of partial lane closures, both directions of travel on area roadways and access to the Project site would be maintained. All temporary lane closures would be coordinated to not occur during peak periods of traffic congestion, to the extent feasible. Emergency vehicle drivers have a variety of options for avoiding traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Further, as discussed above, MM-4.17-1 (Construction Traffic Management Plan) detailed in Section 4.17, Transportation of this Draft EIR, would require that a Construction Traffic Management Plan for the Project be prepared in order to minimize disruptions to through traffic flow, maintain emergency vehicle access to the Project site and neighboring land uses, and schedule worker and construction equipment delivery to avoid peak traffic hours.

Therefore, for the reasons stated above, construction of the Project would not significantly increase demand on existing sheriff services w during construction and would be less than significant with MM-4.1-1 and MM 4.17-1 incorporated.

Operation

The Project would introduce residents and visitors to a site that is currently vacant. The proposed Project would increase resident, employees, daytime, and nighttime population, in the Station's service area, which would generate an increased demand for law enforcement services. Therefore, operational activities associated with the Project would increase the demand for sheriff protection services.

The LASD does not maintain specific service level ratios, per LASD's response to the "Request for Information Letter" provided as Appendix I-2 of this Draft EIR. The LASD has indicated that the average response times under current conditions for emergent and priority calls are within LASD's optimal average, discussed in Section 4.15.1, Existing Conditions, above (see Appendix I-2 for details regarding applicable response times). In the absence of a service ratio requirement, LASD staffing and deployment are based on the needs of the service area and are dependent upon on call volume, crime rates, and a variety of other factors (Appendix I-2).

As mentioned in Appendix I-2, the LASD has recently completed a new Santa Clarita Valley Sheriff Station at 26201 Golden Valley Road, Santa Clarita, 91350 and has not indicated that additional stations are required to serve the increase in daytime and nighttime population at the Project site. The Santa Clarita Valley Sheriff Station was recently constructed and was designed to serve the needs of its service area within the Santa Clarita Valley. Therefore, the Project's operational impacts would not require the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services.

Staffing requirements change over time and the LASD's staffing would need to be responsive to the demand for maintaining acceptable service ratios. Regarding funding for staffing, the Project Applicant and/or developer would be required to pay the County's law enforcement facilities mitigation fee per Section 22.266, Law Enforcement Facilities Fee, of the Zoning Code, which explicitly applies to the unincorporated urban expansion areas of Santa Clarita, Newhall, and Gorman. For Zone 1 (Santa Clarita Zone), the Law Enforcement Facilities Mitigation Fee is $467 per single family dwelling unit, and $337 per multi-family dwelling unit (Zoning Code Table 22.266.050[A] [Law Enforcement Facilities Mitigation Fee]). Pursuant to Zoning Code Section 22.266.080, funds collected from the Law Enforcement Facilities Mitigation Fee must be used exclusively for the purpose of land acquisition, engineering, construction, installation, purchasing, or any other direct cost of providing law enforcement facilities, including Sheriff station facilities, and for no other purpose (County of Los Angeles 2022b).

Further, the Project would implement tenants of CPTED. For example, the Project would include circulation elements to the Project site, including "A" Street and "B" Street, internal roadways between residences, pedestrian walkways, and trails. The roadways would be lighted during nighttime hours, and therefore, deter crime, through informal natural surveillance. The Project would provide adequate lighting for recreational amenities and improved open space areas as well as along pedestrian pathways, circulation ways, paths of egress, and within parking lots, pursuant to Title 24, Part 1 (California Building Code) and Title 24 Part 3 (California Electrical Code) of the California Code of Regulations. In accordance with the California Building Code, the Project would be required to incorporate lighting with minimum light intensities for pedestrian pathways, circulation ways, parking lots, and paths of egress for safety and wayfinding.

Along The Old Road, the Project proposes to construct a retaining wall of a maximum of 4 feet in height, which would reduce opportunities for hiding behind walls, thereby reducing opportunities for criminal activities. Additionally, while security cameras would not be required at the residential development, it is likely that individual

residences could have doorbell cameras, which would provide additional security and surveillance benefits at the Project site.

Landscaping would be planted through implementation of a landscape plan, which would result in plantings, with adequate spacing between trees, and would result in maximum natural surveillance throughout the Project site. The landscape plan is shown on Figure 3-7, Landscape Plan, of Chapter 3, Project Description. Additionally, as the Project's HOA would have Covenants, Conditions, and Restrictions (CCRs) to manage and proactively address potential issues related to security, landscaping maintenance, surveillance, and lighting. Landscaped areas would be managed by the HOA, which would reduce opportunities for overgrown plants, thereby reducing opportunities for areas that an individual could hide, and as such, reducing opportunities for criminal activity.

Given these considerations, Project operation would not necessitate construction of any new or expanded sheriff stations to maintain desired levels of service and thus would not result in adverse environmental effects. The impact of the Project with respect to sheriff protection services during operation would be less than significant.

Threshold 4.15a(iii): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:

Schools?

As discussed in Section 4.15.1, Existing Conditions, the public schools serving the Project site are the Pico Canyon Elementary School within the Newhall School District, and Rancho Pico Junior High School and the West Rancho High School within the William S. Hart Union High School District.

Construction

Construction of future development of the Project would require construction workers who would be hired from a mobile regional construction work force that moves from project to project. Typically, construction workers pass through various development projects on an intermittent basis as their particular trades are required. Given the mobility and short durations of work at a particular site, and a large construction labor pool that can be drawn upon in the region, construction employees would not be expected to relocate their families or their residences to work on future development of the Project. Therefore, Project construction would not result in a notable increase in the resident population or generate new students needing to attend local schools.

Construction vehicles traveling to and from the Project site are anticipated to use I-5, The Old Road, Lyons Avenue, and Calgrove Boulevard to access the Project site and to perform required off-site utility and roadway improvements within the public rights-of-way along The Old Road and Calgrove Boulevard. As depicted on Figure 4.15-1, the schools serving the Project are not located adjacent to proposed on-site or public right-of way construction areas, and Project construction would not impact traffic along Pico Canyon Road or Valencia Boulevard, which are approximately 0.5 and 2.6 miles north of the Project site, respectively. Thus, the schools serving the Project site (Pico Canyon Elementary School, Rancho Pico Junior High School, and West Rancho High School) would not be subject to construction-related traffic. Further, as discussed above, MM-4.17-1, Construction Traffic Management Plan, would require that a Construction Traffic Management Plan for the Project would be prepared that includes a designated construction haul route which directs construction traffic away from nearby residential neighborhoods and schools. Based on the above, construction traffic generated by the Project is not expected to impact the

operation of local public schools. As a result, the temporary construction-related impact on schools during construction would be less than significant with mitigation incorporated.

Operation

The Project would result in 510 dwelling units, including 462 units (253 single family detached units and 209 single family attached units) that would be likely to house elementary, junior high and/or high school aged residents, which would increase the student population within the assigned local schools.[6] The Project site is located within the Newhall School District for elementary school and the William S. Hart Union High School District for both junior high school and high school. Future students would attend Pico Canyon Elementary School, Rancho Pico Junior High School, and West Rancho High School (see Appendix I-3 and I-4).

Table 4.15-2, Project Enrollment Generation, below, shows the number of students that the Project would generate based on generation factors provided by both Newhall School District and William S. Hart Union High School District staff.

Table 4.15-2. Project Enrollment Generation

Type (Number of Dwelling Units)	Newhall School District[a]	William S. Hart Union High School District[b]	
	Elementary School Students	Junior High School Students	High School Students
	Generation Rate x Number of Dwelling Units = Total Students		
Single Family Detached (253 units)	0.350 x 253 = 88.55	0.0917 x 253 = 23.20	0.1662 x 253 = 42.05
Single Family Attached (209 units)	0.204 x 209 = 42.63	0.0848 x 209 = 17.72	0.1552 x 209 = 32.44
Total Students	**131.18**	**40.92**	**74.49**

Source: Student generation rates:
[a] Newhall School District 2021 (Appendix I-4);
[b] William S. Hart Union High School District 2021 (Appendix I-3).
Note: Units included in this generation table do not include senior housing. Pursuant to California Government Code Sections 65995.1 school districts may only charge the applicable commercial/industrial fee for qualified senior citizen housing. The Level 1 fee rate a district may charge for commercial/industrial construction is set by the State Allocation Board and is currently capped at $0.78 per square foot (SchoolWorks 2022). The Level 1 fee rate for non-senior residential construction is capped at $4.79 per square foot (SchoolWorks 2022).

As previously mentioned, correspondence with both school districts indicated that Pico Canyon Elementary School has a capacity of 850 students, Rancho Pico Junior High School has a capacity of 1,200 students, and West Rancho High School has a capacity of 2,600 students. The 2020-2021 Pico Canyon Elementary School enrollment was 790 students. Therefore, the Newhall School District may not have current capacity to accommodate students generated by the Project. However, based on new construction and the potential for future student generation on the west side of I-5 (where the Project site is located), the Newhall School District may consider boundary changes, which would change the elementary school that would service the Project site. Further, correspondence indicated that the Newhall School District has capacity to expand and/or modernize its facilities and could service the Project site;

[6] The Project's proposed 510 dwelling units includes 47 age-restricted senior housing units and one manager's unit, which would not be anticipated to contribute to the student population within the assigned schools; however, these units would be subject to Commercial/Industrial Fee for qualified senior citizen housing, as discussed in further detail in the notes provided within Table 4.15-2, Project Enrollment Generation.

however, there are no plans for expansion at this time (Appendix I-4). As of March 2020, Rancho Pico Junior High School had 853 students enrolled, and West Rancho High School currently had 2,212 students enrolled. Based on the current enrollment numbers, the William S. Hart Union High School District has sufficient capacity to accommodate students generated by the Project.

School districts impose fees on new residential and commercial development to compensate for the impact that a project would have on existing school facilities or services, as set forth in SB 50 and Section 65996 of the California Government Code. The Project would be required to pay fees to both affected school districts, as set forth in the development fee program outlined in the Newhall School District and the William S. Hart Union High School District School Facilities Need Analyses. These fees are imposed to finance construction or reconstruction of school facilities needed to accommodate students coming from new developments. Alternatively, developers have the option to (1) enter into mitigation agreements with a district to provide funding to Newhall School District and the William S. Hart Union High School District to offset the costs to provide capacity for the new students from the project; or (2) request the formation of a community facilities district.

Payment of the required school districts' development impact fees would ensure that impacts to service capacities of schools would be less than significant. As discussed in section 4.15.2, Regulatory Requirements, Level 1 fee rates for the Newhall School District and William S. Hart Union High School District are capped at $4.79 per square foot for residential construction and $0.78 per square foot for commercial/industrial construction.[7] Pursuant to California Government Code Section 65995.1, school districts may only charge the applicable commercial/ industrial fee for qualified senior citizen housing. Therefore, the Project's senior housing facility would be subject to the applicable commercial/industrial developer fees provided by the school districts (in amounts not to exceed the established State Allocation Board fee rates) at the time of building permit issuance.

Given these considerations, the number of students generated by the Project would not necessitate construction of any new or expanded school facilities to maintain desired levels of service and thus would not result in adverse environmental effects. In addition, payment of SB 50 fees by the Project Applicant is considered by the State to represent full mitigation to all potential impacts to school services and facilities. The impact of the Project with respect to schools during operation would be less than significant.

Threshold 4.15a(iv): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:

Parks?

As discussed previously, there is a wide variety of parks located within the vicinity of the Project site. The nearest parks are adjacent to and south/southeast of the Project site, including the Taylor Trail Wilderness and Open Space, Rivendale Park and Open Space, and the Santa Clarita Woodlands Park, which includes the Ed Davis Park at Towsley Canyon. Descriptions of these facilities, including the park facilities discussed above, are provided in Table 4.15-1, Parks and Recreational Facilities Within Two Miles of the Project site.

[7] In order to adopt Alternative School Facility Fees (e.g., Level 2 fees), the school districts must satisfy the necessary prerequisites of Government Code Section 65995.5, and then prepare and adopt a School Facilities Needs Analysis, following the specific mandates regarding the contents of the School Facilities Needs Analysis as well as procedures required for its adoption (Bowie and Wiles 2015).

Construction

During Project construction there would be a temporary increase in population at the Project site due to construction workers. Some of these construction workers are expected to currently reside in the area and, therefore, would not place additional pressure on existing park facilities. Generally, any increase in demand for park services is anticipated to be negligible because construction workers are highly transient in their work location and likely would use parks near their place of residence. In addition, as lunch break times are typically short (30 to 60 minutes), the lunch break is not long enough for construction workers to take advantage of park facilities and return to work within the allotted time. However, as discussed in Section 4.15.1, Existing Conditions, given that a number of park facilities are located near the Project site, there is the potential for construction workers to use these facilities during their lunch break. It is anticipated any increase in the use of these facilities would be temporary and would occur during off-peak usage hours (i.e., weekdays compared to weekends when peak park and recreation usage generally occurs).

Construction activities would be staged on-site and would occur within the Project boundaries. However, construction-related worker and truck trips would enter and exit the Project site each day, which could result in temporary access impacts to parks using the same roadways as the Project, including Ed Davis Park and Rivendale Park and Open Space. However, implementation of MM-4.17-1, Construction Traffic Management Plan (as discussed above) would ensure that ingress/egress from the parking lot for Ed Davis Park in Towsley Canyon (located just south of the site on the corner of The Old Road and Towsley Canyon Road), and at the Taylor Trailhead parking lot (adjacent to the easternmost portion of the Project site) is preserved during all phases of Project construction.

Therefore, during construction, the Project would result in less than significant impacts with mitigation regarding creation of capacity or service level problems or substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities for parks.

Operation

The Project would dedicate approximately 150 acres of preserved open space supporting an on-site network of trail facilities which connect to other dedicated facilities located within parks adjacent and near to the Project site, as well as approximately 24 acres of Homeowners' Association (HOA)-maintained open space and active and passive open space areas located throughout the Project site (discussed further under Section 3.2.3, Open Space and Recreational Facilities, of Chapter 3, Project Description, of this Draft EIR). The Project would also provide a recreation center on 1.13-acres in the central portion of the Project site. The recreation center would include one building and would likely include the following: a club room, fitness center, restrooms, conference room, study room, kitchen space, and entertainment/sitting areas. The recreation center would also include an outdoor swimming pool and spa. The provision of on-site open-space, trail facilities, passive and active open space areas, and recreational facilitates would minimize any potential impacts associated with reduced capacity of or increased levels of service within adjacent or nearby public parks, including the Taylor Trail Wilderness and Open Space, Rivendale Park and Open Space, Ed Davis Park in Towsley Canyon, or other areas within Santa Clarita Woodlands Park. Additionally, the construction and operation of these components at the Project site are considered within the Draft EIR.

As discussed in further detail in Section 4.16, Recreation, DPR's 2016 PNA uses five metrics to determine park need: park land, park access, park pressure, park amenities, and park condition. For the purposes of this impact analysis, descriptions of these metrics are provided for context of the Project's potential to result in capacity or

service level problems or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios for parks.

The Project is in PNA Study Area #49, which, as of 2016, had 9.9 acres of parkland per 1,000 residents. The Study Area #49 ratio of 9.9 acres of parkland per 1,000 residents is in exceedance of the County's average of 3.3 acres of parkland per 1,000 residents. The County has a target ratio of 4 acres of local parkland and 6 acres of regional parkland for every 1,000 people. However, the PNA did not differentiate between local and regional park to service population ratios for Study Area #49, and as such, a direct comparison cannot be made of Study Area #49's ratio to the County's targets for local and regional parkland. However, according to the 2016 PNA, Study Area #49 is in an area with "very low" park need (DPR 2016c). With implementation of the Project, the population of Study Area #49 would increase from approximately 20,030 residents to 21,794 residents, resulting in an estimated parkland to service population ratio of 9.1 acres per 1,000 residents, without consideration of the Project's public open-space and trails on-site (DPR 2016c). Under Project conditions, the new ratio of 9.1 acres of parkland per 1,000 residents in Study Area #49 would continue to exceed the County's overall average, as mentioned above, and would not result in a substantial reduction in parkland per 1,000 residents.

Park access in Study Area #49 is below the County's average of 49% of the population living with ½-mile of a park, at 31% (DPR 2016c). However, the Project would provide open space and trails on-site which would increase park access for residents at the site and for people that live within Study Area #49. As illustrated on Figure 3-2, Vesting Tentative Tract Map No. 83301, of Chapter 3, Project Description, of this Draft EIR, the Project would provide 20-foot-wide multi-use (e.g., equestrian, hiking, and biking) trail easements, to be dedicated to DPR, over the existing on-site, non-dedicated trails within the Project site as requested by DPR (Appendix A-2). Additionally, as the Project would provide trail connections to existing, established off-site trails, this would increase park access for residents at the site and within Study Area #49.

Park pressure is defined by DPR as the amount of park land available to residents in the Study Area around each park. Of the parks analyzed in Study Area #49, the Project site is nearest to Ed Davis Park in Towsley Canyon, which includes 175.08 acres and is part of the larger Santa Clarita Woodland Park(s) jointly managed by the MRCA and SMMC (DPR 2016c; SMMC and MRCA 2014). As the Project would place residents in an area proximate to existing park land and would provide open space and recreational facilities on-site for residents and the public, the Project would not substantively impact neighboring park facilities.

The 2016 PNA rates park amenities and conditions on a rating scale of "good", "fair", or "poor" (DPR 2016c). Regarding park amenities and conditions within Study Area #49, the parks had the highest score for "good" facilities. The Project residents would likely use these park amenities, which could have the potential to affect the existing rating due to an increase in use. However, as detailed above, the Project would also provide parks and park-like amenities proximate to off-site existing and future on- and off-site residents, which would alleviate park pressure on any one facility, and as such, the Project would not result in capacity or level or service problems or require the provision of new or physically altered public park facilities in Study Area #49 (for potential level of service impacts related to trails within the MCRA/SMMC Santa Clarita Woodlands Park and elsewhere within Study Area #49, please refer to the threshold of significance analysis provided under Threshold 4.15a(vi) applicable to "Other public facilities").

Pursuant to the County's Quimby Code (Sections 21.24.340, 21.240.350, and 21.28.140 of the County Code), the Project would be required to pay an in-lieu fee, which could be used for the purpose of acquiring local park land or developing new or rehabilitating existing parks. However, as discussed above, due to the provision of on-site pocket-

parks and other park-like amenities (including open space, dedicated trails, and recreational facilities), Project residents would be provided with immediate access to these facilities on-site. Therefore, for the reasons discussed above, including the provision of parks, trail, open space, and recreational amenities, and the adequate and/or above average condition of parks available to residents within Study Area #49 (as informed by the 2016 PNA), the Project would not be anticipated to create capacity or service level problems, or result in the need to construct new park facilities (beyond what the Project is already providing). Therefore, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities, the construction of which could cause significant environmental impacts, and impacts would be less than significant.

Threshold 4.15a(v): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:

Libraries?

The nearest LACL to the Project site is the Stevenson Ranch Library located at 25950 The Old Road in Stevenson Ranch. The Stevenson Ranch Library is approximately 1.7 miles north of the Project site and is a facility with 11,551 sf of space, a collection of 52,662 books, magazines, and media, and 21 public computers as of June 2020 (Appendix I-6).

Construction

During Project construction, there would be a temporary increase in construction workers at the Project site. Some of these construction workers are expected to currently reside in the area and, therefore, would not place additional pressure on existing library facilities. Generally, any increase in demand for library facilities is anticipated to be negligible because construction workers are highly transient in their work location and likely would use libraries near their place of residence. Although there is potential for construction workers to use library facilities, any resulting increase in the use of these facilities would be temporary. Additionally, given the distance of approximately 2.0 miles from the Project site to the nearest library (Stevenson Ranch Library), it is unlikely that construction workers would have the time, within a 30-60-minute lunch break, to visit the library. Additionally, given the hours of library operations (from 10 AM to 8 PM), it is unlikely that there would be a sizable increase in demand at the Stevenson Ranch library during construction. While it is possible that construction workers would utilize library services after the workday, it would likely be limited in use. Therefore, for the reasons stated above, construction of the Project is not expected to increase demand on existing library facilities to a meaningful extent. As a result, the temporary impact on library facilities during construction would be less than significant.

Operation

As discussed above, the Project would have an estimated population of 1,785 new residents and 10 employees at the recreation center, as detailed in Section 4.14, Population and Housing, of this Draft EIR. These residents and employees would be serviced by the Stevenson Ranch Library— the nearest library to the Project site. The LACL service guidelines state that its ultimate goal is to provide a library facility that has 0.5 square feet of library space per capita, and one to three items of library materials per thousand people served (Appendix I-6). Under existing conditions, the Stevenson Ranch Library does not meet the does not meet the minimum requirements for the population service area, as the library has a deficiency of 5,275 collection items, The increase in residents on the Project site would increase demands for library services provided at the Stevenson Ranch Library. Based on the

LACL's service level guidelines, the Project's projected population increase of 1,785 people would require an additional 4,909 collection items and two (2) additional public access computers; and according to the LACL, no additional library space is needed to serve the Project. This would contribute to LACL's current deficiency at Stevenson Ranch Library as the library would need 10,286additional collection items, to service the existing population plus the Project (Appendix A-2).

Future residential and nonresidential development associated with the Project would be required to pay the LACL's special tax rate of $33.20 per parcel for the 2022-2023 fiscal year, which may increase annually. In an effort to minimize the impact of residential projects on library services, LACL also collects a one-time library facilities mitigation fee (County Code Section 22.248.050 [Library Facilities Mitigation Fee]) at the time building permits are requested for all new residential dwelling units located within the unincorporated areas of the County (Appendix A-2). The current developer fee rate for the Santa Clarita Valley's unincorporated area is $1,096 per dwelling unit (Appendix A-2). This is a one-time library facilities mitigation fee on new construction in the unincorporated County that would help offset demand for library services. This fee would amount to $558,960 for development of 510 dwelling units on-site. In addition, correspondence with the LACL indicated that, while there are no plans to expand the Stevenson Ranch Library, plans have been set forth to build a new library within the new FivePoint Valencia development over the next 20 to 30 years (Appendix I-6). The required Library Facilities Mitigation Fee payment would ensure that the Project's impact on the library system would be less than significant. Therefore, impacts related to the Project's potential to create capacity of service level problems or result in substantial adverse physical impacts for library facilities would be less than significant.

Threshold 4.15a(vi): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:

Other public facilities?

Other public facilities addressed in response to this threshold include nearby regional trails (the Santa Clara River Trail and the Rim of the Valley Trail) and local dedicated trails (the Taylor Trail, Towsley Trail, Wiley Canyon Trail, and Don Mullally Trail). Potential Project impacts to trails are also discussed in Section 4.1, Aesthetics, and Section 4.16, Recreation, of this Draft EIR.

Construction

During Project construction, there would be a temporary increase in construction workers at the Project site. Some of these construction workers are expected to reside in the area and, therefore, would not place additional pressure on existing trail facilities. Generally, the increase in usage of nearby regional trails due to construction workers is anticipated to be negligible because construction workers are highly transient in their work location, often engage in physically intensive labor, and likely would use trails near their place of residence. In addition, as lunch break times are typically short (30 to 60 minutes), they are not long enough for construction workers to take advantage of trail facilities and return to work within the allotted time. As detailed in Section 4.1, Aesthetics, and depicted on Figure 4.1-1, Regional Trails Map, of Section 4.1, Aesthetics, the nearest regional trails to the Project site are the Santa Clara River Trail, located approximately 3.8 miles north of the Project site, and the Rim of the Valley Trail, approximately 2.3 miles south of the Project site (DPR 2018; HMDB 2022). Due to distance from these regional trails to the Project site, Project construction workers would not be likely to use these trails on a frequent basis, particularly given the fact that, as discussed in Section 4.15.1, Existing Conditions and depicted on Figure 4.1-2,

Local Trails Map, of Section 4.1, Aesthetics, there are a number of local trails on, adjacent, and/or near to the Project site, which would provide similar and more convenient use opportunities. Given the proximity of local trails, there is the potential for construction workers to use these facilities during their lunch break. Although any resulting increase in the use of these facilities would be temporary and would occur during off-peak usage hours (i.e., weekdays compared to weekends when peak park and recreation usage occurs), which would not be anticipated to result in capacity or service level problems or require construction of additional facilities.

Although the Project would provide public access to previously non-dedicated trails on private lands, these facilities are already present on the Project site, and would not require the provision of any additional trail facilities which could result in significant adverse environmental impacts. There may be temporary interruption of trail use for a segment of an existing trail near proposed Lot 23 (detention basin) during grading activities; however, there are numerous interconnected trails in the area that could be used, as shown on Figure 4.1-2. Similarly, while the Project would construct a new trailhead at the gated connection of the paved access road to The Old Road at the northeastern corner of the Project site, these improvements are incorporated into the analysis of Project-level impacts, as evaluated in Sections 4.1 through 4.20 of this Draft EIR. Any potential transportation impacts associated with roadway closures or encroachment into the public roadway rights-of-way as a result of the proposed trailhead construction would be reduced to less than significant levels with implementation of MM-4.17-1, as discussed above, which requires preparation of a Construction Traffic Management Plan in compliance with the County's Traffic Control Requirements to provide temporary traffic controls and access within the County public rights-of-way when temporary disruption of traffic is anticipated. Given these considerations, and with incorporation of MM-4.17-1 to minimize any potential traffic impacts associated with construction of the proposed trailhead, Project construction would not create capacity or service level problems or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios other performance objectives for public trails (i.e., "other public facilities"). Implementation of MM-4.17-1, Construction Traffic Management Plan (as discussed above) would ensure that ingress/egress from the Taylor trailhead, and the parking lot for Ed Davis Park in Towsley Canyon is preserved during all phases of Project construction. As such, the temporary construction impacts of the Project with respect to other public facilities would be less than significant with mitigation incorporated.

Operation

As discussed above, due to distance from regional trails to the Project site, Project residents would not be likely to substantively increase regional trail usage, particularly given the Project site's proximity to a number of local, dedicated trails. As detailed in Section 4.15.1, Existing Conditions, the Project site contains non-dedicated trails on-site and is surrounded by off-site non-dedicated and dedicated trails to the south, west, and east. As the Project site is private property, the on-site non-dedicated trails are currently not available to the public. However, with implementation of the Project, trails on-site, within the southern portion of the Project site, would be made available to the public. The Santa Susana Mountains Trails Master Plan specifies numerous gaps and a few major barriers within its study area that have resulted in a lack of overall connectivity between existing trails and to regional and local destinations. While gaps generally indicate a lack of existing trails where connections would benefit regional connectivity, barriers present major obstacles that must be traversed or avoided in order to create connections (DPR 2018). The Project site is within the study area of the Santa Susana Mountains Trails Master Plan. The Project site is intersected by the identified Trail Network Gap #7, Towsley Canyon Road to Lyons Ranch Along Lower Foothills, as shown on Figure 4-1, Trail Network Gaps and Barriers, of the Santa Susana Mountains Trails Master Plan (DPR 2018). As discussed in response to Threshold 4.15a(iv), and per DPR's

request, the Project would provide 20-foot-wide multi-use trail easements to be dedicated to DPR over the existing non-dedicated on-site trails, as illustrated in Figure 3-2 (Appendix A-2). With Project implementation, the inclusion of on-site open space with trails would serve to provide important missing linkages in the existing dedicated trail network within the Santa Clarita Valley and would expand trail facilities consistent with the objectives of the Santa Susana Trails Master Plan. While the Project would increase the service population located adjacent to public trail facilities, and would increase connectivity to existing public trail facilities, the dedication of on-site trail facilities in close proximity to future residents would ensure that capacity and level of service impacts to adjacent and nearby trails would not be significant. On-site trails would be managed by DPR and would be consistent with the objectives of DPR and the County to provided expanded trail facilities for County residents and to increase trail connectivity in the region (DPR 2018).

Grants from State and county bond sources are available to fund trail facilities in urban areas and funding for maintenance of those facilities would be provided through property assessments and taxes. These funding sources would serve to reduce the potential for deterioration of facilities by allowing for adequate funding for the provision and maintenance of trail facilities. Although the Project would provide public access to previously non-dedicated trails on private lands, these facilities are already present on the Project site and would not require the provision of any additional trail facilities which could result in insignificant adverse environmental impacts. Therefore, for the reasons discussed above, Project operation would not create capacity or service level problems or result in substantial adverse physical impacts associated with the provision of new or physically altered regional park facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios other performance objectives for public trails (i.e., “other public facilities”). As such, the operational impact of the Project with respect to other public facilities would be less than significant.

4.15.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., cumulative projects) used for this analysis are presented in Table 2-2, List of Cumulative Projects and on Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR. For purposes of public services, the geographical area of cumulative impacts varies by threshold, further detailed below.

Threshold 4.15a(i): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:

Fire protection?

The geographic area for fire protection is the local Project site vicinity and the LACoFD service area, which is predominantly the unincorporated areas of the County, but also includes some incorporated cities, such as the City of Santa Clarita. Regarding cumulative impacts from capacity problems, service level problems, or provision of new or physically altered governmental facilities related to fire protection, cumulative impacts on fire protection could occur if other related projects in the vicinity of the Project site would result capacity or service level impacts in conjunction with the impacts of the Project, or if buildout of the General Plan, as identified in the General Plan EIR, would result in a significant impact to fire protection services, which the Project could thereby contribute to and/or

exacerbate, resulting in a cumulatively considerable impact. As discussed in the General Plan EIR, the buildout of the General Plan would lead to an increase in the need for fire services (County of Los Angeles 2014). Each cumulative project, however, would be required to demonstrate compliance with CEQA prior to approval and would be required to mitigate its associated increase in need through the payment of the County's Development Fee Program which would be used to find the purchase of fire station sites, the construction of new stations, and the funding of certain capital equipment in compliance with the County Fire Code. Development of the Project, in conjunction with the cumulative projects, would not contribute to any cumulative significant public services impacts as other related projects are implemented in the service area for the reasons discussed below.

The Cumulative Projects included in this Draft EIR are located within the unincorporated County, and some are located within a designated VHFHSZ (CAL FIRE 2022). Per Section 22.01.010 (Adoption of the City Fire Code) of the Santa Clarita Municipal Code, the City Fire Code has adopted by reference the 2022 CFC (CCR Title 24, Part 9) and the County Fire Code (Title 32). Further, pursuant to Section 18.02.240 of the Santa Clarita Municipal Code, "…any building or structure hereafter erected, constructed, altered, added onto, or moved within or into a [VHFHSZ] shall comply with all applicable provisions of Chapter 7A or Section R337 of [the California Residential Code]" (City of Santa Clarita 2022b). Therefore, in addition to applicable State provisions included in the CFC and CSO Article 36 (which is applicable to construction-related impacts to fire protection and emergency medical services), all Cumulative Projects would also be subject to applicable fire safety provision of Chapter 7A of the CBC and the County Fire Code, the same as the Project, which require incorporation of building materials, proactive design measures, and construction methods to minimize exposure to and hazards associated with fire and wildfire, thereby reducing the frequency and severity of fire related emergencies within the broader LACoFD service area. Required measures would include compliance with provisions set forth in Title 32, Section 4908 of the County Code (consistent with CFC Section 4907, California Government Code Sections 51175–51189, and PRC Section 4291), requiring that fuel modification zones be provided around every building that is designed primarily for human habitation or use within a VHFHSZ.

The Fuel Modification Plans prepared for the Project and all Cumulative Projects would be required to be reviewed and approved for defensible space, reasonable fire safety, and compliance with the Fire Code, the Fire Department's Fuel Modification Guidelines, and/or applicable CCR Title 14, Division 1.5, Chapter 7, subchapter 2. Further, for the Cumulative Projects with subdivisions and within a VHFHSZ and a SRA, the Project and Cumulative Projects LA1 through LA13 would also be subject to CCR Title 14, Subchapter 1 Subdivision Safety, including Article 1, Subdivision Map Findings, requiring that the Project and Cumulative Projects LA1 through LA 13 are consistent with regulations certified by the State Board of Forestry and Fire Protection as meeting or exceeding State regulations, and that structural fire protection and suppression services would be available for the Project through the LACoFD, CAL FIRE, or another entity (CCR Title 14 Sections 1266.00 through 1266.02). The Project and Cumulative Projects LA1 through LA13 would also be required to satisfy secondary access requirements detailed in Title 21, Section 21.24 Part 1, of the County Code. Cumulative Projects SC1 through SC23 would similarly be subject to Santa Clarita Municipal Code Section 17.57.025l(4), requiring two distinct means of vehicular access of at least 25 feet in width, exclusive of sidewalks, landscaping, and parking lanes (City of Santa Clarita 2022b). The State's required Fire Safety Survey (conducted a minimum of every 5 years) would help ensure that all subdivisions proposed in the areas surrounding the Project site, as well as elsewhere within the LACoFD service area, would be in compliance with secondary access provisions, requiring that the secondary egress routes are (at a minimum): navigable by a passenger vehicle weighing 6,000 pounds or less; of equal construction standard to the primary access road; free of locked gates or other features limiting access; and, to the extent practicable, not a road that directs traffic to the same outlet road as the primary road or results in a circular traffic flow (CCR Title 14 Section 1267.01[a]). Automatic sprinkler systems for the Project and Cumulative Projects, would be installed according to

building type in accordance with Section 903 (Automatic Sprinkler Systems) of the CFC and Section 903.2.111 (Specific Buildings Areas and Hazards) of the Fire Code. Within the City, all proposed development which includes two or more residential unit is also required to include fire sprinklers, which would be applicable to all cumulative projects within the City's jurisdiction (Santa Clarita Municipal Code, Section 17.57.025[D][12]). Compliance with these and other applicable code provisions pertaining to fire safety and emergency response would reduce the severity and frequency of fire and emergency medical emergencies requiring LACoFD attention and resources, which would therefore reduce impacts associated with capacity or level of service problems created as a result of growth and development occurring within LACOFD's service area.

In response to increasing demands for new facilities, equipment, and staffing created by new development, the County has implemented a Developer Fee Program to fund the purchase of fire station sites, the construction of new stations, and the funding of certain capital equipment in the high-growth areas of the County, including the Santa Clarita Valley, Antelope Valley, the Malibu/Santa Monica Mountains area, and the City or Calabasas (County of Los Angeles 2014; LACoFD 2021c). The City of Santa Clarita is currently served by 15 LACoFD fire stations, including the recently completed Station 104 (26901 Golden Valley Road) completed in 2020. LACoFD's 2022 Developer Fee Detailed Fire Station Plan identified 6 completed fire stations, 13 proposed fire stations, 1 expansion station, 3 helispots, and the necessary capital equipment that will be required as well as the anticipated costs and time frames provided that development occurs as expected. It should be noted that Cumulative Projects LA4, LA5, LA7, and LA8 include fire stations within their development, which would help meet fire protection service needs in the surrounding area. The anticipated costs identified in the Plan will be funded by Developer Fee revenues or funds which the Consolidated Fire Protection District of Los Angeles County has advanced from other sources (LACoFD 2022b).

As identified in the General Plan EIR, while cumulative growth within the LACoFD service area would result in a need for additional fire protection services to serve new development, these impacts would be mitigated through the County's Developer Fee Program to fund the purchase of fire station sites, the construction of new stations, and the funding of certain capital equipment and compliance with the Fire Code within segments of the service area most likely to experience growth (County of Los Angeles 2014). The Fire Facilities fee would be applicable to Project, and all Cumulative Projects. Finally, as discussed above under the discussion for Threshold 4.15a(i) of Section 4.15.5, Impact Analysis, the California Constitution requires local agencies to provide public safety services, including fire protection and emergency medical services. Therefore, it is reasonable to conclude that the County and City of Santa Clarita would comply with that provision to ensure that public safety services are provided to Cumulative Projects within the LACoFD service area. In addition, the LACoFD participates in the California Fire Service and Rescue Emergency Mutual Aid System and thus, mutual aid agreements would ensure that cumulative projects would receive supplemental personnel and resources during a major emergency.

Similar to the Project, all Cumulative Projects, as well as other "projects" under CEQA proposed within the LACoFD service areas, would be required to assess the demands placed on local LACoFD stations, staff, and facilities needed to serve project-related growth and development, supported by the County's General Fund, Fire Facility Fees, taxes, and other revenues that are generated as a result of urban development. The LACoFD utilizes the developer fees to address their infrastructure and staffing requirements, as set forth in their 2022 Developer Fee Detailed Fire Station Plan, which addresses the cumulative demands on fire services. As the Project would comply with applicable State and local provisions pertaining to fire safety and emergency response, would pay applicable Developer fees, and would implement MM-4.17.1, Construction Traffic Management Plan, during construction, the Project's incremental contribution to fire protection and emergency response services would not be cumulatively considerable, and there would be a less than significant cumulative impact.

Threshold 4.15a(ii): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:

Sheriff protection?

The geographic area for sheriff protection is the local Project site vicinity and the LASD service area, which is predominantly the unincorporated areas of the County (Cumulative Projects LA1 through LA14), but also includes incorporated cities, such as the Cumulative Projects within the City of Santa Clarita (SC1 through SC26). Regarding cumulative impacts from service level problems or provision of new or physically altered governmental facilities related to sheriff protection, cumulative public services impacts could occur if other related projects in the vicinity of the Project site would result in capacity or service level impacts in conjunction with the impacts of the Project, or if buildout of the General Plan, as identified in the General Plan EIR, would result in a significant impact to sheriff protection services, which the Project could thereby contribute to and/or exacerbate, resulting in a cumulatively considerable impact. As discussed in the General Plan EIR, the buildout of the General Plan would lead to an increase in the need for law enforcement services (County of Los Angeles 2014). Each cumulative project, however, would be required to demonstrate compliance with CEQA. Operational funding for LASD is derived from various types of tax revenues, which are deposited in the General Fund. The development of the Project, as well as cumulative projects, would result in the generation of additional tax revenue, which would in turn provide additional funding the LASD. Although additional funding through the County Board of Supervisors is not guaranteed, development of the Project, in conjunction with the cumulative projects, would incrementally contribute to cumulative public services impacts for sheriff protection, as other projects are implemented in the service area for the reasons discussed below.

As mentioned in Appendix I-2, the LASD has recently completed a new Santa Clarita Valley Sheriff Station at 26201 Golden Valley Road, Santa Clarita, 91350, which was recently constructed and was designed to serve the needs of its service area within the Santa Clarita Valley. The need for additional facilities to support law enforcement services will be determined with the CEO and Board of Supervisors.

Staffing requirements change over time and the LASD's staffing would need to be responsive to the demand for maintaining acceptable service ratios. Regarding funding for staffing, per Section 22.246.070 (Law Enforcement Facilities Mitigation Fee), of the County's Zoning Code, and Section 17.51.010(B) (Law Enforcement Facilitates Fee) of the Santa Clarita Municipal Code, development of the Project, all of the Cumulative Projects, and other related projects within the City and/or the unincorporated urban expansion areas of Santa Clarita, Newhall, and Gorman, would be required to pay the a law enforcement facilities mitigation fee to mitigate adverse impacts due to the inadequacy of law enforcement facilities that might otherwise occur due to new development (County of+ Los Angeles 2022b; City of Santa Clarita 2022b). In addition, as the Project and related projects are developed within LASD service areas, tax revenues from property taxes would be generated and deposited into the County or City General Fund, as determined to be appropriate by the Board of Supervisors. A portion of these revenues would then be allocated, in accordance with the County and City contractual service agreement, to maintain sheriff station staffing and equipment levels. Finally, public funds such as sales taxes that would be generated by residents of the Project, all of the Cumulative Projects analyzed in this Draft EIR, and other related projects within the LASD service areas, which would be used to cover the incremental costs associated with providing sheriff protection services. As such, the financial contribution through fees and taxes accumulated from future development would contribute to the future expansion or construction of new facilities to increase capacity and maintain adequate levels of service.

Similar to the Project, all Cumulative Projects, and other "projects" proposed within LASD service areas, would be required to assess the demands placed on local sheriff stations and the staff and facilities needed to serve project related growth, to be supported by the City and County's General Fund, the Law Enforcement Facilitates Mitigation Fee, and other public revenues that occur as a result of urban development. As the Project would comply with payment of the Law Enforcement Facilitates Mitigation Fee and would contribute to the General Fund through taxes levied upon future residents, the Project's incremental contribution to law enforcement services would not be cumulatively considerable, and there would be a less than significant cumulative impact.

Threshold 4.15a(iii): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:

Schools?

The geographic area for schools is the Newhall School District and the William S. Hart Union High School District. Regarding cumulative impacts from capacity problems, service level problems, or provision of new or physically altered governmental facilities related to schools, cumulative public services impacts could occur if other related projects in the Newhall School District or William S. Hart Union High School District would result in capacity or service level impacts in conjunction with the impacts of the Project. As discussed in the General Plan EIR, the buildout of the General Plan would lead to an increase in the need for school services (County of Los Angeles 2014). Each cumulative project, however, would be required to pay established school impact fees in accordance with SB 50. As discussed in the General Plan EIR, the fees authorized for collected under SB 50 are conclusively deemed full and adequate mitigation of impacts on school district facilities (County of Los Angeles 2014). Development of the Project would not contribute to any cumulative public services impacts as other projects are implemented in the Newhall School District and the William S. Hart Union High School District (school service area) for the reasons discussed below. As stated in Appendix I-4, neither the William S. Hart Unified High School District nor the Newhall School District have any plans for new or expanded facilities. Therefore, when considering past, planned, and future proposed projects, cumulative impacts have been determined by the school districts to be less than significant.

The Project, and all Cumulative Projects analyzed in this Draft EIR, would be subject to assessment of applicable school fees at the rate in effect at the time of issuance of building permits. The funding program established by SB 50 has been found by the State Legislature to constitute "full and complete mitigation of the impacts by any legislative of adjudicative act… on the provision of adequate school facilities" (Government Code Section 65995[h]). As a result, the payment of fees authorized for collection under SB 50 to the Newhall School District and William S. Hart Union High School District are conclusively considered full mitigation for project impacts, including the Project and all Cumulative Projects. Regarding construction impacts, construction traffic generated by the Project could combine with construction traffic generated by other related projects within the school district's service areas (including the Cumulative Projects) to negatively impact the operation of schools within the Newhall School District and/or William S. Hart Union High School District. Construction the Project and Cumulative Projects would require the participation of construction employees who would be hired from a mobile, regional construction work force. Given the mobility and short durations of work at a particular site, and a large construction labor pool that can be drawn upon in the region, construction employees would not be expected to relocate their families or their residences within the Newhall School District or William S. Hart Union High School District or from other school districts due to working on the Project or Cumulative Projects. Accordingly, construction the Project and/or Cumulative Projects would not result in a notable increase in the resident population or generate new students needing to attend local schools. Additionally, Cumulative Projects LA7, LA8, and LA14 would also include schools

as part of their projects, which would benefit future residents in the area. Thus, the schools serving the Project site (Pico Canyon Elementary School, Rancho Pico Junior High School, and West Rancho High School) would not be subject to substantial construction-related traffic. Similar to the Project, the Cumulative Projects may have construction management plans that would reduce traffic impacts near schools. Nevertheless, as the Project would implement MM-4.17-1 (Construction Traffic Management Plan), the Project would not make a cumulatively considerable contribution to capacity or service level problems for schools during construction or operational activities, and there would be a less than significant cumulative impact.

Threshold 4.15a(iv): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:

Parks?

The geographic area for cumulative analysis regarding parks is PNA Study Area #49, which includes the Project site as well as the sites for Cumulative Projects LA1 through LA14, and is adjacent to the site for Cumulative Project SC1. Regarding cumulative impacts from capacity problems, service level problems, or provision of new or physically altered governmental facilities related to parks, cumulative public services impacts could occur if other related projects in (or adjacent to) Study Area #49 would result in capacity or service level impacts in conjunction with the impacts of the Project. Development of the Project would not contribute to any cumulative public services impacts as other projects are implemented in the County for the reasons discussed below.

Pursuant to the Quimby Act, new residential subdivision developments within and adjacent to Study Area #49, and elsewhere in the County, would be required to donate parkland and/or pay in-lieu fees for parks. The payment of park fees and/or donation of parkland would ensure that established parkland and park facility standards are met with respect to the additional needs created by residential subdivision developments. In addition, Cumulative Projects LA4, LA5, LA8, LA9, LA10, and LA14 would contain 70.2 acres and 14 lots of recreational and park amenities on-site, not including open space.

Regarding construction impacts, some of the construction workers for the Project and Cumulative Projects are expected to reside in the area and, therefore, would not place additional pressure on existing park facilities. Generally, any increase is anticipated to be negligible because construction workers are highly transient in their work location and likely would use parks near their place of residence. However, given that a number of park facilities are located near the Project site and Cumulative Project sites, there is the potential for construction workers to use these facilities during their lunch break. Nevertheless, any resulting increase in the use of these facilities would be temporary and would occur during off-peak usage hours (i.e., weekdays compared to weekends when peak park and recreation usage occurs), which would not result in a cumulatively considerable impact regarding construction.

For the reasons discussed above, the Project along with past, present, and reasonably future projects, would not result in capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for park services. As such, cumulative impacts to parks would be less than significant and would not be cumulatively considerable.

Threshold 4.15a(v): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:

Libraries?

Regarding cumulative impacts from capacity problems, service level problems, or provision of new or physically altered governmental facilities related to libraries, cumulative public services impacts could occur if the Project, in combination with the Cumulative Projects, would result in capacity or service level impacts, or if buildout of the General Plan, as identified in the General Plan EIR, would result in a significant impact to library services at Stevenson Ranch Library, which the Project could thereby contribute to and/or exacerbate, resulting in a cumulatively considerable impact. The General Plan EIR does not identify an existing cumulative impact to library services (County of Los Angeles 2014). Development of the Project would not contribute to any cumulative public services impacts as other projects are implemented in the County for the reasons discussed below.

The Project and Cumulative Projects would result in a temporary increase in population during construction due to the influx of construction workers. Some of these construction workers are expected to reside in the area and, therefore, would not place additional pressure on existing library facilities. Generally, an increase is anticipated to be negligible because construction workers are highly transient in their work location, the nearest library is several miles from the Project site, library hours are not conducive to daily construction schedules, and likely would use libraries near their place of residence. Therefore, and for the reasons stated above, construction of the Project is not expected to increase demand on existing park facilities to residents of the Project and Cumulative Projects would be serviced by the Stevenson Ranch Library, while Cumulative Projects in the City of Santa Clarita would also be serviced by the Santa Clarita Public Library. Future residential and nonresidential development associated with the Project and Cumulative Projects within unincorporated Los Angeles County would be required to pay the LACL's special tax rate of $33.20 per parcel for the 2022-2023 fiscal year, which may increase annually (Appendix A-2). Future residential development in the unincorporated County (including the Project and Cumulative Projects LA1 through LA13), would also be required to pay the County's library facilities mitigation fee (Zoning Code Section 22.248.050). The fee for projects within the Santa Clarita Valley (Area 1) is $1,096 per dwelling unit during preparation of this Draft EIR (Appendix A-2). Cumulative Projects within City of Santa Clarita would be subject to the City's Library Facilities and Technology Mitigation Fee. These one-time library facilities mitigation fees on new construction would help offset demand for library services due to population growth, both for the LACL system and City of Santa Clarita Library. In addition, correspondence with the LACL indicated that, while there are no plans to expand the Stevenson Ranch Library, plans have been set forth to build a new library within the new FivePoint Valencia development over the next 20 to 30 years, which could serve the Project and all of the Cumulative Projects (Appendix I-6). Additionally, as detailed in Table 2-2 of Chapter 2, Environmental Setting, Cumulative Project LA7 (Mission Village) would include development of one library. According to the LACL, developer fees collected for the Project would mitigate for impacts on the library system (Appendix I-6). As developer fees would be collect for the Project and Cumulative Projects in the City and County, these fees can similarly be assumed to mitigate for cumulative impacts through the provision of additional facilities, materials, and/or services.

For these reasons, the Project would not result in capacity or service level problems or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for library services. As such, cumulative impacts to libraries would be less than significant and would not be cumulatively considerable.

Threshold 4.15a(vi): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:

Other public facilities?

The cumulative geographic area for other public facilities (i.e., trails) is the local vicinity (including all Cumulative Projects) and the Santa Clarita Valley Planning Area. Regarding cumulative impacts from capacity problems, service level problems, or provision of new or physically altered governmental facilities related to trails, cumulative public services impacts could occur if all Cumulative Projects in the Santa Clarita Valley Planning Area would result in capacity or service level impacts in conjunction with the impacts of the Project, or if buildout of the General Plan, as identified in the General Plan EIR, would result in a significant impact to trail services in the Santa Clarita Valley Planning Area, which the Project could thereby contribute to and/or exacerbate, resulting in a cumulatively considerable impact. The General Plan EIR does not identify an existing cumulative impact to trails (County of Los Angeles 2014). Development of the Project would not contribute to any cumulative public services impacts as other projects are implemented in the County for the reasons discussed below.

Grants from State and County bond sources are available to fund trail facilities in urban areas and funding for maintenance of those facilities would be provided through property assessments and taxes levied from the Project and Cumulative Projects' residents. These tax revenues from Project and Cumulative Projects' residents would serve to reduce the potential capacity and service level problems by allowing for adequate funding for the provision and maintenance of trail facilities. While the Project and related projects in the Santa Clarita Valley Planning Area would increase the service population located adjacent to public trail facilities, the Project dedication of on-site trail facilitates in proximity to future residents would ensure that incremental Project capacity and level of service impacts to trails in the Santa Clarita Valley Planning Area would not be cumulatively considerable. On-site trails would be dedicated to and managed by DPR (as illustrated in Figure 3-2) and would be consistent with the objectives of DPR and the County to provided expanded trail facilities for County residents and increase trail connectivity in the region (DPR 2018, Appendix A-2). Further, the General Plan EIR does not identify any existing significant impacts (cumulative or otherwise) regarding capacity and level of service problems for trail facilities (County of Los Angeles 2014).

Regarding cumulative construction impacts, the Project and related projects would result in a temporary increase in population during construction due to the influx of construction workers. Some of these construction workers are expected to currently reside in the area and, therefore, would not place additional pressure on existing trail facilities. Generally, this increase is anticipated to be negligible because construction workers are highly transient in their work location and likely would utilize trails near their place of residence. In addition, as lunch break times are typically short (30 to 60 minutes), they are not long enough for construction workers to take advantage of trail facilities and return to work within the allotted time. Given the proximity of local trails to the Project site and Cumulative Project sites, there is the potential for construction workers to utilize these facilities during their lunch break. Although there is a potential for construction workers to utilize these trail facilities, any resulting increase in the use of these facilities would be temporary and would occur during off-peak usage hours (i.e., weekdays compared to weekends when peak park and recreation usage occurs), which would not be anticipated to result in any cumulatively substantial adverse impacts related to capacity or service level problems or require construction of additional trail facilities. None of the cumulative projects would interfere with existing trails in the Project vicinity.

For these reasons, the Project would not result in a cumulatively considerable impact regarding capacity or service level problems or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for other public services. The Project would facilitate additional dedicated trail facilities on-site, which would reduce pressure on existing dedicated trail facilitates in the Santa Clarita Valley Planning Area. Additionally, as detailed in Table 2-2 of Chapter 2, Environmental Setting, several projects, including Cumulative Projects LA1 through LA12, SC3, SC6, and SC14 all include open space and/or recreational amenities, which may contain trails and other public facilities, which would further provide facilities for future residents. As such, cumulative impacts to trails would be less than significant and would not be cumulatively considerable.

4.15.7 Mitigation Measures

MM-4.1-1 from Section 4.1, Aesthetics, MM-4.17-1, from Section 4.17, Transportation, and MM-4.20-1 through MM-4.20-5, of Section 4.20, Wildfire, of this Draft EIR are applicable to this analysis.

4.15.8 Level of Significance After Mitigation

Project impacts regarding capacity problems, service level problems, and/or the provision of a new or physically altered governmental facility related to fire protection would be less than significant with the implementation of MM-4.17-1, from Section 4.17, Transportation, and MM-4.20-4 and MM-4.20-5 from Section 4.20, Wildfire, of this Draft EIR.

Project impacts regarding capacity problems, service level problems, and/or the provision of a new or physically altered governmental facility related to sheriff protection, would be less than significant with mitigation with implementation of MM-4.1-1 from Section 4.1, Aesthetics, and MM-4.17-1 from Section 4.17, Transportation.

Project impacts regarding capacity problems, service level problems, and/or the provision of a new or physically altered governmental facility related to schools would be less than significant with implementation of MM-4.17-1 from Section 4.17, Transportation.

Project impacts regarding capacity problems, service level problems, and/or the provision of a new or physically altered governmental facility related to parks would be less than significant with implementation of MM-4.17-1 from Section 4.17, Transportation.

Project impacts regarding capacity problems, service level problems, and/or the provision of a new or physically altered governmental facility related to other facilities would be less than significant with implementation of MM-4.17-1 from Section 4.17, Transportation.

4.15.9 References

Bowie, A. and W. Wiles. 2015. “School Fees: Do’s, Musts and Do Nots. November 2015.” Accessed July 20, 2022. https://fiscal.sweetwaterschools.org/wp-content/uploads/blogs.dir/56/files/2015/11/School-Fees-Dos-Musts-and-Do-Nots-11-12-2015.pdf.

CAL FIRE (California Department of Forestry and Fire Protection). 2018. *Strategic Fire Plan for California*. State Board of Forestry and Fire Protection. https://www.paperturn-view.com/cal-fire-communications/strategicplan2019-final?pid=MjU253660.

CAL FIRE. 2022. "FHSZ Viewer." https://egis.fire.ca.gov/FHSZ/.

Cal OES (California Governor's Office of Emergency Services). 2017. *State of California Emergency Plan*. October 1, 2017. Accessed February 13, 2024. https://www.caloes.ca.gov/wp-content/uploads/Preparedness/Documents/California_State_Emergency_Plan_2017.pdf.

Cal OES. 2019a. *Law Enforcement Mutual Aid Plan*. 2019 Edition. Accessed February 13, 2024. https://www.caloes.ca.gov/wp-content/uploads/Law-Enforcement/Documents/Blue-Book_Law-Enforcement-Mutual-Aid-Plan.pdf.

Cal OES. 2019b. California Fire Service and Rescue Emergency Mutual Aid Plan. Fire and Rescue Division. Accessed February 13, 2024. https://www.caloes.ca.gov/wp-content/uploads/Fire-Rescue/Documents/CalOES_-_Fire_and_Rescue_-_Mutual_Aid_Plan-3.pdf.

California Building Standards Commission. 2022. 2022 California Building Code, Title 24, Part 2 (Volumes 1 & 2). Accessed February 13, 2024. https://codes.iccsafe.org/content/CABC2022P1.

CHP (California Highway Patrol). 2024. "(540) Newhall." Accessed March 14, 2024. https://www.chp.ca.gov/find-an-office/southern-division/offices/(540)-newhall.

City of Santa Clarita. 2011. "Conservation and Open Space Element." In *City of Santa Clarita General Plan*. June 2011. Accessed July 5, 2022. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/6%20-%20Conservation%20and%20Open%20Space%20Element.pdf.

City of Santa Clarita. 2022a. Parks Division. Last accessed February 8, 2024. https://santaclarita.gov/parks-division/.

City of Santa Clarita. 2022b. Santa Clarita Municipal Code. Accessed February 13, 2024. https://www.codepublishing.com/CA/SantaClarita/.

City of Santa Clarita. 2024. Facilities Directory. Accessed February 13, 2024. https://santaclarita.gov/parks-division/parks/.

County of Los Angeles. 2008. Law Enforcement Facilities Mitigation Fee For North Los Angeles County (Supervisorial District 5). Accessed February 13, 2024. https://file.lacounty.gov/SDSInter/bos/bc/089289_LAWENFORCEMENTMITIGATIONFEE.pdf.

County of Los Angeles. 2012. *Los Angeles County Operational Area Emergency Response Plan*. Accessed February 13, 2024. https://file.lacounty.gov/SDSInter/bos/supdocs/69205.pdf.

County of Los Angeles. 2013. *County of Los Angeles Trails Manual*. Revised June 2013. Accessed June 1, 2022. https://trails.lacounty.gov/Files/Documents/1138/LA%20County%20Trails%20Manual%20%28Revised%2020171031%29.pdf.

County of Los Angeles. 2014. *Los Angeles County General Plan Update Draft Environmental Impact Report*. SCH No. 2011081042. Accessed March 14, 2024. https://case.planning.lacounty.gov/assets/upl/project/gp_2035_deir.pdf.

County of Los Angeles. 2015. *Los Angeles County General Plan 2035*. Adopted October 6, 2015. Updated July 12, 2022. Accessed March 14, 2024. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

County of Los Angeles. 2020. *2020 County of Los Angeles All-Hazards Mitigation Plan*. Accessed July 5, 2022. https://ceo.lacounty.gov/wp-content/uploads/2022/04/County-of-Los-Angeles-All-Hazards-Mitigation-Plan-APPROVED-05-2020.pdf.

County of Los Angeles. 2021. *County of Los Angles Annual Comprehensive Financial Report*. Fiscal Year Ended June 30, 2021. Office of the Auditor-Controller. Accessed July 19, 2022. https://auditor.lacounty.gov/wp-content/uploads/2022/01/Annual-Comprehensive-Financial-Report-FY-2020-2021.pdf.

County of Los Angeles. 2022a. "Safety Element." In *Los Angeles County General Plan 2035*. Adopted October 6, 2015. Updated July 12, 2022. Accessed July 19, 2022. https://planning.lacounty.gov/wp-content/uploads/2022/11/12.1_gp_final-general-plan-ch12_updated_2022.pdf.

County of Los Angeles. 2022b. Los Angeles County Code. Version June 7, 2022. Accessed July 5, 2022. https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances.

DPR (Los Angeles County Department of Park and Recreation). 2016a. "Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment." Accessed July 1, 2022. https://lacountyparkneeds.org/wp-content/uploads/2016/06/ParksNeedsAssessmentSummary_English.pdf.

DPR. 2016b. "Los Angeles Countywide Comprehensive Park & Recreation Needs Assessment, Appendix A, Unincorporated Stevenson-Newhall Ranch-Castaic-Val Verde Study Area Profile, Study Area ID #49." Accessed July 5, 2022. https://lacountyparkneeds.org/wp-content/root/FinalReportAppendixA/StudyArea_049.pdf.

DPR 2016c. "Los Angeles Countywide Comprehensive Park & Recreation Needs Assessment, Appendix A, Unincorporated Castaic-Val Verde Study Area Profile, Study Area ID #91." Accessed July 19, 2022. https://lacountyparkneeds.org/wp-content/root/FinalReportAppendixA/StudyArea_091.pdf.

DPR. 2018. "Santa Susana Mountains Trails Master Plan (Phase II)." December 2018. Accessed June 3, 2022. https://parks.lacounty.gov/santa-susana-mountains-trails-master-plan-phase-ii-aims-to-promote-multi-use-regional-trails-in-the-santa-clarita-valley/.

DPR 2022a. "Planning and Development." Accessed May 19, 2022. https://parks.lacounty.gov/planning-and-development.

DPR. 2022b. "Full List of Parks." Accessed May 19, 2022. https://parks.lacounty.gov/park-overview/?row=2#fullListOfParksColumn.

DRP (Los Angeles County Department of Regional Planning). 2022. "Safety Element Update." Climate Action. Accessed July 5, 2022. https://planning.lacounty.gov/blog/safety-element-update-public-review-period-starts-10-5/.

Durbin. R. 2021. Request for Information Regarding Fire Protection Services, Trails at Lyons Canyon Project. Personal correspondence from R. Durbin (Chief, Forestry Division, Los Angeles County Fire Department) to B. Allee (Managing Associate, Environmental Science Associates). July 7, 2021. Provided as Appendix I-1.

HMDB (Historical Marker Database). 2022. "Marge Feinberg Rim of the Valley Trail (Saddletree Ranch Trailhead)." Accessed May 27, 2022. https://www.hmdb.org/PhotoFullSize.asp?PhotoID=490017.

HUHSD (William S. Hart Union High School District). 2022. "About Us." Accessed July 5, 2022. https://www.hartdistrict.org/apps/pages/index.jsp?uREC_ID=317465&type=d&pREC_ID=725073.

LACL (Los Angeles County Library). 2022a. "About the Library." Accessed July 5, 2022. https://lacountylibrary.org/aboutus/.

LACoFD (Los Angeles County Fire Department). 2019. *Feasibility Study for the Provision of Fire Protection, Paramedic, and Incidental Services for the City Of Manhattan Beach by the Consolidated Fire Protection District of Los Angeles County*. Accessed February 13, 2024. https://file.lacounty.gov/SDSInter/bos/supdocs/133070.pdf.

LACoFD. 2020. "Fiscal Year-End Report, Report of In-Kind Contributions and Updated Developer Fee for the Benefit of the Consolidated Fire Protection District of Los Angeles County." January 28, 2020. Accessed July 19, 2022. http://file.lacounty.gov/SDSInter/bos/supdocs/143490.pdf.

LACoFD. 2021a. "Los Angeles County Fire Department Overview Booklet." August 2021. Accessed July 5, 2022. https://fire.lacounty.gov/wp-content/uploads/2021/09/Department-Overview-Booklet_single-pages_9.09.21-A.pdf.

LACoFD. 2021b. "Developer Fee Detailed Fire Station Plan for the County of Los Angeles Developer Fee Program for the Benefit of the Consolidated Fire Protection District of Los Angeles County." September 2021. Attachment A. Accessed July 5, 2022. https://fire.lacounty.gov/wp-content/uploads/2022/01/2021-Five-Year-Plan-Update-Attachment-A.pdf.

LACoFD. 2021c. "Developer Fee for the Benefit of the Consolidated Fire Protection District of Los Angeles County, 2021 Developer Fee Update, Fee Calculation Summary, Attachment C." Accessed July 5, 2022. https://fire.lacounty.gov/wp-content/uploads/2022/01/2021-Update-Fee-Calc-Summary-Attachment-C.pdf.

LACoFD. 2022a. "2021 Statistical Summary." Accessed June 2022. https://fire.lacounty.gov/wp-content/uploads/2022/06/2021-Statistical-Summary.pdf.

LACoFD. 2022b. Developer Fee Detailed Fire Station Plan For The County Of Los Angeles Developer Fee Program For The Benefit Of The Consolidated Fire Protection District Of Los Angeles County. Accessed February 8, 2024.

LASD (Los Angeles County Sheriff's Department). 2021a. "Santa Clarita Valley Sheriff's Station." Accessed July 5, 2022. https://lasd.org/santa-clarita-valley/.

LASD. 2021b. "Historical Part I and II Crimes (2021)." Accessed July 5, 2022. http://shq.lasdnews.net/CrimeStats/CAASS/2021-PART_I_AND_II_CRIMES.csv.

LASD. 2021c. La County Sheriff's Department Employees Are Now Mirroring La County Demographics. Accessed February 13, 2024. https://lasd.org/lasd-employees-are-now-mirroring-la-county-demographics/.

LASD. 2022. "Part I and Part II Crimes Data." Accessed July 19, 2022. https://lasd.org/transparency/part1and2crimedata/#part1.

LASD. 2024a. Community College Bureau Reports – CCB. Accessed February 13, 2024. https://lasd.org/transparency/ccbreports/.

LASD. 2024b. LASD Metrolink Bureau. Accessed February 13, 2024. https://lasd.org/lasd-metrolink-bureau/.

LASD. 2024c. Court Services. Accessed February 13, 2024. https://lasd.org/courtservices/.

MRCA (Mountains Recreation and Conservation Authority). 2022. "About." Accessed May 19, 2022. https://mrca.ca.gov/about/.

NCES (National Center for Educations Statistics). 2022. "William S. Hart Union High School District: District Directory Information for the 2020-2021 School Year." Accessed July 5, 2022. https://nces.ed.gov/ccd/districtsearch/district_detail.asp?Search=2&ID2=0642510&DistrictID=0642510&details=1.

NSD (Newhall School District). 2020. "Developer Fees Schedule." Effective May 26, 2020. Accessed February 13, 2024. https://www.newhallschooldistrict.com/site/handlers/filedownload.ashx?moduleinstanceid=5952&dataid=7846&FileName=Developer%20Fees%20Schedule%20Effective%2009.19.22.pdf.

Public School Review. 2024. Newhall School District. Last accessed February 8, 2024. https://www.publicschoolreview.com/california/newhall-school-district/627180-school-district.

SchoolWorks. 2022. "Developer Fee Studies." Accessed July 20, 2022. https://www.schoolworks-gis.com/developer-fee-studies.

SMMC and MRCA (Santa Monica Mountains Conservancy and Mountains Recreation and Conservation Authority). 2014. "Trail Dedicated at Ed Davis Park in Towsley Canyon in Santa Clarita." September 29, 2014. Accessed July 20, 2022. https://smmc.ca.gov/wp-content/uploads/2020/12/Don-Mullally-Trail-Dedicated-in-Santa-Clarita-Woodlands-Park.pdf.

USFA (United States Fire Administration). 2022. "What is the WUI?" Last accessed February 8, 2024. https://www.usfa.fema.gov/wui/what-is-the-wui.html.



SOURCE: Bing Maps 2021, Open Street Map 2019, LA County

DUDEK

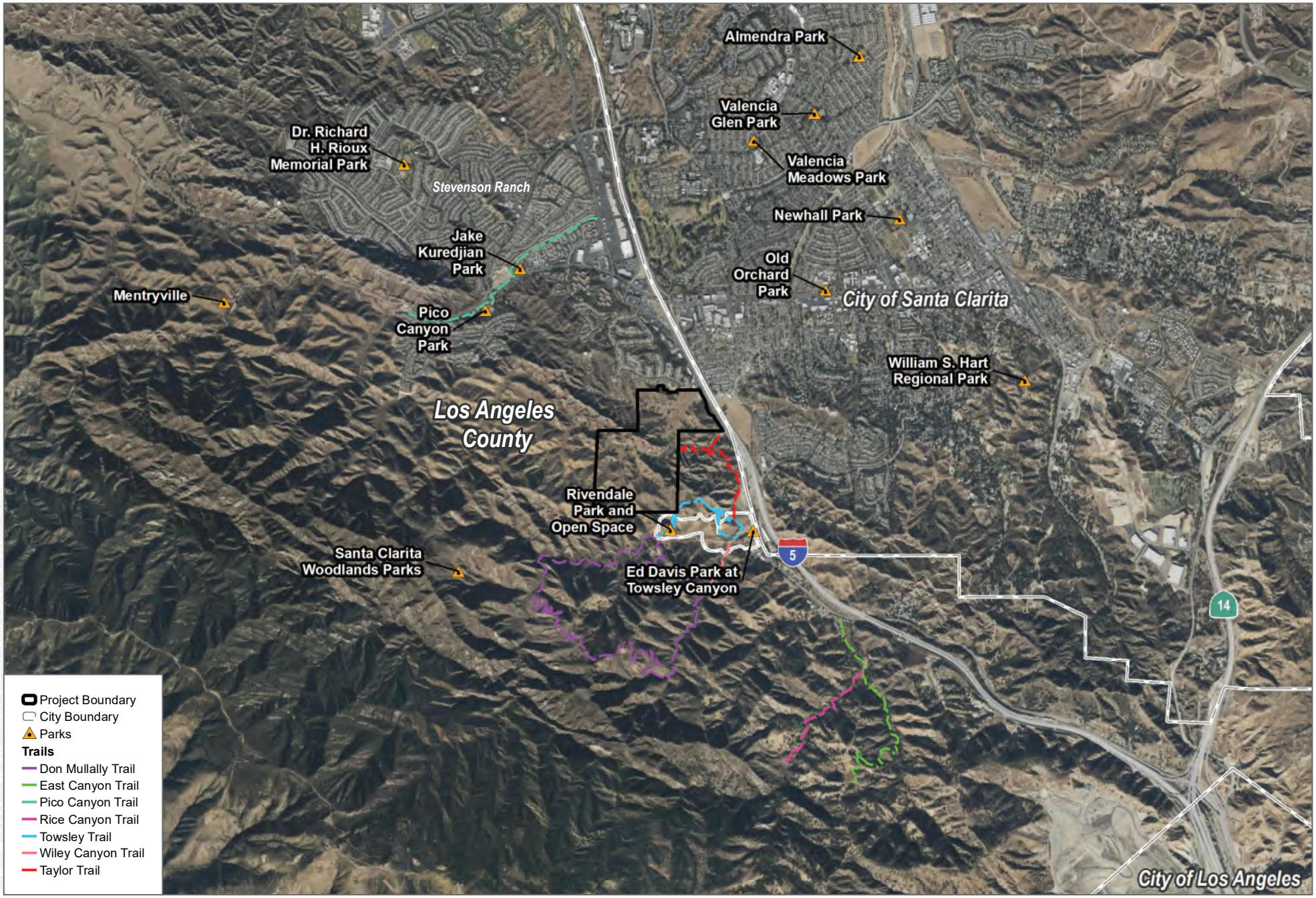
0 2,500 5,000 Feet

FIGURE 4.15-1

Existing Fire Stations, Sheriff Stations, and Schools Serving the Project Site

Trails at Lyons Canyon Project

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SOURCE: Bing Maps 2021, Open Street Map 2019, LA County 2022

DUDEK

0 2,100 4,200 Feet

FIGURE 4.15-2

Existing Parks and Dedicated Trails

Trails at Lyons Canyon Project

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4.16 Recreation

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to recreation, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data and reports from the Los Angeles County Department of Parks and Recreation, the Los Angeles County General Plan 2035, and the City of Santa Clarita (City). Other sources consulted are listed in Section 4.16.9, References.

4.16.1 Existing Conditions

This section describes the existing conditions in the Project area and identifies the resources that could be affected by the Project.

Regional Setting

National Forests and Other Federal Lands

The Angeles National Forest (and a small portion of the Los Padres National Forest) encompass nearly 650,000 acres of land within the unincorporated areas of the County. The Angeles National Forest stretches across the County in two sections (a northern section and southwestern section) encompassing the San Gabriel Mountain Range and portions of the Sierra Pelona Ridge to the northwest, and is 1,018 square miles, or 25 percent of the land area of the County (County of Los Angeles 2015). The U.S. Forest Service is responsible for managing public forest lands; however, within the boundaries of the national forests, nearly 40,000 acres are privately-owned. For these parcels, commonly referred to as "in-holdings," the County retains responsibility for land use regulation (County of Los Angeles 2015). Recreational facilities in the Angeles National Forest include hiking trails, parks and picnic areas, and campgrounds (USDA and Forest Service 2022). The Angeles National Forest is located to the north and southeast of the Santa Clarita Valley. The western border of the southeastern portion of the Angeles National Forest is approximately five miles east of the Project site, and the southern border of the northern Angeles National Forest land is about eight miles north from the Project site, respectively.

The U.S. Bureau of Land Management (BLM) also owns thousands of acres of open space land in the northern portion of the County (including lands to the west of the Project site). These lands serve to preserve federally-listed endangered and threatened species, and where compatible, provide recreational, agricultural, energy, and mining activities (County of Los Angeles 2015).

State Recreational Facilities

There are three California State Parks (State parks) located within the Santa Clarity Valley: Placerita Canyon State Park (six miles east of the Project site), Santa Susana Pass State Historic Park (9 miles southwest of the Project site), and Castaic Lake Recreation Area (10 miles northeast of the Project site) (City of Santa Clarita 2011). These State parks, including trail systems and other notable recreational facilities, are described briefly, below:

Placerita Canyon State Park

Placerita Canyon State Park, the closest State Park to the Project site, is operated by the County (DPR 2022a). The park preserves and protects the site of the first discovery of gold in California, in 1842. Designated as a State

Historic Landmark, Placerita Canyon State Park is situated in the transition zone between the San Gabriel Mountains and the Mojave Desert, and contains sandstone formations, seasonal streams and riparian oak woodlands, as well as stands of cottonwood and native sycamore trees (DPR 2022b). The Placerita Canyon State Park supports eight trails with a trail network over 12 miles in length and provides significant linkages connecting the Angeles National Forest, the Santa Susana Mountains, the Simi Hills and the Santa Monica Mountains, and contains the remnants of an historic ranch (DPR 2022b). The park also contains public restrooms, a nature center, animal exhibits, equestrian staging areas, a gift shop, a museum, and picnic tables (DPR 2022a).

Santa Susana Pass State Historic Park

The Santa Susana Pass State Historic Park is located near the County line just south of SR-118, where the Simi Hills transition into the Santa Susana Mountains. The Santa Susana Pass State Historic Park is managed by California Department of Recreation (popularly referred to as "California State Parks") and is rich in natural, historical, and cultural significance, with lands dominated by high, narrow ridges and deep canyons covered with an abundant variety of plant life (DPR 2022b). The park offers panoramic views of the rugged natural landscape as a striking contrast to the developed communities nearby. The trails throughout the park support hiking, biking and equestrian uses. Other activities and facilities include picnic areas, nature and wildlife viewing, intermittent hosted exhibits, and significant historic/cultural areas, including the Santa Susana Stage Road (listed on the National Register of Historic Places), and the 500-acre Spahn Ranch (DPR 2022b).

Castaic Lake Recreation Area

Castaic Lake State Recreation Area, one of the largest state water reservoirs in California, is operated by the County. This 12,658-acre facility includes 29 miles of shoreline and the 425-foot-tall Castaic Dam. Castaic Lake has two bodies of water: the upper lake, which includes a boat ramp and allows sailing, power boating, water and jet skiing, and fishing, and the lower lake, which is for non-power boating and canoeing, and includes picnic areas, launch areas, and a swim beach. The park is also known for hiking, horseback riding, wake boarding, jet skiing, and camping (DPR 2022c).

County of Los Angeles Parks and Recreational Facilities

The Los Angeles County Department of Parks and Recreation (DPR) oversees the development, operation, and maintenance of County parks and recreational facilities (DPR 2022d). There are 181 County parks, ranging from local neighborhood parks, sports parks, and golf courses to regional recreational centers and nature centers and wildlife sanctuaries (DPR 2022e). The County's park system is composed of approximately 70,000 acres of land located within cities and unincorporated areas in the County (County of Los Angeles 2015). The County has an adopted standard of 4 acres of local parkland for every 1,000 people and 6 acres of regional parkland for every 1,000 people (County of Los Angeles 2015). As of 2016, the County had an average of 3.3 acres of parkland per 1,000 residents.

Other Recreational Facilities in the County

Conservancy Lands

The unincorporated areas of the County house scenic areas and diverse topographic, geologic and vegetative features that provide important habitat for wildlife, but also hold recreational value. Publicly-created and non-profit conservancies play a critical role in preserving many of these areas through the acquisition and preservation of

available open space areas. The County partners with a number of conservancies and other non-state agencies to manage and preserve open-space lands (County of Los Angeles 2015). Within the Santa Clarita Valley Planning Area, conservancies include the Mountains Recreation and Conservation Authority (MRCA) and the Santa Monica Mountains Conservancy (SMMC). The MRCA is a local government public entity established in 1985 pursuant to the Joint Powers Act. The MRCA is a partnership between the SMMC, the Conejo Recreation and Park District, and the Rancho Simi Recreation and Park District.[1] The MRCA manages more than 75,000 acres of parkland that it owns or that is owned by the SMMC (MRCA 2022a).

Private Open Space

Open space dedications in the County are defined as privately-owned lands that have been set aside for permanent open space as part of a larger land development proposal (County of Los Angeles 2015). The California Open Space Easement Act of 1969 sets forth general conditions governing the creation of recognized open space easements (County of Los Angeles 2015). Agreements or contracts establishing such easements specify the standards and conditions for uses and activities permitted within the area covered, which can include amenities such as publicly accessible multi-use trails providing connectivity to adjacent public parks and/or trail systems. Commitment of such lands to open space use in perpetuity is typically assured through deed-restrictions or dedication of construction rights secured at the time of development permit approval. Within dedicated open space areas, standards and conditions for use are specifically set forth as conditions of the zoning permit or subdivision tract map (County of Los Angeles 2015). Private spaces can support both dedicated and non-dedicated trail facilities (discussed further below), which may be accessible for public use.

Santa Clarita Valley Planning Area Recreational Facilities

The Santa Clarita Valley Planning Area contains 71 acres of local parkland, which consists of parks of varying sizes that meet local needs, including community parks, neighborhood parks, pocket parks, and park nodes, as well as 14,425 acres of regional parkland (County of Los Angeles 2015). These local and regional facilities are owned and/or operated by the State, County, the City, and conservancies such as MRCA and SMMC. The Santa Clarita Valley Planning Area had a surplus of approximately 12,798 acres of regional parkland to support its population in 2010, with approximately 53 acres of regional parkland per 1,000 persons (County of Los Angeles 2015). Regarding local recreation, the Santa Clarita Valley Planning Area had a deficit of approximately 308 acres to support its unincorporated population in 2010, with approximately 0.7 acre of local parkland per 1,000 persons (County of Los Angeles 2015).

As detailed below in Section 4.16.2, Regulatory Requirements, the Project site is in the Unincorporated Stevenson-Newhall Ranch-Castaic-Val Verde Study Area (Study Area #49) of DPR's Parks Needs Assessment (PNA). Study Area #49 had a population of 20,030 and 197.5 acres of parkland in 2016, which resulted in a ratio of 9.9 acres of parkland per 1000 residents (DPR 2016a).

City of Santa Clarita Recreational Facilities.

The City Department of Parks, Recreation and Community Services currently maintains 36 parks (City of Santa Clarita 2022). The parks range in size from slightly more than 0.5 acre to 80 acres and include numerous recreational facilities (City of Santa Clarita 2011). DPR's PNA analyzed the parks to service population ratio for two study areas in the City: North Santa Clarita Study Area and South Santa Clarita Study Area. In 2016, the North Santa

[1] SMMC is a state agency while the Conejo Recreation and Park District and the Rancho Simi Recreation and Park District are local park agencies.

Clarita Study Area had a local parkland to service population ratio of 1.8 acres per 1,000 residents, and a regional ratio of 2 regional park acres per 1,000 residents (DPR 2016b). The South Santa Clarita Study Area had a total parkland to service population ratio of 4.8 park acres per 1,000 residents (DPR 2016c). The Project site is adjacent to the South Santa Clarita PNA Study Area (DPR 2016c).

Regional Trails

According to DPR, "regional trails extend over large expanses of land, providing a continuous route around or through areas such as mountain ranges, or around the rim of a valley" (DPR 2013). The Santa Susana Mountains Trails Master Plan, a comprehensive trails planning document incorporating portions of the Santa Clarita Valley Planning Area east of I-5 and south of the Newhall Ranch Specific Plan Area, identifies two regional riding, hiking, and/or multi-use trails: the Santa Clara River Trail, located approximately 3.8 miles north of the Project site and the Rim of the Valley Trail, approximately 2.5 miles south (DPR 2018a; HMDB 2022). Figure 4.1-1, Regional Trails Map, of Section 4.1, Aesthetics, shows the segments of these regional trails closest to the Project site.

Santa Clara River Trail

The regional Santa Clarita River Trail, proposed as part of the Santa Susana Mountains Trail Master Plan (discussed in Section 4.16.2, Regulatory Requirements), consists of a network of local trails following the east—west alignment of the Santa Clara River channel (DPR 2018a). The Santa Clara River is an ecologically rich, and valuable ecosystem and one of the last remaining naturalized river systems in Southern California (City of Santa Clarita 2011). The trail segments closest to the Project site are mostly paved trails traveling through urbanized areas of the City of Santa Clarita to the north.

Rim of the Valley Trail

A part of the SMMC Conservancy Zone, the Rim of the Valley Trail corridor is a circular network of trails connecting the Santa Monica Mountains to all the mountains surrounding the San Fernando, Simi, Conejo, and La Crescenta Valleys (SMMC 2024). Officially recognized in 2000 as the "Marge Feinberg Rim of the Valley Trail,"[2] the 200-mile Rim of the Valley Trail represents the backbone of the Rim of the Valley Trail corridor's trail network (SMMC 2022; HMDB 2022). The challenging, long distance Rim of the Valley Trail can be traced along many prominent ridgelines and offers broad, sweeping views of Santa Clarita Valley (DPR 2018b).

Local Setting

Figure 2-2, Surrounding and Nearby Land Uses, of Chapter 2, provides an overview of nearby land uses. The Project site is surrounded by open space, single-family residential, and limited commercial uses. The undeveloped and open space areas (including parks and recreational areas) surrounding the Project site are characterized by hillside and valley terrain, including steep slopes and defined ridgelines. These areas also support a network of dedicated and non-dedicated trails. The recreational facilities near the Project site, including trails, are detailed below.

Parks and Recreational Areas

A wide variety of parks and recreational facilities are located within the vicinity of the Project site. The nearest facilities are adjacent and south/southeast of the Project site, including the Taylor Trail Wilderness and Open Space, Rivendale Park and Open Space, and Ed Davis Park at Towsley Canyon. Santa Clarita Woodlands Park consists of

[2] Pursuant to Assembly Bill (AB) 1927 (Rim of the Valley)

four main recreational areas, including the Ed Davis Park in Towsley Canyon, East and Rice Canyon, Pico Canyon, and Mentryville. Together, these recreational areas compose 4,000 acres of public parkland that links the Santa Monica Mountains to the Angeles and Los Padres National Forests (MRCA 2022b).

Descriptions of these facilities, including the recreational facilities discussed above, are provided below in Table 4.16-1, Parks and Recreational Facilities Within Two Miles of the Project Site, organized by the local government entity managing the facility, including the County, the City, SMMC, and MRCA. Park and recreational facilities within two miles of the Project site, listed below in Table 4.16-1, total to approximately 5,364 acres.

Table 4.16-1. Parks and Recreational Facilities within Two Miles of the Project Site

Facility Name	Address	Distance from Project site (Direction)	Park Classification	Acres	Amenities
County of Los Angeles					
Taylor Trail Wilderness and Open Space	24955 The Old Rd Santa Clarita, CA 91381	Adjacent (SE)	Trailhead and Local Open Space	—	Hiking, biking, and equestrian trails, parking
Jake Kuredijan Park	25265 Pico Canyon Road Stevenson Ranch, CA 91381	1 mile (NW)	Local Park	6	Restroom, parking, walking trails, dog amenities
Pico Canyon Park	25600 Pico Canyon Road Stevenson Ranch, CA 91381	1.2 miles (NW)	Local Park	21	Hiking trails, picnic tables, restrooms
William S. Hart Regional Park	24151 North Newhall Avenue Newhall, CA 91321	2 miles (E)	Regional Park	265	Barbecue, hiking trails, mountain biking trails, museum, picnic tables, restroom, senior center
Dr. Richard H. Rioux Memorial Park	26233 West Faulkner Drive Stevenson Ranch, CA 91381	2 miles (NE)	Local Park	17	Barbecue, baseball fields, basketball courts, children's play areas, horseshoe pits, outdoor stage, picnic tables, restrooms, running track, soccer fields, softball fields, tennis courts
City of Santa Clarita					
Rivendale Park and Open Space	Towsley Canyon Rd Santa Clarita, CA 91381	Adjacent (S)	Regional Park	358	Hiking, biking, and equestrian trails, parking
Newhall Pass Open Space	22892-23100 The Old Rd Newhall, CA 91321	0.75 mile (SE)	Trailhead and Regional Open Space	540	Hiking, biking, and equestrian trails, parking

Table 4.16-1. Parks and Recreational Facilities within Two Miles of the Project Site

Facility Name	Address	Distance from Project site (Direction)	Park Classification	Acres	Amenities
Vista Valencia Golf Course	24700 Trevino Dr Santa Clarita, CA 91355	1 mile (N)	Golf Course	—	Golf facility with 18-hole and 9-hole course, driving range, eatery
Old Orchard Park	25023 Avenida Rotella Santa Clarita, CA 91355	1.2 miles (NE)	Local Park	—	Baseball field, basketball court, barbeque, children's play areas, community room, picnic tables, restrooms
Valencia Meadows Park	25671 Fedala Road Santa Clarita, CA 91355	1.5 miles (NE)	Local Park	6.1	Baseball field, basketball court, children's play area, picnic tables, community room, restrooms, swimming pool
Wildwood Canyon Open Space	23360 Haskell Vista Ln Santa Clarita, CA 91321	1.7 miles (SE)	Trailhead and Local Open Space	1.7	Hiking and walking trails, future Coast to Crest Trail location
Almendra Park	23420 Alta Madera Drive Santa Clarita, CA 91355	2 miles (NE)	Local Park	4.3	Picnic tables, basketball court, children's play area
Gates King Open Space	Railroad Mtwy Santa Clarita, CA 91321	2 miles (SE)	Trailhead and Regional Open Space	180	Hiking trails, parking
Newhall Park	24923 Newhall Ave Santa Clarita, CA 91321	2 miles (NE)	Local Park	14.3	Baseball field, basketball court, barbeques, children's play area, community room, picnic tables, swimming pool
Valencia Glen Park	23750 Via Gavola Santa Clarita, CA 91355	2 miles (NE)	Local Park	7.3	Basketball court, barbeques, picnic tables, children's play area, parking, community building, swimming pool, tennis courts
MRCA					
Santa Clarita Woodlands Parks (County; MRCA; SMMC)	The Old Road and Towsley Canyon Road, Newhall	Adjacent (S)	Regional Park and Open Space	4,000	Jointly managed regional park and open space comprised of four main recreation areas: Ed Davis Park at Towsley Canyon, East and Rice Canyons, Pico Canyon, and Mentryville.

Table 4.16-1. Parks and Recreational Facilities within Two Miles of the Project Site

Facility Name	Address	Distance from Project site (Direction)	Park Classification	Acres	Amenities
Mentryville	27201 Pico Canyon Road Stevenson Ranch, CA 91381	2.5 miles (NW)	Local (Historic) Park	69	Historic buildings; oils wells; trail head; trails; bathrooms
SMMC					
Ed Davis Park in Towsley Canyon (SMMC)	24335 The Old Road Santa Clarita, CA 91321	Adjacent (S)	Regional Park	175	Hiking trails, picnic tables; bathrooms, lodge/event space

Source: DPR 2018a, 2022e; City of Santa Clarita 2024.
Notes: S = south; SE = southeast; N = north; NE = northeast; NW = northwest; SMMC: Park acreages not available for all parks.

Local Trails

Dedicated Trails

Figure 4.1-2, Local Trails Map, of Section 4.1, Aesthetics, includes a trail feature referred to as "Dedicated Trail (City or County)." For the purposes of this analysis, dedicated trails refer to formally recognized trails accessible to the public and managed by the MRCA, the SMMC, and/or other responsible County or City entities. Dedicated trails adjacent to and/or near the Project site include the following: Taylor Trail (adjacent) to the southeast; the Towsley Trail (adjacent) and Wiley Canyon Trail (approximately 0.46 mile) to the southeast; the Don Mullally Trail (approximately 916 feet) to the south; and the Pico Canyon Trail (approximately 1.2 miles) to the northwest. Although dedicated trails may provide valued riding, hiking, and multi-use opportunities to the public, the dedicated trails identified in Figure 4.1-2 are not considered regional trails pursuant to the County (County of Los Angeles 2013; DPR 2018a).

Non-Dedicated Trails

Figure 4.1-2 also identifies "non-dedicated trails" within, adjacent to, or near the Project site. For the purposes of this analysis, non-dedicated trails are informal and/or private trails that may provide linkages to dedicated trails but are not formally recognized or managed by a public entity and would not be anticipated to provide de facto public access. These non-dedicated trails include Lyons Ranch road, an unpaved road traversing through the Project site from the northeastern end, traveling south and eventually west, and continuing off-site. Other non-dedicated trails are located throughout the Project site's hillsides, generally meandering between Lyons Ranch and Towsley Canyon Road.

4.16.2 Regulatory Requirements

Federal

There are no federal policies or regulations applicable to recreation with respect to the Project.

State

California Government Code

Assembly Bill 1191, "Quimby Act", Section 66477. The Quimby Act (Government Code Section 66477), enacted in 1975, creates a framework that allows cities and counties to provide parks for growing communities. The Quimby Act authorizes jurisdictions to adopt ordinances that require parkland dedication or payment of in-lieu fees as a condition of approval of residential subdivisions. The Quimby Act also specifies acceptable uses and expenditures of the funds, such as allowing developers to set aside land, donate conservation easements, or pay direct fees for park improvements.

Landscaping and Lighting Act of 1972, California Streets and Highway Code

The California Landscaping and Lighting Act of 1972 authorizes local legislative bodies to establish benefit related assessment districts or landscaping and lighting districts. Legislative bodies can levy assessments for the construction, installation, and maintenance of certain public landscaping and lighting improvements, including local public parks.

Regional and Local

Los Angeles County 2035 General Plan

Parks and Recreation Element

The Los Angeles County 2035 General Plan (General Plan) Parks and Recreation Element guides policy for the maintenance and expansion of Los Angeles County's parks and recreation system. The purpose of the Parks and Recreation Element is to plan and provide for an integrated parks and recreation system that meets the needs of residents. The following provides a summary of the most applicable goals and policies that pertain to the Project, and is not a comprehensive list:

Goal P/R 1. Enhanced active and passive park and recreation opportunities for all users.

Policy P/R 1.2. Provide additional active and passive recreation opportunities based on a community's setting, and recreational needs and preferences.

Policy P/R 1.3. Consider emerging trends in parks and recreation when planning for new parks and recreation programs.

Goal P/R 3. Acquisition and development of additional parkland.

Policy P/R 3.1. Acquire and develop local and regional parkland to meet the following County goals: 4 acres of local parkland per 1,000 residents in the unincorporated areas and 6 acres of regional parkland per 1,000 residents of the total population of Los Angeles County.

Policy P/R 3.2. For projects that require zone change approvals, general plan amendments, specific plans, or development agreements, work with developers to provide for local and regional parkland above and beyond their Quimby obligations.

Goal P/R 4. Improved accessibility and connectivity to a comprehensive trail system including rivers, greenways, and community linkages.

Policy P/R 4.1. Create multi-use trails to accommodate all users.

Policy P/R 4.2. Develop staging areas and trail heads at strategic locations to accommodate multi-use trail users.

Policy P/R 4.3. Develop a network of feeder trails into regional trails.

Policy P/R 4.4. Maintain and design multi-purpose trails in ways that minimize circulation conflicts among trail users.

Policy P/R 4.6. Create new multi-use trails that link community destinations including parks, schools, and libraries.

Los Angeles Countywide Parks and Recreation Needs Assessment

Adopted by the Board of Supervisors on July 5, 2016, the Countywide Comprehensive Parks and Recreation Needs Assessment (also known as the Parks Needs Assessment or PNA) was a historic and significant undertaking to engage communities within Los Angeles County in a collaborative process to gather data and input for future decision-making on parks and recreation (DPR 2016c). The primary goal of the PNA was to quantify the magnitude of need for parks and recreational facilities and determine the potential costs of meeting that need. The PNA final report uses a transparent, best-practices approach to evaluate park and recreation needs and is the product of an engagement process that involved the public, cities, unincorporated communities, community-based organizations, and other stakeholders. Specifically, the PNA:

- Uses a set of metrics to measure and document park needs for each study area;
- Establishes a framework to determine the overall level of park need for each study area;
- Offers a list of priority park projects for each study area;
- Details estimated costs for the priority park projects by study area;
- Builds a constituency of support and understanding of the park and recreational needs and opportunities; and
- Informs future decision-making regarding planning and funding for parks and recreation.

To categorize the facilities inventoried during the PNA, four types of parks and open spaces were identified: local parks, regional recreation parks, regional open space, and natural areas. These categories are defined below:

Local Parks. Pursuant to the DPR, local parks include all parks under 5 acres as well as all parks under 100 acres that contain active amenities such as athletic courts and fields, playgrounds, and swimming pools; and schools with joint-use agreements. County and City-owned tot lots, pocket parks, neighborhood parks, and community parks, as well as special-use facilities such as aquatic centers and community recreation centers, are also included in this category. The PNA inventoried 1,602 local parks in the County.

Regional Recreation Parks. The regional park system is intended to meet the park and recreation needs of residents and visitors throughout the County, and consists of community regional parks, regional parks, and special use facilities. These parks are over 100 acres and contain at least three active amenity types such as athletic courts and fields, playgrounds, and swimming pools. The PNA inventoried 17 regional recreation parks in the County.

Regional Open Spaces. Regional open space, include facilities that are more than 5 acres and generally contain only passive amenities such as visitor centers, trails, picnic shelters, or restrooms. Facilities in this category include, but are not limited to, State parks, State Recreation Areas, Habitat Conservation Lands, State Ecological Reserves, and National Park Service. The PNA inventoried 329 regional open spaces in the County.

Natural Areas. These areas are generally larger than 100 acres and contain no reported amenities. These facilities were not included in any of the needs analyses of the PNA. Types of open space in this category include, but are not limited to, agricultural land, habitat conservation lands, ecological reserves, military lands, flood control channels, tribal lands, and BLM public land. The PNA inventoried 1,057 natural areas in the County.

The Project site is in the Unincorporated Stevenson-Newhall Ranch-Castaic-Val Verde Study Area (Study Area #49). According to the PNA, Study Area #49 had a population of 20,030 and 197.5 acres of parkland in 2016, which resulted in a ratio of 9.9 acres of parkland per 1000 residents in Study Area #49. Of the total population, 31% live within one half mile of a park (DPR 2016a). This metric does not include the additional 4,987.8 acres of regional open space, nature preserves, or State and National Forest land in Study Area #49 (DPR 2016a).

County of Los Angeles Trails Manual

The County of Los Angeles Trails Manual (Trails Manual) provides guidance to County departments that interface with trail planning, design, development and maintenance of hiking, equestrian, and mountain biking trails. The Trails Manual was adopted by the Board of Supervisors on May 17, 2011 and was revised in June 2013 (County of Los Angeles 2013). The Trails Manual provides guidelines for implementation of multi-use trails within the unincorporated communities of Los Angeles County and recognizes the existence of the broader regional trail network in the County and surrounding counties that provides access to recreational resources operated by federal, State, and local agencies. The Trails Manual sets the guidelines for reviewing plans and specifications for trails that are provided in conjunction with land use planning and the entitlement process for projects proposed for development within the County. Proposed developments are reviewed for consistency with the Trails Manual. The goal of the Trails Manual is to establish well-defined trail types, guidelines, and priorities to facilitate the development of high-quality trails that benefit the public.

Santa Susana Mountains Trails Master Plan

The Santa Susana Mountains Trails Master Plan is a two-part, comprehensive trails planning document incorporating portions of the Santa Clarita Valley Planning Area west and southwest of the I-5 corridor within its 22-square-mile study area (which also includes the Project site). The Santa Susana Mountains Trails Master Plan seeks to respect sensitive resources within its study area while reducing unmet demand for recreation opportunities in the Santa Clarita Valley Planning Area and throughout the County's Fifth Supervisorial District (DPR 2018a). Recommendations included in the Santa Susana Mountains Trails Master Plan are consistent with the adopted Trails Manual (discussed above) (DPR 2018a).

In May 2015, the County adopted the Santa Susana Mountains Final Trails Master Plan–Phase I (SSMFTMP-PI), which identifies recreational trail opportunities in the Santa Susana Mountains area with the intent of adopting these proposed trails as part of the County's Regional Trail System. The SSMFTMP-PI proposed the extension of the 35.7 miles of existing County, city, and conservancy-managed trails in the Santa Susanna Mountains area by approximately 35.9 miles with 22 proposed trail segments, for a total of approximately 71.5 miles of trails (DPR 2018b). The Santa Susana Mountains Final Trails Master Plan–Phase II (SSMFTMP-PII), which built upon baseline data and previously adopted existing and proposed trails and amenities of the SSMFTMP-PI, focused on lands within the urban/suburban transition zone, and was subsequently adopted in 2018. The SSMFTMP-PII identifies 20 trail corridors to connect to existing trails and other priority destinations. Together, SSMFTMP-PI and SSMFTMP-PII represent a single, comprehensive trails plan for the Santa Clarita Valley Planning Area (i.e., Santa Susana Mountains Trails Master Plan), with the intent of providing connections to parks and open spaces, a large commercial district, seven schools, numerous natural features, Six Flags Magic Mountain theme park, the regional Rim of the Valley Trail, and existing trails in the City of Los Angeles, City of Santa Clarita, and Newhall Ranch Specific Plan, as well as trails within the unincorporated County areas and other jurisdictions as identified in the Trails Master Plan (DPR 2018b). The trails proposed as part of the Santa Susana Mountains Trails Master Plan are now considered part of the General Plan and are slated for ad hoc development. It is anticipated that the trails will be constructed incrementally over the General Plan's 2035 planning horizon (DPR 2018a).

Los Angeles County Code (County Code), Title 21, Subdivisions

Chapter 21.24, Design Standards, Part 4, Lots, Section 21.24.340, Residential Subdivisions, Local Park Space Obligation, Formula

The subdivider of a residential subdivision shall provide local park space to serve the subdivision, pay an in lieu fee (in accordance with provisions of Section 21.28.140, Park Fees Required When, Computation and Use, provide local park space containing less than the required obligation but developed with amenities equal in value to the park fee), or do a combination of the above in accordance with the requirements of this section. Section 4.15, Public Services, of this Draft EIR, provides the local park space obligation.

Chapter 21.24, Design Standards, Part 4, Lots, Section 21.24.350, Residential Subdivisions, Provisions of Local Park Sites

Upon ascertaining the local park space obligation to be fulfilled by the subdivider of a residential subdivision pursuant to Section 21.24.340, the advisory agency shall review the proposed subdivision, the park and recreational needs of the future inhabitants of the subdivision, and existing or potential neighboring park and recreational facilities to determine whether all or any portion of the local park space obligation should be satisfied by the provision of park space to serve the subdivision. If the advisory agency determines that park space should be provided, the advisory agency shall advise the subdivider of the design and location of such space. If the subdivision contains more than 50 lots, the subdivider shall provide the necessary park space as determined by the advisory agency. If such park space is less than the total park space obligation required by the provisions of Section 21.24.340, the subdivider shall pay the park fees, in accordance with the provisions of Section 21.28.140, Park Fees Required When, Computation and Use, provide amenities to the park space equal in value to park fees, or do a combination of both.

Chapter 21.28, Dedications, Section 21.28.140, Park Fees Required When, Computation and Use

If all or any portion of the local park space obligation for a residential subdivision is not satisfied by the provision of local park space designated by the advisory agency pursuant to Section 21.24.350, this section provides park fees to be paid as a condition precedent to final approval of the subdivision.

Santa Clarita Valley Area Plan

One Valley, One Vision (OVOV)

The OVOV is a component of the County's General Plan and is intended to provide focused goals, policies, and maps to guide the regulation of development within the unincorporated portions of the Santa Clarita Valley. The OVOV establishes goals and policies related to public services for areas within the Santa Clarita Valley. The following recreation-related OVOV objectives and policies, within the Land Use Element, Circulation Element, and the Conservation and Open Space Element, are relevant to the Project:

Objective LU-6.2. Provide attractive public and open spaces in places visited by residents and visitors, where feasible and appropriate.

Policy LU-6.2.2. Provide and enhance trail heads where appropriate with landscaping, seating, trash receptacles and information kiosks.

Objective C-1.1. Provide multi-modal circulation systems that move people and goods efficiently while protecting environmental resources and quality of life.

Policy C-1.1.4. Promote public health through provision of safe, pleasant, and accessible walkways, bikeways, and multi-purpose trail systems for residents.

Objective C-2.2. Adopt and apply consistent standards throughout the Santa Clarita Valley for street design and service levels, which promote safety, convenience, and efficiency of travel

Policy C-2.2.6. Within residential neighborhoods, promote the design of "healthy streets" which may include reduced pavement width, shorter block length, provision of on street parking, traffic-calming devices, bike routes and pedestrian connectivity, landscaped parkways, and canopy street trees.

Objective C-7.1. A continuous, integrated system of safe and attractive pedestrian walkways, paseos and trails linking residents to parks, open space, schools, services, and transit.

Policy C-7.1.10. Continue to expand and improve the Valley's multi-use trail system to provide additional routes for pedestrian travel.

Objective CO-9.1. Develop new parklands throughout the Santa Clarita Valley, with priority given to locations that are not now adequately served, and encompassing a diversity of park types and functions (including passive and active areas) in consideration of the recreational needs of residents to be served by each park, based on the following guidelines: (Guiding Principle #36)

Policy CO-9.1.9. Ensure that new development projects provide a fair share towards park and recreational facilities, phased to meet needs of residents as dwelling units become occupied, pursuant to the Quimby Act (California Government Code Section 66477) and local ordinances as applicable.

Project compatibility with OVOV goals and policies is discussed within Section 4.11, Land Use and Planning, of this Draft EIR.

4.16.3 Thresholds of Significance

The thresholds used for the analysis of recreation impacts are based on the County's adopted CEQA Guidelines, which incorporates Appendix G of the State CEQA Guidelines as well as County-specific thresholds of significance. A project would have a significant impact with respect to recreation if it would:

Threshold 4.16a: 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 4.16b: Include neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities which might have an adverse physical effect on the environment.

Threshold 4.16c: Interfere with regional trail connectivity.

4.16.4 Methodology

Analysis of parks or recreational impacts is typically based on an estimate of a project's resident population size, given the number of proposed residential units, and a description of a project's park, recreation and open space features and their effects in serving a project's residents and thereby reducing potential impacts on local park facilities. This analysis estimates the number of residents that would be generated by implementation of the Project and assesses whether existing and planned public recreational facilities (including parks and trails) would have sufficient available capacity to accommodate additional users and whether new facilities would need to be constructed, the construction of which would cause significant environmental impacts; whether the Project would result in substantial physical deterioration of park/recreational facilities; and whether the Project would interfere with regional trail connectivity.

For purposes of the analysis below, "neighborhood parks" shall generally refer to PNA-defined local parks (e.g., all parks less than 5 acres, and parks less than 100 acres that contain active amenities), while "regional parks" shall refer to PNA-defined regional parks and regional open spaces (i.e., parks over 100 acres and open space areas over 5 acres that generally contain only passive amenities) within a 2-mile radius of the Project site. Other recreational facilities shall refer to public, dedicated trails and trail networks. As PNA-defined natural areas contain no reported amenities (such as dedicated trails or other recreational facility types), these areas are not discussed or further analyzed below. Additionally, the analysis of potential impacts to "regional trail connectivity" will focus on potential impacts to connectivity within regional and local dedicated trail networks, however, non-dedicated local trails and trail networks shall also be discussed, as they provide connectivity to dedicated trails in the immediate Project site vicinity. The geographic scope of the facilities analysis will be limited to those within a 2-mile radius of the Project site, as these would be the facilitates most likely to be used by future Project residents.

4.16.5 Impact Analysis

Threshold 4.16a: 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?

Park services for the Project site are provided by a variety of jurisdictions, including the County, the City, and the State, as outlined in Section 4.16.1, above. Table 4.16-1, above, lists the parks serving the Project site. During construction, the Project would result in a temporary increase of persons in the Project area due to the influx of construction workers. Some of these construction workers are expected to currently reside in the area and, therefore, would not place additional pressure on existing park and recreational facilities. Generally, this increase is anticipated to be negligible because construction workers are highly transient in their work location and likely would utilize parks and recreation facilities near their place of residence. In addition, lunch break times are typically short (30 to 60 minutes), thus not allowing for much time for construction workers to take advantage of park and recreation facilities and return to work within the allotted time. However, given that a number of park and recreation facilities are located near the Project site, there is the potential for construction workers to utilize these facilities during their lunch break. Although there is a potential for construction workers to utilize these park and recreation facilities, any resulting increase in the use of these facilities would be temporary and would mostly occur during off-peak usage hours (i.e., mostly weekdays compared to weekends when peak park and recreation usage occurs). Therefore, for the reasons stated above, construction activities would not result in an increase in 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, and impacts would be less than significant.

As described in Section 4.14, Population and Housing, the Project would construct 510 residential units on a currently undeveloped site, which would have the potential to house approximately 1,785 residents, based on the County's Housing Element Update average person per household of 3.5. An increase of 1,785 people at the currently vacant Project site would result in the potential for increased use of existing neighborhood and regional parks, particularly within the adjacent and/or proximate parks and recreation areas including Ed Davis Park in Towsley Canyon and Rivendale Park and Open Space (in the City) and other areas within the Santa Clarita Woodlands Park (in the County's unincorporated area) to the south/southwest, and the County's Taylor Trail Wilderness and Open Space to the east/southeast.

DPR's 2016 PNA uses five metrics to determine park need: park land, park access, park pressure, park amenities, and park condition. For the purposes of this impact analysis, descriptions of these metrics are provided for context of the Project's potential to exacerbate these metrics. The exacerbation of these metrics is provided to address the Project's potential impacts to increase use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

The Project is in PNA Study Area #49, which, as of 2016, had 9.9 acres of parkland per 1,000 residents. The Study Area #49 ratio of 9.9 acres of parkland per 1,000 residents exceeds the County's average of 3.3 acres of parkland per 1,000 residents. Additionally, according to the 2016 PNA, Study Area #49, is in an area with "very low" park need (DPR 2016a). With implementation of the Project, the population of Study Area #49 would increase from 20,030 residents to 21,836 residents, resulting in an estimated parkland to service population ratio of 9.1 acres per 1,000 residents, without consideration of the Project's public open-space and trails on-site (DPR 2016a). Under Project conditions, the new ratio of 9.1 acres of parkland per 1,000 residents in Study Area #49 would continue to be in exceedance of the County's overall average, as mentioned above, and would not result in a substantial reduction in parkland per 1,000 residents.

Park access in Study Area #49 is below the County's average of 49% of the population living within 1/2-mile of a park, at 31% (DPR 2016a). However, the Project would provide preserved open space and trails on-site, to be managed by DPR, which would increase the park access for residents at the site and for persons within Study Area #49. The HOA would manage the improved passive and active open space areas within the developed portion of the Project site. Additionally, as the Project would provide trail connections to existing, established off-site trails, this would increase park access for residents at the site and within Study Area #49.

Park pressure is defined by DPR as the amount of park land available to residents in the Study Area around each park. Of the parks analyzed in Study Area #49, the Project site is nearest to Ed Davis Park in Towsley Canyon, which is 175.08 acres (DPR 2016a). As the Project would place residents in an area proximate to park land and would provide park land on-site for residents and the public, the Project would not substantively impact park pressure at the site.

The 2016 PNA rates park amenities and conditions on a rating scale of "good", "fair", or "poor" (DPR 2016a). Regarding park amenities and conditions within Study Area #49, the parks had the highest score for "good" facilities. The Project residents would likely use these park amenities, which could have the potential to reduce the rating of park conditions as a result. However, as detailed below, the Project would also provide recreational facilities, including 2.59 acres of passive and active open space areas dispersed throughout the residential Lots, and an approximately 1.1-acre recreational center on-site, proximate to existing and future residents of the Project, which would alleviate park pressure to any one facility, and as such, the Project would not substantively deteriorate park amenities and conditions in Study Area #49.

The Project site is adjacent to the PNA's South Santa Clarita Study Area. As of 2016, the City had a 4.8 acres of parkland per 1,000 residents.[3] The PNA determined that the South Santa Clarita Study Area has a "moderate" amount of park need, however, the PNA did not incorporate into its analysis the 973.7 acres of regional open space, nature preserves, or State and National Forest located in South Clarita Study Area (DPR 2016c). Many of these areas include other recreational facilities (i.e., trails) that would be available to future Project residents for recreational uses, including hiking, biking, and horseback riding. The 197.5 acres of parkland within Study Area #49, combined with the 442.5 acres of parkland and trail facilities located throughout the 973.7 acres of regional open space, nature preserves, or State and National Forest land in the South Santa Clarita Study area, would ensure that residents of the Project and the surrounding community have sufficient access to neighborhood parks, regional parks, and other recreational facilities.

As such, although the Project would add residents to a previously-vacant site, access to a multitude of existing neighborhood and regional parks or other recreational facilities in the local vicinity (as discussed above), as well as the substantial amount of open space and trails that would be provided on-site, together, would ensure that the 1,785 new residents would not result in, or accelerate, substantial physical deterioration of any given facility or facilities. In addition, consistent with OVOV's direction, to avoid developing on open hillsides and other sensitive areas, the Project Applicant is requesting approval of a density-controlled development Conditional Use Permit (CUP) to allow the Project's proposed residential dwelling units to be clustered on approximately 41 acres of the Project site positioned proximate to the Project frontage on The Old Road and adjacent to existing development along the I-5 corridor. In total, the area of land within the Project's grading limits, as well as a surrounding construction buffer area, includes 72.55 acres that are in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space. Through the density-controlled development CUP,

[3] Similar to Study Area #49, the PNA did not differentiate between local and regional parklands in determining the parks to service population ratio, however, it would appear that their analysis incorporated both local and regional parks within City boundaries.

the Applicant would be able to designate approximately 175 acres of the 233.49-acre Project site as preserved and improved open space, including 2.59 acres of passive and active open space areas dispersed throughout the residential Lots, and an approximately 1.1-acre recreational center on-site. As proposed by the Project, the on-site park and open space areas would also support network of trails. As shown on Figure 3-2, Vesting Tentative Tract Map No. 83301, of Chapter 3, Project Description, the Project would construct a paved access road along the outer northern and western edge of the development area that would serve as a part of an on-site, multi-use trail system and would connect to existing non-dedicated trails in the south/southwest portions of the Project site. Portions of existing on-site, non-dedicated trails depicted in Figure 4.1-2, Local Trails, of Section 4.1, Aesthetics, of this Draft EIR, would be preserved and, together, with the paved access road, would be available for public use. The Project would also construct a new trailhead at the gated connection of the paved access road to The Old Road at the northeastern corner of the Project, which would encourage access and use of the on-site trails. As depicted on Figure 4.1-2, the proposed on-site dedicated trails would connect to adjacent public open spaces and trail networks outside of the Project's boundaries, including the City's Rivendale Park and Open Space and Ed Davis Park in Towsley Canyon to the south, and the County's Taylor Trail Open Space to the east/southeast (City of Santa Clarita 2016). The on-site trails proposed by the Project increase connectivity to the existing public trail system by providing a critical "missing link" in connectivity, specifically, Trail Network Gap #7, from Towsley Canyon Road to Lyons Ranch road (i.e., the Project's proposed paved access road) as identified in the Santa Susana Mountains Trails Master Plan, as discussed further in response to Threshold 4.16c, below (DPR 2018a).[4]

In addition to the recreational facilitates proposed by the Project, as discussed in Section 4.16.2, Regulatory Setting, and the magnitude of existing parks and recreational facilities in the local Project site vicinity (i.e. 9.1 acres of parkland per 1,000 residents under Project conditions), in accordance with the Quimby Act (Government Code Section 66477) and Sections 21.24.340, 21.240.350, and 21.28.140 of the County Code, the Project would be required to pay an in-lieu fee, which would be used for the purpose of acquiring local park land or developing new or rehabilitating existing recreational facilities. Although the Project is in a park rich area (as established above), these fees (potentially resulting in the acquisition of parkland and/or construction of new facilities, as determined by the County), would further alleviate the pressure of increased use of existing neighborhood and regional parks or other recreational facilities in the vicinity of the Project site. For the reasons discussed above, including a surplus of existing parkland and recreational facilities, the Project's proposed trails, opens spaces, and recreational facility, and the required payment of in lieu fee payments to the County, the Project would not 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. The impact regarding the Project's potential to 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 would be less than significant.

Threshold 4.16b: Does the project include neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities, which might have an adverse physical effect on the environment?

As detailed in response to Threshold 4.16a above, the Project site is within Study Area #49, which is above the County's average for park acreage per resident. With implementation of the Project, Study Area #49 would continue to have an abundance of park space per resident in exceedance of the County's average ratio. The Project would include approximately 150 acres of preserved open space at the Project site. This preserved open space (Conservation Area) mostly borders existing natural open space outside of the Project site's western and southern

[4] Gap Area #7, Towsley Canyon Road to Lyons Ranch Along Lower Foothills is depicted on Figure 4-1, Trail Network Gaps and Barriers, of the Santa Susana Mountains Trails Master Plan.

boundaries and would preserve significant ridgelines, provide open space adjacent to existing open space, conserve habitat areas, and provide a buffer and transition to the proposed developed uses at the Project site. This open space area would not be altered as a result of the Project. These 150 acres would be consistent with the existing conditions of the site, and therefore, would not have an adverse physical effect on the environment.

The Project would also provide a 1.1-acre recreation center in the central portion of the Project site. The recreational center would be connected via sidewalks to the proposed on-site multi-use trail system that would lead to on-site nature trails and to the County's regional trail system. Additionally, the Project would construct a private-gated access road that would provide access to all residential lots, open spaces, County-maintained facilities, and adjacent properties for pedestrian, biking and hiking use. A new trailhead would be constructed near the gated connection of the access road to The Old Road at the northeastern corner of the Project site, providing public access to the existing trail. Although the access road would be gated to restrict vehicular access (except for emergency use), there would be a non-gated portion of the walkway to allow full access for pedestrians and cyclists. Trailhead signage would be posted at this access point at The Old Road, as required through implementation of MM-4.20-1, Wildfire Evacuation Program, of Section 4.20, Wildfire. The construction of these facilities is part of the design of the Project, and therefore, is analyzed throughout this Draft EIR, and as such, would not have an adverse physical effect on the environment beyond what is disclosed throughout this Draft EIR. Additionally, in accordance with the Quimby Act (Government Code Section 66477) and Sections 21.24.340, 21.240.350, and 21.28.140 of the County Code, the Project would be required to pay an in-lieu fee, which would be used for the purpose of acquiring local park land or developing new or rehabilitating existing recreational facilities. However, as discussed above, due to the provision of on-site passive and active open space and other park-like amenities (including open space, dedicated trails, and recreational facilities), Project residents would be provided with immediate access to these facilities on-site. Therefore, impacts related to the inclusion of neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities, which might have an adverse physical effect on the environment would be less than significant and no mitigation measures are required.

Threshold 4.16c: Would the project interfere with regional trail connectivity?

According to DPR, "regional trails extend over large expanses of land, providing a continuous route around or through areas such as mountain ranges, or around the rim of a valley" (DPR 2013). As detailed in Section 4.16.1, Existing Conditions, and depicted on Figure 4.1-1, Regional Trails Map, of Section 4.1, Aesthetics, the nearest regional trails to the Project site are the Santa Clara River Trail, located approximately 3.8 miles north of the Project site, and the Rim of the Valley Trail, approximately 2.5 miles south (DPR 2018a; HMDB 2022). Due to distance from these regional trails to the Project site, the Project would not directly interfere with the connectivity of these regional trails, during construction or operation of the Project. The Santa Susana Mountains Trails Master Plan specifies 14 gaps and 3 major barriers within its study area that cause a lack of overall connectivity between existing trails and to regional and local destinations. While gaps generally indicate a lack of existing trails where connections would benefit regional connectivity, barriers present major obstacles that must be traversed or avoided in order to create connections (DPR 2018a). As detailed above, the Project site is within the study area of the Santa Susana Mountains Trails Master Plan. The Project site is intersected by the identified Trail Network Gap #7, Towsley Canyon Road to Lyons Ranch Along Lower Foothills on Figure 4-1, Trail Network Gaps and Barriers, of the Santa Susana Mountains Trails Master Plan (DPR 2018a).

As stated in the Santa Susana Mountains Trails Master Plan, "West of the narrows on the Towsley Canyon Loop Trail, there is a drainage that could connect over the foothills to Lyons Ranch Road. This connection could create a new shorter loop trail with Lyons Ranch Road and Towsley Canyon Road, and the future Pico Canyon Trail. Parts of the connection through Lyons Ranch have existing roadways and de facto/social trails that could be used. There

are multiple alignments out of Towsley Canyon that could be used, one that seems to have an existing trail and another without" (DPR 2018a). The Project site contains non-dedicated trails on-site and is surrounded by off-site non-dedicated and dedicated trails to the south, west, and east, as detailed in Section 4.16.1, Existing Conditions. As the Project site is private property, the on-site trails are currently not available to the public. However, with implementation of the Project, trails on-site, within the southern portion of the Project site, would be made available to the public.

The Project proposes development of the site (i.e., dwelling units) in a configuration defined by the County as "density-controlled development" (Chapter 22.140.170, Density-Controlled Developments, of the County's Zoning Code). Density-controlled development is defined as "a concentration of dwelling units within one or more portions of a lot, resulting in the remainder of the lot being free of buildings or structures, as opposed to development spread throughout the entire lot" (Chapter 22.14.010, Definitions, of the County's Zoning Code). As such, even though the Project site is 233.49 acres, with approval of the density-controlled development CUP, development of the Project's dwelling units would be concentrated within approximately 41 acres in the northeastern portion of the Project site, nearby existing residential uses. In total, the area of land within the Project's grading limits, as well as a surrounding construction buffer area, includes 72.55 acres that are in the northeastern portion of the Project site, thereby allowing for preservation of the majority of the site as open space. Through this developmental configuration on-site, approximately 175 acres of preserved and improved open space would be located contiguous to off-site open space and trails. As shown on Figure 3-5, Conceptual Trail Map, Project implementation would result in the preservation of a portion of existing on-site non-dedicated trails, which would connect to off-site non-dedicated and dedicated trails. For example, the Project site would provide trail connections to the off-site Taylor Trail and Rivendale Trail (through non-dedicated trails off-site), and non-dedicated trails west of the Project site boundary. These trail connections and on-site easements for trails would be maintained by DPR. Additionally, as shown on Figure 3-5, the Project would provide a trail network connection on The Old Road, at the northeastern corner of the Project site. This proposed trail network connection would provide a 28-foot-wide multi-use trail available for public use within the Project site, and would connect to on-site and off-site trails, providing contiguous trail access throughout the Santa Clarita Valley. With implementation of the Project, the Santa Susana Mountains Trails Master Plan's specified "Trail Network Gap #7" would be connected and made available to the public through establishment of an access road on-site, thereby filling the "gap" within the Santa Susana Mountains Trails Master Plan.

During construction of the Project, all construction activities would be located within the northeastern portion of the Project site. During construction of the Project, trail users could use the networking of surrounding trails, including trails in Rivendale Park and Open Space, Ed Davis Park at Towsley Canyon, as shown in Figure 3-5, Conceptual Trail Map, of Chapter 3, Project Description. With Project implementation, the inclusion of on-site open space with dedicated trails would serve to provide important missing linkages in the existing dedicated trail network within the Santa Clarita Valley and would expand trail facilities consistent with the objectives of the Santa Susana Trails Master Plan. As such, the Project would improve regional trail connectivity by increasing recreational access, through an on-site trail system, which would provide trail connections that would ultimately connect to the Rim of the Valley Trail and Santa Clara River Trail, thereby providing regional trail connectivity in the region and supporting the goals and policies of the Santa Susana Mountains Trails Master Plan. The Project would increase the amount of linear open space in a mountainous region within the Project site with approval of the density-controlled development CUP, and would not inhibit existing open space connectivity because it would not involve the planning of any large structures or barriers within the southern portion of the Project site. Through implementation of the Project, the Project would provide a comprehensive trail network, including a publicly accessible trailhead, that would provide connections for the public to access existing open space areas and established trails in an area with

mountain ranges, thereby supporting the goals of DPR for regional trail connectivity in the region. Therefore, impacts regarding regional trail connectivity would be less than significant, and no mitigation is required.

4.16.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., cumulative projects) used for this analysis are presented in Table 2-2, List of Cumulative Projects, and on Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR.

Threshold 4.16a: 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?

Pursuant to the General Plan, under buildout conditions for the Project and all Cumulative Projects, the Santa Clarita Valley Planning Area should attain the goal of providing 6 acres of regional parkland for every 1,000 residents (County of Los Angeles 2015).[5] According to the General Plan, the Santa Clarita Valley Planning Area has 71 acres of local parkland and 14,425 acres of regional parkland (County of Los Angeles 2015). According to the County's General Plan Housing Element, the projected population for the Santa Clarita Valley Planning Area in 2035 will be 237,638 people, which includes the projected buildout population of the Project and Cumulative Projects (refer to Section 4.14, Population and Housing). As such, the anticipated regional parkland to service population ratio in 2035 would be approximately 60 acres of regional parkland per 1,000 residents. This is in exceedance of the County's goal of 6 acres of regional parkland per 1,000 residents, suggesting that the Santa Clarita Valley Planning Area is a regionally parks-rich area. As such, the residents in the Santa Clarita Valley Planning Area would have access to a high magnitude of parkland which would alleviate park pressure to any one facility. Additionally, as detailed in Section 4.16.4, the Project would result in less than significant impacts regarding the increased use of existing neighborhood and regional parks or other recreational facilities. Therefore, implementation of the Project would not be anticipated to result in occurrence or acceleration of substantial physical deterioration of existing neighborhood and regional parks or other recreational facilities. In addition, new residential development with subdivisions within the Santa Clarita Valley Planning Area, many of which are included Cumulative Projects LA1 through LA14 and SC1 through SC26 would be required to donate parkland and/or pay in-lieu fees for parks pursuant to the Quimby Act. The payment of park fees and/or donation of parkland would ensure that established parkland and recreational facility standards are met with respect to the additional needs created by individual developments. As detailed in Table 2-2, List of Cumulative Projects, in Chapter 2, Environmental Setting, several of the Cumulative Projects include on-site open space and recreational/park components that would alleviate potential exacerbation of use on existing recreational facilities. For these reasons, the Project along with past, present, and reasonably future projects, would not result in 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. As such, cumulative impacts to existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated, would be less than significant and would not be cumulatively considerable.

[5] As the cumulative analysis focuses on a regional geographic scope, the regional parkland ratio (as opposed to local parkland) is appropriate for this analysis.

Threshold 4.16b: Does the project include neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities, which might have an adverse physical effect on the environment?

The Project and Cumulative Projects LA1 through LA14 are primarily residential and commercial projects and as such, are not predominantly park- or recreational-facilities-projects. Although the Cumulative Projects may include recreational components for their future residences, it is likely that these recreational components or facilities would not result in an adverse physical effect on the environment. In addition, new residential subdivisions within the Santa Clarita Valley Planning Area, including Cumulative Projects, would be required to donate parkland and/or pay in-lieu fees for parks pursuant to the Quimby Act. The Project does not propose any neighborhood or regional parks, and construction and operation of the recreational component on-site, include the recreational center and passive and active open space impacts have been analyzed throughout this EIR. As such, pursuant to the Quimby Act requirements, and the lack of construction or expansion of neighborhood and regional parks or other recreational facilities for the Project or Cumulative Projects, cumulative impacts related to the inclusion of neighborhood and regional parks or other recreational facilities or construction or expansion of recreational facilities which might have an adverse physical effect on the environment would be less than significant, and would not result in a cumulatively considerable impact.

Threshold 4.16c: Would the project interfere with regional trail connectivity?

The Project and Cumulative Projects LA1 through LA14 are located west of I-5. As demonstrated in the analysis in response to Threshold 4.16c of Section 4.16.5, Impact Analysis, the Project would result in a less than significant impact regarding inference with regional trail connectivity. The following Cumulative Projects are located within the same open space area and nearest the Project site, west of I-5, as the Project: Cumulative Projects LA1 and LA2. Similar to the Project, Cumulative Project LA1 would preserve a majority of its site for open space and be required to obtain approval of a density-controlled development CUP, and of its approximately 94-acre proposed project site, approximately 75 acres in the northeastern and southern portions of the site would remain in a natural state (OPR 2019). The proposed development at Cumulative Project LA1 would consist of 37 dwelling units proximate to existing residential uses and would not interfere with trail connectivity due to its preservation of open space on-site and lack of direct interference with regional trails (OPR 2019). Cumulative Project LA2 would also be located proximate to existing residential uses and would not interfere with regional trail connectivity due to its limited size and development footprint (i.e., 7 dwelling units within 20 acres), and the fact that there are no regional trails located on-site. The preservation of natural open space on-site at the Project and Cumulative Projects is relevant to regional trail connectivity in that it would not be a physical barrier for regional trail connectivity. Additionally, further from the Project site, several Cumulative Projects west of I-5, including Cumulative Projects LA1 through LA12, contain preserved open space on-site, which would reduce impacts to regional trail connectivity within the respective Cumulative Projects. Therefore, the Project, in combination with the Cumulative Projects, would not interfere with regional trail connectivity. Cumulative impacts to regional trail connectivity would be less than significant and would not be cumulatively considerable.

4.16.7 Mitigation Measures

No mitigation measures are required.

4.16.8 Level of Significance After Mitigation

The Project would result in less than significant impacts regarding increase of 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.

The Project would result in less than significant impacts regarding inclusion of neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities which might have an adverse physical effect on the environment.

The Project would have a less than significant impact regarding interference with regional trail connectivity.

4.16.9 References

City of Santa Clarita. 2011. "Conservation and Open Space Element." In *City of Santa Clarita General Plan*. June 2011. Accessed May 19, 2022. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/6%20-%20Conservation%20and%20Open%20Space%20Element.pdf.

City of Santa Clarita. 2016. Trails and Parks Map. Accessed February 13, 2024. https://filecenter.santa-clarita.com/PRCS/Trails%20Map%202016_reduced.pdf.

City of Santa Clarita. 2022. "Parks Division." Accessed May 19, 2022. https://santaclarita.gov/parks-division/.

City of Santa Clarita. 2024. Facilities Directory. Accessed February 13, 2024. https://santaclarita.gov/parks-division/parks/.

County of Los Angeles. 2013. *County of Los Angeles Trails Manual*. Revised June 2013. Accessed June 1, 2022. https://trails.lacounty.gov/Files/Documents/1138/LA%20County%20Trails%20Manual%20%28Revised%2020171031%29.pdf.

County of Los Angeles. 2015. *County General Plan 2035*. Adopted October 6, 2015. Accessed May 19, 2022. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

DPR (County of Los Angeles County Department of Parks and Recreation). 2013. Trails Handbook. Accessed February 12, 2024. https://www.parks.ca.gov/?page_id=29174.

DPR. 2016a. "Los Angeles Countywide Comprehensive Park & Recreation Needs Assessment, Appendix A, Unincorporated Stevenson-Newhall Ranch-Castaic-Val Verde Study Area Profile." https://lacountyparkneeds.org/wp-content/root/FinalReportAppendixA/StudyArea_049.pdf.

DPR. 2016b. "Los Angeles Countywide Comprehensive Park & Recreation Needs Assessment, Appendix A, Santa Clarita-North Study Area Profile." https://lacountyparkneeds.org/wp-content/root/FinalReportAppendixA/StudyArea_179.pdf.

DPR. 2016c. "Los Angeles Countywide Comprehensive Park & Recreation Needs Assessment, Appendix A, Santa Clarita-South Study Area Profile." https://lacountyparkneeds.org/wp-content/root/FinalReportAppendixA/StudyArea_151.pdf.

DPR. 2018a. *Santa Susana Mountains Trails Master Plan (Phase II)*. December 2018. Accessed June 3, 2022. https://parks.lacounty.gov/santa-susana-mountains-trails-master-plan-phase-ii-aims-to-promote-multi-use-regional-trails-in-the-santa-clarita-valley/.

DPR. 2018b. *Santa Susana Mountains Trails Master Plan (Phase II) Final Mitigated Negative Declaration*. Accessed May 27, 2022. https://trails.lacounty.gov/Files/Documents/133/Santa%20Susana%20Mts%20Trails%20MP_MND_Vol%20I.pdf.

DPR. 2022a. "Placerita Canyon State Park." Accessed May 19, 2022. https://parks.lacounty.gov/placerita-canyon-state-park/#.

DPR. 2022b. "Santa Susana Pass State Historic Park." Accessed June 2, 2022. https://www.parks.ca.gov/?page_id=611.

DPR. 2022c. "Castaic Lake State Recreation Area." Accessed June 3, 2022. https://parks.lacounty.gov/castaic-lake-state-recreation-area/.

DPR 2022d. "Planning and Development." Accessed May 19, 2022. https://parks.lacounty.gov/planning-and-development.

DPR. 2022e. "Full List of Parks." Accessed May 19, 2022. https://parks.lacounty.gov/park-overview/?row=2#fullListOfParksColumn.

HMDB (Historical Marker Database). 2022. "Marge Feinberg Rim of the Valley Trail (Saddletree Ranch Trailhead)." Accessed May 27, 2022. https://www.hmdb.org/PhotoFullSize.asp?PhotoID=490017.

MRCA (Mountains Recreation and Conservation Authority). 2022a. "About." Accessed May 19, 2022. https://mrca.ca.gov/about/.

MRCA. 2022b. "Santa Clarita Woodlands Park." Accessed May 20, 2022. https://mrca.ca.gov/parks/park-listing/santa-clarita-woodlands-park/.

OPR (Office of Planning and Research). 2019. *Environmental Checklist Form (Initial Study) County of Los Angeles, Department of Regional Planning—Project Title: Canyon View Estates/Project No. 2016-002179; Tract Map No. 74650; Conditional Use Permit No. 2016004409; Oak Tree Permit No. RPPL2017009209; and Environmental Assessment No. 20160044100*. Received August 21, 2019. Accessed June 12, 2022. https://files.ceqanet.opr.ca.gov/254740-2/attachment/ipA1dV8BsKDWvH3jLJCGOad1ZYE9tU66A4Emy6qrgsnaYbzaU8-tcKwCl1Qy2OVHgOkITQlSGNVBenHe0.

SMMC (Santa Monica Mountains Conservancy). 2024. The Santa Monica Mountains and Rim of the Valley Trail Corridor. Accessed February 12, 2024. https://smmc.ca.gov/the-santa-monica-mountains-and-rim-of-the-valley-corridor/#:~:text=The%20Rim%20of%20the%20Valley%20Trail%20Corridor%20is,San%20Fernando%2C%20Simi%2C%20Conejo%2C%20and%20La%20Crescenta%20Valleys.

USDA and Forest Service. 2022. "Angeles National Forest: About the Area." Accessed May 19, 2022. https://www.fs.usda.gov/main/angeles/about-forest/about-area.

4.17 Transportation

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to transportation, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data as well as the following:

Appendix J Transportation Impact Analysis, prepared by Fehr & Peers, dated November 2023

Other sources consulted are listed in Section 4.17.9, References.

4.17.1 Existing Conditions

A comprehensive data collection effort was undertaken to develop a detailed description of existing conditions in the Project's study area. The assessment of conditions relevant to this study includes a description of the study area, an inventory of the local street system in the vicinity of the Project site, a summary of the current transit service, and bicycle and pedestrian facilities in the study area. A detailed description of these elements is presented in this chapter.

Study Area

The study area selected for Project's analysis includes The Old Road to the east, Pico Canyon Road to the north, and Calgrove Boulevard to the south. There is no development located to the west of the Project site. The streets in the study area are under the jurisdiction of the County of Los Angeles (County).

Existing Street System

Interstate (I) 5 is located less than 0.25-mile east of the Project site and provides regional access to and from the site and vicinity. Arterial roadways serving the study area include The Old Road and The Old Road/Calgrove Boulevard in the north/south direction and Pico Canyon Road in the east/west direction. The characteristics of the roadways serving the Project site, including their roadway classification as identified in the County's *Master Plan of Highways*, last updated May 2019, are described below.

Freeways

I-5 runs in a north/south direction east of the Project site. In the vicinity of the study area, I-5 provides four lanes in each direction. Interchanges are provided at Pico Canyon Road and Calgrove Boulevard in the study area.

East/West Streets

Pico Canyon Road is classified as a Major Highway in the study area. It provides two lanes in both directions with a raised median in the study area. Parking is not permitted along either side of the street in the study area.

North/South Streets

The Old Road is classified as a Secondary Highway between Pico Canyon Road and Calgrove Boulevard. North of Pico Canyon Road and south of Calgrove Boulevard, The Old Road is classified as a Major Highway. It fronts the

Project site and provides one lane in both directions, south of Sagecrest Circle. North of Sagecrest Circle, it provides two lanes in both directions. Parking is not permitted along either side of the street in the study area.

Calgrove Boulevard is classified as a Secondary Highway and is located southeast of the Project site. It provides one lane in each direction and parking is not permitted on either side of the street in the study area.

Existing Public Transit Service

Figure 4.17-1, Transit Routes, shows the bus routes that provide service in the study area. There are four local and four express Santa Clarita Transit routes within the study area.

Details on the transit lines in the vicinity of the Project site include:

- Santa Clarita Transit Route 4 – Route 4 provides local service between Bouquet Junction and the Newhall Metrolink Station. It runs along Pico Canyon Road north of the Project site near the study area. Route 4 has average headways of one hour during the weekday AM and PM peak period. The Newhall Metrolink Station is approximately 3 miles from the Project site.
- Santa Clarita Transit Route 5 – Route 5 provides local service between Stevenson Ranch and Forest Park. It runs along Pico Canyon Road and The Old Road north of the Project site in the study area. Route 5 has average headways of one hour during the weekday AM and PM peak period.
- Santa Clarita Transit Route 6 – Route 6 provides local service between Stevenson Ranch and Shadow Pines. It runs along Pico Canyon Road and The Old Road north of the Project site in the study area. Route 6 has average headways of one hour during the weekday AM and PM peak period.
- Santa Clarita Transit Route 14 – Route 14 provides local service between Plum Canyon and the Newhall Metrolink Station. It runs along Pico Canyon Road north of the Project site near the study area. Route 14 has average headways of one hour during the weekday AM and PM peak period.
- Santa Clarita Transit Route 757 – Route 757 provides express service between the McBean Regional Transit Center and the Metro North Hollywood Station. It runs along the I-5 Freeway in the study area. Route 757 has average headways of one hour during the weekday AM peak period and 30 minutes during the PM peak period.
- Santa Clarita Transit Route 791 – Route 791 provides express service between Santa Clarita and Canoga Park. It runs along the I-5 Freeway in the study area. Route 791 has headways of 30 minutes to one hour during the weekday AM and PM peak periods.
- Santa Clarita Transit Route 792 – Route 792 provides express service between Santa Clarita and Century City. It runs along the I-5 Freeway in the study area. Route 792 has headways of 30 minutes to one hour during the weekday AM and PM peak periods.
- Santa Clarita Transit Route 794 – Route 794 provides express service between Santa Clarita and the Burbank Metrolink Station/Union Station. It runs along the I-5 Freeway in the study area. Route 794 has one bus that runs during the AM peak period average headways of one hour during the weekday AM peak period and has an approximately one hour headway during the PM peak period.

Existing Bicycle and Pedestrian Facilities

Sidewalks are not currently present on The Old Road fronting the Project site. There are sidewalks present on the west side of The Old Road north of Sagecrest Circle, which continue north toward Pico Canyon Road. There are

marked crosswalks provided at The Old Road and Pico Canyon Road. There are no marked crosswalks at The Old Road and Calgrove Boulevard. As described in Section 3.2, Project Characteristics of this Draft EIR, pedestrian access to the Project would be provided along The Old Road once the Project is built, and pedestrian access to the nearby trail system would be provided from the Project site.

Existing bicycle facilities in the study area include a Class II bike lane on The Old Road, north of Sagecrest Circle. Figure 4.17-2, Existing and Planned Bicycle Facilities, identifies the existing and planned bicycle facilities in the Project's study area. The County Bicycle Master Plan (2012) as well as the Santa Clarita Non-Motorized Transportation Plan (2020) indicates that a Class II bike lane is planned in the study area along The Old Road, south of Sagecrest Circle; along Pico Canyon Road, west of The Old Road; and along Calgrove Boulevard, east of The Old Road.

Surrounding Land Uses

As discussed within Chapter 2, Environmental Setting, Figure 2-2, Surrounding and Nearby Land Uses, provides an overview of nearby land uses. The Project site is located within the unincorporated County, but is adjacent to City of Santa Clarita boundaries, with residential, limited commercial, and open space land uses surrounding the Project site. The Project site is south of Sagecrest Circle in the Stevenson Ranch residential community, adjacent to The Old Road and I-5 on its eastern side, and north of Calgrove Boulevard near Ed Davis Park in Towsley Canyon. Commercial areas in close proximity to the Project site include Valencia Plaza, which contains hotels, restaurants and businesses approximately 0.5-mile north of the Project site, and Valencia Marketplace, an outdoor mall located approximately 0.8-mile north of the Project site.

4.17.2 Regulatory Requirements

Federal

There are no federal policies or regulations applicable to transportation with respect to the Project.

State

California Department of Transportation

The California Department of Transportation, also known as Caltrans, is the public agency responsible for designing, building, operating, and maintaining California's state highway system, which consists of freeways, highways, expressways, toll roads, and the right-of-way area between the roadways and property lines. Caltrans is also responsible for permitting and regulating the use of state roadways. Caltrans' construction practices require temporary traffic control planning during any activities that interfere with the normal function of a roadway.

Senate Bill 743

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743, which became effective on January 1, 2014. The purpose of SB 743 is to streamline the review under the California Environmental Quality Act (CEQA) process for several categories of development projects including the development of infill projects in transit priority areas and to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions. SB 743 adds Chapter 2.7: Modernization of Transportation Analysis for Transit Oriented Infill Projects to the CEQA Statute (Public

Resources Code Section 21099). Section 21099(d)(1) provides that aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. In addition, SB 743 mandates that alternative metric(s) for determining impacts relative to transportation shall be developed to replace the use of LOS in CEQA documents.

In the past, environmental review of transportation impacts focused on the delay that vehicles experience at intersections and on roadway segments, which is often measured using LOS. Mitigation for impacts on vehicular delay often involves increasing capacity such as widening a roadway or the size of an intersection, which in turn encourages more vehicular travel and greater pollutant emissions. Additionally, improvements to increase vehicular capacity can often discourage alternative forms of transportation such as biking and walking. SB 743 directed the Governor's Office of Planning and Research (OPR) to develop an alternative metric(s) for analyzing transportation impacts in CEQA documents. The alternative shall promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution by promoting the development of multimodal transportation system and providing clean, efficient access to destinations. Under SB 743, it was anticipated that the focus of transportation analysis will shift from vehicle delay to VMT within transit-priority areas (i.e., areas well served by transit).

Pursuant to SB 743, OPR released the draft revised CEQA Guidelines in November 2017, recommending the use of VMT for analyzing transportation impacts. Additionally, OPR released Updates to Technical Advisory on Evaluating Transportation Impacts in CEQA, to provide guidance on VMT analysis. In this Technical Advisory, OPR provides its recommendations to assist lead agencies in screening out projects from VMT analysis and selecting a significance threshold that may be appropriate for their jurisdictions (OPR 2018). While OPR's Technical Advisory is not binding on public agencies, CEQA allows lead agencies to "consider thresholds of significance … recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence" (24 CCR 15064.7[c]).

In December 2018, the State CEQA Guidelines were updated to add Section 15064.3, Determining the Significance of Transportation Impacts, that describes specific considerations for evaluating a project's transportation impacts using the VMT methodology. This new methodology is required to be used for projects beginning on July 1, 2020.

State CEQA Guidelines Section 15064.3(b) is divided into four subdivisions as follows:

(1) **Land Use Projects**. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

(2) **Transportation Projects.** Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.

(3) **Qualitative Analysis.** If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

(4) **Methodology.** A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project.

Since the Project is a land use development, State CEQA Guidelines Section 15064.3(b)(1) applies to the Project. In July 2020, the County of Los Angeles updated its *T*ransportation Impact Analysis Guidelines (County's Guidelines) to reflect changes required by SB 743, which include the screening criteria, analysis requirements, thresholds, and mitigation options for VMT analysis associated with the operation of new projects in the County (Public Works 2020).

Assembly Bill 1358

The Complete Streets Act of 2008 (AB 1358) requires, beginning January 1, 2011, cities and counties, upon any substantive revision to their circulation elements, to plan for a balanced multi-modal transportation network that meets the needs of all users of streets, roads, and highways, including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation.

Regional and Local

Southern California Association of Governments

The Southern California Association of Governments (SCAG) develops the Regional Transportation Plan (RTP), which presents the transportation vision for Los Angeles, Orange, San Bernardino, Imperial, Riverside, and Ventura Counties. SB 375 was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. Under the law, SCAG is tasked with developing a Sustainable Communities Strategy (SCS), an element of the RTP that provides a plan for meeting emissions reduction targets set forth by the California Air Resources Board.

The 2020–2045 RTP/SCS also known as Connect SoCal, is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians (SCAG 2020). The Connect SoCal Plan was adopted on September 3, 2020 by SCAG's Regional Council. The goals applicable to the Project are summarized below.

Goal 1. Encourage regional economic prosperity and global competitiveness.

Goal 2. Improve mobility, accessibility, reliability, and travel safety for people and goods.

Goal 3. Enhance the preservation, security, and resilience of the regional transportation system.

Goal 4. Increase person and goods movement and travel choices within the transportation system.

Goal 6. Support healthy and equitable communities.

Goal 7. Adapt to a changing climate and support an integrated regional development pattern and transportation network.

Goal 8. Leverage new transportation technologies and data-driven solutions that result in more efficient travel.

Long Range Transportation Plan

The 2020 Long Range Transportation Plan (LRTP) provides a detailed roadmap for how the Los Angeles County Metropolitan Transportation Authority (Metro) would plan, build, operate, maintain, and partner for improved mobility in the next 30 years. The LRTP is a planning document to help guide future funding plans and policies needed to move Los Angeles County forward for a more mobile, resilient, accessible, and sustainable future. The LRTP was adopted by the Metro Board of Directors on September 24, 2020.

Metro has constructed roughly 130 miles of fixed-guideway transit in the past 40 years and the 2020 LRTP plans to add more than 100 miles over the next 30 years, the most aggressive transit expansion plan in the nation. Beyond transit, Metro will invest in arterial and freeway projects to reduce congestion, such as the I-5 North Capacity Enhancements project, and bicycle and pedestrian projects to provide alternative transportation modes, such as the LA River Path and Active Transportation Rail to Rail Corridor. Through these investments, Metro will enhance regional mobility, support economic recovery and promote sustainability through green construction practices (Los Angeles County Metropolitan Transportation Authority 2020).

Los Angeles County 2035 General Plan

Mobility Element

The County's General Plan Mobility Element, adopted in 2015, provides an overview of the transportation infrastructure and strategies for developing an efficient and multimodal transportation network (County of Los Angeles 2015). The Element assesses the challenges and constraints of the Los Angeles County transportation system, and offers policy guidance to reach the County's long-term mobility goals. Two sub-elements—the Highway Plan and Bicycle Master Plan—supplement the Mobility Element. These plans establish policies for the roadway and bikeway systems in the unincorporated areas, which are coordinated with the networks in the 88 cities in Los Angeles County. The General Plan also establishes a program to prepare community pedestrian plans, with guidelines and standards to promote walkability and connectivity throughout the unincorporated areas. A consistency analysis of the Project's specific goals and policies with the County's relevant plans, policies, and goals related to transportation and circulation is provided in Section 4.11, *Land Use and Planning*, of this Draft EIR.

Highway Plan

The Los Angeles County Highway Plan provides policy guidance for building a comprehensive highway network throughout unincorporated areas. The Highway Plan provides a highway system that is consistent with and supportive of the goals and policies outlined in the Land Use Element. More specifically, the Highway Plan maintains right-of-way corridors to ensure space for future facility improvements to accommodate alternative modes. The Highway Plan roadway classifications and descriptions of highway types are provided below.

Major Highway: This classification includes urban and rural highways that are of countywide significance and are, or are projected to be, the most highly traveled routes. These roads generally

require four or more lanes of moving traffic, channelized medians and, to the extent possible, access control and limits on intersecting streets.

In urban areas, the typical right-of-way width for these highways is 100 feet. Alternative major highway sections may be established by the County to accommodate features such as raised medians, bicycle facilities, and wider parkways with varying right-of-way widths.

In rural areas, major highways are intended to maintain a rural appearance (without curb, gutter, and/or sidewalk) to reflect the rural character of various communities throughout Los Angeles County. The typical right-of-way width of a rural major highway is 108 feet. Additional right-of-way may be required to accommodate other transportation uses. In addition, beyond the ultimate road right-of-way, there may be a need for additional dedications for trail purposes, to accommodate equestrian and other non-vehicular uses.

Secondary Highway: This classification includes urban and rural routes that serve or are planned to serve an areawide or countywide function, but are less heavily traveled than major highways. Secondary highways also frequently act as oversized collector roads that feed the countywide system. In this capacity, the routes serve to remove heavy traffic from local streets, especially in residential areas. Access control, especially to residential property and minor streets, is desirable along these roads.

In urban areas, secondary highways generally have four lanes of vehicular traffic on 80 feet of right-of-way. However, configuration and width may vary with traffic demand and existing conditions. In a few cases, routes that carry major highway levels of traffic are classified as secondary highways because it is impractical to widen them to major highway standards. Alternative secondary highway sections may be established by the County to accommodate features such as raised medians, bicycle facilities, and wider parkways with varying right-of-way widths.

In rural areas, certain connector highways to and between rural communities are also classified as secondary highways. These highways are intended to maintain a rural appearance (without curb, gutter, and/or sidewalk) to reflect the rural character of various communities throughout Los Angeles County. The typical right-of-way width of rural secondary highways is 86 feet. Additional right-of-way may be required to accommodate other transportation uses. In addition, beyond the ultimate road right-of-way, there may be a need for additional dedications for trail purposes, to accommodate equestrian and other non-vehicular uses.

Limited Secondary Highway: This classification includes urban and rural routes that provide access to low-density areas.

In urban areas, limited secondary highways generally feature lower traffic volumes and multimodal transportation facilities. The typical right-of-way width of these highways generally ranges between 64-80 feet. Alternative secondary highway sections may be established by the County to accommodate features such as raised medians, bicycle facilities, and wider parkways with varying right-of-way widths.

In rural areas, limited secondary highways are generally located in rural communities and remote foothill, mountain and canyon areas. These highways are intended to maintain a rural appearance (without curb, gutter, and/or sidewalk) to reflect the rural character of various communities throughout

Los Angeles County. The typical right-of-way width of rural limited secondary highways is 64 feet. Additional right-of-way width may be required to accommodate left-turn pockets and passing lanes may be provided when required for traffic safety. The right-of-way may be increased for additional improvements where traffic or drainage conditions warrant. In addition, beyond the ultimate road right-of-way, there may be a need for additional dedications for trail purposes, to accommodate equestrian and other nonvehicular uses.

Parkway: This classification includes urban and rural routes that have park-like features either within or adjacent to the roadway. The right-of-way width required varies as necessary to incorporate these features, typically with a minimum of 80 feet.

Roadway improvements vary depending on the composition and volume of traffic carried.

Expressway: This classification includes urban and rural controlled-access highways connecting communities. Expressways can generally accommodate six to ten traffic lanes and are intended for thru-traffic, featuring full or partial control of access. The right-of-way required varies as necessary to incorporate these features, but is typically 180 feet in width. Roadway improvements vary depending upon the composition and volume of traffic carried.

Bicycle Master Plan

The Bicycle Master Plan provides direction for improving mobility of bicyclists and encouraging more bicycle ridership within the County by expanding the existing bikeway network, connecting gaps, addressing constrained areas, providing for greater local and regional connectivity, and encouraging more residents to bicycle more often (County of Los Angeles 2012).

Class I (Bicycle Path): Bike paths, also called shared-use paths or multi-use paths, are paved right-of-way for exclusive use by bicyclists, pedestrians, and other non-motorized modes of travel. They are physically separated from vehicular traffic and can be construction in roadway right-of-way or exclusive right-of-way. Most of Los Angeles County bicycle paths are located along the creek and river channels, and along the beach. These facilities are often used for recreation but also can provide important transportation connections.

Class II (Bicycle Lane): Bike lanes are defined by pavement striping and signage used to allocate a portion of roadway for exclusive bicycle travel. Bike lanes are one-way facilities on either side of a roadway. Bike lanes are located adjacent to a curb where no on-street parking exists. Where on-street parking is present, bike lanes are striped to the left side of the parking lane.

Class III (Bicycle Route): Bike routes provide shared use with motor vehicle travel within the same travel lane. Designated by signs, bike routes provide continuity to other bike facilities or designate preferred routes through corridors with high demand.

Los Angeles County Code

The Los Angeles County Code (County Code) consists of the regulatory, penal and administrative ordinances of a general nature of Los Angeles County. It is codified pursuant to California Government Code Sections 50022.1 et seq, and is organized by chapters, articles, divisions, and sections. The County Code is updated as new ordinances

are adopted by the County Board of Supervisors. Sections of the code applicable to transportation and mobility include the following:

Title 15, Vehicles and Traffic

Title 15 regulates the moving, parking, and standing of vehicles in the unincorporated areas of the County and includes Section 15.76.170, which establishes that whenever the road commissioner finds that the regulation of traffic is necessary at the site of road or street construction or maintenance, traffic may be regulated by means of persons authorized for such duty (i.e., flagmen).

Title 16, Highways

Chapter 16.16, Construction Work, of Title 16 contains provisions that apply to permits for the laying, constructing, reconstructing or repairing of curbs, sidewalks, gutters, driveways, highway surfaces, retaining walls, storm drains, culverts, highway lights or lighting system, or other appurtenant structures in the County.

Title 22, Planning and Zoning.

The Zoning Code includes regulations concerning where and under what conditions various land uses may occur in the County's unincorporated areas. It also establishes zone-specific height limits, setback requirements, and other development standards, for residential, mixed-use, commercial, industrial, and all other types of sites. The Zoning Code is a primary tool for implementing the County's General Plan. The purpose of the Zoning Code is to encourage, classify, designate, regulate, and restrict the highest and best locations and uses of buildings and structures, for residential, commercial, and industrial or other purposes.

Title 32, Fire Code

Emergency services within the urban areas of the County are provided by the Los Angeles County Fire Department (LACoFD). Pursuant to Section 105.7.26.2 of the Fire Code, when required by law or other agencies, LACoFD fire code official review and approval is required prior to final approval of the following applications: tract maps, parcel maps, final maps, planned unit developments, conditional use permits, design overlay reviews, environmental impact reviews, road vacations, zone changes, water plan reviews, and gate design review for land development projects. Further, Section 4811.9, Fire department access, requires that emergency vehicle access, fire lanes, and access roads be maintained at all times, pursuant to Section 503 of the Fire Code. Any deviations are subject to approval by the LACoFD fire code official.

Requirements for Temporary Controls for Lane Closures, Street Closures, and Detours

The Requirements for Temporary Controls for Lane Closures, Street Closures, and Detours (Traffic Control Requirements) provides the requirements for temporary traffic controls and access for any permitted activity within the County public rights-of-way when temporary disruption of traffic is implemented. The provisions are supplemental to Part 6 of the "Greenbook" Standard Specifications for Los Angeles County Public Works (Public Works) Construction. As a general provision, the Traffic Control Requirements state that temporary street closures, detours, lane closures, signs, lights and other traffic control devices shall conform to the latest California Manual on Uniform Traffic Control Devices (California MUTCD). The Traffic Control Requirements also include provisions pertaining to emergency access, preparation of Traffic Control Plans, traffic lanes and clearances, emergency traffic controls, and notifications related to roadway closures (County of Los Angeles 2016).

Santa Clarita Valley Area Plan

For reference, the County's Santa Clarita Valley Area Plan is also referred to as "One Valley, One Vision" (OVOV).

Circulation Element

The Circulation Element of the OVOV is a document for the continued development of efficient, cost-effective and comprehensive transportation systems that are consistent with regional plans, local needs, and the Valley's community character. The Circulation Element complements and supports the Land Use Element, insofar as a cohesive land use pattern cannot be achieved without adequate circulation. The Circulation Element identifies and promotes a variety of techniques for improving mobility that go beyond planning for construction of new streets and highways. These techniques include development of alternative travel modes and support facilities; increased efficiency and capacity of existing systems through management strategies; and coordination of land use planning with transportation planning by promoting concentrated, mixed-use development near transit facilities (LACDRP 2012). The goals and policies within the Circulation Element that are applicable to the Project are provided in Section 4.11, Land Use and Planning, of this Draft EIR.

4.17.3 Thresholds of Significance

In accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to transportation are listed below. A project may have a significant impact if it would:

Threshold 4.17a: Conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Threshold 4.17b: Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

Threshold 4.17c: Substantially increase hazards due to a road design feature (e.g., sharp curves) or incompatible uses (e.g., farm equipment).

Threshold 4.17d: Result in inadequate emergency access.

4.17.4 Methodology

Public Works adopted their Transportation Impact Analysis Guidelines on July 23, 2020 (Public Works 2020). The Transportation Impact Analysis (TIA) prepared for the Project analyzes impacts from the Project based on a consultation with Public Works in accordance with the County's Guidelines, adopted in July 2020, which focuses on automobile delay (or level of service [LOS] and vehicle miles traveled [VMT]) (Fehr & Peers 2023; Public Works 2020). Please note that the LOS analysis conducted for the TIA is not included in the evaluation of transportation impacts in this Draft EIR, as LOS is no longer used by the County to determine the significance of a transportation impact under CEQA pursuant to Senate Bill (SB) 743. In addition to the vehicular mode analyses, the multi-modal network in the influence of the Project study area was reviewed, including pedestrian, bicycle, transit and alternative vehicle mobility. Collectively, vehicular mobility combined with multi-modal networks were reviewed to help promote local and regional mobility without auto-dependency.

A complete description of methodology is provided in Appendix J of this Draft EIR (Fehr and Peers 2023). Key tasks undertaken for the TIA include (1) determination of existing traffic conditions, (2) trip generation forecasts of the Project's land uses, (3) assignment of project-generated trips to the study area roadway system, and (4) evaluation of the impact of cumulative traffic at the study intersections.

Review for Conflicts with Plans, Programs, Ordinances, or Policies

As required by Appendix G of the CEQA Guidelines, the Project must review for conflicts with transportation-related plans, programs, ordinances, or policies. SCAG 2020-2045 RTP/SCS, the Los Angeles County General Plan 2035 Mobility Element, the OVOV, and the County's Guidelines are applicable to the Project.

Consistency with CEQA Section 15064.3, subdivision (b) – VMT Analysis

CEQA Section 15064.3, subdivision (a) Purpose, established VMT as the most appropriate measure of transportation impacts. The subdivision (a) defines vehicle miles traveled as "the amount and distance of automobile travel attributable to a project.". The term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. CEQA Guidelines Section 15064.3(b) is divided into four subdivisions and the Project is classified as a land use project. For land use projects and plans, based on the predominant use, the following VMT efficiency metrics and method of estimation can be used:

> **Total VMT per Service Population:** The total VMT to and from all zones in the geographic area are divided by the total service population to get the efficiency metric of VMT per service population. The total service population is the sum of the number residents and the number of employees.
>
> **Residential (Home-based) VMT per capita:** All home-based auto vehicle trips are traced back to the residence of the trip-maker (non-home-based trips are excluded) and then divided by the population within the geographic area to get the efficiency metric of home-based VMT per capita (or per resident).
>
> **Employment (Home-based work)/Work VMT per employee:** All auto vehicle trips between home and work are counted, and then divided by the number of employees within the geographic area to get the efficiency metric of home-based work VMT per employee.

The County used the regional SCAG Model[1] to estimate average VMT for the unincorporated areas and County baseline VMT as shown in Table 4.17-1, Los Angeles County Baseline VMT Data by Analysis Year.

[1] Los Angeles County Senate Bill (SB) 743 Implementation and CEQA Updates Report, June 2020: The most current version of the SCAG Model has a base year of 2012 and future year of 2040 and was developed for the 2016 SCAG Regional Transportation Plan and Sustainable Communities Strategy, April 2016. The model contains traffic analysis zones that contain socio-economic data reflecting the population, employment, and land use development characteristics throughout the region. The TAZs are characterized as Tier 1 and Tier 2 zones, and each Tier 1 zone contains multiple Tier 2 zones. The Tier 2 zones represent a smaller geographic area that allows the model to produce more refined trip assignment forecasts. Both Tier 1 and Tier 2 zones are used to calculate VMT. Total VMT is calculated using the Tier 1 zones. VMT by trip purpose (e.g., homebased VMT) is calculated using the Tier 2 zones. The SCAG regional model contains the socioeconomic data and transportation network for the entire SCAG region including the incorporated Cities. The model also contains neighboring, external zones that are used to estimate travel demand that occurs between the SCAG region and adjacent areas, as well as estimate regional travel demand for those traveling through the SCAG region.

Table 4.17-1. Los Angeles County Baseline VMT Data by Analysis Year

VMT Metric	Analysis Year					
	2020	2021	2022	2023	2024	2025
Residential VMT per capita	12.9	12.8	12.7	12.6	12.6	12.5
Work VMT per employee	16.7	16.5	16.3	16.1	16.0	15.8
Total VMT per service population	30.9	30.8	30.7	30.6	30.4	30.3

Source: Baseline VMT data by Analysis Year per *LA County Baseline VMT Data* memorandum, dated January 26, 2022 (Appendix C of Appendix J of this Draft EIR)

A project's VMT analysis follows the process of first using screening criteria, identifying an efficiency metric, identifying the significance threshold and, lastly, determining requirements for modeling and assessment.

VMT Screening

The first step of a VMT analysis is to determine what type of analysis, if any, is needed. The Project was evaluated against three different screening criteria to assess if a VMT analysis would be applicable per the County's guidelines. The screening criteria are detailed below and applied for the Project to determine whether further VMT analysis is warranted.

Non-Retail Project Trip Generation Screening Criteria

If the answer is no to the question below, further analysis is not required, and a less than significant determination can be made.

- Does the development project generate a net increase of 110 or more daily vehicle trips?

Based on the Project's daily vehicle trip generation estimated using *Trip Generation, 10th Edition*[2] (ITE 2017), the Project's estimated trip generation is greater than 110 daily trips and is therefore not screened out on this criteria.

Proximity to Transit Based Screening Criteria

If a project is located near a major transit stop or high-quality transit corridor, the following question should be considered:

- Is the project located within a one-half mile radius of a major transit stop or an existing stop along a high-quality transit corridor?

Based on existing transit service in the study area, the Project is located within a one-half mile radius of a high-quality transit corridor. There are four Santa Clarita Transit routes that run along the I-5 Freeway with an average headway of approximately 13 minutes in the AM peak period and 16 minutes in the PM peak period. Table 1 of the TIA shows the calculation of the peak period headways.

While high frequency transit is present along the I-5 corridor near the Project, there are no transit stops within a half-mile of the Project site that provide access to the high frequency transit service and there are no major transit

[2] As detailed in Appendix J, the most recent edition is the 11th Edition ITE. However, the ITE Trip Generation 11th Edition was published after the Project's scoping memo. If the 11th Edition was used, it would result in fewer daily and peak hour trips, so therefore using 10th Edition is conservative. Comparisons are presented in Appendix I of the TIA (Appendix J of this Draft EIR).

stops (planned or existing) within a half-mile radius. Therefore, the Project is not screened out from further VMT analysis under this screening criteria.

Residential Land Use Based Screening Criteria

Independent of the screening criteria for non-retail and retail projects, certain projects that further the State's affordable housing goals are presumed to have less than significant impact on VMT. If the project requires a discretionary action and the answer is yes to the question below, further analysis is not required, and a less than significant determination can be made.

- Are 100% of the units, excluding manager's units, set aside for lower income households?

The Project will not be providing 100% of the units for lower income households and hence is not screened out from further VMT analysis under this screening criteria.

Project VMT Methodology

Per County Guidelines, the Project does not meet any of the screening criteria described above. Therefore, a detailed VMT assessment of the Project has been conducted using the County of Los Angeles VMT Tool to determine the significance of its transportation impact.

Per the County's procedures, daily household VMT per capita was estimated using the County's VMT Tool and compared with its published threshold guidance. The baseline VMT data in which the County thresholds are based have recently been updated to represent the amount of VMT generated by land uses within the entire County, rather than using the geographic boundaries for the North County and South County areas. The Los Angeles County Public Works Transportation Impact Guidelines (July 23, 2020) and a VMT calculator tool that the County provides to consultants for use in VMT impact analysis for land use projects in the County are in the process of being updated with the revised baseline VMT data and thresholds. The VMT Tool starts by allowing the user to enter in the analysis year, project location, land use type, and number of units. The VMT Tool then estimates VMT based on trip generation and trip length data from the Southern California Association of Government (SCAG) Regional Transportation Plan (RTP) travel demand model and accounts for the effects of internalization, transit, and walkability on VMT. The VMT Tool allows for the selection of the single-family housing and multi-family housing land uses. No special land uses or modifications to the VMT tool were needed for this Project.

Cumulative Project VMT Methodology

Per the County's TIA Guidelines, the SCAG RTP/SCS Travel Demand Model was used as the basis for the cumulative analysis. This analysis was conducted by running the SCAG model with the cumulative "no project" scenario representing the RTP/SCS cumulative year 2040 conditions and the cumulative "plus project" scenario representing the addition of the Project to the year 2040 conditions. The socioeconomic data in the traffic analysis zone (TAZ)[3] in which the Project is located was updated to reflect the addition of the Project. The SCAG model was used to estimate average home-based trip length, vehicle trips, and population for the cumulative "no project" scenario and cumulative "plus project" scenario.

[3] A TAZ is the spatial unit (or geographical area) within which travel behavior and traffic generation are estimated in a travel demand model.

After running the SCAG model without and with the Project, the model outputs show that the cumulative "no project" residential VMT per capita for the Project area is 18.4, and the cumulative plus project residential VMT per capita is 18.7 for all home-based production trips (See Appendix J for detailed description of VMT calculations).

County's VMT Impact Criteria

The project has a potentially significant VMT impact if it meets one or more of the criteria listed below. The impact criteria below were selected as thresholds for determining significance of the Project's VMT impact.

Direct Impact Criteria

Residential Projects. The project's residential VMT per capita would not be 16.8% below the existing residential VMT per capita for the LA County.

Cumulative Impact Criteria

Land use projects that: (1) demonstrate a project impact after applying an efficiency based VMT threshold and (2) are not deemed to be consistent with the SCAG RTP/SCS could have a significant cumulative impact on VMT. Further evaluation would be necessary to determine whether the project's cumulative impact on VMT is significant. This analysis is conducted by running the SCAG RTP/SCS Travel Demand Forecasting Model with the cumulative "no project" scenario for the specific TAZ in which the project is located and determining the specific VMT per capita in that particular location. This approach then involves adding the project data to the model and running the RTP/SCS cumulative year "plus project" scenario for the TAZ in which the project is located, thereby representing the reallocation of the population and/or employment growth based on the land supply changes associated with the proposed project. Any increase in VMT per capita above that which was forecasted in the RTP/SCS (a cumulative "no project" scenario) would constitute a significant impact.

Geometric Design Feature or Incompatible Use Hazards

For vehicle, bicycle and pedestrian safety impacts, a review was conducted for all new driveways or vehicle access points, internal circulation, and parking access from an operational and safety perspective (e.g., turning radii, driveway queuing, line-of-sight for turns into and out of project driveway[s]). Where Project driveways would cross pedestrian facilities or bicycle facilities (bike lanes or bike paths), the analysis considers operational and safety issues related to the potential for vehicle/pedestrian and vehicle/bicycle conflicts and the severity of consequences that could result.

Emergency Access

For emergency access impacts, a review was conducted for Project access points, internal circulation, and parking access to determine if adequate emergency access is provided. The analysis considers the physical conditions of the Project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers. Also, a determination is made as to whether the Project would preclude adequate emergency access within the adjacent roadway network.

4.17.5 Impact Analysis

Threshold 4.17a: Would the project conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Based on an evaluation conducted as part of the TIA (Appendix J), the following plans, policies, and programs were determined to be relevant to the Project and are analyzed in this section: SCAG 2020-2045 RTP/SCS, the County of Los Angeles General Plan, the County's TIA Guidelines, and OVOV.

SCAG 2020-2045 RTP/SCS

The RTP/SCS establishes goals for the region and identifies transportation investments that address the region's growing population, as well as strategies to reduce traffic congestion and greenhouse gas (GHG) emissions (SCAG 2020). The RTP/SCS goals are provided in detail in Section 4.17.2, Regulatory Requirements. An assessment of whether the Project would conflict with SCAG's 2020-2045 RTP/SCS Goals is shown in Table 4.17-2, Potential to Conflict with 2020-2045 RTP/SCS Goals, below.

Table 4.17-2. Potential to Conflict with 2020-2045 RTP/SCS Goals

RTP/SCS Goal	Project Applicable Component(s)
Goal 1 Encourage regional economic prosperity and global competitiveness.	**No Conflict.** The Project would develop 510 residential units. In addition to market-rate housing, the Project includes the development of 71 deed-restricted, affordable units, representing 15% of the dwelling units on-site. Specifically, the Project would provide 47 very low-income senior housing units and 24 middle/moderate-income units, thus increasing a diversity of housing types in the Santa Clarita Valley. As such, the Project would improve regional economic development by introducing a mix of new housing units in proximity to a major transportation corridor with easy access to major employment centers in the Santa Clarita Valley and beyond.
Goal 2 Improve mobility, accessibility, reliability, and travel safety for people and goods.	**No Conflict.** The location of the Project site, in proximity to the Valencia Plaza and multiple regional and local bus lines; the I-5 and The Old Road; and bicycle facilities such as bike racks, a private-gated access road, and off-site improvements to the Old Road would maximize mobility and the accessibility to the Project site. Both the Calgrove and Lyons Avenue freeway interchanges provide access to the Project site via The Old Road. The I-5 Freeway and the Old Road are designed with sufficient capacity to convey the Project's anticipated traffic (Appendix J). Additionally, the Project would include improvements to The Old Road to further improve traffic flow and reduce potential vehicle conflicts with pedestrian activity around the Project site.
Goal 3 Enhance the preservation, security, and resilience of the regional transportation system.	**No Conflict.** The Project proposes to implement a TDM program in accordance with MM-4.17-2 that includes strategies that emphasize the use of alternative travel modes, such as cycling and transit, which would support the region's transportation investment and the sustainability of the regional transportation system.
Goal 4	**No Conflict.** The location of the Project site, in proximity to the Valencia Plaza and multiple regional and local bus lines; the I-5 and The Old Road; and

Table 4.17-2. Potential to Conflict with 2020-2045 RTP/SCS Goals

RTP/SCS Goal	Project Applicable Component(s)
Increase person and goods movement and travel choices within the transportation system.	bicycle facilities, would support an increase in person and goods movement and increase the available travel choices within the transportation system.
Goal 5 Reduce greenhouse gas emissions and improve air quality.	**No Conflict.** The Project would provide a pedestrian-friendly design, promote access from the nearby transit, provide bicycle storage areas for Project residents, employees, and visitors, and provide off-site pedestrian improvements along The Old Road. The Project site is oriented such that visitors and residents would be able to walk through and around the Project site with multiple access points and community connections to the residential development and proposed trails. As demonstrated in response to Threshold 4.8b of Section 4.8, Greenhouse Gas Emissions, the Project complies with plans, policies, regulations and GHG reduction actions/strategies outlined in the County's Community Climate Action Plan, General Plan and OVOV, the County Los Angeles Countywide Sustainability Plan, 2017 Scoping Plan, and 2020–2045 RTP/SCS. In addition, the Project design provides for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations for all dwelling units. As described above, the Project would include a TDM program that would reduce VMT through a combination of GHG reduction strategies to encourage walking, biking, carpooling, and transit use (MM-4.17-2). In accordance with Title 24 2019, the Project would install solar photovoltaic systems on buildings throughout the Project site, for a total of 1,122 kW of solar on the residential development generating 2,012,815 kWh per year. Based on the above, the Project's design and characteristics would serve to reduce GHG emissions and improve air quality, in support of this goal.
Goal 6 Support healthy and equitable communities.	**No Conflict.** The Project would support "healthy and equitable communities" through street improvements and development of a recreational center, as well as recreational trails, which would be easily accessible to Project residents and residents of the surrounding neighborhoods. The Project's interior roadway system has been designed consistent with County roadway design criteria for Private Drives. The widths for the main interior streets, "A" Street and "B" Street, are proposed as Residential-Collector streets, each with a 64 feet full ROW. The two streets create a loop system for ingress and egress to The Old Road.

Table 4.17-2. Potential to Conflict with 2020-2045 RTP/SCS Goals

RTP/SCS Goal	Project Applicable Component(s)
Goal 7 Adapt to a changing climate and support an integrated regional development pattern and transportation network.	**No Conflict.** As described in Section 3.2, Project Characteristics of this Draft EIR, pedestrian access to the Project would be provided along The Old Road, and pedestrian access to the nearby trail system would be provided from the Project site. Off-site improvements of the Project would include widening The Old Road by 47 feet to create a total 68-foot-wide curb to curb road within an 80-foot right of way. A new 8-foot-wide concrete sidewalk would be installed along the western frontage of the Project site, which would improve pedestrian and vehicular access to the site. The Project proposes to implement a TDM program in accordance with MM-4.17-2 that includes strategies that emphasize the use of alternative travel modes, such as bicycle and transit, which would support community adaptations to climate change. The Project would develop residential uses within proximity to the Valencia Plaza and multiple regional and local bus lines; the I-5 and The Old Road; and bicycle facilities such as bike racks, a private-gated access road, and off-site improvements to the Old Road, thus supporting an integrated regional development pattern and transportation network.
Goal 8 Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	**No Conflict.** The Project would implement a TDM program in accordance with MM-4.17-2, which includes strategies that emphasize the use of alternative travel modes, such as cycling and transit. To further facilitate transit and active transportation, the Project site within an urbanized portion of Los Angeles County with access to regional transportation systems that can use new transportation technologies and data driven solutions to provide more efficient travel. Additionally, the Project's proximity to the Valencia Plaza and multiple regional and local bus lines; the I-5 and The Old Road; and bicycle facilities would maximize mobility and the accessibility to the Project site.
Goal 9 Encourage development of diverse housing types in areas that are supported by multiple transportation options.	**No Conflict.** The Project would construct 510 dwelling units with a mix of attached and detached dwelling units and affordable senior housing, within an area that is supported by multiple transportation options, including public transportation routes, pedestrian facilities, and bicycle facilities such as bike racks, a private-gated access road, and off-site improvements to IT Old Road. The residential units include a mix of unit types to encourage diverse housing types within this area of the County. The Project would implement a TDM program in accordance with MM-4.17-2, which includes strategies that emphasize the use of alternative travel modes, such as cycling and transit.
Goal 10 Promote conservation of natural and agricultural lands and restoration of habitats.	**No Conflict.** As detailed in Chapter 2, Environmental Setting, the Project site is within the Santa Susana Mountains/Simi Hills Significant Ecological Area (SEA) and within a Hillside Management Area (HMA). The Project would cluster development in a manner that would preserve over approximately 175 acres of the Project site as preserved and improved open space, thereby concentrating development and minimizing development within the Santa Susana Mountains/Simi Hills SEA and HMA. Additionally,the Project would reduce impacts to federal and State-listed species by providing on-site habitat preservation, as detailed in Section 4.4, Biological Resources. As detailed in Chapter 3, Project Description, the Project would require an Oak Tree Permit in accordance with Chapter 22.17, Oak Tree Permits, of the Los Angeles County Code. The Project would require approval

Table 4.17-2. Potential to Conflict with 2020-2045 RTP/SCS Goals

RTP/SCS Goal	Project Applicable Component(s)
	of a CUP to remove SEA-protected trees. With approval of the Project's CUPs, the Project's proposed residential design would cluster development and protect natural resources and the SEA. Additionally, the Project would be required to demonstrate compliance with the County's Hillside Design Guidelines (County of Los Angeles 2019). The Project proposes a number of amenities to residents and to the surrounding community, including abundant open space and an extensive trail network connecting the public to the Project's open space and adjacent off-site trail networks and open space.

Source: SCAG 2020.

As shown in Table 4.17-2 above, the Project would not conflict with the goals of the 2020-2045 RTP/SCS. The Project would provide 510 residential units near the Valencia Plaza and multiple regional and local bus lines; the I-5 and The Old Road; and bicycle facilities. As shown in Table 4.17-2, the Project would be consistent with 2020-2045 RTP/SCS goals to encourage economic prosperity; improve mobility, accessibility, reliability, and travel safety; enhance the preservation, security, and resilience of the regional transportation system; increase the productivity of the transportation system, reduce GHG emissions and improvement of air quality; support healthy and equitable communities; adapt to climate change and support an integrated regional development pattern; leverage new transportation technologies and data driven solutions that result in more efficient travel; encourage development of diverse housing types; and promote conservation of natural and agricultural lands and restoration of habitats. Additionally, as shown under cumulative VMT analysis conducted by running the SCAG RTP/SCS Travel Demand Forecasting Model and implementation of MM 4.17-2, the Project would not conflict with the RTP/SCS under cumulative conditions. Therefore, the Project would result in a less than significant impact with regard to potential conflicts with the 2020-2045 RTP/SCS.

Los Angeles County Public Works Transportation Impact Analysis Guidelines

According to the County's Transportation Impact Analysis Guidelines, Project access would be considered constrained if the Project's traffic would contribute to unacceptable queuing at nearby signalized intersections (Public Works 2020). Unacceptable or extended queuing may be defined as spill over from turn pockets into through lanes or spill over into intersections (Public Works 2020). However, operational deficiency is not considered a CEQA transportation impact.

Operational Traffic

An operational analysis of intersections and driveways identified for the Project's site access analysis per the County's Transportation Impact Analysis Guidelines is included in the TIA (Appendix J). The operational analysis has

been conducted to provide level of service and queuing analysis for existing (Year 2022)[4], future year (Year 2029)[5] and future year plus Project traffic conditions for the following:

- The Old Road/Pico Canyon Road
- The Old Road/Calgrove Boulevard
- The Old Road/Project Driveway North
- The Old Road/Project Driveway South

As stated in the TIA, the study area intersections of Old Road/Pico Canyon Road and Old Road/Calgrove Boulevard operate at LOS D or better under existing conditions, future conditions, and future plus Project conditions (Appendix J). The 95th percentile queue at the southbound left turn movement at the Old Road/Pico Canyon Road intersection was found to exceed the storage capacity under existing conditions during the PM peak period. Under future conditions, the northbound left turn and southbound left turn pockets are projected to have a queue length that exceeds storage at The Old Road /Pico Canyon Road during the PM peak period. Under future plus Project conditions, Project traffic would not increase the queue at the southbound left turn at the Old Road/Pico Canyon Road intersection. It was determined that the increase in the queue in the northbound left turn lane at the Old Road/Pico Canyon Road intersection would extend in the two-way left-turn lane, and therefore, not contribute to unacceptable levels of queuing at the Old Road/Pico Canyon Road intersection. Both Project driveways along The Old Road are projected to operate acceptably under future plus Project conditions in an unsignalized, side street stop-controlled configuration. Neither Project driveways do not warrant signalization under future plus Project conditions.

The Project would not result in unacceptable or extended queuing at these intersections and driveways, as analyzed in the TIA (Appendix J). Therefore, the Project would be consistent with the operational criteria specified in the County's Transportation Impact Analysis Guidelines.

Construction Traffic

As described in Chapter 2, Environmental Setting, the Project site currently consists of undeveloped hillsides with no habitable structures or paved roads on-site. Miscellaneous structures on the Project site includes fencing, a metal frame bridge, an abandoned water tank, water wells, metal drainage pipe, irrigation lines, trails, electrical distribution lines, dirt roads, and an abandoned and plugged oil well. The number of construction workers and construction equipment would vary throughout the construction process. The construction workforce likely would come from all parts of the County and is assumed to arrive and depart from all directions. Construction traffic generally occurs prior to the peak period (7:00 A.M. – 9:00 A.M. and 4:00 P.M. – 6:00 P.M.). Consistent with the typical construction workday, most employees would arrive to the Project site between 6:30 A.M. and 7:00 A.M. for daily meetings and planning purposes (noting that construction equipment would not be utilized until after 7:00 A.M.). Most workers would be expected to leave the Project site between 3:30 P.M. and 4:00 P.M., although some could leave during the weekday afternoon peak traffic hour. Regardless of the timing during the weekday afternoon

[4] The existing peak hour traffic counts were collected at the traffic study area intersections in June 2022 after stay-at-home orders during the COVID-19 pandemic were lifted and most businesses returned to working in person.

[5] The estimates of traffic growth were developed for the traffic study area to forecast future conditions (i.e., year 2029) without the Project. These forecasts included traffic increases as a result of both regional background traffic growth (ambient growth rate) and traffic generated by cumulative projects. An ambient growth rate (of 0.35% per year) was applied to adjust the existing base year traffic volumes to reflect the effects of regional growth and development by year 2029. Additionally, traffic from three known cumulative projects within one-half mile from the farthest outlying study intersection were included in the forecasting effort to capture the local traffic growth that could be added to the intersections in the traffic study area.

peak hour, the construction employee trips would be short term and in consideration of the number of potential trips, would not be anticipated to substantially affect the performance of the circulation system during peak traffic periods. Construction worker parking would be accommodated within the construction area of the Project and not on local public streets.

The Project would require approximately 1,500,000 cubic yards of cut and 1,300,000 cubic yards of fill for a total of 2,800,000 cubic yards of grading with 1,345,000 cubic yards of over excavation. There is expected to be 15% shrinkage on the over excavation for a total of 200,000 cubic yards. The total earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site parcel adjacent to The Old Road that would be constructed with manufactured slopes. The grading would balance onsite, and as such, no import or export of soils would be required for the Project.

Heavy equipment to be utilized on site during construction would include, but not be limited to flat beds, dozers, scrapers, graders, small utility tractors, track hoes, dump trucks, cement trucks, pavers, rubber-tired compactors, rollers, water trucks, rolling container trucks and bobcats. Heavy equipment would be delivered and removed from the Project site throughout the construction phase. As most heavy equipment is typically not authorized to be driven on a public roadway, most of the equipment would be delivered and removed via large flatbed trucks. It is anticipated that delivery of heavy equipment would not occur daily, but rather periodically throughout the construction phase based on need.

Project construction would be ongoing for a minimum of five years and would include off-site improvements such as utility infrastructure and roadway improvements. The Project would require temporary lane closures along the segment of The Old Road in the vicinity of the Project during some of the construction activities. Construction of the Project could also potentially interfere with pedestrian, bicycle, transit, or vehicle circulation and accessibility to adjoining areas during these construction activities, resulting in a potentially significant impact, and mitigation is required.

There are no pedestrian or transit facilities adjacent to the Project site that could potentially be blocked during construction activities. However, there are trails nearby the Project site. A temporary traffic control and access plan is required to permit activity within the County public right of way when temporary disruption of traffic is implemented. This plan would also address safety and access for pedestrians, bicyclists and passage of public transit vehicles and implement parking restrictions, if required. MM-4.17-1 requires preparation of a Construction Traffic Management Plan in compliance with the County's Traffic Control Requirements to provide temporary traffic controls and access within the County public rights-of-way when temporary disruption of traffic is anticipated. This includes compliance with the latest California MUTCD, as well with the provision that emergency access to all nearby properties shall be maintained at all times, unless the permit allows a temporary restriction. The Plan would require notifications in advance of closing, partially closing or reopening public throughways, traffic lanes and clearances, pedestrian access, and other emergency traffic controls, such as the provision of flagmen, which may also be required pursuant to Section 15.76.170 (Flagmen at construction and maintenance areas) of the County Code.

The County's Traffic Control Requirements require preparation of a Construction Traffic Management Plan. With preparation and implementation of a Construction Traffic Management Plan, per MM-4.17-1, the impacts of the Project's short-term construction activities related to a conflict with the County's Transportation Impact Analysis Guidelines would be less than significant.

County of Los Angeles General Plan

Table 4.11-1, Potential to Conflict with General Plan, within Section 4.11, Land Use and Planning, of this Draft EIR includes an analysis of the Project compared to the applicable policies of the Los Angeles County General Plan. As discussed, the Project would be consistent with the Mobility Element and would ensure that safety, street design, and circulation is maintained for the duration of the Project. For example, the Project would be consistent with Policies M 1.1 and M 1.2 and would improve The Old Road at the Project site consistent with the circulation planning for streets and highways to ensure adequate access for motorists, pedestrians, cyclists, and other users. Sidewalks meeting ADA standards would be constructed within all the subdivision's local street rights- of-way. Trail improvements on the Project site would include an accessible park loop path that connects to the onsite trail system leading to nature trails that connect to the County trails system.

In addition, the Project's interior roadway system has been designed consistent with County roadway design criteria for private drives and would not conflict with Mobility Element Policy M 2.1. The Project's interior roadway system has been designed consistent with County roadway design criteria for Private Drives. ROW widths for the main interior streets, "A" Street and "B" Street, are proposed as Residential-Collector streets, each with a 64 feet full ROW. The two streets create a loop system for ingress and egress to The Old Road. The Project would provide street trees and other forms of landscaping such as shrubs, with fire-retardant species and spaced to reduce fire hazard, and therefore, would not conflict with Mobility Element Policy M 2.9. Therefore, the Project would not conflict with applicable transportation policies within the Los Angeles General Plan, therefore, impacts would be less than significant.

Santa Clarita Valley Area Plan, One Valley One Vision (OVOV)

The Circulation Element of OVOV includes policies pertaining to public safety and mobility within the Santa Clarita planning area, which includes the Project site. As discussed within Table 4.11-2, Potential to Conflict with OVOV, of Section 4.11, Land Use and Planning, the Project would not conflict with all appliable OVOV policies. As such, the Project would not conflict with the applicable policies within the OVOV, and a less than significant impact would occur in this regard.

Therefore, as shown in the analysis above, with implementation of MM 4.17-1, the Project's impacts related to SCAG's 2020-2045 RTP/SCS, the County of Los Angeles General Plan, the County's TIA Guidelines, and the OVOV related to impacts to the circulation system, including transit, roadway, bicycle, and pedestrian facilities, would be less than significant.

Threshold 4.17b: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

The methodology for the Project's VMT analysis is provided under Section 4.17.4, Methodology, above. The County's published guidelines identify a significance threshold for residential projects: if the project's residential VMT per capita is not more than 16.8% below the existing residential VMT per capita for the entire County, the project would have a significant VMT impact. Stated another way, if the Project would generate VMT at a level higher than the threshold for the County baseline, then the Project would have a significant VMT impact. If the Project would generate VMT at a level lower than the threshold, then the Project would not have a significant VMT impact.

Consistent with the RTP and the County General Plan, the model forecasts for future years suggests that residential VMT per capita is projected to decrease over time in the County. The County's procedures require the baseline VMT

applied in the Transportation Impact Analysis be consistent with the year of the Project's NOP. The baseline analysis year for the Project is 2022.

The County is in the process of updating its guidelines and VMT Tool to reflect the updated baseline VMT data and thresholds. The updated baseline VMT data were used based on direction from the County and were taken from the *LA County Baseline VMT Data* memorandum, dated January 26, 2022, which provides the updated baseline VMT for LA County (included as Appendix C of Appendix J of this Draft EIR). The baseline residential VMT per capita is 12.7 for the analysis year of 2022.[6]

According to the VMT Tool, the daily residential VMT per capita of the Project is estimated at 20.5 as shown in Table 4.17-3, Project VMT Metrics and Impact without Mitigation, and the TIA. The significance threshold of 16.8% below the County baseline for 2022 is 10.6 residential VMT per capita (16.8% below 12.7) for the year 2022. Therefore, per County's significance criterion for a direct impact, the Project's 20.5 residential VMT per capita exceeds the threshold and represents a potentially significant impact as estimated by the VMT Tool.

Table 4.17-3. Project VMT Metrics and Impact without Mitigation

Metric	County Baseline (Year 2022)	LA County VMT Threshold - 16.8% below County Baseline (Year 2022)	Project VMT	Exceeds the Baseline Threshold
Residential VMT per capita	12.7	10.6	20.5	**Yes**

Source: County of Los Angeles VMT Tool, Table 4.17-1 and Appendix J.

The Project's 20.5 daily household VMT per capita is higher than the threshold by 9.9 VMT per capita. In order to mitigate the residential VMT per capita impacts to less than significant, residential VMT per capita would need to be reduced by 48%. As previously stated, while the immediately adjacent City of Santa Clarita's residential VMT/capita is 24.1, the baseline residential VMT per capita is 12.7 for Los Angeles County in analysis year 2022.

To reduce the Project's VMT impacts, a Transportation Demand Management (TDM) program is required, as mandated by MM-4.17-2. The 2021 California Air Pollution Control Officers Association (CAPCOA) publication, Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, provides tools and methods in selecting and combining transportation measures (CAPCOA 2021). The Project as proposed includes compliance with regulatory requirements and site design elements for pedestrian network improvements that would be expected to enhance the usage of walking, biking, and transit modes as alternatives to automobiles.

A TDM plan that will detail additional program elements beyond the regulatory and site design features described above will be prepared as mitigation to reduce the trip generation and VMT impacts of the Project. The effectiveness of the TDM strategies is based primarily on research documented in the CAPCOA publication. CAPCOA provides quantified measures at both the Project/Site scale and Plan/Community scale. Per their guidance, while it may be possible that a user's project involves measures that affect vehicle trips or VMT at both scales, it is likely that combining the percent reduction from measures of different scales would not be valid. Since the site design

6 While the Project is not located in the City of Santa Clarita, it is immediately adjacent to the City boundary. Per the *Los Angeles County Senate Bill (SB) 743 Implementation and CEQA Updates Report*, the City of Santa Clarita's residential VMT/capita is 24.1 (County of Los Angeles 2020).

features for pedestrian network improvements were identified as the Plan/Community scale by CAPCOA, Table 4.17-4, TDM Strategies and VMT Reduction for the Project, details the quantitative and qualitative reductions from implementation of MM-4.17-2.

Table 4-17-4. TDM Strategies and VMT Reduction for the Project (MM-4.17-2)

TDM Measure	Description	VMT Reduction for Project
Quantitative TDM Measures		
Neighborhood Design		
Site Design for Pedestrian Network Improvements (T-18)	The Project site has been designed to encourage walking, biking, and taking transit. Providing a pedestrian access network to link areas within the Project site and connecting off-site locations (retail/open space) encourages people to walk instead of drive.	5.07%
Locating the Project near a Bike Lane (T-19-A)	The Project shall include a Class III bike route on “A” Street, “B” Street, and the private access road proposed on-site. The County is also planning to extend the existing Class II bike lane along The Old Road at the Project frontage. This proposed Class II bike lane would improve bike access to the neighborhood and benefit the Project, encouraging alternative mode use.	0.07%
Improve Bike Boulevard (T-19-B)	Per CAPCOA, Bicycle Boulevards are a designation within Class III bike route that create safe, low-stress connections for people biking and walking on streets. The Project shall include a Class III bike route on "A" Street, "B" Street, and the proposed private access road on the northwest periphery of the Project site) and improve the connectivity between The Old Road and the trails to the west.	0.03%
Expand Bikeway Network (T-20)	The Project's main loop road (i.e., "A" Street and "B" Street) would be wide enough to accommodate a Class III bike route. The paved private access road (the proposed maintenance road on the northwest periphery of the Project site) would also be a Class III bicycle route and would provide connectivity between The Old Road and the trails to the west.	0.07%
E-bikeshare System (T-22-B)[b]	E-bike loaner program to provide residents with short-term access for trips.	0.06%
Neighborhood Design Subsector Combined Reduction[c]		
Trip Reduction Programs		
Provide Community-Based Travel Planning (T-23)[b]	This 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 household VMT. The Project would create a ridesharing program for school children. Most school districts provide bussing services to public schools only. School Pool helps to match parents to transport students to private schools or to schools where students cannot walk or bike and do not meet the requirements for bussing.	2.28%
Qualitative TDM Strategies[d]		
Trip Reduction Programs		
Carpool/Vanpool Incentives (T-5)[e]	This includes monetary assistance with fares or fast costs for carpool/vanpool users.	0.00%

Table 4-17-4. TDM Strategies and VMT Reduction for the Project (MM-4.17-2)

TDM Measure	Description	VMT Reduction for Project
Implement Subsidized or Discounted Transit Program (T-9)[e]	This provides subsidized/discounted daily or monthly public transit passes	0.00%
	Total Reduction at Plan/Community Scale[c]	**7.45%**

Source: Fehr & Peers 2023.
Note: TDM: Transportation Demand Management; VMT: vehicle miles travelled

[a] VMT reduction based on research documented in the 2021 California Air Pollution Control Officers Association (CAPCOA) publication, Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, as well as the Fehr & Peers TDM+ tool. The TDM+ tool incorporates research conducted by Fehr & Peers under contract to the CAPCOA and elsewhere. It considers a variety of TDM strategies and the setting in which they may apply, estimates effectiveness for each, and applies caps when appropriate. CAPCOA offers methodologies based on preferred literature, along with methodologies based on alternative literature, for each strategy.

[b] The E-bikeshare system (T-22-B) and Community-Based Travel Planning (T-23) TDM measures will be active for five years following the initial deposit by the developer.

[c] Per CAPCOA publication, effectiveness levels for multiple measures within a subsector and across subsectors may be multiplied to determine a combined effectiveness level.

[d] Based on CAPCOA's Handbook for Analyzing GHG Emission Reductions (CAPCOA 2021), combining the percent reduction from measures of different scales would not be valid. Thus, measures at the Project/Site scale would be applied to the Project qualitatively.

[e] Carpool/Vanpool Incentives (T-5) and Subsidized Transit Program (T-9) will be active for three years following the initial deposit by the developer.

Implementation of MM-4.17-2 (detailed in Table 4.17-4, above), is estimated to result in a 7.45 percent reduction in VMT at a plan/community scale. Table 4.17-5, Project Baseline VMT with Mitigation, provides the Project's estimated VMT after implementation of MM-4.17-2 (Table 4.17-4).

Table 4.17-5. Project Baseline VMT with Mitigation

Project VMT Impact Analysis	Baseline
Residential VMT per Capita	20.5
TDM Mitigation Measure VMT Reduction	7.45%
Residential VMT per Capita with Mitigation	**19.0**
Threshold[a]	**10.6**
Significant Impact Remaining?	**YES**

Source: Fehr & Peers 2023; Public Works 2020.
Note:

[a] Baseline Threshold: 16.8% less than County Baseline VMT of 12.7 Residential VMT per capita for analysis year 2022, i.e., 10.6. Impact thresholds are based on the Los Angeles County Public Works Transportation Impact Guidelines, July 23, 2020.

As shown in Table 4.17-5, the daily residential VMT per capita is projected to be reduced from 20.5 to 19.0 under 2022 Project conditions, which still exceeds the significance threshold of 10.6 VMT per capita. To fully mitigate the remaining VMT impact, the Project would need to implement additional TDM measures to achieve an additional 44% reduction in VMT. While this would likely exceed the CAPCOA subsector maximum reduction and not be feasible, other potential supplemental mitigation measures were evaluated. One example is the LA Metro Universal College Student Transit Pass (U-Pass) program. The U-Pass program has the potential of reducing VMT by providing

a low-cost transit option for college students in the County. The VMT Mitigation Program Pilot Project identified the nexus between daily VMT reduction, number of student transit passes, and mitigation cost. Although the U-Pass program can be a potential mitigation measure for certain projects in the County where participation in the U-Pass program could potentially reduce those projects VMT, there is no nexus at the Project site. There are no schools that participate in the U-Pass program proximate to the Project site. Additionally, there are no schools in the Santa Clarita Valley that participate in the program, with the vast majority of schools participating in the program located geographically far away in central or south Los Angeles County. In addition, none of the bus/transportation providers with routes that provide service in the study area have a partnership with the U-Pass program. Santa Clarita Valley Transit Authority does not participate in the program. As there is no connection between a potential reduction of Project VMT and Project participation in the U-Pass program, there is no nexus between this potential mitigation measure and any reduction in a Project impact on transportation. Therefore, the U-Pass program is not feasible for the Project (Appendix J).

Therefore, per the TIA, no combination of feasible mitigation measures would reduce the impact below the County's threshold of significance. Therefore, even with implementation of MM-4.17-2, the Project's VMT impact would remain significant and unavoidable, and the Project would conflict with CEQA Guidelines section 15064.3, subdivision (b).

Threshold 4.17c: Would the project substantially increase hazards due to a road design feature (e.g., sharp curves) or incompatible uses (e.g., farm equipment)?

Construction Traffic

On-site traffic signage and striping would be incorporated into the detailed construction plans for the Project. Additionally, as discussed under Threshold 4.17a, Construction Traffic, the implementation of MM-4.17-1, would ensure that hazards related to construction traffic are reduced to less than significant.

Operational Traffic

No existing hazardous design features such as sharp curves or dangerous intersections exist on Project site or in the Project vicinity. Vehicular access to the Project site would be provided directly from The Old Road via two ingress/egress unsignalized driveways at the north and south and would serve as the primary Project site entrance.

A level of service (LOS) and queuing analysis was conducted to evaluate the ability of the Project access plan to accommodate the anticipated traffic levels at the driveway access points. As described in the TIA, both the north and south driveway approaches to The Old Road are projected to operate at an acceptable LOS and would not substantially increase hazards related to queuing of vehicles entering or exiting the Project. In addition, a signal warrant analysis was conducted for the north and south driveways to see if they would trigger the need for a traffic signal (Fehr & Peers 2023). Using the CA MUTCD methodology for Signal Warrant Analysis, the two driveways were tested to see if their volumes meet signal warrants (Caltrans 2021). As shown in Table 11 of the TIA, both driveways do not trigger a signal warrant analysis under the Future plus Project conditions and would not substantially increase hazards due to the establishment of new driveways.

In addition, the TIA noted that Project access and circulation has been reviewed by Public Works with respect to Caltrans/Los Angeles County standards to ensure that the Project does not substantially increase hazards due to a design feature. The County of Los Angeles would also periodically review traffic operations in the Project

vicinity once the Project is constructed to ensure that traffic operations are satisfactory. The impact would be less than significant.

Threshold 4.17d: Would the project result in inadequate emergency access?

Regional access to the Project site is provided via I-5, located approximately 250 feet east. The Project would provide a total of two vehicle access points via two unsignalized driveways from The Old Road. As a component of the Project, emergency vehicle access via "A" Street and "B" Street would be provided, in addition to the private access road that would connect to each Lot. An egress-ingress roadway would be built to meet all minimum fire apparatus access requirements of the County Fire Code to the property west of the Project site, proposed TTM 74979. Consistent with Title 21, Subdivisions, of the County Code, the Project's roadways would meet all County access requirements. The County Fire Code requirements describe the applicable County access standards (i.e., roadway widths, all-weather surface requirements, length of streets, turning requirements, grade restrictions, maintenance requirements, and parking restrictions) would be implemented by the Project. Specific fire and life safety requirements would be addressed at the building permit phase when architectural plans are submitted to the LACoFD for review and approval. A detailed analysis of emergency vehicle access, response and evacuation plan is provided in Sections 4.9 Hazards and 4.20 Wildfire, respectively, of this Draft EIR. While specific to wildfire evacuation and emergency access, as detailed in Section 4.20, the Project includes on-site locations to safely shelter in place, improved road conditions, an alternative evacuation route to I-5, and adheres to all State buildings codes to minimize the spread of a wildfire, which would also increase emergency access to and from the site. As detailed in Section 4.20-1, MM-4.20-1 would require that the HOA prepare an educational program with wildfire-related information to be provided to all residents and occupants, including the Wildfire Evacuation Plan (WEP), and the Fire Protection Plan (FPP) requirements. MM-4.17-1 would ensure adequate emergency access to the Project site during construction.

The Los Angeles County Sheriff's Department provides law enforcement services to the Project site. The nearest station is the Santa Clarita Valley Sheriff's Station, located approximately 4 miles east of the Project site. The LACoFD provides fire protection services to the Project site. The nearest existing fire station is 3.4 miles northeast of the Project site.

The Project's access points and internal roadways would be designed to meet County standards. Because the Project's access points and driveways would be designed in accordance with applicable Public Works Department Standard Plans, the Project site would be accessible to emergency responders during construction and operation of the Project. Implementation of MM-4.20-1 and MM-4.17-1 would ensure proper emergency access to the Project site. Therefore, impacts associated inadequate emergency access would be less than significant with mitigation.

4.17.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., cumulative projects) used for this analysis are presented in Section 2.6, Cumulative Impacts, and on Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR.

The methodology for inclusion of cumulative projects within the Transportation Impact Analysis is based on guidance from Public Works' Transportation Impact Analysis Guidelines, and specifically includes pending and approved development projects that are expected to be completed by the buildout horizon of the Project (2029)

within one-half-(0.5)-mile from the farthest outlying study intersection (Appendix J; Public Works 2020). The radius is consistent with the intent of Public Works' guidance for inclusion of cumulative projects. Based on the list of cumulative projects provided by the County and City of Santa Clarita, three projects are included in Figure 2-8: LA1, Canyon View Estates; LA2, Tentative Tract Map No. 74979; and SC1, Wiley Canyon Project.

For purposes of transportation, the geographical area of cumulative impacts varies by threshold, further detailed below.

Threshold 4.17a: Would the project conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The three cumulative projects analyzed for purposes of transportation impacts (i.e., Cumulative Projects LA1, LA2, and SC1) are primarily residential developments, and during preparation of this analysis, LA2 and SC1 are undergoing discretionary review process per CEQA, including consistency with local and regional policies related to the circulation system. Cumulative Projects LA1, LA2, and SC1 would be required to comply with all applicable local and regional policies related to the circulation system, including transit, roadway, bicycle, and pedestrian facilities similar to the Project. Applicable local and state provisions would apply to construction activities (including those encroaching upon the public rights-of-way) and would provide for public and emergency access and safety for all road users, including pedestrians and bicyclists. Construction of Cumulative Projects LA1, LA2, and SC1 are not anticipated to result in significant construction traffic impacts, as construction of Cumulative Projects LA1, LA2, and SC1 would include construction-specific traffic management plans, per each project's requirement, that would likely reduce any potentially significant impacts with regard to construction related impacts to less than significant. Therefore, with the implementation of Construction Traffic Management Plans, including MM-4.17-1 for the Project, cumulative construction related impacts to the circulation system would be less than significant.

Additionally, the operational analysis of cumulative projects' traffic was included under Future Year 2029 and Future Year 2029 plus Project conditions in the TIA prepared by Fehr & Peers (Appendix J). There were no unacceptable level of service or queuing affects noted under future conditions without or with the Project traffic, and as such, there would be no cumulative contribution from operation of the Project regarding conflict with an applicable program, plan, ordinance, or policy addressing the circulation system.

Threshold 4.17b: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Per the County's TIA Guidelines, the SCAG RTP/SCS Travel Demand Model was used as the basis for the cumulative analysis for VMT. This analysis was conducted by running the SCAG model with the cumulative "no project" scenario representing the RTP/SCS cumulative year 2040 conditions and the cumulative "plus project" scenario representing the addition of the Project to the year 2040 conditions. Based on the County's TIA Guidelines and per standard travel demand modeling methodology used for estimation of VMT, the socioeconomic data in the TAZ in which the Project is located was updated to reflect the addition of the Project. The SCAG model was used to estimate average home-based trip length, vehicle trips, and population for the cumulative "no project" scenario and cumulative "plus project" scenario. As outlined in the County's TIA Guidelines, any increase in residential VMT per capita above that which was forecasted in the RTP/SCS would result in a significant cumulative impact. After running the SCAG model without and with the Project, the model outputs show that the cumulative "no project" residential VMT per capita for the Project area is 18.4, and the cumulative plus Project residential VMT per capita is 18.7 for all home-based production trips (See Appendix C of TIA for detailed description of VMT calculations).

As shown in Table 4.17-6, Cumulative VMT without Mitigation, the cumulative "plus project" scenario is estimated to generate 18.7 daily residential VMT per capita, which represents an increase over the cumulative "no project" residential VMT per capita. Therefore, the Project would potentially result in cumulatively significant impact for VMT prior to mitigation.

Table 4.17-6. Cumulative VMT without Mitigation

Metric	Cumulative "No Project" Baseline	Threshold—No Project Baseline Residential VMT per Capita	Cumulative Residential VMT	Exceeds the Cumulative VMT Threshold
Residential VMT per capita	18.4	18.4	18.7	**YES**

Source: Appendix J.

However, as shown in Table 4.17-7, Cumulative Project VMT with Mitigation, VMT reduction measures as required by MM-4.17-2 would reduce the daily residential VMT per capita to a level below the significance threshold. Therefore, with the implementation of MM-4.17-2, the Project would not make a cumulatively considerable contribution to a cumulative impact and the cumulative VMT impact would be less than significant.

Table 4.17-7. Cumulative Project VMT with Mitigation

Project VMT Impact Analysis	Cumulative
Residential VMT per Capita without Mitigation	18.4
TDM Mitigation Measure VMT Reduction (MM-4.17-2)[2]	5.23%
Residential VMT per Capita with Mitigation	**17.7**
Threshold[1]	**18.4**
Significant Impact Remaining	**NO**

Note:

1 Cumulative Threshold: Cumulative No Project Baseline Residential VMT per Capita from SCAG RTP/SCS Travel Demand Model Run. Impact thresholds are based on the Los Angeles County Public Works Transportation Impact Guidelines, July 23, 2020.

2 The VMT reduction with cumulative mitigation strategies would be 5.23% under cumulative conditions, since the proposed E-bikeshare System (T-22-B) and Community-Based Travel Planning (T-23) measures will be active for five years following the initial deposit by the developer. The cumulative VMT mitigation of 5.23% includes all the measures in Table 4.17-4 except for E-bikeshare system (T-22-B) and Community-Based Travel Planning (T-23) since all the other measures in Table 4.17-4 reduce cumulative VMT level to less than significant under cumulative conditions. Further details are available in Table 12A of Appendix J of this Draft EIR.

Source: Fehr & Peers 2023.

Threshold 4.17c: Would the project substantially increase hazards due to a road design feature (e.g., sharp curves) or incompatible uses (e.g., farm equipment)?

The access and circulation for Cumulative Projects LA1, LA2, and SC1 would be reviewed by the Public Works or respective jurisdictions such as City of Santa Clarita with respect to applicable design standards to ensure that those projects do not substantially increase hazards due to a road design feature. The site access analysis or traffic analysis of each cumulative project would ensure that appropriate operational traffic analysis has been conducted to identify required improvements such a traffic signal or stop sign, left turn phasing, pavement markings, or reconfiguration of access points or nearby intersections. The Project's proposed driveways would be designed per County's Standard Plans and as shown in level of service (LOS) and queuing analysis in the TIA, the driveways would

operate acceptably under Future Year 2029 plus project conditions. The cumulative projects' access driveways are not in the vicinity of the Project driveways and do not have a potential to conflict with the Project driveway trips. Therefore, the Project would not result in hazardous design features with respect of the location and access of cumulative projects. Therefore, the impact to increasing hazards due to a road design feature (e.g., sharp curves) or incompatible uses would be cumulatively less than significant.

Threshold 4.17d: Would the project result in inadequate emergency access?

Cumulative Projects LA1, LA2, and SC1 would be required to comply with applicable requirements related to emergency vehicle access and circulation per LACoFD, the County, and the City of Santa Clarita, as applicable. All cumulative projects, as well as the Project, would be required to satisfy applicable Fire Code and Circulation requirements. As detailed in Section 4.9, Hazards and Hazardous Materials, the Project's construction activities would take place entirely on the Project site, and existing access for emergency service providers would be maintained during the entire construction phase and enhanced after development of the Project is complete. An egress-ingress roadway would be built to meet all minimum fire apparatus access requirements of the County Fire Code to Cumulative Project LA2, which would increase emergency access from Cumulative Project LA2 to The Old Road and surrounding roadways. Further, the Project would result in increased access via The Old Road by providing additional vehicular accessways to the Project site and Cumulative Project LA2—thereby enhancing emergency egress and ingress in the event of an emergency or evacuation. Additionally, as detailed in Section 4.20, Wildfire, the Los Angeles County Fire and Building Codes, along with project-specific needs assessments and fire prevention plan requirements, ensure that every project approved for construction includes adequate emergency access. Roads for all proposed projects are required to meet minimum widths, have an all-weather surface, and be capable of supporting the imposed loads of responding emergency apparatus. Therefore, the Project would not cumulatively impact the adequacy of emergency access.

4.17.7 Mitigation Measures

MM-4.17-1 Construction Traffic Management Plan. Prior to construction of the Project, the Applicant shall prepare a detailed Construction Traffic Management Plan, that shall be prepared in accordance with the County's Requirements For Temporary Traffic Controls For Lane Closures, Street Closures And Detours and supplemental to Part 6 of the Greenbook Standard Specifications for Public Works Construction, subject to County review and approval. The Plan shall include, but not be limited to, the following:

- Maintain existing access for land uses in proximity of the Project site throughout construction, unless otherwise approved by the County.
- Schedule deliveries and pick-ups of construction materials to non-peak travel periods, to the maximum extent feasible.
- Coordinate deliveries and pick-ups to reduce the potential of trucks waiting to load or unload for protracted periods of time.
- Minimize obstruction of through traffic lanes on The Old Road and ensure adequate evacuation capabilities of the Project site and nearby developed areas that may require use of The Old Road during evacuations. Use flag persons as needed to ensure safe traffic operations along The Old Road.

- If any lane closure is necessary, include detailed safety precautions for pedestrians and bicyclists to allow for safe passage such as alternate routing, protection barriers, and appropriate signage.
- Construction equipment traffic from the contractors shall be controlled by flagman.
- Identify designated transport routes for heavy trucks (in addition to haul trucks) to be used throughout Project construction.
- Schedule vehicle movements to ensure that there are no vehicles waiting off-site and impeding public traffic flow on the surrounding streets.
- Install temporary construction signs to warn vehicular traffic of reduced speed limits in construction zone.
- Establish requirements for loading/unloading and storage of materials on the Project site, where length of time traffic travel lanes could be encumbered and/or sidewalk closings or pedestrian diversions would be implemented, to ensure the safety of the pedestrians.
- Coordinate with adjacent property owners and emergency service providers to ensure adequate access to the Project site and surrounding uses.
- Limit potential roadway lane closure(s) to off-peak travel periods.
- Identify a contact person in the Construction Traffic Management Plan that would be available to oversee implementation of the Plan and address any community concerns.

MM-4.17-2 Transportation Demand Management (TDM) Program. Prior to issuance of final map recordation, the Project Applicant shall prepare a TDM Program aimed at discouraging single-occupancy vehicle trips and encouraging alternative modes of transportation, such as carpooling, taking transit, walking, and biking for residents. The TDM Program shall be subject to review and approval by the Los Angeles County Department of Regional Planning and Los Angeles County Public Works. The exact measures to be implemented shall be determined when the TDM Program is prepared, prior to issuance of a final map recordation for the Project. The following TDM measures are based on measures by the California Air Pollution Control Officers Association (CAPCOA) publication, *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (2021). The TDM Program must include, but would not be limited to, the following:

a. **Locating the Project near a Bike Lane; Improving Bike Boulevard; Expand Bikeway Network:** The Project shall include a Class III bicycle route on the proposed "A" Street, "B" Street, and the gated private access road on-site, which would connect to Los Angeles County's future Class II bicycle lane along the Project frontage on The Old Road.

b. **E-Bikeshare System:** The Project shall include an E-bike loaner program (separate from the publicly accessible options in the City of Santa Clarita) to provide residents with short-term access for trips. This program shall be active for five years following an initial deposit by the Project Applicant.

c. **Provide Community-Based Traveling Planning:** The Project shall provide households with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles, thereby reducing household vehicle miles traveled (VMT). The Project shall create a ridesharing program for school children. Most school districts provide bussing services to public schools only. School Pool helps match parents to

transport students to private schools or to schools where students cannot walk or bike and do not meet the requirements for bussing.

d. **Carpool/Vanpool Incentives:** The Project shall include monetary assistance with fares or gas costs for carpool/vanpool users. This incentive shall be active for three years following an initial deposit by the Project Applicant.

e. **Implement Subsidized or Discounted Transit Program:** The Project shall provide subsidized/discounted daily or monthly public transit passes. This incentive shall be active for three years following an initial deposit by the Project Applicant.

MM-4.20-1 in Section 4.20, Wildfire of this Draft EIR is applicable to this analysis.

4.17.8 Level of Significance after Mitigation

The Project could result in potentially significant impacts with regard to construction related impacts under the County's Guidelines. Implementation of MM-4.17-1 is required to reduce impacts to less than significant.

The Project would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) related to the VMT threshold, resulting in a potentially significant impact under baseline conditions. MM-4.17-2 requires a TDM plan that would detail additional program elements beyond the regulatory and site design features described above to reduce VMT impacts. The VMT reductions associated with the TDM plan would not reduce the daily residential VMT per capita to a level below the significance threshold under baseline conditions (year 2022). Therefore, the Project impact is considered significant and unavoidable.

The Project would have a less-than-significant impact regarding substantially increase hazards due to a road design feature (e.g., sharp curves) or incompatible uses (e.g., farm equipment) and no mitigation is required.

The Project would have a less-than-significant impact regarding inadequate emergency access with implementation of MM-4.17-1 and MM-4.20-1.

4.17.9 References

Caltrans (California Department of Transportation). 2021. *California Manual on Uniform Traffic Control Devises—2014 Revision, Revision 6 (March 30, 2021)*. Updated March 30, 2021. Accessed June 23, 2022. https://dot.ca.gov/programs/safety-programs/camutcd.

CAPCOA (California Air Pollution Control Officers Association). 2021. *Final Draft—Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*. December 2021. Accessed November 2023. https://www.caleemod.com/documents/handbook/full_handbook.pdf.

County of Los Angeles. 2012. *Bicycle Master Plan, Final Plan*. March 2012. https://pw.lacounty.gov/tpp/bike/docs/bmp/FINAL%20Bicycle%20Master%20Plan.pdf.

County of Los Angeles. 2015. *Los Angeles County General Plan 2035*. Adopted October 6, 2015. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

County of Los Angeles. 2016. Requirements for Temporary Controls for Lane Closures, Street Closures, and Detours. Accessed February 12, 2024. https://dpw.lacounty.gov/ldd/lib/fp/Permits/Temporary%20Traffic%20Control%20Requirements.pdf.

County of Los Angeles. 2019. *Hillside Design Guidelines*. Revised March 2019. https://planning.lacounty.gov/wp-content/uploads/2023/02/Draft-Community-Wildfire-Protection-Ordinance-Title-22-HMA-Design-Guidelines.pdf.

County of Los Angeles. 2020. *Los Angeles County Senate Bill (SB) 743 Implementation and CEQA Updates Report*. June 2020. Accessed November 2023. https://dpw.lacounty.gov/traffic/docs/Implementation-Report.pdf.

Fehr & Peers. 2023. *Transportation Impact Analysis for Lyons Canyon Residential Project*. November 2023. Provided as Appendix J.

ITE (Institute of Transportation Engineers). 2017. Trip Generation Manual, 10th Edition. 2017.

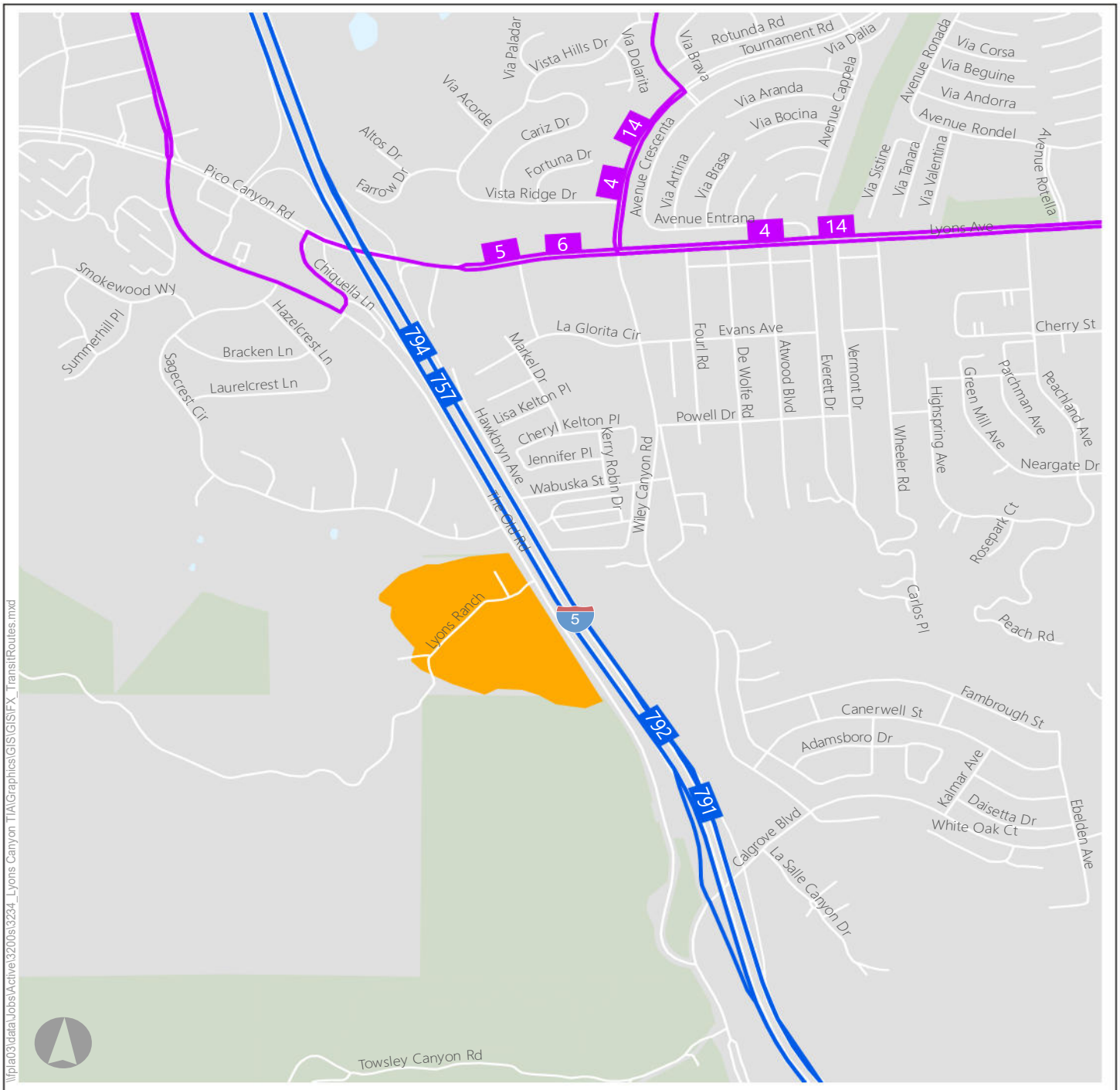
LACDRP (Los Angeles County Department of Regional Planning). 2012. *Santa Clarita Valley Area Plan, One Valley One Vision*. https://planning.lacounty.gov/wp-content/uploads/2022/10/Santa-Clarita-Valley-Area-Plan.pdf.

Los Angeles County Metropolitan Transportation Authority. 2020. *2020 Long Range Transportation Plan*. Approved September 2020. Accessed July 1, 2022. https://www.metro.net/about/plans/long-range-transportation-plan/.

OPR (California Governor's Office of Planning and Research). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December 2018. http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

Public Works (Los Angeles County Public Works). 2020. *Transportation Impact Analysis Guidelines*. July 2020. https://pw.lacounty.gov/traffic/docs/Transportation-Impact-Analysis-Guidelines-July-2020-v1.1.pdf.

SCAG. 2020. *The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments*. Connect SoCal. Adopted on September 3, 2020. Accessed July 15, 2022. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?.



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Transit Routes

Commuter Express Service

Local Service

Project Development Area

Figure 3

Transit Routes

14

SOURCE: Fehr and Peers, 2022

FIGURE 4.17-1

Transit Routes

Trails at Lyons Canyon Project

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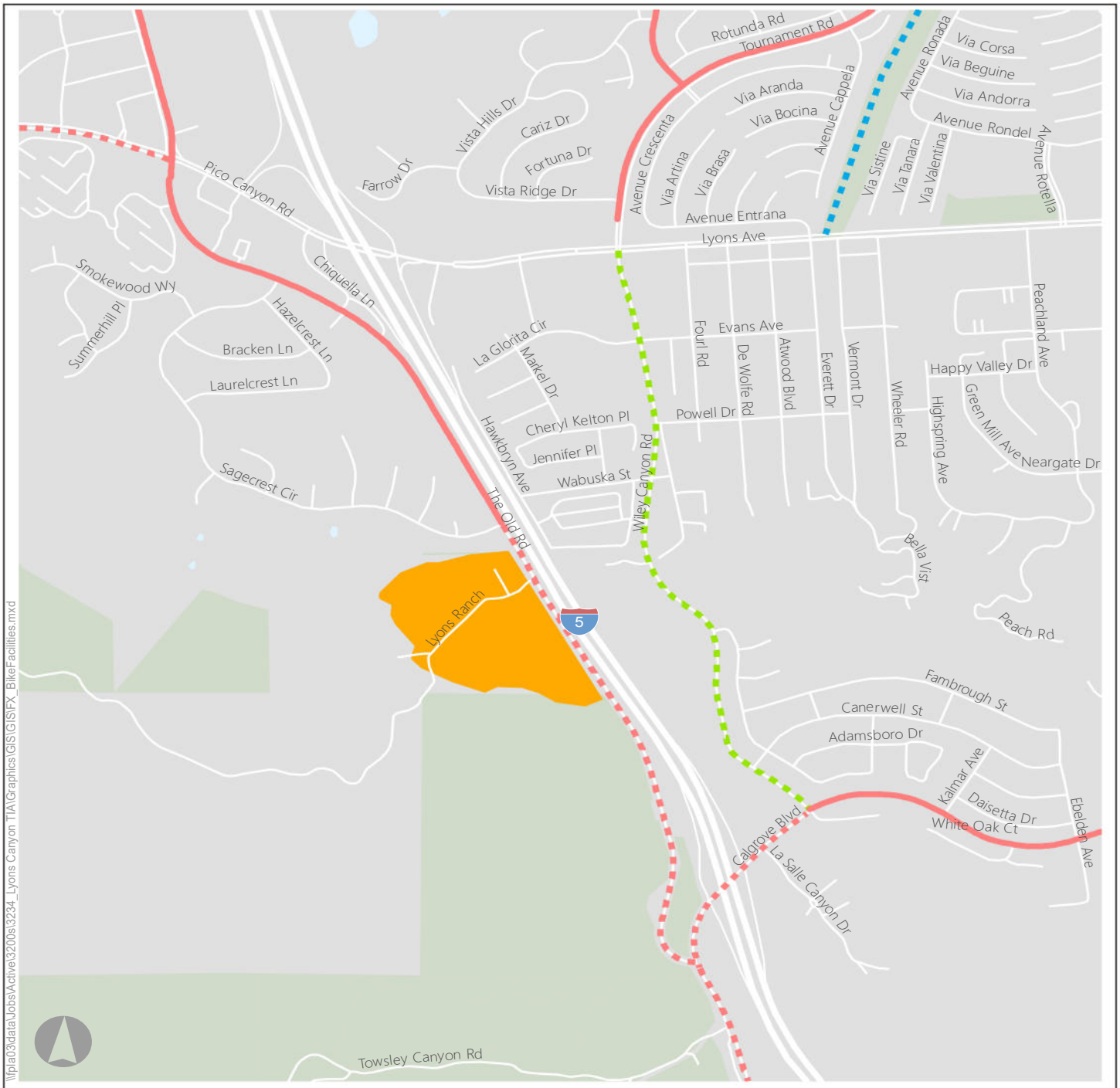


Figure 4

Existing and Planned Bicycle Facilities

15

SOURCE: Fehr and Peers, 2022

FIGURE 4.17-2

Existing and Planned Bicycle Facilities

Trails at Lyons Canyon Project

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4.18 Tribal Cultural Resources

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to Tribal Cultural Resources (TCRs), identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts analysis, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data and reports, as well as the following:

Appendix D Confidential Cultural Resources Technical Report for the Trails at Lyons Canyon Project, Santa Clarita Valley, prepared by Dudek, dated November 2023

Appendix K Confidential Assembly Bill 52 Consultation Record, dated January 2023

Other sources consulted are listed in Section 4.18.9, References.

4.18.1 Existing Conditions

Regional Setting

Ethnographic Setting

Tataviam

The Project site falls within the ethnographic boundary of the Tataviam (Johnson and Earle 1990; King and Blackburn 1978; Kroeber 1925). Tataviam territories included the upper reaches of the Santa Clara River drainage east of Piru Creek, but also encompassed the Sawmill Mountains to the north and the southwestern portion of the Antelope Valley (King and Blackburn 1978). Tataviam territory is bound by various branches of tribes, such as Chumash to the north and west (including the Ventureño to the west, and Castaic and Emigdiano to the northwest), Kitanemuk to the northeast, Serrano to the east, and Gabrielino to the south (King and Blackburn 1978).

Note that there is limited ethnographic data (i.e., data acquired by means of observation or taken from persons who practiced native lifeways) available concerning the Tataviam and their native lifeways. Most of what is known today about the Tataviam comes in the form of ethnohistory (i.e., historical accounts developed through examination of historical records and oral histories) as presented in the works of anthropologists Alfred L. Kroeber (1915, 1925) and John P. Harrington (1935). Their data is largely based on interviews conducted in the early 1900s with a Native American consultant named Juan José Fustero, a man who spoke Kitanemuk and claimed that his grandparents were born near the town of Newhall and spoke a language that is no longer extant (Bright 1975). Most of the subsequent works published on the Tataviam (Bright 1975; Hudson 1982; King and Blackburn 1978), including discussions of their cultural and geographic affiliations, were based on the Kroeber and Harrington interviews with Fustero and several other Kitanemuk consultants. Other studies have analyzed Spanish mission baptismal, marriage, and burial registers in an attempt to better understand the distribution of historic village settlements and kinship ties between settlements (Johnson 1978, 1997; NEA and King 2004).

Early ethnologies referred to the Tataviam as Ataplili'ish (Kroeber 1915), but Kroeber found this name to be too general since it had already been used to describe other indigenous groups (namely the Gabrielino). Kroeber changed the term to Alliklik (Krober 1925), which was noted to be a Ventureño Chumash name for the group

(although it is believed to be a derogatory term for the sound of the language) but offered almost no information concerning their native lifeways. One account of the Tataviam, provides a narrative that they held the river up from a point between Sespe and Piru, most of Piru Creek, Castaic Creek, and probably Pastoria Creek across the mountains in the San Joaquin Valley drainage and adjacent to the Yokuts (Kroeber 1925:613-614).

The Tataviam are linguistically classified as an Uto-Aztecan Serran sub-branch of Takic speaking groups consisting of Kitanemuk, Serrano (including Vanyume), and Tataviam (Golla 2011; Sutton 1980). William Bright has suggested that Tataviam was actually a separate language with Takic affinities, or perhaps a "remnant, influenced by Takic, of a language family otherwise unknown in southern California" (Bright 1975:230). However, the current and most widely accepted view is that Tataviam is in fact a Takic language (King and Blackburn 1978; Johnson and Earle 1990).

King and Blackburn (1978:536) noted several Tataviam settlements based on information provided by Harrington and other sources, including mission registers. Among these is the putative village of *tsawayung* (also referred to as *Chaguayabit*, *Chaguayanga*, *takuyama'm*), which some believe was located near Castaic Junction at the site of Rancho San Francisco. However, there is a lack of consensus as to the village's exact location. Harrington's own notes reflect this uncertainty: "Jose Juan Olivas thinks it is over by San Francisquito [Rancho San Francisco] but does not know and never did know just where" (NEA and King 2004:119). Based on diary entries from the Portolá Expedition (Perkins 1957), some have hypothesized that Estancia San Francisco de Xavier (often incorrectly referred to as an asistencia) was placed at the location of the village of *tsawayang*, but this is based on descriptive diary entries and has never been confirmed by archaeological or other historic evidence. In fact, no physical evidence of the village has ever been found. Other Tataviam villages mapped outside of the Project area include *tikatsing* located on upper Castaic Creek, and *pi'ing* located where Castaic Creek meets Elizabeth Lake Canyon. The village of *Tochonaga*, was recorded on an 1843 land grant map. This site appears to be located to the southeast of Newhall, but its precise location has also never been confirmed: "Tochononga was located in the mountains northwest of San Fernando…over by Los Alamos somewhere here in the Tejon Ranch" (NEA and King 2004:117). Other villages and seasonal camp sites identified by Harrington include *akure'eng*, which was located at the original Newhall town site; *apatsitsing*, located on upper Castaic Creek; and *naqava'atang*, located east of Townsend Peak. Piru Creek also contained several village and rancheria sites, located on the northern edge of Tataviam territory (Johnson and Earle 1990).

Pedro Fage's account of the 1769 Portola expedition indicates that the first Chumash settlement encountered upon leaving Tataviam territory was located west of the mouth of Piru Creek. The village of *kamulus* (*Camulos*), located east of Piru Canyon, bears a Chumash name (Johnson and Earle 1990), leading to speculation that this village consisted of a mixed Chumash-Tataviam population. There has been much discussion regarding Chumash ties to areas generally accepted as Tataviam territory (Beeler and Klar 1977).

More recent studies have examined additional Tataviam investigations conducted by Harrington with neighboring groups (Johnson and Earle 1990). These studies support the original Kroeber and Harrington findings that the Tataviam were a distinct group:

> The correspondence between (1) ancestral villages traced using genealogical evidence and (2) independently elicited information regarding Tataviam territoriality builds confidence in the reliability of the ethnographic record compiled by Kroeber and Harrington. The distinctiveness of the Tataviam as an ethnic entity, separate from the Kitanemuk and Fernandeño, is supported by our research (Johnson and Earle 1990:209).

In 1996, as the result of a Caltrans District 7 highway widening project for State Route (SR) 126, archaeologists discovered and excavated 45 burials from CA-LAN-2233, a prehistoric village site dating from approximately 2000 to 1640 years before present (BP) and located within Tataviam territory. Examination of mitochondrial DNA from five burials at CA-LAN-

2233 found that these individuals were genetically linked to modern Uto-Aztecan speaking groups, such as the Tataviam (Sutton 2009).

Local Setting

California Historical Records Information System Record Search

Assembly Bill (AB) 52 requires government agencies to consider TCRs as cultural resources identified by tribal individuals that are eligible for or listed in the California Register of Historical Resources, or resources that are established through substantial evidence provided by consulting tribes such that the lead agency designates a resource as a TCR. As such, it is appropriate to review identification of prehistoric archaeological resources that have the potential to be identified by consulting tribes as a TCR, by referring to records searches and cultural resources inventories.

As previously discussed in Section 4.5, Cultural Resources, the cultural resources record search indicated that 30 previous cultural resource studies have been conducted within 1-mile of the Project site between 1974 and 2015. Of these studies, seven (7) intersect or overlap the Project site; no cultural resources were identified within the current Project site as a result of these previous investigations (Appendix D). In addition, South Central Coastal Information Center (SCCIC) records indicate that a total of 13 previously recorded cultural resources fall within 1-mile of the Project site. Of these, three (3) overlap or interest the Project site. Only one of these resources is a prehistoric archaeological isolate.

1938 Kirkman-Harriman Historical Map Review

Dudek also reviewed pertinent academic and ethnographic literature for information pertaining to historic use of the Project area and vicinity, including sources commonly identified through Tribal consultation, notably the 1938 Kirkman-Harriman Historical Map (Kirkman 1938). This map is a valuable representation of post-colonization mission history; however, it is limited to a specific period of Native American history and substantiation of the specific location and uses of the represented individual features should be verified by archaeological records and/or other primary documentation. It should be noted that this map is highly generalized due to scale and age and may be somewhat inaccurate with regards to distance and location of mapped features. Additionally, this map was prepared based on review of historic documents and notes more than 100 years following secularization of the missions (in 1833). Although the map contains no specific primary references, it matches with the details documented by the Gaspar de Portolá expedition (circa 1769–1770). A summary of the Kirkman-Harriman Map review in relation to the Project site is provided below.

Based on the Kirkman-Harriman Map, the Project site is approximately 2.5 miles directly west of the northwest–southeast-trending “Portola Route” that traversed through the area in 1769 and approximately 1 mile south of an offshoot road that connects the local area to the east-west trending “Old Road to Santa Barbara”. The nearest mapped source of freshwater is the Santa Clara River approximately 6.5 miles due north. The nearest mapped Native American village is mapped approximately 2.5 miles northeast of the Project site and is named “Saugus”. The map also marks “Gold Placer, 1st Discovery of Gold in Calif. Mch 1, 1842” approximately 6.5 miles due east of

the Project site and the location of a battle that occurred between Spanish Soldiers and Indians in 1830 due east approximately 4.5 miles. This battle is likely the same battle that occurred in the *Canyon de Los Difuntos* that Friar Mariano Payeras uses to petition Spain to establish another mission on the Santa Clara River near Newhall. Nothing in the archaeological record recorded within 1-mile of the Project site or information collected during archival research conducted for this study refutes the mapped locations depicted on this portion of the Kirkman-Herriman Map (Kirkman 1937 Appendix D).

Native American Coordination

Native American Heritage Commission Sacred Lands File Search

As part of the process of identifying cultural resources within or near the Project site, the Native American Heritage Commission (NAHC) was conducted by Environmental Science Associates (ESA) on October 9, 2020 to request a review of the Sacred Lands File (SLF). The NAHC replied via email on October 13, 2020, stating that the SLF search was completed with negative results. Because the SLF search does not include an exhaustive list of Native American cultural resources, the NAHC suggested contacting Native American individuals and/or tribal organizations who may have direct knowledge of cultural resources in or near the Project site. In compliance with AB 52, the County has contacted all NAHC-listed traditionally geographically affiliated tribal representatives that have requested Project notification and is discussed in detail below.

Assembly Bill 52 Consultation

The Project is subject to compliance with AB 52 (California Public Resources Code [PRC], Section 21074), which requires consideration of impacts to TCRs as part of the CEQA process, and that the lead agency notify California Native American Tribal representatives (that have requested notification) who are traditionally or culturally affiliated with the geographic area of the Project. All NAject notification pursuant to AB 52 were sent letters by the Los Angeles County Department of Regional Planning (LACDRP or “County”) on June 29, 2022 via certified mailing. The letters contained a Project Description, an outline of AB 52 timing, request for consultation, and contact information for the appropriate lead agency representative. AB 52 allows tribes 30 days after receiving notification to request consultation. If a response is not received within the allotted 30 days, it is assumed that consultation is declined. To date, government-to-government consultation initiated by the County has not resulted in the identification of a TCR within or near the Project site. To date, two responses were received as a result of the County’s AB 52 consultation notification. Table 4.18-1 summarizes the results of the AB 52 process for the Project. The confidential AB 52 consultation results are on file with the County.

Table 4.18-1. Assembly Bill 52 Native American Tribal Outreach Results

Native American Tribal Representatives	AB 52 Delivery Method and Date of Notification from County to Tribe	Response to County Notification Letters	Consultation Date and Notes
Jairo Avila, Tribal Historic and Cultural Preservation Officer Fernandeño Tataviam Band of Mission Indians	**June 29, 2022** via certified mail letter **July 21, 2022** follow up via email	**July 25, 2022**: Request for consultation from Tribe to County	**August 8, 2022**: Call via Zoom, the County provided Draft Cultural Resources Technical Report to the Tribe **October 11, 2022:** The Tribe informed the County that Mr. Avila is no longer with the Tribe and directed communication to Sarah Brunzell (below).
Sarah Brunzell, Manager Cultural Resources Management Division Fernandeño Tataviam Band of Mission Indians	N/A (see above correspondence with Mr. Avila)	N/A (see above correspondence with Mr. Avila)	**October 20 & 27, 2022:** Ms. Brunzell, via email to the County, requested the Draft Cultural Resources Technical Report. **October 27, 2022:** The County provided Draft Cultural Resources Technical Report to the Tribe. **November 1, 2022:** Ms. Brunzell provided draft mitigation measures via email. **November 9, 2022:** Proposed edits to mitigation measures from the County sent to the Tribe. **November 14, 2022:** Ms. Brunzell requested meeting with the County **November 16, 2022:** Meeting occurred with Ms. Brunzell and the County via Zoom. **December 5, 2022:** AB 52 Consultation was concluded.
Anthony Morales, Chief San Gabriel Band of Mission Indians/Gabrieleno Tongva	**June 29, 2022** via certified mail letter **July 21, 2022** follow up via email **October 11, 2022** follow up via email and voicemail	None	As no response was received, consultation was concluded.
Anthony Salas, Chairman Gabrieleno Band of Mission Indians – Kizh Nation	**June 29, 2022** via certified mail letter	**July 8, 2022:** Request for consultation.	**July 12, 2022:** Mr. Salas canceled request for consultation and deferred to other tribes. As this request was canceled, consultation was concluded.

Source: Appendix K.
Notes: AB: Assembly Bill.

4.18.2 Regulatory Requirements

State

California State Assembly Bill 52

AB 52 was approved by Governor Jerry Brown, Jr., on September 25, 2014. AB 52 amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 established that TCRs must be considered under CEQA and also provided for additional Native American consultation requirements for the lead agency. PRC Section 21074 describes a TCR as a site, feature, place, cultural landscape, sacred place, or object that is considered of cultural value to a California Native American Tribe. A TCR is defined as follows:

(a) Tribal cultural resources are either of the following:
  (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:
    (C) A resource may be listed as an historical resource in the California Register if it meets any of the following National Register of Historic Places criteria:
      (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.
      (4) Has yielded, or may be likely to yield, information important in prehistory or history.

      In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

AB 52 formalizes the lead agency–tribal consultation process, requiring the lead agency to initiate consultation with California Native American groups that are traditionally and culturally affiliated with the Project area, including tribes that may not be federally recognized. Lead agencies are required to begin consultation prior to the release of a

negative declaration, mitigated negative declaration, or environmental impact report. Section 1(b)(9) of AB 52 establishes that "a substantial adverse change to a tribal cultural resource has a significant effect on the environment." Effects on TCRs should be considered under CEQA. Section 6 of AB 52 adds PRC Section 21080.3.2, which states that parties may propose mitigation measures "capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource." Further, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects to TCRs, the consultation shall include those topics (PRC Section 21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

PRC Section 21082.3(c)(1) outlines how confidentiality is addressed with respect to the consultation process and how it is memorialized in environmental documentation. It states that any information, including, but not limited to, the location, description, and use of the TCRs, submitted by a California Native American tribe during the environmental review process shall not be included in an environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. Any information submitted by a California Native American tribe during the consultation or environmental review process must only be published in a confidential appendix attached to the environmental document. An exception to PRC Section 21082.3(c)(1) is if the tribe providing the information consents, in writing, to the disclosure of some or all of the information to the public. Additionally, confidentiality does not apply to data/information that: 1) is or becomes publicly available; 2) already in lawful possession of the project applicant before the California Native American tribe provided the same; 3) is independently acquired by the project applicant or the project applicant's agents; 4) lawfully obtained by the project applicant from a third party that is not the lead agency, a California Native American tribe, or another public agency (PRC Section 21082.3[c][2][B]).

California Public Resources Code and Health and Safety Code

The California Public Resources and Health and Safety codes consist of the regulatory, penal, and administrative ordinances for the State of California. A summary of the California codes that are applicable to the subject of the discovery of human remains are provided below.

California Health and Safety Code Section 7050.5

This code establishes that human remains are to not be knowingly mutilated or disinterred, wantonly disturbed, or willfully removed from any location other than a dedicated cemetery without authority of law. The code specifically provides exception to any person carrying out an agreement developed pursuant to subdivision (l) of Section 5097.94 of the Public Resources Code or to any person authorized to implement Section 5097.98 of the Public Resources Code. The code also provides protocols to be followed in the case of discovery or recognition of any human remains in any location other than a dedicated cemetery and stipulates the role of the coroner. Finally, the code provides the protocols to follow in the case the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American as well as the role of the Native American Heritage Commission. Public Resource Code 5097.94

This code establishes the powers and duties bestowed on the Native American Heritage Commission (NAHC). As they relate to those powers and duties that apply to human remains, this code states that the NAHC has the responsibility to: identify and catalog places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands; make recommendations relative to Native American sacred places that are located on private lands; mediate disputes arising between landowners and known

descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials; provide protection to Native American human burials and skeletal remains from vandalism and inadvertent destruction; and assist interested landowners in developing agreements with appropriate Native American groups for treating or disposing, with appropriate dignity, of the human remains and any items associated with Native American burials.

Public Resource Code 5097.98

This code outlines the protocols to be followed in the case of a discovery of Native American human remains including the roles and responsibilities of the coroner, NAHC, the individual identified by the NAHC as the most likely descended from the deceased Native American, and the landowner of whose land the discovery was made. The code defines the manner of "conferral" or "discuss and confer" as "the meaningful and timely discussion and careful consideration of the views of each party, in a manner that is cognizant of all parties' cultural values, and where feasible, seeking agreement" and states that all parties involved "shall recognize the other's needs and concerns for confidentiality of information provided to the other". If the either the NAHC is unable to identify a descendant, or the descendants identified fail to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in subdivision (k) of section 5097.94. if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance.

Public Resource Code 5097.99

This code is intended to protect by prohibiting obtaining or possessing Native American artifacts or human remains taken from grave or cairn on or after January 1, 1984 and states that "any person who removes, without authority of law, any Native American artifacts or human remains from a Native American grave or cairn with an intent to sell or dissect or with malice or wantonness is guilty of a felony which is punishable by imprisonment in the state prison".

Public Resource Code 5097.991

This code establishes the policy of the state that Native American remains and associated grave artifacts shall be repatriated.

Regional and Local

Los Angeles County 2035 General Plan

The County of Los Angeles Board of Supervisors adopted the Los Angeles County 2035 General Plan on October 6, 2015. The 2035 General Plan is intended to provide policy framework for development within the County through the year 2035 (County of Los Angeles 2015). The following policies apply to TCRs and are applicable to the Project. An analysis of all applicable County General Plan policies and objectives is included in Section 4.11, Land Use and Planning of this Draft EIR.

Conservation and Natural Resources Element

Goal C/NR 14. Protected historic, cultural, and paleontological resources.

Policy C/NR 14.4. Ensure proper notification procedures to Native American tribes in accordance with Senate Bill 18 (2004).

Policy C/NR 14.6. Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources

Santa Clarita Valley Area Plan "One Valley, One Vision"

The One Valley, One Vision (OVOV) was adopted by the Board of Supervisors on November 27, 2012. The Plan Amendment and related zone changes took effect on December 27, 2012 (County of Los Angeles 2012). The Santa Clarita City Council and Los Angeles County Board of Supervisors initiated the joint planning effort, called "One Valley, One Vision," in recognition of a mutual need to coordinate land uses and the pace of development with provision of adequate infrastructure, conservation of natural resources, and common objectives for the Valley. Major goals of the joint planning effort were to achieve greater cooperation between the County and the City, coordinate planning for roadways, infrastructure, and resource management, and enhance quality of life for all who live and work in the Santa Clarita Valley. It refines the policies of the General Plan as they apply to a smaller geographic area and is implemented by ordinances and other discretionary actions, such as zoning regulations and Community Standards Districts. The following policies apply to TCRs (County of Los Angeles 2012). An analysis of all applicable OVOV policies and objectives is included in Section 4.11, Land Use and Planning of this Draft EIR.

Goal LU-6. Community Appearance. A scenic and beautiful urban environment that builds on the community's history and natural setting.

Objective LU-6.4. Protect the Santa Clarita Valley's significant historical and cultural resources in a scenic setting through appropriate land use designations.

Policy LU-6.4.3. Maintain cultural resources from pre-historical Native American habitation and historical settlement in the areas around Vasquez Rocks, Elsmere Canyon, and along the Santa Clara River, through designation of these areas as Open Space on the Land Use Map.

Policy LU-6.4.6. Through the environmental review and development review processes, evaluate impacts on historic and cultural sites from proposed development and require appropriate mitigation.

Goal CO-5. Cultural and Historic Resources. Protection of historical and culturally significant resources that contribute to community identity and a sense of history.

Objective CO-5.3. Encourage conservation and preservation of Native American cultural places, including prehistoric, archaeological, cultural, spiritual, and ceremonial sites on both public and private lands, throughout all stages of the planning and development process.

Policy CO-5.3.2. For any proposed development project that may have a potential impact on Native American cultural resources, provide notification to California Native American tribes on the contact list maintained by the Native American Heritage Commission that have traditional lands within the County's jurisdiction, and consider the input received prior to a discretionary decision.

Policy CO-5.3.3. Review and consider a cultural resources study for any new grading or development in areas identified as having a high potential for Native American resources, and incorporate

recommendations into the project approval as appropriate to mitigate impacts to cultural resources.

4.18.3 Thresholds of Significance

In accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to TCRs are listed below. A project may have a significant impact if it would:

Threshold 4.18a: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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:

(i) ***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 § 5020.1(k), or;***

(ii) ***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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.***

4.18.4 Methodology

In order to determine potential impacts associated with TCRs, on November 16, 2020, ESA performed a California Historical Resources Information System (CHRIS) record search. Because ESA was only able to receive partial results due to limitations imposed by the COVID-19 pandemic, a supplementary records search was requested by Dudek on May 25, 2022. This search encompassed the Project site and a 1-mile radius. The records search included a review of mapped prehistoric, historic, and built environment resources; Department of Parks and Recreation Site records; technical reports; ethnographic resources; historical maps; the National Register of Historic Places; California Register Historical Resources; the California Historic Property Data file; lists of California State Historical Landmarks and California Points of Historical Interest; and the Archaeological Determinations of Eligibility. Pertinent academic and ethnographic literature was also reviewed for information pertaining to past Native American use of the Project site. Pursuant to AB 52, California Native American Tribes were notified and provided an opportunity to request consultation in order to address potential impacts associated with Native American resources. In addition, a SLF search was conducted by the NAHC on October 13, 2020 to determine the presence of any recorded TCRs on the Project site.

4.18.5 Impact Analysis

Threshold 4.18a: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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:

(i) 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 § 5020.1(k)?

As previously discussed above under Section 4.18.1, Existing Conditions, a CHRIS record search (completed May 25, 2022) was conducted for the Project site. No known significant cultural resources, as defined by CEQA Section 15064.5, exist within the Project site or in the areas designated for off-site improvements. One (1) prehistoric resource, an artifact isolate (P-19-101350) was identified as a result of the record search. Artifacts, in archaeological terms, represents any physical evidence of human activities over 45 years old that can be readily moved from one place to another whereas "isolate" is defined as three or fewer artifacts. Standard practice in accordance with *Instructions for Recording Historical Resources* (OHP 1995) and Secretary of Interior's standards and guidelines, dictates that isolated artifacts, such as P-19-101350, need not be evaluated for significance since their isolated nature and lack of potential to contribute information important in prehistory or history already falls below the threshold of significance. Furthermore, SCCIC records indicate that 30 previous cultural resource studies have been conducted within 1-mile of the Project site between 1974 and 2015. Of these, seven (7) studies address portions of or the entirety of the Project site; the entirety of the Project site has been previously investigated.

No significant cultural resource, as defined by CEQA Section 15064.5, has been identified within the Project site as a result of previous or current investigations. Therefore, the Project would not adversely change a known TCR 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 § 5020.1(k). However, considering that a substantial portion of the Project site is undisturbed and includes intact native soils, there is a potential that yet unknown TCRs that have the potential for listing in the California Register of Historical Resources, or in a local register of historical resources may exist, which would result in a potentially significant impact. Therefore, implementation of Mitigation Measure (MM) 4.18-1 through MM-4.18-3 are required to reduce impacts to less than significant. MM-4.18-1, Retention of Native American Monitoring, requires the retention of a Native American monitor to observe initial ground disturbing activities occurring from one foot above native soils and up to five feet below the surface of native soils. MM-4.18-2, Workers Environmental Awareness Program (WEAP), requires the retained Native American monitor/entity to be notified of the location and timing of the WEAP training. MM-4.18-3, Inadvertent Discovery Clause, outlines protocols to address inadvertent discoveries and requires all construction work occurring within no less than 60 feet of an inadvertent find to be halted and the retained Native American monitor/entity (procured by the Fernandeño Tataviam Band of Mission Indians) be notified. Therefore, with implementation of MM-4.18-1 through MM-4.18-3, the impact regarding a potential substantial adverse change in the significance of a TCR eligible for listing in the California Register of Historical Resources, or in a local register of historical resources would be less than significant.

Threshold 4.18a: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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:

> ***(ii) 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 § 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.***

As a result of seven (7) cultural resource studies and 2 additional studies conducted for this Project, addressing portions of or the entirety of the Project site, only one (1) prehistoric resource, an artifact isolate (P-19-101350), has been identified within the Project site or offsite improvement areas (Appendix D). Furthermore, a SLF Search conducted by the NAHC on October 13, 2022 to determine the presence of any reported Native American TCRs within the Project site resulted in negative findings. The Project is subject to AB 52, which requires consideration of impacts to TCRs as part of the CEQA process and requires lead agencies provide notification of proposed projects to California Native American tribal representatives that have requested such notifications. Of the tribal representatives/entities that previously requested notification from the County, one tribe, the Fernandeño Tataviam Band of Mission Indians, requested and engaged in the formal AB 52 consultation process with the County (see Table 4.18-1).

AB 52 consultation, initiated by the County, acting in good faith and after a reasonable effort, has not proven that a TCR would not be found, with implementation of the Project, within or near the Project site that meets the threshold of a resource determined by the lead agency. Based on evidence provided by the consulting Tribe, the generally tribal and archaeological sensitive nature of the Project site, and considering that a substantial portion of the Project site is undisturbed and includes intact native soils, there is a potential that yet unknown TCR(s) exist that would be determined significant pursuant to criteria set forth in subdivision c of Public Resources Code § 5024.1. Therefore, in its discretion, the lead agency determines that there is a potential for TCRs within or near the Project site that meets the threshold of a resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1. Therefore, implementation of Mitigation Measure (MM) 4.18-1 through MM-4.18-3 are required to reduce impacts to less than significant. MM-4.18-1, Retention of Native American Monitoring, requires the retention of a Native American monitor to observe initial ground disturbing activities occurring from one foot above native soils and up to five feet below the surface of native soils. MM-4.18-2, Workers Environmental Awareness Program (WEAP), requires the retained Native American monitor/entity to be notified of the location and timing of the WEAP training. MM-4.18-3, Inadvertent Discovery Clause, outlines protocols to address inadvertent discoveries and requires all construction work occurring within no less than 60 feet of an inadvertent find to be halted and the retained Native American monitor/entity (procured by the Fernandeño Tataviam Band of Mission Indians) be notified. Therefore, with implementation of MM-4.18-1 through MM-4.18-3, the impact regarding a potential substantial adverse change in the significance of a TCR would be less than significant with mitigation.

4.18.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA

Guidelines. The past, present, and reasonably foreseeable future projects (i.e., Cumulative Projects) used for this analysis are presented in Table 2-2, List of Cumulative Projects, and on Figure 2-8, Cumulative Projects Location Map, of Chapter 2, Environmental Setting, of this Draft EIR. For purposes of TCRs, the geographical area of cumulative impacts varies by threshold, further detailed below.

Threshold 4.18a: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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:

(i) 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 § 5020.1(k)?

The Cumulative Projects that would occur in accordance with General Plan growth and buildout are all subject to PRC 21083.2 and other the regulatory requirements that mandate evaluation and consideration of potential impacts to TCRs prior to approval of any discretionary permit for site development. As discussed in Section 4.18.5, Impact Analysis, above, there are no known significant TCRs as defined in Public Resources Codes §21074 and found significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1 present on the Project site. Due to the location of the Cumulative Projects and the higher sensitivity for cultural resources to occur within the undeveloped areas of the County or the City, there is the potential that unknown TCRs could occur at one or more of the Cumulative Project sites. The potential destruction of unknown TCRs associated with ground-disturbing activities at the Project site and Cumulative Project sites could be cumulatively considerable, due to the collective loss of California Native American artifacts and knowledge regarding the culture of the people who lived at the respective sites. The Project, and Cumulative Projects included in this Draft EIR, include discretionary actions with physical impacts to the environment, which would require compliance with AB 52 or Senate Bill 18, which require the lead agency (County of Los Angeles or City of Santa Clarita) to initiate tribal consultation with California Native American groups that are traditionally and culturally affiliated with the Project area, including tribes that may not be federally recognized.

The Project-specific mitigation combined with the mandatory evaluation of potential impacts to other nearby Cumulative Projects would ensure that there would not be cumulatively considerable impacts to TCRs that are 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 § 5020.1(k). Therefore, the cumulative impact related to a known TCR 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 § 5020.1(k) would be less than significant.

Threshold 4.18a: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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:

> ***(ii) 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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?***

As discussed above and in Section 4.18.5, Impact Analysis, no known TCR as defined in Public Resources Code §21074 and found significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1 was identified as a result of the AB 52 tribal consultation conducted for this Project. However, there is a potential for an impact to unidentified TCRs meeting the same criteria, which would require implementation of MM-4.18-1 through MM-4.18-3. With mitigation, the Project-specific impact to TCRs would be reduced to a less than significant level at the Project site. Because all TCRs are unique and nonrenewable resources, projects that cause a substantial adverse change in the significance of a TCR have the potential to erode a general tribal cultural landscape to which the resources belong. Therefore, if an impact to an unknown TCR occurs due to implementation of the Project, a cumulative significant effect on TCRs could result when combined with other cumulative development in the area due to the loss of identified or unknown TCRs through the physical destruction, relocation, or alteration of a resource or its immediate surroundings such that the significance of a resource would be materially impaired. However, the Project is required to implement MM-4.18-1 through MM-4.18-3, which would reduce a Project-related impact to a less than significant level at the Project site. Because there are no known significant TCRs at the Project site, the mitigation is for Native American monitoring and protocols for treatment of inadvertent discoveries.

The Cumulative Projects, as well as all other Cumulative Projects in the City of Santa Clarita or County of Los Angeles that would occur in accordance with OVOV and/or respective City or County General Plan growth and buildout, as applicable, are all subject to PRC 21083.2 and other the regulatory requirements that mandate evaluation and consideration of potential impacts to TCRs prior to approval of any discretionary permit for site development. According to PRC 21083.2, the Cumulative Projects would be required to undergo an evaluation to determine presence/absence of archaeological resources and TCRs and mitigate accordingly, if necessary. Based on the degree of protection afforded by MM-4.18-1 through MM-4.18-3 for Project-specific impacts to potential unknown TCRs, the Project would not contribute to cumulatively considerable impacts related to substantial adverse changes in the significance of a TCR.

4.18.7 Mitigation Measures

MM-4.18-1 Retention of Native American Monitoring. Prior to the commencement of any ground disturbance activities, the applicant/owner/developer shall retain a Native American monitor/entity procured by the Fernandeño Tataviam Band of Mission Indians. The applicant/owner/developer shall make arrangements with the retained Native American monitor/entity to enter into a Native American Monitoring Agreement with the intent of securing a total of one Native American monitor to be present during initial ground disturbance (including testing, clearing, grubbing, and grading operations) occurring from one foot above native soils and up to five feet below the surface of native soil. Initial ground disturbance is defined as initial

construction-related earthmoving of sediments from their place of deposition. This definition excludes movement of sediments after they have been initially disturbed or displaced by current Project-related construction. More than one monitor may be required if multiple areas within the Project site are simultaneously exposed to initial ground disturbance causing monitoring to be hindered by the distance (more than 100 feet apart) of the simultaneous activities.

MM-4.18-2 Workers Environmental Awareness Program. The retained Native American monitor/entity procured by the Fernandeño Tataviam Band of Mission Indians (as detailed in MM-4.18-1, above) shall be notified by the applicant/owner/developer of the time and location of the Worker Environmental Awareness Program (WEAP) training no later than 72 hours prior to its scheduled occurrence. The applicant/owner/developer shall provide the retained Native American monitor/entity the access and opportunity to participate in the WEAP training. For further details and requirements pertaining to the WEAP training, please see MM-4.5-2.

MM-4.18-3 Inadvertent Discovery Clause. In the event that potential prehistoric or historic-era Native American/Tribal resources (sites, features, or artifacts) are exposed during construction activities for the Project, all construction work occurring within 60 feet of the find shall immediately stop and the retained Native American monitor/entity procured by the Fernandeño Tataviam Band of Mission Indians (as detailed in MM-4.18-1, above) must be notified promptly. The find shall be assessed by the retained Principal Investigator/Archaeologist (as detailed in MM-4.5-1) in consultation with the retained Native American monitor/entity. Consultation shall assess and document potential finds in real time to determine whether or not additional study is warranted.

In the event that human remains and associated funerary objects are inadvertently encountered during construction activities, the remains and funerary objects shall be treated in accordance with state and local regulations that provide requirements with regard to the accidental discovery of human remains, including California Health and Safety Code Section 7050.5, California Public Resources Code Section 5097.98, and CEQA Guidelines Section 15064.5(e). In accordance with these regulations, if human remains are found, the County Coroner must be immediately notified of the discovery. Additionally, the retained Native American monitor/entity must be notified of the discovery immediately. No further excavation or disturbance of the Project site or any nearby (no less than 100 feet) area reasonably suspected to overlie adjacent remains can occur until the County Coroner has determined, within 2 working days of notification of the discovery, if the remains are potentially human in origin. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she is required to notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant must then complete their inspection within 48 hours of being granted access to the site. The most likely descendant would then determine, in consultation with the property owner, the disposition and treatment of the human remains.

4.18.8 Level of Significance After Mitigation

The Project would result in less than significant impacts with implementation of MM 4.18-1 through MM 4.18-3 regarding the potential to cause a substantial adverse change in the significance of a TCR 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 PRC § 5020.1(k).

The Project would result in less than significant impacts with implementation of MM 4.18-1 through MM 4.18-3 regarding the potential to cause a substantial adverse change in the significance of a TCR that is a resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of PRC § 5024.1.

4.18.9 References

Beeler, M.S., and K.A. Klar. 1977. "Interior Chumash." *The Journal of California Anthropology* 4(2): 287–305.

Bright, W. 1975. "The Alliklik Mystery." *The Journal of California Anthropology* 2(2): 228–230.

County of Los Angeles. 2012. *Santa Clarita Valley Area Plan, One Valley One Vision*. Accessed September 13, 2022.

County of Los Angeles. 2015. *Los Angeles County General Plan*. October 6, 2015. Accessed January 3, 2023. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

County of Los Angeles. 2019. *Environmental Checklist Form (Initial Study) County of Los Angeles, Department of Regional Planning—Canyon View Estates/Project No. 2016-002179; Tract Map No. 74650; Conditional Use Permit No. 2016004409; Oak Tree Permit No. RPPL2017009209; and Environmental Assessment No. 20160044100*. Accessed September 5, 2022. https://ceqanet.opr.ca.gov/2019089066/2.

Golla, V. 2011. *California Indian Language*s. Berkeley: University of California Press.

Harrington, J.P. 1935. "Fieldwork among the Indians of California." In *Explorations and Fieldwork of the Smithsonian Institution in 1934*, 81–84. Washington, DC.: John P. Harrington Papers.

Hudson, T. 1982. "The Alliklik-Tataviam Problem." *Journal of California and Great Basin Anthropology*. 4(2): 222–232.

Johnson, J.R. 1978. "The Trail to Kashtiq." *The Journal of California Anthropology*. 5(2): 188–198.

Johnson, J.R. 1997. "The Indians of Mission San Fernando." *Southern California Quarterly*. 79(3): 249–290.

Johnson, J.R. and D.D. Earle. 1990. "Tataviam Geography and Ethnohistory." *Journal of California and Great Basin Anthropology*. 12(2): 191–214.

King, C., and T.C. Blackburn. 1978. "Tataviam." In *California*, edited by R.F. Heizer, 535–537. Vol. 8 of *Handbook of North American Indians*, edited by W.C. Sturtevant. Washington, D.C.: Smithsonian Institution.

Kirkman, G.W. 1937. "Principal Historic Sites, Old Highways, Also Battle Fields, Spanish, Mexican, Early American, in Old Los Angeles County, 1937." Accessed from the Los Angeles Public Library Photo Collection, Photo ID Map-00001. https://tessa2.lapl.org/digital/collection/maps/id/29/.

Kroeber, A.J. 1915. "A New Shoshonean Tribe in California." *American Anthropologist* 17: 773–775.

Kroeber, A.J. 1925. "Handbook of the Indians of California." *Bureau of American Ethnology Bulletin 78*. New York: Dover Publications, Inc..

NEA (Northwest Economic Associates) and C. King. 2004. *Ethnographic Overview of the Angeles National Forest: Tataviam and San Gabriel Mountain Serrano Ethnohistory*. Prepared for the U.S. Department of Agriculture. February 6, 2004.

OHP (Office of Historic Preservation). 1995. *Instructions for Recording Historical Resources*. Available online October 2021. http://ohp.parks.ca.gov/?page_id=1069.

Perkins, A.B. 1957. "Rancho San Francisco: A Study of a California Land Grant." *The Historical Society of Southern California Quarterly*. 39(2): 99–126.

Sutton, M.Q. 1980. "Some Aspects of Kitenamuk Prehistory." *Journal of Great Basin and California Archaeology* 2(2): 214–225.

Sutton, M.Q. 2009. "People and Language: Defining the Takic Expansion into Southern California." *Pacific Coast Archaeological Society Quarterly*41 (2 and 3): 49.

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4.19 Utilities and Service Systems

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to utilities and service systems, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts analysis, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data and reports from the Los Angeles County Department of Regional Planning (LACDRP), the Valencia Water Division of the Santa Clarita Valley Water Agency (SCV Water), Los Angeles County Sanitation Districts (LACSD), Southern California Edison (SCE), Southern California Gas Company (SoCalGas), California Department of Resources Recycling and Recovery (CalRecycle), as well as the following:

Appendix G-2 Hydrology Report for Tract No. 83301, prepared by United Civil, Inc., dated October 3, 2024

Appendix G-3 Lyons Canyon Drainage Concept Report- Volume 1, Regional Flood Protection and Debris Management Tract No. 83301, prepared by Pacific Advanced Civil Engineering, Inc., dated September 2024

Appendix G-4 Draft FEMA Conditional Letter of Map Revision Request, prepared by Pacific Advanced Civil Engineering, Inc., dated September 2024

Appendix L-1 Hydraulic Analysis, prepared by Akel Engineering Group, dated September 2022

Appendix L-2 The Trails at Lyons Canyon Water Supply Assessment (WSA), prepared by Santa Clarita Valley (SCV) Water, dated April 13, 2022

Appendix L-3 Addendum to WSA, prepared by SCV Water, dated May 8, 2023

Appendix L-4 Sewer Area Study, prepared by Dexter Wilson Engineering, dated October 17, 2022

Appendix L-5 Addendum to Hydraulic Analysis and Sewer Area Study, prepared by Dexter Wilson Engineering, Inc., dated November 17, 2023

Appendix L-6 Wastewater Will Serve Letter, prepared by Los Angeles County Sanitation Districts, dated January 26, 2024

Appendix L-7 Water Availability Form, prepared by Santa Clarita Valley Water Agency, dated May 28, 2024

Other sources consulted are listed in Section 4.19.9, References.

4.19.1 Existing Conditions

This section describes the existing conditions in the Project area and identifies the resources that could be affected by the Project.

Water

Existing Water Infrastructure

As illustrated on Figure 4.19-1, Santa Clarita Valley Water Agency, the Project site lies within the jurisdiction of the Valencia Water Division of SCV Water but would be connected to the adjacent Newhall Water System. This water system consists of pump stations, storage reservoirs, transmission and distribution mains, fire hydrants, and pressure reducing valves. The water system is currently divided into six existing pressure zones, which are interconnected through booster stations and pressure reducing valves to allow the distribution of water throughout the system (Appendix L-1).

Existing onsite water infrastructure includes an abandoned water tank and irrigation lines.

Regional Water Supply and Demand

The Castaic Lake Water Agency (CLWA) currently provides water for urban and agricultural uses in the Project area. The CLWA was initially formed in 1962 as a wholesale water agency to acquire, treat, and deliver State Water Project (SWP) water from the California Department of Water Resources (DWR) to purveyors throughout the Santa Clarita Valley. These purveyors include Los Angeles Waterworks District 36, the Santa Clarita Water Division, the Valencia Water Division, and the Newhall Water Division (see Figure 4.19-1, Santa Clarita Valley Water Agency) (SCV Water 2022a). On January 1, 2018, Senate Bill (SB) 634 merged the CLWA and these retail water purveyors with whom CLWA contracted (California Legislative Information 2022). SCV Water serves a population of 273,000 through 70,000 retail water connections, in approximately 195 square miles or 124,000 acres (SCV Water 2022a).

The Valencia Water Company became the Valencia Water Division (a division of SCV Water), which now supplies customers in Valencia, Stevenson Ranch, Saugus, Newhall, and parts of Castaic, as illustrated in Figure 4.19-1. Historically, the water demand in the Santa Clarita Valley was for agricultural use. Between the 1940s and the 1960s, agricultural water use ranged from about 27,000 acre-feet per year (AFY) to 42,000 AFY, which was solely supplied by groundwater sources. This agricultural water demand has decreased over time to 12,500 AF in 2019 from 15,000 AFY in the late 1990s (SCV Water 2020).

In 2019, total water requirements in the Santa Clarita Valley were approximately 72,600 AF, of which 60,100 AF were for municipal use and the remaining 12,500 AF for agricultural and other (miscellaneous) uses, including individual domestic uses. This is a 7% decrease in water demand from 2018. Total water requirements in the Santa Clarita Valley in 2019 were met by a combination of approximately 30,000 AF from local groundwater resources, approximately 42,500 AF of SWP and other imported water, and approximately 500 AF of recycled water (SCV Water 2020).

Imported Water

As of 2019, the imported water supplies to SCV Water consisted of a combination of SWP, the Buena Vista Water Storage District (BVWSD) and Rosedale-Rio Bravo Water Storage District (RRBWSD) in Kern County, and other sources outside of the Valley. Annually, SCV Water receives 11,000 AFY of water through the exchange of SWP water from the BVWSD or RRBWSD, under the 2007 Water Acquisition Agreement with those districts. In 2019, SCV Water imported 86,758 AF, including the water from the SWP, 11,000 AF of water purchased from the BVWSD and RRBWSD, 750 AF returned from the Central Coast Water Authority Exchange, and 3,608 AF of 2018 SWP carryover water available in 2019 (SCV Water 2020). In 2020, imported water use in the Santa Clarita Valley was

25,871 AF. As part of its SWP contract with DWR, SCV Water has access to a portion of the storage capacity of Castaic Lake. This Flexible Storage Account allows SCV Water to utilize up to 4,684 AF of the storage in Castaic Lake for SCV Water. Any of this amount that SCV Water withdraws must be returned to storage by SCV Water within five years of its withdrawal. SCV Water manages this storage by keeping the account full in normal and wet years and then delivering that stored amount (or a portion of it) during dry periods. However, while it is expected that SCV Water and Ventura County will extend the existing flexible storage agreement beyond the 2025 term, the agreement is not expected to be available beyond 2025, based on the 2020 Urban Water Management Plan (UWMP) for SCV Water (SCV Water 2021) and the Project Water Supply Assessment (WSA) (Appendix L-2).

Groundwater

The Project site is located within the Santa Clara River Valley Groundwater Basin (Basin), East Subbasin, as designated by the California DWR (2006). Within this subbasin, groundwater occurs in alluvium, terrace deposits, and Saugus Formation sandstone, siltstone, and conglomerate. However, the terrace deposits are not used for municipal purposes. The groundwater storage capacity of the alluvial aquifer is about 240,000 AF and the Saugus Formation is at least 1,650,000 AF (DWR 2006).

Groundwater pumping in the Basin varies from year to year to allow increased groundwater usage in dry periods and increased recharge during wet periods, and to collectively assure that the Basin is adequately replenished through various wet/dry cycles. An updated evaluation of groundwater basin yield from 2009 was used to develop the groundwater operating plan in the 2020 SCV Water UWMP, which includes pumping 30,000 to 40,000 AFY following wet/normal years and slightly reduced pumping (30,000 to 35,000 AFY) following dry years from the alluvial aquifer. Pumping from the Saugus Formation in a given year is tied directly to the availability of other water supplies, particularly from the SWP. During average year conditions within the SWP system, Saugus pumping ranges from 7,500 AFY to 15,000 AFY. Planned dry-year pumping from the Saugus Formation ranges between 15,000 AFY and 25,000 AFY during a drought year and can increase to between 21,000 and 25,000 AFY if SWP deliveries are reduced for two consecutive years. Similarly, pumping can increase to between 21,000 AFY and 35,000 AFY if SWP deliveries are reduced for three consecutive years. Such high pumping would be followed by periods of reduced (average year) pumping, at rates between 7,500 AFY and 15,000 AFY, to further enhance the effectiveness of natural recharge processes, which would recover water levels and groundwater storage volumes after the higher pumping years with low SWP allocations (SCV Water 2021).

In 2019, SCV Water pumped 21,000 AF from the alluvial aquifer and 9,000 AF from the Saugus Formation, which was approximately 5,450 AF and 450 AF less than what was pumped in 2018, respectively, and is below the UWMP's operating plan range for a dry year. Specifically, the Valencia Water Division pumped 5,243 AF of water from the alluvium in 2018 (SCV Water 2020).

The groundwater component of overall water supply in the Santa Clarita Valley derives from a groundwater operating plan developed by CLWA and local water purveyors, which now includes SCV Water, over the past 20 years to meet water requirements (municipal, agricultural, small domestic), while maintaining the Basin in a sustainable condition (i.e., no long- term depletion of groundwater or interrelated surface water). The resulting CLWA Groundwater Management Plan (GWMP) was developed in December 2003, in accordance with California Water Code Section 10753. This plan contains four management objectives for the Basin: (1) meet existing and projected demands for municipal, agricultural, and other water uses through the development of an integrated surface water, groundwater, and recycled water supply; (2) assess and quantify the Basin's conditions and yields to avoid overdraft and its effects, as well as to assist in managing groundwater levels so as not to negatively affect surface and groundwater discharges to downstream basins; (3) preserve groundwater quality, which includes identifying and resolving

groundwater contamination issues; and (4) preserve surface water resources through proper management of groundwater (Appendix L-2).

However, California Water Code Section 10753 was superseded in 2014 by the Sustainable Groundwater Management Act (SGMA), which resulted in creation of the Santa Clarita Valley Groundwater Sustainability Agency (SCVGSA) and submittal of a groundwater sustainability plan (GSP) to DWR by the SCVGSA in January 2022. The GSP was in large part built on the GWMP, with the groundwater basin operating within the yields identified in the GWMP. The SCVGSA operates under a Joint Powers Agreement, which was executed by member agencies in 2018 (Appendix L-2).

The SCVGSA has adopted the State-required GSP for the East Subbasin of the Santa Clara River Valley Groundwater Basin. The plan represents a significant multi-year undertaking concluding with its adoption and submittal to DWR. Development of the GSP reflected a significant stakeholder engagement effort with the involvement of a Stakeholder Advisory Committee to reflect the views from private well owners, members at large, environmental interests, and the business community. The GSP is consistent with the current groundwater operating plan as described in the GWMP; however, the GSP refined the technical analysis as it utilized a new groundwater flow model that reflects the groundwater operating plan. These refinements include updates such as redistribution of pumping and current Basin conditions. The GSP also developed minimum thresholds as a basis to determine that the groundwater basin is being managed in a sustainable manner. The SCVGSA will conduct required annual monitoring and reports for the GSP (Appendix L-2).

Groundwater contamination can affect groundwater pumping and available groundwater supplies. As discussed previously in Section 4.10, Hydrology and Water Quality, with some exceptions, the quality of groundwater in the East Subbasin's two primary aquifer systems is suitable for drinking water and agricultural uses (SCVGSA 2022). Within the East Subbasin, perchlorate, volatile organic compounds (VOCs), and per- and polyfluoroalkyl substances (PFAS) are the primary human caused constituents of concern. The most frequently detected VOCs in the Basin are trichloroethylene (TCE) and tetrachloroethylene (PCE). Less frequently detected compounds include chloroform, and 1,1-dichloroethene which have been detected in trace amounts below the state drinking water standards maximum contaminant level (MCL) in the Basin. The Salt and Nutrient Management Plan (SNMP) prepared by SCV Water in 2016 identified dichlorodiphenyltrichloroethane (DDT) and polychlorinated biphenyls (PCBs) as other constituents of concern. PFAS is considered a contaminant of emerging concern in the Subbasin. Formerly extensively used in firefighting foams, non-stick coatings, cookware, carpets, and furniture, these substances tend to accumulate in groundwater and long-term exposure could potentially affect the immune system, thyroid, liver, and can cause cancer (SCVGSA 2022). The most common types of PFAS are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS).

The presence of these constituents of concern has necessitated construction of wellhead treatment facilities at some supply wells (SCVGSA 2022). During planning and construction of these treatment facilities, affected wells have been shut down and SCV Water (and its predecessor agencies) have relied on other wells and/or imported water to make up for the temporary reduction in supply. The California Division of Drinking Water (DDW) lowered their response level guidelines in 2020 related to PFAS and SCV Water responded with a voluntary quarterly sampling program and an expedited schedule for construction of treatment facilities. These temporary reductions in supply from some wells have not impacted the ability of SCV Water to provide high quality groundwater. These responses to contamination have been conducted under the oversight of the DDW (SCVGSA 2022).

Recycled Water

Recycled water is municipal wastewater that is purified for beneficial reuse. Higher value uses of recycled water include landscape or agricultural irrigation, commercial and industrial applications, groundwater recharge, seawater intrusion barrier, and other uses such as street sweeping and dust control. CLWA began a recycled water service in July 2003, and it has continued with SCV Water. Approximately 460 AF of recycled water was used in 2019 within SCV Water jurisdiction for irrigation and other non-potable uses. This is generally consistent with recycled water deliveries that have ranged between 300 AFY and 500 AFY over the past 15 years. In 2017, SCV Water updated its Recycled Water Master Plan with projections for recycled water use as well as short-, mid-, and long-term objectives for increasing the use of recycled water where it is economically feasible (SCV Water 2020).

As previously discussed, SCV Water uses a mix of groundwater, imported water, recycled water, and water obtained through banking or exchanges. Table 4.19-1, below, summarizes SCV Water's projected existing and planned water supply sources for the period ranging from 2025 to 2050, as reported in the 2020 UWMP (SCV Water 2021).

Table 4.19-1. SCV Water's Existing and Planned Water Supplies (Acre-Feet)

Water Supply Sources	2025	2030	2035	2040	2045	2050
Existing Sources						
Groundwater[a]	23,340	15,290	14,410	14,410	14,410	14,410
Imported Water	67,220	64,310	64,017	62,107	62,107	62,107
Recycled Water	450	450	450	450	450	450
Banking/Exchange Programs	0	0	0	0	0	0
Total Existing	**91,010**	**64,310**	**64,017**	**62,107**	**62,107**	**62,107**
Planned Sources						
Groundwater	15,540	22,660	26,280	26,280	26,280	26,280
Recycled	1,849	3,696	5,091	6,498	7,499	8,511
Banking/Exchange Programs	0	0	0	0	0	0
Total Planned	**17,389**	**26,356**	**31,371**	**32,778**	**33,779**	**34,791**

Source: SCV Water 2021, Table 7-2, p. 7-8 to 7-9.
Notes:
[a] Existing groundwater supplies represent the quantity of groundwater anticipated to be pumped with existing wells. Declines from 2025 pumping levels reflect transfer of normal year pumping from existing wells to future and recovered wells.

Wastewater

Wastewater generated within the Santa Clarita Valley is treated by the Santa Clarita Valley Sanitation District (SCVSD), which includes two existing water reclamation plants (WRPs) operated by LACSD. These plants include the Saugus WRP and the Valencia WRP, which are interconnected, forming the Santa Clarita Valley Joint Sewerage System (SCVJSS). The joint powers agreement that created the regional system allows the Valencia WRP to accept flows that exceed the capacity of the Saugus WRP. The water is treated to tertiary levels (biological treatment followed by filtration and disinfection) and is discharged to the Santa Clara River. The Saugus WRP is located at 26200 Springbrook Avenue in the City of Santa Clarita and provides primary, secondary, and tertiary treatment for 6.5 million gallons per day (mgd) of wastewater (LACSD 2022a). The Valencia WRP is located at 28185 The Old Road in the community of Valencia, in Los Angeles County unincorporated area, and provides primary, secondary, and tertiary treatment for 21.6 mgd of wastewater (LACSD 2022b). The Valencia WRP also has solids processing

facilities and processes all wastewater solids generated in the SCVSD. The SCVJSS has a combined permitted treatment capacity of 28.1 mgd and currently processes an average flow of 19.0 mgd (Appendix L-5).

The mechanism that is used to fund expansion of the treatment system is the LACSD's Connection Fee Program. The program requires all new users of the sewerage system, as well as existing users of the sewerage system who expand their discharge, to pay a connection fee to the LACSD based upon the quantity and strength of the wastewater discharge. This fee applies to residential, commercial, and industrial dischargers. For new facilities, the connection fee is to be paid prior to the time the facility is connected to the sewer or, in the case of expanding existing facilities, as the time of expansion of the wastewater discharge (LACSD 2022c).

The SCVSD operates and maintains the wastewater conveyance system for the Santa Clarita Valley, which consists of a 34-mile long, interconnected network of trunk sewers and two pumping plants. The system conveys wastewater and wastewater solids from the local sewer lines, which are either owned by the City of Santa Clarita or County, to the Saugus and Valencia WRPs (LACSD 2022d). The nearest existing sewer line to the Project site, consisting of a County 8-inch to 18-inch vitrified clay pipe (VCP) sewer, is located approximately 400 feet to the north (Appendix L-4). Wastewater flow from this VCP flows to either or both the SCVSD's District #32 Main Trunk Sewer, located in a private right-of-way southeast of the intersection of Orchard Village Road and Wiley Canyon Road, or the Valencia Trunk Sewer, located in Orchard Village Road south of Wiley Canyon Road. The SCVSD's 18-inch diameter District #32 Main Trunk Sewer has a capacity of 3.3 mgd and conveyed a peak flow of 0.1 mgd when last measured in 2018. The SCVSD's 24-inch diameter Valencia Trunk Sewer has a capacity of 5.3 mgd and conveyed a peak flow of 1.9 mgd when last measured in 2018 (Appendix L-6).

Stormwater Drainage

The Project site currently drains in a northeast direction into an existing storm drain in the northeast corner of the site, which carries flow under The Old Road and Interstate (I) 5 freeway to Los Angeles County Flood Control District (LACFCD) stormwater facilities. No other stormwater drainage facilities are present on-site. The primary drainage on the Project site is Lyons Creek, which drains eastward into the South Fork of the Santa Clara River, which leads to the Santa Clara River, approximately 3.75 miles northeast of the Project site. The LACFCD encompasses more than 2,700 square miles and approximately 2.1 million land parcels within six major watersheds. The LACFCD includes drainage infrastructure within 86 incorporated cities as well as the unincorporated County areas, including 14 major dams and reservoirs, 483 miles of open channel, 27 spreading grounds, 3,330 miles of underground storm drains, 47 pump plants, 172 debris basins, 27 sediment placement sites, three seawater intrusion barriers, and an estimated 82,000 catch basins (Public Works 2022a).

Electricity, Natural Gas, and Telecommunications

The Project site is within the Southern California Edison (SCE) service area. SCE, a public utility that functions on demand, supplies electricity to the Project site via underground and overhead lines. SCE is regulated by the California Public Utilities Commission (CPUC) and Federal Energy Regulatory Commission (FERC). Electrical power is generated by a combined system of gas and coal production, oil, hydroelectricity, nuclear production, solar and wind technology, and energy purchase. Above-ground electrical distribution lines currently traverse the Project site. In addition, an electric powered billboard is located on-site, near the Project's northeastern boundary.

The Project area is provided with natural gas by the Southern California Gas Company (SoCalGas). SoCalGas Company's service territory encompasses approximately 24,000 square miles and more than 500 communities. According to SoCalGas, there are existing facilities within the Project area (SoCalGas 2024). No natural gas lines

are present on-site and the Project would not connect to or add gas line extensions within the Project site, consistent with mitigation measure MM-4.8-2, of Section 4.8, Greenhouse Gas Emissions.

The Project site is within the service areas of AT&T and Charter. Together, these providers offer both voice and data communication services. Both AT&T and Charter offer multiple services (dial tone, video, and internet access). Funding for telecommunication services is collected through company billings and developer fees applied to the extension of infrastructure to new development. No telecommunication infrastructure is present on-site.

Solid Waste

The Santa Clarita Valley is served primarily by three Class III (non-hazardous) landfills: Chiquita Canyon Landfill in Castaic, the Antelope Valley Landfill in Palmdale, and Sunshine Canyon Landfill in Sylmar. Details on the two closest landfills are provided as follows:

- The closest landfill to the Project site is the Sunshine Canyon Landfill, located west of I-5 and San Fernando Road at 14747 San Fernando Road, 5 miles southeast of the Project site. As of May 2018, the date for which the most recent information is available, the remaining capacity of this landfill was 77,900,000 cubic yards, with an estimated cease operation date of 2037 (CalRecycle 2022a). Based on a conversion factor of 0.5 ton per cubic yard of refuse, for compacted mixed municipal solid waste (US EPA and CIWMB 2006), the remaining landfill capacity is 38,950,000 tons of solid waste. The maximum permitted disposal rate for the landfill is 12,100 tons per day (CalRecycle 2022a).
- The Chiquita Canyon Sanitary Landfill, located at 29201 Henry Mayo Drive in Castaic, is approximately 6 miles northwest of the Project site. As of August 2018, the year for which the most recent information is available, the remaining capacity of this landfill was 60,408,000 cubic yards (30,204,000 tons), with an estimated cease operation date of 2047. The maximum permitted disposal rate is 12,000 tons per day (CalRecycle 2022b).

These two landfills have a combined remaining capacity of 138,308,000 cubic yards (69,154,000 tons) (CalRecycle 2022a, 2022b).

Construction waste is typically disposed at inert landfills, which are facilities that accept materials such as soil, concrete, asphalt, and other construction and demolition debris. The Azusa Land Reclamation landfill, located 46 miles southeast of the Project site, is the only permitted Inert Waste Landfill in the County that has a full solid waste facility permit (Public Works 2022b). The landfill has a maximum permitted daily capacity of 8,000 tons of waste, a remaining capacity of 51,512,201 cubic yards (25,756,100 tons) and is expected to remain open until 2045 (CalRecycle 2022c). There are other facilities that process, recycle, and transfer inert waste and other construction and demolition waste in the County, including several in Sun Valley, including AMH Recycling, Vulcan Materials, RAMCO, and Security Paving Company (Public Works 2022c).

4.19.2 Regulatory Requirements

Federal

There are no applicable federal regulations.

State

Senate Bill X7-7 – Water Conservation Act

SB X7-7, effective February 3, 2010, is the water conservation component to the Delta legislative package (SB 1, Delta Governance/Delta Plan). It sought to implement water use reduction goals established in 2008 to achieve a 20% statewide reduction in urban per capita water use by December 31, 2020. The bill required each urban retail water supplier to develop urban water use targets to help meet the 20% goal by 2020 and an interim 10% goal by 2015. The bill establishes methods for urban retail water suppliers to determine targets to help achieve water reduction targets. The retail water supplier must select one of the four compliance options. The retail agency may choose to comply with SB X7-7 as an individual or as a region in collaboration with other water suppliers. Under the regional compliance option, the retail water supplier shall report the water use target for its individual service area. The bill also included reporting requirements in the 2010, 2015, and 2020 UWMPs.

Urban Water Management Planning Act

In accordance with California Water Code Sections 1610-10656, California urban water providers are required by state law to develop an UWMP to ensure sufficient water supplies are available to meet the long-term needs of its customers during normal, dry, or multiple-dry years. The Urban Water Management Plan Act requires urban water suppliers, which provide water for municipal purposes to more than 3,000 customers or supply more than 3,000 acre-feet (AF) of water annually, to develop an UWMP every five years, in the years ending in 0 and 5.

In the Act, the California Legislature declared that the waters of the state are a limited and renewable resource subject to fluctuating demands; that the conservation and efficient use of urban water supplies are of a statewide concern; that successful implementation of plans is best accomplished at the local level; that conservation and efficient use of water shall be actively pursued to protect both the people of the state and their water resources; that conservation and efficient use of urban water supplies shall be a guiding criterion in public decisions; and that urban water suppliers shall be required to develop water management plans to achieve conservation and efficient use.

The SCV Water 2020 UWMP is an update of the CLWA 2015 UWMP. The UWMP is intended to serve as a general, flexible, and open-ended document that periodically can be updated to reflect changes in regional water supply trends, conservation policies, and water use efficiency policies (SCV Water 2021).

Sustainable Groundwater Management Act

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package—AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley)—collectively known SGMA. SGMA requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through SGMA, the California DWR provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form GSAs to manage basins sustainably and requires those GSAs to adopt GSPs for crucial groundwater basins in California.

As part of legislation authorizing SCV Water to provide retail water service to individual customers, Assembly Bill (AB) 134 (2001) included a requirement that SCV Water prepare a groundwater management plan (provided as Appendix I of the 2020 SCV Water UWMP), in accordance with the provisions of Water Code 10753, which was originally enacted by AB 3030. This legislation has since been superseded by the passage of SGMA, in 2014, and the submittal of a GSP to DWR by the SCV Groundwater Sustainability Agency, in January 2022.

Senate Bill 610 and Senate Bill 221: Water Supply Assessments and Water Supply Verifications

SB 610 and SB 221, amended into state law effective January 1, 2002, improve the linkage between certain land use decisions made by cities and counties and water supply availability. The statutes require detailed information regarding water availability and reliability with respect to certain developments to be included in the administrative record, to serve as evidentiary basis for an approval action by the city or county on such projects. Under Water Code Section 10912(a), projects subject to the California Environmental Quality Act (CEQA) requiring a water supply assessment include: residential development of more than 500 dwelling units; shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space; commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space; hotel, motel or both, having more than 500 rooms; industrial, manufacturing, or processing plants, or industrial parks planned to house more than 1,000 persons, occupying more than 40 acres of land or having more than 650,000 square feet of floor area; mixed-use projects that include one or more of the projects specified; or a project that would demand an amount of water equivalent to or greater than the amount required by a 500 dwelling unit project. A fundamental source document for compliance with SB 610 is the UWMP, which can be used by the water supplier to meet the standard for SB 610. SB 221 applies to the applicant of a subdivision map of 500 dwelling units or more to verify that the public water supplier has sufficient water available to serve the proposed development. Related to Water Code Section 1912(a) is California Water Code Section 10910(d)(2), which requires the identification of existing water supply entitlements, water rights, or water service contracts; federal, state, and local permits for construction of necessary infrastructure, and any regulatory approvals required in order to be able to deliver the water supply.

Model Water Efficient Landscape Ordinance

The Model Water Efficient Landscape Ordinance (CCR Title 23, Division 2, Chapter 2.7, Section 490) adopts water efficiency standards for new and retrofitted landscapes and encourages the use of more efficient irrigation systems, graywater usage, and on-site storm water capture, and limits the portion of landscapes that can be covered in turf. Encourages local agencies to designate the necessary authority that implements and enforces the provisions of the ordinance or its local landscape ordinance.

Executive Order N-7-22

On March 28, 2022, the Governor signed Executive Order N-7-22, building on 2021 executive orders intended to combat the current drought. With every county in California declared to be in a state of drought emergency, per Executive Order N-10-21, dated October 19, 2021, Executive Order N-7-22 primarily focuses on implementing increased drought response actions heading into the summer months. While this Order reiterates that prior drought executive orders, signed April 21, 2021, May 10, 2021, June 8, 2021, and October 19, 2021, will remain in full force and effect, Order N-7-22 expands upon those orders by the addition of the following provisions:

- By May 25, 2022, the State Water Resources Control Board (SWRCB) must consider adopting emergency regulations that require Urban Water Suppliers to:
  1. Submit preliminary water demand assessments by June 1, 2022, and to submit final assessments as required by Water Code Section 10632.1;
  2. Implement the shortage response actions for a shortage level of up to 20% (Level 2), if the supplier has submitted a water shortage contingency plan to the Department of Water Resources, by a date to be set by the SWRCB; and
  3. Implement response actions similar to those required by Level 2 of water shortage contingency plans as will be established by the SWRCB, if the supplier has not submitted a water shortage contingency plan to the Department of Water Resources, by a date to be set by the SWRCB.

SCV Water submitted an Annual Water Supply and Demand Assessment Report to DWR on July 1, 2022 (SCV Water 2022b). Based on this report, overall non-potable water uses for 2022 and 2023 are estimated to be much lower than anticipated in the 2020 UWMP, due to engineering report delays and non-potable water conversions transitioning slower than expected. However, recycled water will continue to supply a small fraction of the total water demand. With the diversified water supply portfolio discussed previously in Section 4.19.1, Existing Conditions, SCV Water anticipates having more than adequate supplies to meet all water demands in 2022 and 2023 if dry conditions continue. SCV Water continues to operate the imported water supply portfolio in anticipation of the drought continuing in order to adequately maintain supplies needed to meet 2023 demands.

On April 26, 2022, SCV Water's Board of Directors voted to move the Agency into Stage 2 (Level 2) of its Water Storage Contingency Plan. As a result, customers were requested to voluntarily reduce their water by up to 20%. New watering requirements effective with Stage 2 include limiting watering to three days per week, limiting water station run times, and watering only in the morning and evening (ACWA 2022). In addition, effective July 28, 2022, the SWRCB adopted the State Water Board's Water Conservation Emergency Regulations of 2022, which prohibits watering non-functional lawns in commercial, industrial, and institutional areas, including common areas of homeowners' associations (SWRCB 2022). Any demand reductions resulting from Stage 2 restrictions will assist in preserving augmentation supplies for future shortages (SCV Water 2022b).

- The following regulatory and permitting provisions are to be suspended for the duration of the Order:
  1. Public Resources Code, Division 13 (Section 21000 et seq.), specifically for projects and activities for the purpose of water conservation and any permits necessary to carry out such projects or activities;
  2. Change petitions under Water Code section 1707, 1425 through 1432, or 1725 through 1732, specifically for voluntary approaches to improve fish habitat; and
  3. Any ordinance, regulation, prohibition, policy, or requirement adopted by a public agency that prohibits the hauling of water out of the water's basin of origin or a public agency's jurisdiction, but only for the hauling of water by truck or bottle to be used for human consumption, cooking, or sanitation in communities or residences threatened with the loss of affordable safe drinking water.
- Counties, cities, and other public agencies are all prohibited from:
  1. Approving a permit for a new or altered groundwater well in a basin subject to SGMA and classified as medium or high-priority without first obtaining written verification from a GSA managing the basin; or
  2. Issuing a permit for a new or altered groundwater well without first determining that extraction of groundwater from the proposed well is (1) not likely to interfere with the production and functioning of

existing nearby wells, and (2) not likely to cause subsidence that would adversely impact or damage nearby infrastructure.

- Lastly, the SWRCB is directed to expand inspections to determine whether illegal diversions or wasteful or unreasonable use of water are occurring and bring enforcement actions against illegal diverters and those engaging in the wasteful and unreasonable use of water.

California Code of Regulations Title 22, Chapter 16

Based on California Code of Regulations Title 22, Division 4, Environmental Health, Chapter 16, California Waterworks Standards, Article 2, Permit Requirements, Section 64556, Permit Amendments, an application for an amended domestic water supply permit shall be submitted to the SWRCB for the following:

- Addition of a new distribution reservoir with a capacity of 100,000 gallons or more;
- Changing or altering the water source;
- Consolidation with one or more other water systems; or
- Expansion of the existing service area by 20% or more of the number of service connections specified in the most recent permit or permit amendment.

Based on Chapter 16, California Waterworks Standards, Article 4, Materials and Installation of Water Mains and Appurtenances, the layouts of new water pipelines must comply with the Water Main Separation requirements. These requirements primarily include minimum separation distances from other utilities, wastewater facilities, and hazardous materials storage areas.

California Code of Regulations Title 24, Part 11

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code, Part 11 of Title 24, is commonly referred to as CALGreen, and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all new construction of residential and non-residential buildings. CALGreen standards are updated periodically. The latest (2022) version became effective on January 1, 2023.

Mandatory CALGreen standards pertaining to water, wastewater, and solid waste include the following (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings.
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California DWR's Model Water Efficient Landscape Ordinance.
- Diversion of 65% of construction and demolition waste from landfills.

Executive Order B-29-15

In response to droughts in California, Executive Order B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the Executive Order extended through February 28, 2016, although many of the directives became permanent water-efficiency

standards and requirements. The Executive Order includes specific directives that set strict limits on water usage in the state. In response to Executive Order B-29-15, the California DWR modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Sanitary Sewer General Waste Discharge Requirements

On May 2, 2006, the SWRCB adopted a General Waste Discharge Requirement (Order No. 2006-0003) for all publicly owned sanitary sewer collection systems in California with more than 1 mile of sewer pipe. The Order provides a consistent statewide approach to reducing sanitary sewer overflows by requiring public sewer system operators to take all feasible steps to control the volume of waste discharged into the system, in order to prevent sanitary sewer waste from entering the storm sewer system, and to develop a Sewer System Management Plan. The General Waste Discharge Requirement also requires that storm sewer overflows be reported to the SWRCB, using an online reporting system.

California Integrated Waste Management Act - Assembly Bills 939 and 341

The California Integrated Waste Management Act of 1989 (AB 939) was enacted as a result of a national crisis in landfill capacity, as well as a broad acceptance of a desired approach to solid waste management of reducing, reusing, and recycling. AB 939 mandated local jurisdictions to meet waste diversion goals of 25% by 1995 and 50% by 2000 and established an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. AB 939 requires cities and counties to prepare, adopt, and submit to CalRecycle a source reduction and recycling element to demonstrate how the jurisdiction will meet the diversion goals. Other elements included encouraging resource conservation and considering the effects of waste management operations. The diversion goals and program requirements are implemented through a disposal-based reporting system by local jurisdictions, under California Integrated Waste Management Board (CIWMB) regulatory oversight. Since the adoption of AB 939, landfill capacity is no longer considered a statewide crisis. AB 939 has achieved substantial progress in waste diversion, program implementation, solid waste planning, and protection of public health, safety, and the environment, from landfills operations and solid waste facilities.

In 2011, AB 341 was passed, requiring CalRecycle to require that local agencies adopt strategies that would enable 75% diversion of all solid waste by 2020.

California Solid Waste Reuse and Recycling Act

The California Solid Waste Reuse and Recycling Act of 1991 (AB 2176) was enacted to assist local jurisdictions with accomplishing the goals of AB 939. In accordance with AB 2176, any application submitted for a building permit must include adequate, accessible areas for the collection and loading of recyclable materials. Furthermore, the areas to be used must be demonstrated as adequate in capacity, number, and distribution to serve the proposed program. Moreover, the collection areas are to be situated as close as possible to existing exterior refuse collection areas.

Assembly Bill 1327: California Solid Waste Reuse and Recycling Access Act of 1991

AB 1327, which was established in 1991, required CalRecycle to develop a model ordinance for the use of recyclable materials in development projects. Local agencies were then required to adopt the model ordinance, or

an ordinance of their own, governing adequate areas for collection and loading of recyclable materials in development projects.

Senate Bill 1374: Construction and Demolition Waste Reduction

SB 1374 requires that annual reports submitted by local jurisdictions to the CIWMB include a summary of the progress made in diversion of construction and demolition waste materials. In addition, SB 1374 required the CIWMB to adopt a model ordinance suitable for adoption by any local agency that required 50% to 75% diversion of construction and demolition waste materials from landfills by March 1, 2004. Local jurisdictions are not required to adopt their own construction and demolition ordinances, nor are they required to adopt CIWMB's model by default.

Assembly Bill 1826: Mandatory Commercial Organics Recycling

In October 2014, Governor Brown signed AB 1826 (Chapter 727, Statutes of 2014), requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste generated per week. (Organic waste is defined as food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food 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 multifamily residential dwellings that consists of five or more units. This law phases in the mandatory recycling of commercial organics over time. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to recycle organic waste.

Senate Bill 1383: California's Short-Lived Climate Pollutant Reduction Strategy

As a follow up to AB 1826, in 2016, the State Legislature passed Senate Bill (SB) 1383, California's Short-Lived Climate Pollutant Reduction Strategy, to reduce methane and other greenhouse gas (GHG) emissions statewide. The bill aims to achieve two targets by 2025: (1) 75% reduction of statewide organics waste disposal from 2014 levels and (2) 20% or greater recovery (for human consumption) of edible food currently disposed of in California (CalRecycle 2022d). In order to meet these goals, SB 1383 requires all local jurisdictions to provide mandatory source-separated organic waste collection and diversion services to all businesses, schools, multi-family complexes, and single-family home residents. SB 1383 will further support California's efforts to achieve the statewide 75% recycling goal by 2020 established in AB 341. The State has not yet met this target. In 2019, statewide recycling rates were 37%.

In November 2021, the County Board of Supervisors adopted the Mandatory Organic Waste Disposal Reduction Ordinance (Ordinance) (L.A. County Code, Ch. 20.91), in accordance with SB 1383. The Ordinance requires all businesses and residents in County unincorporated areas to subscribe to organic waste collection services, such that organic waste is diverted from landfills.

California Code of Regulations, Titles 14 and 27

Title 14 (Natural Resources, Division 7) and Title 27 (Environmental Protection, Division 2 [Solid Waste]) of the California Code of Regulations govern the handling and disposal of solid waste and operation of landfills, transfer stations, and recycling facilities.

Assembly Bill 1890 (1996)

The California Public Utilities Commission (CPUC) regulates investor-owned electric power and natural gas utility companies in the State of California. Assembly Bill 1890, enacted in 1996, deregulated the power generation industry, allowing customers to purchase electricity on the open market. Under deregulation, the production and distribution of power that was under the control of investor-owned utilities (e.g., SCE) was decoupled. All new construction in the State of California is subject to the energy conservation standards set forth in Title 24, Part 6, Article 2 of the California Administrative Code. These are prescriptive standards that establish maximum energy consumption levels for the heating and cooling of new buildings. The utilization of alternative energy applications in development projects (including the Project), while encouraged, is not required as a development condition. Such applications may include installation of photovoltaic solar panels, active solar water heating systems, or integrated pool deck water heating systems, all of which serve to displace consumption of conventional energy sources (i.e., electricity and natural gas). Incentives, primarily in the form of state and federal tax credits, as well as reduced energy bills, provide a favorable basis.

Regional and Local

Los Angeles County Sanitation Districts – Sewer Connection Fees

Capital improvements to LACSD's water reclamation plants are funded from connection fees charged to new developments, redevelopments, and expansions of existing land uses. The connection fee is a capital facilities fee used to provide additional conveyance, treatment, and disposal facilities (capital facilities) required by new users connecting to the LACSD sewerage system or by existing users that significantly increase the quantity or strength of their wastewater discharge.

Los Angeles County Roadmap to a Sustainable Waste Management Future

On October 21, 2014, the County Board of Supervisors adopted the Roadmap to a Sustainable Waste Management Future that established a goal to divert 80% of solid waste generated in the unincorporated county areas from landfills by 2025, 90% by 2035, and 95% or more by 2045. The Board directed Public Works to prepare the Roadmap in coordination with the Chief Executive Office; the Office of Sustainability; and the Departments of Regional Planning, Internal Services, Public Health, Health Services, and the Sheriff's; and in consultation with the County Sanitation Districts. Accordingly, the Sustainable Waste Management Future Working Group was formed to collectively develop the Roadmap. Los Angeles County's efforts to achieve waste diversion places a greater emphasis on source reduction, reuse, recycling, and otherwise maximizing the benefits and use of materials over disposal. However, strong economic activity in Los Angeles County's unincorporated areas (with a corresponding increase in waste generation) and unstable statewide recycling markets presents a challenge to maximizing the benefits and use of materials over disposal. The implementation of the roadmap's initiatives (such as organic waste recycling) and the implementation of new ordinances will contribute to achieving the roadmap's goal of 80% diversion by 2025 (Public Works 2014).

Countywide Integrated Waste Management Plan

As a follow-up to AB 939 and AB 341, and as required by AB 75 (Strom Martin, Chapter 764, Statues of 1999), each state agency and large state facility was required to develop an integrated waste management plan by July 1, 2000. The plan was to lay out how the agency or facility would divert at least 25% of its solid waste from landfills or transformation facilities by 2002, and 50% by 2004. Annual reporting on implementation of the plans is also

required. In compliance with this bill, each county is required to adopt a County Integrated Waste Management Plan, in compliance with CalRecycle protocol, that serves as a roadmap to approaching countywide solid waste and recycling issues, including landfill needs. CalRecycle has statutory requirements under Public Resources Code Sections 41813 and 41850 to enforce provisions of Assembly Bill 939 if a local jurisdiction fails to submit an adequate element or plan, or if a local jurisdiction fails to implement its Source Reduction and Recycling Element or Household Hazardous Waste Element.

Countywide Organic Waste Management Plan

In April 2018, the County published its Countywide Organic Waste Management Plan (Organics Plan), which is intended to identify and determine whether there is adequate compostable organic waste processing facility infrastructure and processing capacity to meet the demand for organic waste that is projected to be diverted due to the newly enacted legislation. The Organics Plan provides an estimate of the total organic waste processing capacity currently available in the County and the neighboring counties in the Southern California region. An analysis of the additional processing capacity needed to handle organic waste recycling is also included in the Organics Plan. The first Annual Report to the Organics Plan was published by the County in December 2019.

Construction and Demolition Debris Recycling and Reuse Ordinance

The County Board of Supervisors adopted the Construction and Demolition Debris Recycling and Reuse Ordinance on January 4, 2005. The ordinance added Chapter 20.87 to the Los Angeles County Code, which requires projects in the unincorporated areas to recycle or reuse 50% by weight of all construction and demolition debris removed from a site. Its purpose is to increase the diversion of construction and demolition debris from disposal facilities, which will assist the County in meeting the state's waste reduction mandates. The code also requires submission of a recycling and reuse plan and associated annual reporting to demonstrate compliance with the plan.

In January 2011, the County adopted the Green Building Standards Code, which also sets forth recycling requirements for construction and demolition projects in the unincorporated areas of Los Angeles County. The provisions of the Green Building Standards Code are more stringent than those of the Construction and Demolition Debris Recycling and Reuse Ordinance that was adopted in 2005. For non-residential construction projects, 65% of the debris generated (by weight) must be recycled.

Los Angeles County 2035 General Plan

The County of Los Angeles Board of Supervisors adopted the Los Angeles County 2035 General Plan on October 6, 2015. The 2035 General Plan is intended to provide policy framework for development within the County through the year 2035 (County of Los Angeles 2015). The following policies apply to utilities and service systems and are applicable to the Project. An analysis of all applicable County General Plan policies and objectives is included in Section 4.11, Land Use and Planning of this Draft EIR.

Goal PS/F 1. A coordinated, reliable, and equitable network of public facilities that preserves resources, ensures public health and safety, and keeps pace with planned development.

Policy PS/F 1.1. Discourage development in areas without adequate public services and facilities.

Policy PS/F 1.2. Ensure that adequate services and facilities are provided in conjunction with development through phasing or other mechanisms.

Goal PS/F 2. Increased water conservation efforts.

Policy PS/F 2.1. Implement water conservation measures, such as drought tolerant landscaping and restrictions on water used for landscaping.

Goal PS/F 5. Adequate disposal capacity and minimal waste and pollution.

Policy PS/F 5.5. Reduce the County's waste stream by minimizing waste generation and enhancing diversion.

Policy PS/F 5.6. Encourage the use and procurement of recyclable and biodegradable materials.

Policy PS/F 5.7. Encourage the recycling of construction and demolition debris generated by public and private projects.

Policy PS/F 5.9. Encourage the availability of trash and recyclables containers in new developments, public streets, and large venues.

Goal PS/F 6. A County with adequate public utilities.

Policy PS/F 6.6. Encourage the construction of utilities underground, where feasible.

Policy PS/F 6.8. Encourage projects that incorporate onsite renewable energy systems.

Santa Clarita Valley Area Plan "One Valley, One Vision"

The One Valley, One Vision (OVOV) was adopted by the Board of Supervisors on November 27, 2012. The Plan Amendment and related zone changes took effect on December 27, 2012 (County of Los Angeles 2012). The Santa Clarita City Council and Los Angeles County Board of Supervisors initiated the joint planning effort, called "One Valley, One Vision," in recognition of a mutual need to coordinate land uses and the pace of development with provision of adequate infrastructure, conservation of natural resources, and common objectives for the Valley. Major goals of the joint planning effort were to achieve greater cooperation between the County and the City, coordinate planning for roadways, infrastructure, and resource management, and enhance quality of life for all who live and work in the Santa Clarita Valley. It refines the policies of the General Plan as they apply to a smaller geographic area and is implemented by ordinances and other discretionary actions, such as zoning regulations and Community Standards Districts. The following policies apply to utilities and service systems (County of Los Angeles 2012). An analysis of all applicable OVOV policies and objectives is included in Section 4.11, Land Use and Planning of this Draft EIR.

Goal CO-4. An adequate supply of clean water to meet the needs of present and future residents and businesses, balanced with the needs of natural ecosystems.

Policy CO-4.1.3. Require low water use landscaping in new residential subdivisions and other private development projects, including a reduction in the amount of turfgrass.

Goal LU-9. Adequate public facilities and services, provided in a timely manner and in appropriate locations to serve existing and future residents and businesses.

Objective LU-9.2. Coordination of City and County sewer master planning and sewer mitigation to support future development and avoid fiscal impacts to local government or the existing community.

Policy LU-9.2.1. Ensure that the cost of extending new sewer infrastructure is fully borne by the development that is served, and is not passed on to the existing community.

Policy LU-9.2.2. Require that all new development mitigates its impact on existing sewer capacity by upgrading facilities when warranted or payment of a fee to allow construction of new facilities when needed.

Goal LU 7. Environmentally responsible development through site planning, building design, waste reduction, and responsible stewardship of resources.

Objective LU 7.5. Promote waste reduction through site and building design.

Policy LU 7.5.1. Ensure that all new development provides adequate space for recycling receptacles and bins on site.

Policy LU 7.5.2. Promote the use of recycled building materials.

4.19.3 Thresholds of Significance

In accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the State CEQA Guidelines, the applicable thresholds of significance regarding utilities and service systems are listed below. A Project may have a significant impact if it would:

Threshold 4.19a: Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects.

Threshold 4.19b: Not have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years.

Threshold 4.19c: Result in a determination by the wastewater treatment provider which serves or may serve the Project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Threshold 4.19d: 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 4.19e: Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

4.19.4 Methodology

The potential for adverse impacts on utilities and service systems has been evaluated based on information concerning current service levels and the ability of the service providers to accommodate the increased demand generated by the Project.

Water, Sewer, Storm Drains, and Other Public Utilities Capacity

The analysis of water infrastructure focuses on the availability and capacity of existing water infrastructure to convey the increased water demand for the Project. Similarly, the analysis of wastewater conveyance focuses on the availability and capacity of existing infrastructure to convey the increased wastewater generated by the Project. The analysis of wastewater treatment focuses on the capacity of existing wastewater treatment facilities to treat the increased wastewater generated by the Project. Impacts are considered significant if buildout of the Project would result in the need for construction of water facilities and wastewater facilities that could result in a significant impact on the environment.

The analysis of the Project's impact on storm water drainage facilities identifies the general increase or decrease in stormwater that is anticipated to occur from buildout of the Project and identifies the existing drainage infrastructure that serves the Project area. Impacts would be considered significant if the Project would result in a substantial increase in stormwater that would result in the need to construct or expand drainage facilities that could cause a significant impact on the environment. The analysis is based in part on the findings of hydrology reports, included as Appendices G-2, G-3, and G-4 of this Draft EIR.

Water Supply

The analysis of water supply is focused on a comparison of available water supplies in comparison to water demand associated with buildout of the Project. The primary resources used for this analysis include the SCV Water UWMP (SCV Water 2021), and information provided by the Project WSA and WSA Addendum (Appendices L-2 and L-3). The projected increase in water demand over the Project planning-period is compared to future available supplies. The demand generated by the Project at buildout compared to water supplies available determines whether an impact

from implementation of Project would occur. If buildout of the Project would result in new or expanded water supply entitlements, a significant impact could occur.

Landfill Capacity

The analysis of the Project's impact on landfill facilities identifies solid waste that is anticipated to be generated during both construction and operation of future development of the Project. The analysis identifies the anticipated amount of non-hazardous construction debris and operational solid waste that would be generated from implementation of the Project and the amount that would be disposed of in landfills after compliance with recycling/diversion requirements. The results (i.e., solid waste after recycling/diversion) are compared with the available capacity of the landfill(s) serving the Project area, to assess the significance of the Project's solid waste generation during construction and at buildout. Impacts would be considered significant if the Project would result in a substantial increase in solid waste that would affect landfill capacity, such that a new or expanded landfill facility would be required; the development of which could result in an impact on the environment.

4.19.5 Impact Analysis

Threshold 4.19a: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

Water Facilities

Construction

The Project would require approximately 1,500,000 cubic yards of cut and 1,300,000 cubic yards of fill for a total of 2,800,000 cubic yards of grading with 1,345,000 cubic yards of over excavation. There is expected to be 15% shrinkage on the over excavation for a total of 200,000 cubic yards. The total earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site parcel adjacent to The Old Road that would be constructed with manufactured slopes. The grading would balance onsite, and as such, no import or export of soils would be required for the Project. During grading activities, trenching for storm drain, sewer, water, and wastewater facilities would commence. Paving-related activities would begin after trenching for utilities onsite. Towards the end of these activities, vertical construction of the residences would begin. It is currently anticipated that these phases would be completed within approximately five to seven years after construction begins.

Grading and construction would include spraying with water trucks for soil compaction and dust suppression. Water would be provided by SCV Water for such purposes. During grading and construction, water would be stored in standard 10,000-gallon portable water tanks that can be accessed by water trucks. For a grading project the size of this Project, two 10,000-gallon portable water tanks would likely be used. The amount of water required for soil compaction and dust suppression during grading is highly variable, depending on the soil moisture at the time of grading. Assuming the soils are very dry at the time of grading, approximately 10 to 12 gallons of water would be required for each cubic yard of soil moved during grading. Assuming 4,150,000 cubic yards of grading, including overexcavation and recompaction, approximately 41,500,000 to 49,800,000 gallons of water, or 127 to 152 AF of water would be required for the duration of Project grading. In addition, approximately 80,000 gallons, or 0.25 AF, of water would be required for dust suppression during grading of the entire Project.

Temporary installation and operation of the portable water tanks would result in soil disturbance, which in turn could result in wind- and water-induced soil erosion and off-site sedimentation of downstream drainages, including Lyons Creek. However, in accordance with the Construction General Permit, which is described in detail in Section 4.10, Hydrology and Water Quality of this Draft EIR, a SWPPP, describing BMPs the discharger would use to protect stormwater runoff from sediment and erosion, would be implemented. Additionally, as described in detail in Section 4.3, Air Quality of this Draft EIR, the Project would be required to comply with SCAQMD Rule 403 for watering requirements during construction, which would reduce associated fugitive dust and potential soil erosion during construction activities. As a result of complying with current regulations, impacts would be less than significant, and no mitigation is required.

Operations

As illustrated in Figure 4.19-1, Santa Clarita Valley Water Agency, the Project site lies within the service area of the Valencia Water Division, but would be serviced by the adjacent Newhall Water Division of SCV Water (Appendix L-1, L-5, and L-7). On-site water infrastructure would include new water meters and connections, as well as installation of new water mains and water laterals, throughout the Project site. These water lines would provide domestic water, fire-fighting water, and potable irrigation water to the Project.

A new water tank would be installed at the Project site to assure a reliable fire flow water pressure for the Project uses onsite. The estimated storage capacity of the water tank would be up to 2 million gallons of water. A private access road would be constructed up the slope to the tank. The water tank would be surrounded by natural and homeowners' association-managed open space at the Project site. As indicated in a Notice of Preparation comment letter from the SWRCB, dated July 6, 2022 (Appendix A-2), pursuant to Section 64556, Title 22 of the California Code of Regulations (CCR), an application for an amended domestic water supply permit would be required to be submitted to the SWRCB prior to Project construction, as the Project would include a new water distribution tank with a capacity in excess of 100,000 gallons.

In addition, in coordination with SCV Water, the Project would require various off-site water infrastructure improvements to service the Project site. These improvements would be completed by the Applicant. As identified on Figure 4.19-2, Off-Site Water Infrastructure, the required improvements include the following:

- New Zone Valve between Newhall and Valencia in The Old Road
- 2,950 feet of 18-inch water main in The Old Road
- 4,000 feet of 12-inch water main in The Old Road
- Pump Station 4 Upgrades:
  - 1,975 gallons per minute (gpm) firm capacity (820 gpm increase)
  - Upsize 50 feet of on-site 6-inch pump station pipelines to 8-inch
  - Upsize 190 feet of on-site 8-inch pump station pipelines to 10-inch
- Pump Station 5 Upgrades:
  - 1,225 gpm firm capacity (366 gpm increase) (Appendix L-1 and L-5).

As indicated in a Notice of Preparation comment letter from the SWRCB, dated July 6, 2022 (Appendix A-2), based on Title 22, Chapter 16, California Waterworks Standards, Article 4, Materials and Installation of Water Mains and Appurtenances, of the CCR, the layouts of new water pipelines would be required to comply with the Water Main

Separation requirements, which include minimum separation distances from other utilities, wastewater facilities, and hazardous materials storage areas.

As detailed in response to Threshold 4.7a(iv), of Section 4.7, Geology and Soils, there is potential for creep and surficial slope erosion along the proposed water tank access road, which could eventually progress to the south where it could adversely affect the proposed road. However, as stated in the Geotechnical Report (Appendix E-1), implementation of the five cast-in-drilled-hole soldier piles (concrete reinforcements), installed to depths of about 30 feet, or as an alternative, a stability fill with backdrains along the access road, would ensure that slope stability consistent with building code requirements (Appendix J, Grading) would occur in this location. Recommendations from the Geotechnical Report (Appendix E-1) would be included as part of the Final Geotechnical Engineering Investigation Report and the geotechnical slope stability design measures (e.g., slope inclinations, fill compaction, and drainage improvements) implemented in accordance with Los Angeles County Building Code and California Building Code requirements, as approved by County Public Works. As a result, construction of the proposed water tank and associated access road would not cause significant environmental effects.

Installation of new water mains, on- and off-site, as well as on-site water laterals, would consist of either trenching to the depth of pipe placement or using a variety of different trenchless technology, which causes substantially less ground disturbance. Trenching results in a temporary stockpiling of soil along the length of the trench, pending backfilling, which could result in potential short-term soil erosion. Similarly, construction of the off-site infrastructure improvements within the Newhall service district would result in temporary ground disturbance and potential erosion, use of construction equipment, and generation of temporary construction noise. In accordance with the Construction General Permit, a SWPPP, which describes BMPs the discharger would use to protect stormwater runoff from sediment and erosion, would be implemented. Additionally, the Project would be required to comply with SCAQMD Rule 403 for watering requirements during construction, which would reduce associated fugitive dust and potential soil erosion during construction activities. As a result of complying with current regulations, adverse impacts associated with new water infrastructure would be less than significant.

Wastewater Facilities

Wastewater Conveyance. As detailed in Section 4.19.1, Existing Conditions, the SCVSD operates and maintains the wastewater conveyance system for the Santa Clarita Valley, which consists of a 34-mile long, interconnected network of trunk sewers and two pumping plants. The system conveys wastewater and wastewater solids from the local sewer lines, which are either owned by the City of Santa Clarita or the County, to the Saugus and Valencia WRPs. Local conveyance facilities near the Project site consist of a 11,500-linear feet, County-owned sewer pipeline system, ranging from 8 to 18 inches, located approximately 400 feet to the north of the Project site. This sewer line connects to either or both the SCVSD's District #32 Main Trunk Sewer or the Valencia Trunk Sewer, The #32 Main Trunk Sewer has a capacity of 3.3 mgd and conveyed a peak flow of 0.1 mgd when last measured in 2018. The Valencia Trunk Sewer has a capacity of 5.3 mgd and conveyed a peak flow of 1.9 mgd when last measured in 2018 (Appendix L-6).

Based on the Sewer Area Study for the Project (Appendix L-4) and Addendum to Hydraulic Analysis and Sewer Area Study (Dexter Wilson Engineering, Inc. 2023; Appendix L-5), all sewer pipelines 15-inch or greater meet the capacity criteria of less than 75% full during Project operations. However, not all of the existing 8-inch lines are sufficient to meet anticipated wastewater flows and would therefore be upgraded by the Applicant to a 10-inch line as part of the Project. In addition, a 400-foot section of new sewer would be installed by the Applicant in The Old Road, between the Project site and the existing sewer main. Wastewater flow from the Project would proceed through the County-owned 10-inch pipe to existing Manhole #14, at which point the wastewater would flow through existing 10-

to 18-inch pipe owned by the City of Santa Clarita, before discharging into the 24-inch Valencia Trunk Sewer, which has a capacity of 5.3 mgd. Based on correspondence with LACSD, adequate sewer capacity would be available to serve the Project (See Appendix L-6).

As discussed for proposed water facilities, installation of new sewer lines would consist of either trenching to the depth of pipe placement or using a variety of different trenchless technology, which causes substantially less ground disturbance. Trenching results in a temporary stockpiling of soil along the length of the trench, pending backfilling, which could result in potential short-term soil erosion. Similarly, construction of the off-site infrastructure improvements would result in temporary ground disturbance and potential erosion, use of construction equipment, and generation of temporary construction noise. In accordance with the Construction General Permit, a SWPPP, which describes BMPs the discharger would use to protect stormwater runoff from sediment and erosion, would be implemented. Additionally, the Project would be required to comply with SCAQMD Rule 403 for watering requirements during construction, which would reduce associated fugitive dust and potential soil erosion during construction activities. As a result of complying with current regulations, adverse impacts associated with new water infrastructure would be less than significant.

Wastewater Treatment. Based on a SCVSD will-serve letter for the Project, included as Appendix L-6 , the SCVSD has sufficient capacity to accommodate wastewater flows from the Project, assuming 510 residential units and a recreation center. Projected wastewater flows are based on LACSD's average wastewater generation factors. Based on the Sewer Area Study analysis, the expected average wastewater flow from the Project site would be 0.525 cubic feet per second (cfs), based on 504 residential units, a recreation center, and a fire station. Subsequent to completion of the Sewer Area Study, the number of detached and attached dwelling units was increased by six units, from 504 to 510 units, and the fire station was removed from the Project. As a result, projected wastewater flows decreased from 0.525 cfs to 0.511 cfs (Appendix L-5), which is equivalent to 0.33 mgd. Wastewater generated within the Santa Clarita Valley is treated by the SCVSD at the Saugus and Valencia WRPs, which are interconnected, forming the SCVJSS. The SCVJSS has a combined permitted treatment capacity of 28.1 mgd and currently processes an average flow of 19.0 mgd, resulting in an available treatment capacity of 9.1 mgd.

The capacities of the wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). All expansion of LACSD's facilities must be sized and service-phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. Therefore, the available capacity of the treatment facilities will be limited to levels associated with the growth identified by SCAG. As detailed in Section 4.14, Population and Housing, the Project's proposed population growth would represent 1.32% of the anticipated population growth for the Santa Clarita Valley Planning Area in 2035. At the time of the issuance of the NOP, the applicable regional growth forecasts were included in SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also referred to as Connect SoCal. As such, the Project's anticipated population growth would not exceed SCAG's population growth projections for the Santa Clarita Valley Planning Area.

The Project will-serve letter does not constitute a guarantee of wastewater service, but advises the Project Applicant that the SCVSD intends to provide wastewater treatment service up to the levels that are legally permitted and to inform the developer of the currently existing capacity and any proposed expansion of the SCVSD's facilities (Appendix L-6). The will-serve letter does not indicate the need for any proposed expansion of the SCVSD's facilities.

In the event that increased wastewater treatment capacity is necessary to accommodate discharge from the Project, the mechanism that is used to fund expansion of the treatment system is the LACSD's Connection Fee

Program. The program requires all new users of the sewerage system, as well as existing users of the sewerage system who expand their discharge, to pay a connection fee to the LACSD based upon the quantity and strength of the wastewater discharge. This fee applies to residential, commercial, and industrial dischargers. For new facilities, the connection fee is to be paid prior to the time the facility is connected to the sewer or, in the case of expanding existing facilities, at the time of expansion of the wastewater discharge (LACSD 2022c).

In addition, considering the available treatment capacity of the SCVJSS is 9.1 mgd, the expected Project wastewater flow of 0.33 mgd would constitute 4.0% of that available capacity. Based on this small percentage, the Project would not result in the relocation or construction of a wastewater treatment facility, the relocation or construction of which would cause significant environmental impacts. Impacts would be less than significant, and no mitigation is required.

Stormwater Drainage

Following Project construction, the impervious areas of the site would increase, resulting in a potential for stormwater runoff volumes and/or stormwater runoff rates to increase. As discussed in Section 4.10, Hydrology and Water Quality, Lyons Canyon, located in the central portion of the Project site, drains eastward into the South Fork of the Santa Clara River, which leads to the Santa Clara River, approximately 4.0 miles northeast of the Project site (refer to Figure 4.10-3, Existing Drainages and Watershed, of Section 4.10, Hydrology and Water Quality). The new development would permanently alter drainage courses within the northeastern portion of the Project site. Stormwater runoff would be conveyed from the developed portion of the Project site through the proposed drainage system to the culvert at The Old Road, which crosses under I-5 and ultimately to the South Fork of the Santa Clara River.

During storm events, all stormwater flows from outside of the Project's developed footprint would be directed into two larger regional debris basins (Basins A and B) and five smaller basins (Basins C, E, F, G, and J), which would allow for settlement of debris and would then pass clear flows into the on-site storm drainage system to the outfall in the existing reinforced concrete box culvert at The Old Road (see Figure 4.10-7, Proposed Drainage and Water Quality Infrastructure, of Section 4.10, Hydrology and Water Quality). The larger debris basins would be maintained by the LACFCD and other pervious areas would be maintained by the HOA to ensure that long-term operations on the site are conducted in accordance with the requirements of the Municipal Separate Storm Sewer System (MS4) permit. The Project Drainage Concept Report determined that the proposed basins would reduce the existing 50-year peak flow rate at the California Department of Transportation (Caltrans) culvert under I-5 from 1,656 cubic feet per second (cfs) to 1,218 cfs, a reduction of 438 cfs, which would meet the County hydrology standard requirements (Appendix G-3). A CLOMR will be processed through and approved by FEMA prior to the approval of storm drain plans and construction of the proposed channel and basins (Appendix G-4). The final stormwater management for the Project would be designed to reduce the post-construction peak flow rates and volumes to be less than or equal to the pre-construction peak runoff rates and volumes, for the 25-year, 50-year, and 100-year design storm. The Project would not result in expansion of any existing off-site storm water drainage facilities or in the construction or relocation of new off-site storm water drainage facilities.

Similar to that described above for construction of water and wastewater infrastructure, construction of the on-site stormwater infrastructure and the connection to the existing box culvert at The Old Road would be completed in accordance with the Construction General Permit, which is described in detail in Section 4.10, Hydrology and Water Quality of this Draft EIR. A SWPPP, which describes BMPs the discharger would use to protect stormwater runoff from sediment and erosion, would be implemented as part of the Construction General Permit. Additionally, as described in detail in Section 4.3, Air Quality, of this Draft EIR, the Project would be required to comply with SCAQMD Rule 403 for watering requirements during construction, which would reduce associated fugitive dust and potential

soil erosion during construction activities. As a result of complying with current regulations, impacts would be less than significant, and no mitigation is required. As a result of complying with current regulations, adverse impacts associated with new stormwater infrastructure would be less than significant.

Electric Power

The Project site is within the service area of SCE. Extensions of existing electrical infrastructure into the Project site will be obtained from power lines within The Old Road right of way. Existing on-site above-ground electrical lines, including those for an existing billboard, would either be buried underground or removed. Upgrades would be confined to on-site electrical transformers and electric line connections. Transformers would either be installed above-ground or underground. The latter would require soil excavations and recompaction. The electric line connections would likely be completed by either trenchless technology or completion of open trenching, to the depth of the underground electrical lines. The construction of the power lines would be temporary and would be subject to all applicable regulatory requirements. Similar to that described above for construction of water, wastewater, and storm drain infrastructure, installation of the on-site electrical infrastructure would be completed in accordance with the Construction General Permit, which is described in detail in Section 4.10, Hydrology and Water Quality of this Draft EIR. A SWPPP, which describes BMPs the discharger would use to protect stormwater runoff from sediment and erosion, would be implemented as part of the Construction General Permit. Additionally, as described in detail in Section 4.3, Air Quality of this Draft EIR, the Project would be required to comply with SCAQMD Rule 403 for watering requirements during construction, which would reduce associated fugitive dust and potential soil erosion during construction activities. As a result of complying with current regulations, adverse impacts associated with new and expanded electrical infrastructure would be less than significant.

Natural Gas

As discussed in Section 4.8, Greenhouse Gas Emissions, the Project would not have natural gas use onsite due to implementation of mitigation measure MM-4.8-2. MM-4.8-2, Electrify Buildings (quantified), would reduce energy-related operational greenhouse gas emissions by replacing natural gas uses with electricity, as electricity is a less greenhouse gas-intensive power source that also has the potential to be provided by renewable, zero-emission sources. As a result, the Project would not result in the relocation or construction of natural gas facilities, the relocation or construction of which would cause significant environmental impacts. No impacts would occur.

Telecommunication

The Project site is within the service areas of AT&T and Charter. Extensions of existing telecommunication infrastructure into the Project site would be obtained from existing lines within The Old Road right of way. Upgrades would be confined to on-site connections and would likely be completed by either trenchless technology or completion of open trenching, to the depth of the underground telecommunication lines. Similar to that described above for construction of water, wastewater, storm drain, and electrical infrastructure, installation of the on-site telecommunication infrastructure would be completed in accordance with the Construction General Permit, which is described in detail in Section 4.10, Hydrology and Water Quality of this Draft EIR. A SWPPP, which describes BMPs the discharger would use to protect stormwater runoff from sediment and erosion, would be implemented as part of the Construction General Permit. Additionally, as described in detail in Section 4.3, Air Quality of this Draft EIR, the Project would be required to comply with SCAQMD Rule 403 for watering requirements during construction, which would reduce associated fugitive dust and potential soil erosion during construction activities. As a result of complying with current regulations, adverse impacts associated with expanded telecommunication infrastructure would be less than significant.

Threshold 4.19b: Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?

Construction

As discussed for Threshold 4.19a, the Project would require approximately 2,845,000 cubic yards of earth movement, including the on-site Project components and the off-site adjacent parcel adjacent to The Old Road that includes manufactured slopes. During grading activities, trenching for storm drain, sewer, water, and water quality facilities would commence. Paving-related activities would begin after trenching for utilities onsite. Towards the end of these activities, vertical construction of the residences would begin. It is currently anticipated that these phases would be completed within approximately five to seven years after construction begins.

As described below, the water demand for Project operations would be approximately 228 AFY to 242 AFY. Grading and construction would include spraying with water trucks for soil compaction and dust suppression. Water would be provided by SCV Water for such purposes (Appendix L-7). During grading and construction, water would be stored in standard 10,000-gallon portable water tanks that can be accessed by water trucks. As discussed for Threshold 4.19a, for a grading project the size of the Proposed Project, approximately 127 to 152 AF of water would be required for soil compaction and dust suppression during grading of the entire Project site. Construction of the Project is anticipated to begin in the second quarter of 2025 and end in the fourth quarter of 2029, for a total duration of approximately 4 years and 6 months. Construction and operations of the Project would overlap. For example, dwelling units in Lots 7, 8, and 9 (first residential lots to be constructed) would be operational during the construction of other phases. As a result, combined construction and operations water demand may be temporarily higher than the projected construction water demand of 127 to 152 AF. However, the grading related water demand of 127 to 152 AF is very conservative and the combined construction and partial operational water demand would be less than the projected operations water demand at full build-out. As a result, Project construction would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be less than significant, and no mitigation is required.

Operations

As detailed in Section 4.19.1, Existing Conditions, water supply for the Project would be supplied by SCV Water (Appendix L-7). As noted in SCV Water's most recent 2020 UWMP, completed in 2021, water supplied to the Project area by SCV Water is accessed from diverse sources including local groundwater, imported water, and recycled water (SCV Water 2021, p. 7-8 to 7-9; Table 4.19-1). SCV Water is a State Water Contractor with access to imported water from the SWP, operated by the California DWR. SCV Water is responsible for managing water supplies to ensure projected future demands are met through local and imported sources, in addition to implementing local conservation efforts.

As discussed in Section 4.10, Hydrology and Water Quality (Threshold 4.10b) and included in the Project WSA (Appendix L-2), the local groundwater basin is managed by the SCVGSA, pursuant to the requirements of SGMA. The SCVGSA has adopted a GSP that outlines sustainability criteria and management actions needed to ensure the groundwater basin is not depleted. As a result, the Project's water demands to be supplied by SCV Water would not result in the depletion of groundwater supplies, since SCV Water is subject to the GSP requirement to avoid significant impacts to groundwater. The GSP defines chronic lowering of groundwater levels as a sustainability criteria indicator and establishes minimum thresholds that would require the implementation of management actions to avoid chronic adverse effects. As a result, the adherence with the GSP criteria and management actions ensures that groundwater is managed sustainably.

As detailed in Section 4.19.1, Existing Conditions, groundwater contamination can affect groundwater pumping and available groundwater supplies. Within the East Subbasin, perchlorate, VOCs, and PFAS are the primary human caused constituents of concern. The most frequently detected VOCs in the Subbasin are TCE and PCE. Less frequently detected compounds include chloroform, and 1,1-dichloroethene, which have been detected in trace amounts below the state drinking water standards MCL in the Basin. The SNMP prepared by SCV Water in 2016 identified DDT and PCBs as other constituents of concern. PFAS is considered a contaminant of emerging concern in the Subbasin. A total of 28 existing SCV Water wells have been impacted by PFAS, with 60% of those wells containing PFAS concentrations in excess of regulatory action levels. As a result, SCV proactively shut down numerous wells that are anticipated to exceed action levels. On February 22, 2021, the USEPA published notice in the federal register that the agency is in the process of developing an MCL for PFAS, under the federal Safe Drinking Water Act. In addition, the DDW lowered their response level guidelines in 2020 related to PFAS and SCV Water responded with a voluntary quarterly sampling program and an expedited schedule for construction of treatment facilities.

To-date, one centralized treatment system was completed for three impacted wells and restoration of the remaining wells is estimated to occur by 2030. These temporary reductions in supply from some wells, which have been conducted under the oversight of the DDW, have not impacted the ability of SCV Water to provide high quality groundwater. The loss of capacity of wells impacted by water quality issues and removed from service in the near-term will be met by near-term excess capacity in non-impacted wells, other water sources including imported water supplies, and/or through the installation of replacement wells, if necessary, until remediation alternatives, including wellhead treatment, and DDW approval is obtained for restoration of the impacted supply. Therefore, no anticipated change in reliability of supply due to water quality is anticipated based on the present data (Appendix L-2). As discussed in more detail in Section 4.19.1, Existing Conditions, as of 2019, the SCV Water imported water supplies consisted of a combination of SWP, the BVWSD and RRBWSD in Kern County, and other sources outside of the Santa Clarita Valley. As part of its SWP contract with DWR, SCV Water also has access to a portion of the storage capacity of Castaic Lake, via a Flexible Storage Account. Any amount of water that SCV Water withdraws must be returned to storage by SCV Water within five years of its withdrawal. SCV Water manages this storage by keeping the account full in normal and wet years and then delivering that stored amount (or a portion of it) during dry periods. However, while it is expected that SCV Water and Ventura County will extend the existing flexible storage agreement beyond the 2025 term, the agreement is not expected to be available beyond 2025, based on the 2020 UWMP for SCV Water and the Project WSA (Appendix L-2).

As indicated in Section 3.2.1, Land Use Entitlements, of Chapter 3.0, Project Description, as well as Section 4.14, Population and Housing, Threshold 4.14a, the Project density is consistent with the County General Plan (Housing Element) growth assumptions. In addition, the Project's proposed population growth would represent 1.32% of the anticipated population growth for the Santa Clarita Valley Planning Area in 2035. The Project would not require a General Plan Amendment. As such, the Project's anticipated population growth would not exceed SCAG's population growth projections for the Santa Clarita Valley Planning Area, and therefore, the Project is included within demand projections included in the 2020 UWMP.

As detailed in the WSA prepared for the Project, the total water demand for the Project was originally estimated to be 228 AFY for an average year, 242 AFY for a projected single dry year, and 233 AFY for projected multiple dry years (Table 4.19-2, Water Demand Estimates—Projected Normal/Average Year Demands) (Appendix L-2). Subsequent to completion of the WSA, 12 affordable housing apartments for seniors were added to the Project, resulting in an additional water demand of 1.25 AFY (Appendix L-3, WSA Addendum). Subsequent to completion of the WSA Addendum (Appendix L-3), the number of detached and attached dwelling units was decreased by 6 units,

from 468 units to 462 units, and the fire station was removed from the Project. The net increase in dwelling units is 6 units, for a total of 510 units. Removal of the fire station reduced the water demand by 13.94 AFY and a reduction of 6 dwelling units reduced the water demand by 1.19 AFY (at 0.2 AFY/dwelling unit), for a total reduction of 15.13 AFY from the original water demands in the WSA (Appendix L-2).

Based on the Project WSA (Appendix L-2), the Project's total projected water demand was accounted for in the 2020 UWMP because the timing of the Project places it within the time frame for calculating "planned future uses" within the UWMP. The total demand for water supplies is expected to continue to rise within the Santa Clarita area because of population growth, planned development, economic activity, environmental and water quality needs, and regulatory requirements. Population and water use projections were made based upon existing land uses and planned land use development compiled for the service area, including the City of Santa Clarita and County of Los Angeles land use plans, also known as the One Valley One Vision (OVOV). The Project is located in the unincorporated area of the County covered by the OVOV plan, and the Project is contained in and consistent with the OVOV plan. As the UWMP is based on the housing and commercial development projected in the OVOV plan, the Project's water demand has already been incorporated into the existing UWMP demand projections. In addition, population and water use projections were used in order to estimate demand out to 2050 (assumed year of designated land use buildout) (Appendix L-2).

Table 4.19-2. Water Demand Estimates–Projected Normal/Average Year Demands

Land Use	No. of Land Use Type	Land Use Type	Demand (AFY)
Multi-Family Condominium	462	Dwelling Unit	92.40
Multi-Family Condominium Landscape	31.9	Acres	100.17
Misc. Landscaped Areas	3.28	Acres	10.30
Senior Apartment	48	Dwelling Unit	5.02
Recreation Center	29.6	TSF	6.86
		Total Average Year Demands	**215**

Source: Modified after Appendices L-2 and L-3.
Notes: AFY: acre feet per year; TSF: thousand square feet

As indicated in Table 5-2, Projected Average/Normal Year Supplies and Demands, of Appendix L-2, the projected total water demand in 2050 for the SCV Water service area, with passive conservation, is 115,100 AF, yet the total water supplies (existing and planned) is 111,758 AF, resulting in a projected deficit in water supplies. However, the projected demand in 2050 with passive and active conservation is 101,000 AF, resulting in a projected water surplus. Water supply and demand projections assuming a single-dry year and five-year drought resulted in a similar deficit and surplus scenario with passive conservation and passive/active conservation, respectively (Tables 5-3 and 5-4 of Appendix L-2).

The water supply analysis in the WSA is based on the assumption that the Project would implement active conservation with respect to water demand. Project landscaping would be designed in accordance with all current California DWR Model Water Efficient Landscape Ordinance standards and that the LACDRP, or other department within the County, would enforce these standards during its plan checks, when performing inspections of the installed landscapes and irrigation components, and when conducting irrigation audits. As illustrated on Figure 3-7, Landscape Plan, and discussed in Section 3.2.5, Landscaping and Protected Trees, of Chapter 3.0, Project Description, the Project landscaping would use native, drought-tolerant, and climatically appropriate species. The plantings would provide shade in the warmest times of the year and would be composed of safe, non-invasive, non-

thorny, and non-toxic flowers, leaves, seeds, and sap. The overall planting palette would be primarily low maintenance and low water use, and plantings would be grouped and organized according to consistent seasonal maintenance practices, water use, and solar exposure. The use of native plants is recommended; however, the palette could also reflect the planting and geographic diversity of Southern California and use species that are climatically appropriate. Approximately one-quarter of the Project site would be planted with restored native habitat planting, including indigenous oak trees. Each of these landscape features would contribute to minimizing Project water demand. Similar to the proposed Project, active conservation would be implemented on reasonably foreseeable future developments within the SCV Water service area, thus reducing water demand on those future developments. Landscaping would be designed in accordance with all current California DWR Model Water Efficient Landscape Ordinance standards and the LACDRP, or other department within the County, would enforce these standards during its plan checks when performing inspections of the installed landscapes and irrigation components, and when conducting irrigation audits.

The Project WSA concludes that the total projected water supplies available to the SCV Water service area over the 30-year projection during normal, single-dry, and multiple-dry year (five year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses, including agricultural and industrial uses, throughout the Santa Clarita Valley, assuming that SCV Water continues to utilize available State Water Project water, and continues to incorporate conjunctive use (coordinated use of surface water and groundwater), water conservation, water transfers, recycled water, and water banking as part of the total water supply portfolio and management approach to long-term water supply and strategy (Appendix L-2).

Based on Project changes subsequent to completion of the WSA, removal of the fire station would reduce the water demand by 13.94 AFY and a reduction of 6 dwelling units would reduce the water demand by 1.19 AFY, for a total reduction of 15.13 AFY from the original water demands in the WSA (Appendix L-2). In addition, as indicated in Appendix L-7, Water Availability Form, SCV Water can provide safe and reliable water service to the Project, and fully expects to be able to continue providing safe and reliable water service into the future. As a result, the Project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years. Impacts would be less than significant, and no mitigation is required.

Threshold 4.19c: 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?

As previously described in response to Threshold 4.19a, based on a SCVSD will-serve letter for the Project, included as Appendix L-6, the SCVSD has sufficient capacity to accommodate wastewater flows from the Project, assuming 510 residential units and a recreation center. Projected wastewater flows are based on LACSD's average wastewater generation factors. Based on the Sewer Area Study analysis, the expected average wastewater flow from the Project site would be 0.525 cfs, based on 504 residential units, a recreation center, and a fire station. Subsequent to completion of the Sewer Area Study, the number of detached and attached dwelling units was increased by six units, from 504 to 510 units, and the fire station was removed from the Project. As a result, projected wastewater flows decreased from 0.525 cfs to 0.511 cfs (Appendix L-5), which is equivalent to 0.33 mgd. Wastewater generated within the Santa Clarita Valley is treated by the SCVSD at the Saugus and Valencia WRPs, which are interconnected, forming the SCVJSS. The SCVJSS has a combined permitted treatment capacity of 28.1 mgd and currently processes an average flow of 19.0 mgd, resulting in an available treatment capacity of 9.1 mgd. Based on this treatment capacity, the expected Project wastewater flow of 0.33 mgd would constitute 4.0% of that available capacity.

As described for Threshold 4.19a, per the SCVSD will-serve letter, the SCVSD bases the capacities of the LACSD's wastewater treatment facilities on the regional growth forecast adopted by the SCAG. All expansions of SCVSD's facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the SCVSD's treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As detailed in Section 4.14, Population and Housing, the Project's proposed population growth would represent 1.32% of the anticipated population growth for the Santa Clarita Valley Planning Area in 2035. At the time of the issuance of the NOP, the applicable regional growth forecasts were included in SCAG's 2020-2045 RTP/SCS, also referred to as Connect SoCal. As such, the Project's anticipated population growth would not exceed SCAG's population growth projections for the Santa Clarita Valley Planning Area. Based on this small percentage and the will-serve letter, the Project would have adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Impacts would be less than significant, and no mitigation is required.

Threshold 4.19d: 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?

Construction

Construction of the Project would result in the generation of solid waste such as scrap lumber, concrete, residual wastes, packing materials, and plastics. Soil cut and fill quantities would be balanced during grading, resulting in no off-site soil disposal. Per CALGreen and the County Green Building Standards Code, 65% of construction and demolition waste must be diverted from landfills. As such, at least 65% of all construction and demolition debris from the site would be diverted. Any hazardous wastes that are generated during construction activities, such as used motor oil, empty paint cans, or empty solvent containers, would be managed and disposed of in compliance with all applicable federal, state, and local laws. The remaining 35% of construction and demolition material that is not required to be recycled would either be disposed of or voluntarily recycled at a solid waste facility with available capacity.

As described in Section 4.19.1, Existing Conditions, the only permitted inert landfill in the County (Azusa Land Reclamation landfill) has a maximum permitted daily capacity of 8,000 tons of waste, a remaining capacity of 51,512,201 cubic yards (25,756,100 tons) and is expected to remain open until 2045. There are other facilities that process, recycle, and transfer inert waste and other construction and demolition waste in the County, including several in nearby Sun Valley, including AMH Recycling, Vulcan Materials, RAMCO, and Security Paving Company. Project construction and demolition debris requiring disposal at an inert waste landfill would be sufficiently accommodated by existing landfills. As a result, Project construction would not 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.g., County and CALGreen standards). Impacts would be less than significant, and no mitigation is required.

Operations

Once operational, the Project would produce solid waste in association with operation and maintenance activities. Based on a Project-specific air quality analysis (Appendix B-1), the solid waste currently generated at the Project site is estimated to be approximately 492 tons per year. Anticipated solid waste generation attributable to the proposed Project is shown in Table 4.19-3, Anticipated Solid Waste Generation.

Table 4.19-3. Anticipated Solid Waste Generation

Land Use[1]	Solid Waste Generation (tons per year)
Lots 10 and 11 (Apartments, Low Rise)	35.47
City Park	0.17
Lots 2, 3, 7 through 9 (Condominium/Townhouse)	154.63
Recreational Center (Health Club)	25.88
Recreational Swimming Pool	76.66
Lots 4 through 6 (Single Family Housing)	198.71
Total	**491.53**

Sources: Appendix B-1 and B-2, Section 8.2, Waste by Land Use (Unmitigated).
Notes:
1 The land uses in parentheses represent surrogate uses for CalEEMod

As described in Section 4.19.1, Existing Conditions, the Sunshine Canyon and Chiquita Canyon landfills are the closest landfills to the Project site. The Sunshine Canyon Landfill has a remaining capacity of 77,900,000 cubic yards (38,950,000 tons), with an estimated cease operation date of 2037, and a maximum permitted disposal rate of 12,100 tons per day. Similarly, the Chiquita Canyon Landfill has a capacity of 60,408,000 cubic yards (30,204,000 tons), an estimated cease operation date of 2047, and a maximum permitted disposal rate of 12,000 tons per day. These two landfills have a combined remaining capacity of 138,308,000 cubic yards (69,154,000 tons).

The net solid waste that is anticipated to be produced by the Project would equate to approximately 0.0007% of the combined available capacity of these two landfills, through the estimated closure dates, per year. As such, the Project's solid waste generation would be minimal to negligible relative to available landfill capacity and relative to existing and future solid waste generation in the region. As such, the landfills that would serve the Project are anticipated to have adequate capacity to accommodate the waste disposal needs of the Project.

The County Integrated Waste Management Plan includes an assessment of the County's ability to accommodate solid waste disposal demands throughout a 15-year planning horizon. As shown in the County's latest (2019) annual report for the Countywide Integrated Waste Management Plan (Public Works 2020), there are numerous scenarios through which the County could meet the disposal needs of all jurisdictions. Future disposal needs are calculated through 2032 based on employment, population, and taxable sales projections based on long-term forecasts for the County. (All scenarios would meet the County's projected disposal needs except for a scenario in which out-of-county landfills are not used.) The Countywide Integrated Waste Management Plan is updated to include strategies for the County and local jurisdictions to continue meeting long-term needs and to maintain adequate disposal capacities. As such, the County is required to continue identifying ways to meet its disposal needs well into the future.

According to the latest (2019) annual report for the Countywide Integrated Waste Management Plan, there are landfills used by the County with up to 100 years of remaining life. For example, the Prima Deshecha Sanitary Landfill in Orange County is expected to remain open for another 83 years, the Mesquite Regional Landfill in Imperial County is expected to remain open for another 109 years, and the Simi Valley Landfill in Ventura County is expected to remain open for another 42 years. As such, in the event of closure of the Sunshine Canyon and Chiquita Canyon landfills, other landfills in the region would be able to accommodate solid waste from the Project, and regional planning efforts would ensure continued landfill capacity into the foreseeable future. For the reasons

previously described, Project operations would not 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.g., County Integrated Waste Management Plan). Impacts would be less than significant, and no mitigation is required.

Threshold 4.19e: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

As described in Section 4.19.1, Existing Conditions, the Sunshine Canyon and Chiquita Canyon landfills are the closest landfills to the Project site. These facilities are regulated under federal, state, and local laws. Additionally, the County is required to comply with the solid waste reduction and diversion requirements set forth in AB 75, AB 939, AB 341, AB 1327, AB 1374, and AB 1826 (see Section 4.19.2, Regulatory Requirements). With respect to organic waste, AB 1826 (Chapter 727, Statutes of 2014) requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by multifamily residential dwellings that consists of five or more units. (Organic waste is defined as food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.) This law phases in the mandatory recycling of commercial organics over time. In addition, in accordance with SB 1383, the Mandatory Organic Waste Disposal Reduction Ordinance (L.A. County Code, Ch. 20.91) requires all businesses and residents in County unincorporated areas to subscribe to organic waste collection services, such that organic waste is diverted from landfills. The Countywide Organic Waste Management Plan (Organics Plan) identifies and determines whether there is adequate compostable organic waste processing facility infrastructure and processing capacity to meet the demand for organic waste that is projected to be diverted due to AB 1826.

Project solid waste disposal would also be completed in compliance with the California's 2022 Green Building Standards Code (CALGreen), which sets forth recycling requirements for construction and demolition projects in the unincorporated areas of Los Angeles County. The provisions of the CALGreen are more stringent than those of the Construction and Demolition Debris Recycling and Reuse Ordinance that was adopted in 2005. For residential and non-residential construction projects, 65% of the debris generated (by weight) must be recycled. Project solid waste disposal would also be in compliance with the Roadmap to a Sustainable Waste Management Future, which established a goal to divert 80% of solid waste generated in the unincorporated county areas from landfills by 2025, 90% by 2035, and 95% or more by 2045; and the Countywide Integrated Waste Management Plan (under AB 75), which established how individual agencies or facilities would divert at least 25% of its solid waste from landfills or transformation facilities by 2002, and 50% by 2004.

As a result of Project compliance with federal, state, and local management and reduction statutes and regulations related to solid waste, impacts are considered less than significant, and no mitigation is required.

4.19.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., Cumulative Projects) used for this analysis are presented in Table 2-2, List of Cumulative Projects and on Figure 2-8, Cumulative Projects Location Map, of Section 2.6, Cumulative Impacts, of Chapter 2, Environmental Setting, of this Draft EIR. For purposes of utilities and service systems, the geographical area of cumulative impacts varies by threshold, further detailed below.

Threshold 4.19a: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

Water Facilities

Cumulative water infrastructure impacts are considered on a system-wide basis and are associated with the capacity of existing and planned infrastructure. The geographic scope for cumulative impacts related to water infrastructure include the jurisdiction of SCV Water, which supplies customers throughout the Santa Clarita Valley area, including all of the Cumulative Projects analyzed in this Draft EIR. Valley-wide population projections are based on land use dwelling unit projections, using buildout estimates and persons per household estimates. For County area developments of Northlake, Sloan Canyon Spring Canyon, Tapia and Tesoro del Valle, projections assume Newhall Water Division's persons per household. Accessory dwelling units were also considered in the projections. Based on these assumptions, the population in the SCV Water service area is projected to grow at an average annual rate of approximately 1.3% per year, over the 30-year planning period to 2050 (buildout) (SCV Water 2021).

Completion of projects within the SCV Water service area would involve construction of water distribution infrastructure (i.e., pipes, valves, meters, etc.) on the project sites. The Cumulative Project facilities would be connected to off-site water lines in the adjacent rights-of-way. All water infrastructure construction work within the public right-of-ways and on private property would be subject to applicable City and/or County code requirements. For example, for Cumulative Projects with new water distribution reservoirs with a capacity in excess of 100,000 gallons, an amended domestic water supply permit would be submitted to and approved by the SWRCB prior to construction, pursuant to Section 64556, Title 22 of the California Code of Regulations. In addition, based on Title 22, Chapter 16, California Waterworks Standards, Article 4, Materials and Installation of Water Mains and Appurtenances, the layouts of new water pipelines would be required to comply with the Water Main Separation requirements, which include minimum separation distances from other utilities, wastewater facilities, and hazardous materials storage areas.

In addition, for Cumulative Projects involving ground disturbance in excess of 1.0-acre, Cumulative Project construction would be required to occur in accordance with the requirements of the Construction General Permit, which includes implementation of a SWPPP and related BMPs the discharger would use to protect stormwater runoff, including erosion-induced siltation of downstream drainages and incidental spills of petroleum products from construction equipment. As a result, indirect cumulative impacts associated with upgrades of water conveyance infrastructure for Cumulative Project sites would not be cumulatively considerable. Cumulative impacts would be less than significant, and no mitigation is required.

Wastewater Conveyance and Treatment

The geographic scope for cumulative wastewater conveyance and treatment would include the jurisdiction of the SCVSD, which includes the Saugus WRP and the Valencia WRP, and which collectively form the SCVJSS. All of the Cumulative Projects included within the Draft EIR are within this geographic scope. The joint powers agreement that created the regional system allows the Valencia WRP to accept flows that exceed the capacity of the Saugus WRP. The water is treated to tertiary levels (biological treatment followed by filtration and disinfection) and is discharged to the Santa Clara River. The SCVJSS has a combined permitted treatment capacity of 28.1 mgd and currently processes an average flow of 19.0 mgd (Appendix L-6).

In the event that the Cumulative Projects would require increased wastewater treatment capacity, the mechanism that is used to fund expansion of the treatment system is the LACSD's Connection Fee Program. The program requires all new users of the sewerage system, as well as existing users of the sewerage system who expand their discharge, to pay a connection fee to the LACSD based upon the quantity and strength of the wastewater discharge. This fee applies to residential, commercial, and industrial dischargers. For new facilities, the connection fee is to be paid prior to the time the facility is connected to the sewer or, in the case of expanding existing facilities, at the time of expansion of the wastewater discharge (LACSD 2022c).

Wastewater treatment facilities are planned based on regional growth projections, such as those produced by SCAG. As detailed in Section 4.14, Population and Housing, the Project is within population and employment growth projections that have been identified by SCAG. So long as projects fall within these projections, existing wastewater treatment facilities have been planned to accommodate commensurate increases in wastewater generation across the region. Because the wastewater treatment plants that would serve the project and many of the Cumulative Projects are subject to existing permits, because the Project and Cumulative Projects would be required to pay development fees that fund updates to wastewater facilities, and because the Project falls within regional growth projections, the Project would not result in cumulatively considerable impacts with respect to potential relocation, construction, or expansion of wastewater treatment facilities.

In addition, as described for water facilities, Cumulative Project construction would be required to comply with applicable regulatory requirements. As a result, indirect impacts associated with upgrades of sewer connections to Cumulative Project sites would not be cumulatively considerable. Cumulative impacts would be less than significant, and no mitigation is required.

Stormwater Drainage

The geographic scope of cumulative impacts related to stormwater drainage infrastructure is the watershed of the South Fork of the Santa Clara River, which leads to the Santa Clara River, approximately 3.75 miles northeast of the Project site. Each Cumulative Project would be required to demonstrate through the CEQA process, as well as in compliance with City and/or County regulations, that adequate stormwater conveyance capacity would be sufficient to accommodate each of the Cumulative Projects within the watershed of the South Fork of the Santa Clara River.

Most Cumulative Projects, including the Project, would be subject to the most recent MS4 Permit for Los Angeles County, which includes a requirement to minimize the percentage of impervious surfaces on land developments by minimizing soil compaction during construction, designing projects to minimize the impervious area footprint, and employing low-impact development design principles to mimic predevelopment water balance hydrology through infiltration, evapotranspiration, and rainfall harvest and reuse (See Section 4.10, Hydrology and Water Quality). Compliance with this permit generally results in a reduction in stormwater runoff from redevelopment and infill sites, when compared with existing conditions. Upon Project implementation, stormwater runoff from the Project site would be less than or equal to runoff that occurs under existing conditions. As such, the Project would not contribute to a cumulatively considerable impact. For most of the Cumulative Projects, stormwater runoff would be expected to be equal to or less than runoff under existing conditions. Therefore, it is unlikely that downstream flood control improvements would be required as a condition of Cumulative Project completion.

In addition, as described for water facilities, Cumulative Project construction would be required to comply with applicable regulatory requirements. As a result, indirect impacts associated with new storm drain construction on

Cumulative Project sites would not be cumulatively considerable. Impacts would be less than significant, and no mitigation is required.

Electric Power, Natural Gas, and Telecommunication

The geographic scope for cumulative impacts related to electric power, natural gas, and telecommunication facilities is the Santa Clarita Valley Planning Area, which includes all Cumulative Projects included in Table 2-2, List of Cumulative Projects, of Chapter 2 of this Draft EIR. Completion of the Project would require installation of new electric power and telecommunication infrastructure in roadways and rights-of-way associated with the development. As discussed in Section 4.8, Greenhouse Gas Emissions, the Project would not have natural gas use onsite. MM-4.8-2, Electrify Buildings (quantified) would reduce energy-related operational greenhouse gas emissions, by replacing natural gas with electricity. As a result, the Project would not result in the relocation or construction of natural gas facilities.

Cumulative project development would occur incrementally on a project-by-project basis. Trenching and excavations completed for the new connections to existing electric, natural gas, and telecommunication infrastructure could result in potential short-term soil erosion, as excavated and temporarily stockpiled soils would be susceptible to rainfall. However, standard BMPs and pollutant control measures would be employed during construction to minimize pollutants, including erosion-induced siltation of downstream drainages and incidental spills of petroleum products from construction equipment. Individual projects would be required to comply with regulatory requirements to address construction impacts for specific project needs. Impacts of the Project associated with upgrades of electric, natural gas, and telecommunication facilities would not be cumulatively considerable. Cumulative impacts would be less than significant, and no mitigation is required.

Threshold 4.19b: Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?

The geographic scope for cumulative water supply impacts is the jurisdiction of SCV Water, which supplies customers throughout the Santa Clarita Valley area, including all Cumulative Projects within Table 2-2, List of Cumulative Projects, of Chapter 2 of this Draft EIR. As noted in SCV Water's most recent 2020 UWMP, completed in 2021, water supplied to the Project area by SCV Water is accessed from diverse sources including local groundwater, imported water, and recycled water. SCV Water is a State Water Contractor with access to imported water from the SWP, operated by the California DWR. SCV Water is responsible for managing water supplies to ensure projected future demands are met through local and imported sources, in addition to implementing local conservation efforts.

As indicated in Section 3.2.1, Land Use Entitlements, since the Project density is consistent with the County General Plan growth assumptions, the Project is included within demand projections included in the 2020 UWMP. Based on the Project WSA (Appendix L-2), the Project's total projected water demand was accounted for in the 2020 UWMP because the timing of the Project places it within the time frame for calculating "planned future uses" within the UWMP. Also, in order to estimate demand out to 2050 (assumed year of designated land use buildout), population and water use projections were made based upon existing land uses and planned land use development compiled for the service area, including the City of Santa Clarita and County of Los Angeles land use plans, also known as the OVOV. The Project is located in the unincorporated area of the County covered by the OVOV plan, and the Project is contained in and consistent with the OVOV plan. As the UWMP is based on the housing and commercial development projected in the OVOV plan, the Project's water demand has already been incorporated into the existing UWMP demand projections (Appendix L-2). As a result, the Project would not contribute to a significant

cumulative impact. In addition, the Project WSA and WSA Addendum conclude that the total projected water supplies available to the SCV Water service area over the 30-year projection during normal, single-dry, and multiple-dry year (five-year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses, including agricultural and industrial uses, throughout the Santa Clarita Valley (Appendices L-2 and L-3). As a result, impacts associated with the Project, in combination with Cumulative Project development, would not be cumulatively considerable. Cumulative impacts would be less than significant, and no mitigation is required.

Threshold 4.19c: 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?

As discussed for Threshold 4.19a, the geographic scope for cumulative wastewater treatment would include the jurisdiction of the SCVSD, which includes the Saugus WRP and the Valencia WRP, and which collectively form the SCVJSS, which includes all of the Cumulative Projects included within the Draft EIR. Wastewater treatment facilities are planned based on regional growth projections, such as those produced by SCAG. The Project is within population and employment growth projections that have been identified by SCAG. No General Plan Amendment or zone change is required with implementation of this Project. So long as Cumulative Projects fall within these projections, existing wastewater treatment facilities have been planned to accommodate commensurate increases in wastewater generation across the region. Because the wastewater treatment plants that would serve the Project and many of the Cumulative Projects are subject to existing permits, because the Project and Cumulative Projects would be required to pay development fees that fund updates to wastewater facilities, and because the Project falls within regional growth projections, impacts would not be cumulatively considerable with respect to capacity of wastewater treatment facilities. Cumulative impacts would be less than significant, and no mitigation is required.

Threshold 4.19d: 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?

The geographic scope for cumulative solid waste impacts is the greater Los Angeles area. As described in Section 4.19.1, Existing Conditions, the Sunshine Canyon and Chiquita Canyon landfills are the closest landfills to the Project site. The Sunshine Canyon Landfill has a remaining capacity of 77,900,000 cubic yards (38,950,000 tons), with an estimated cease operation date of 2037, and a maximum permitted disposal rate of 12,100 tons per day. Similarly, the Chiquita Canyon Landfill has a capacity of 60,408,000 cubic yards (30,204,000 tons), an estimated cease operation date of 2047, and a maximum permitted disposal rate of 12,000 tons per day. These two landfills have a combined remaining capacity of 138,308,000 cubic yards (69,154,000 tons). The net solid waste that is anticipated to be produced by the Project would equate to approximately 0.0007% of the combined available capacity of these two landfills, through the estimated closure dates. Additionally, according to the latest (2019) annual report for the Countywide Integrated Waste Management Plan, there are landfills used by the County with up to 100 years of remaining life.

Development of Cumulative Projects could increase land use intensities in the area, resulting in increased solid waste generation in the service area for Los Angeles County landfills. As discussed in Section 4.19.5, Impact Analysis, projections of solid waste generation from 2019 to 2034, as a result of Cumulative Project development, were completed for the County of Los Angeles Countywide Integrated Waste Management Plan (Public Works 2020). Based on population, employment, and real taxable sales projections, solid waste generation and disposal is anticipated to increase from 30 million tons in 2019 to 35 million tons in 2034. This analysis considers imported

and exported waste, a 65% diversion rate, and potential engineered municipal solid waste conversion facilities, or other alternative technologies that may be developed during the planning period.

Seven different scenarios were evaluated in determining whether the existing landfills had sufficient capacity to accommodate the increase in solid waste disposal for all Cumulative Projects in the County. The scenarios varied based on the diversion rate, the amount of import and export (in and out of the County), and degree of utilization of alternative technologies. For all seven scenarios, the projected waste generation remained the same. Based on this analysis, a shortfall in landfill capacity would occur for only one of the seven scenarios: Scenario I, for utilization of Permitted In-County Disposal Capacity Only. This shortfall was a result of complete reliance on existing permitted in-County landfill capacity, (i.e., no exports and no alternative technologies). However, through Scenario II, Status Quo Scenario, there is no shortfall in disposal capacity expected within the planning period (Public Works 2020). The Status Quo Scenario represents current procedures projected into the future, and assumes that all solid waste disposed will be managed by existing permitted in-County disposal infrastructure and available out-of-County landfill capacity. As detailed in Section 4.19.5, Project operations would not 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, and as such, the Project would not result in a cumulatively considerable impact regarding solid waste.

Threshold 4.19e: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The geographic scope for cumulative solid waste impacts is the greater Los Angeles area. As described in Section 4.19.1, Existing Conditions, the Sunshine Canyon and Chiquita Canyon landfills are the closest landfills to the Project site. These facilities are regulated under federal, state, and local laws. Additionally, the County is required to comply with the solid waste reduction and diversion requirements set forth in AB 75, AB 939, AB 341, AB 1327, AB 1374, and AB 1826 (see Section 4.19.2, Regulatory Requirements). Project solid waste disposal would also be completed in compliance with the 2021 Green Building Standards Code, the Roadmap to a Sustainable Waste Management Future, and the Countywide Integrated Waste Management Plan (under AB 75), As a result of Project and Cumulative Project compliance with federal, state, and local management and reduction statutes and regulations related to solid waste, cumulative impacts would not be cumulatively considerable. Impacts are considered less than significant, and no mitigation is required.

4.19.7 Mitigation Measures

No mitigation measures would be required.

4.19.8 Level of Significance After Mitigation

The Project would require the construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which would not cause significant environmental effects. Impacts would be less than significant.

The Project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years and impacts would be less than significant.

The Project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments, and impacts would be less than significant.

The Project would not 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, and impacts would be less than significant.

The Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste and impacts would be less than significant.

4.19.9 References

ACWA (Association of California Water Agencies). 2022. "SCV Water Board Votes to Ramp Up Water Restrictions as Severe Drought Intensifies." Accessed October 10, 2022. https://www.acwa.com/news/scv-water-board-votes-to-ramp-up-water-restrictions-as-severe-drought-intensifies/.

California Legislative Information. 2022. "SB-634 Santa Clarita Valley Water Agency." Accessed July 26, 2022. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB634.

CalRecycle (California Department of Resources Recycling and Recovery). 2022a. "SWIS Facility/Site Activity Details, Sunshine Canyon City/County Landfill (19-AA-2000)." Accessed July 27, 2022. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/259?siteID=4702.

CalRecycle. 2022b. "SWIS Facility/Site Activity Details, Chiquita Canyon Sanitary Landfill (19-AA-0052)." Accessed July 27, 2022. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3574?siteID=1037.

CalRecycle. 2022c. "SWIS Facility/Site Activity Details, Azusa Land Reclamation Co. Landfill (19-AA-0013)." Accessed August 9, 2022. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3532?siteID=1001.

CalRecycle. 2022d. "California's Short-Lived Climate Pollutant Reduction Strategy." Accessed January 7, 2022. https://www.calrecycle.ca.gov/organics/slcp.

County of Los Angeles. 2012. *Santa Clarita Valley Area Plan, One Valley One Vision*. Accessed September 13, 2022.

County of Los Angeles. 2015. *Los Angeles County General Plan 2035*. October 6, 2015. Accessed September 13, 2022. https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

DWR (California Department of Water Resources). 2006. "Santa Clara River Valley Groundwater Basin, Santa Clara River Valley East Subbasin." California's Groundwater Bulletin 118. Accessed July 26, 2022. https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/4_004_07_SantaClaraRiverValleyEastSubbasin.pdf.

LACSD (Los Angeles County Sanitation Districts). 2022a. "Saugus Water Reclamation Plant." Accessed July 27, 2022. https://www.lacsd.org/services/wastewater-sewage/facilities/saugus-water-reclamation-plant.

LACSD. 2022b. "Valencia Water Reclamation Plant." Accessed July 27, 2022. https://www.lacsd.org/services/wastewater-sewage/facilities/valencia-water-reclamation-plant.

LACSD. 2022c. "Connection Fee Program." Accessed July 27, 2022. https://www.lacsd.org/services/wastewater-programs-permits/industrial-waste-pretreatment-program/surcharge-and-connection-fee-programs/connection-fee-program#:~:text=In%201981%2C%20a%20Sanitation%20Districts,the%20Sanitation%20Districts'%20sewerage%20system.

LACSD. 2022d. "Wastewater Collection Systems." Accessed July 27, 2022. https://www.lacsd.org/services/wastewater-sewage/facilities/wastewater-collection-systems#scvwrp.

Public Works (Los Angeles County Department of Public Works). 2014. *Roadmap to a Sustainable Waste Management Future, Waste Diversion Strategies in the Unincorporated Communities of Los Angeles County, Throughout the Region, and at County Operations*. October 2014. Accessed October 11, 2022. https://pw.lacounty.gov/epd/Roadmap/PDF/Roadmap_Appendices.pdf.

Public Works. 2020. *Countywide Integrated Waste Management Plan, 2019 Annual Report*. September 2020. Accessed August 9, 2022. https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=14372&hp=yes&type=PDF.

Public Works. 2022a. "Los Angeles County Flood Control District." Accessed July 27, 2022. https://dpw.lacounty.gov/LACFCD/web/.

Public Works. 2022b. "Location of Existing Class III Landfills, Permitted Inert Waste Landfill, and Transformation Facility in Los Angeles County." Accessed August 9, 2022. https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=15106&hp=yes&type=PDF.

Public Works. 2022c. "Construction and Demolition Debris Recycling Facilities in Los Angeles County." Accessed August 9, 2022. https://dpw.lacounty.gov/epd/CD/cd_attachments/Recycling_Facilities.pdf.

SCV Water (Santa Clarita Valley Water Agency). 2020. *2019 Santa Clarita Valley Water Report*. Prepared by Luhdorff & Scalmanini. July 2020. Accessed July 26, 2022https://www.yourscvwater.com/sites/default/files/SCVWA/2019-Santa-Clarita-Valley-Water-Report.pdf.

SCV Water. 2021. 2020 *Urban Water Management Plan for Santa Clarita Valley Water Agency*. Accessed July 26, 2022. https://www.yourscvwater.com/sites/default/files/SCVWA/SCVWA-2020-UWMP-Volume-I_FINAL.pdf.

SCV Water. 2022a. "Your Water Agency." Accessed July 26, 2022. https://yourscvwater.com/your-district/.

SCV Water. 2022b. *Annual Water Supply and Demand Assessment Report*. Prepared for Department of Water Resources, July 1, 2022.

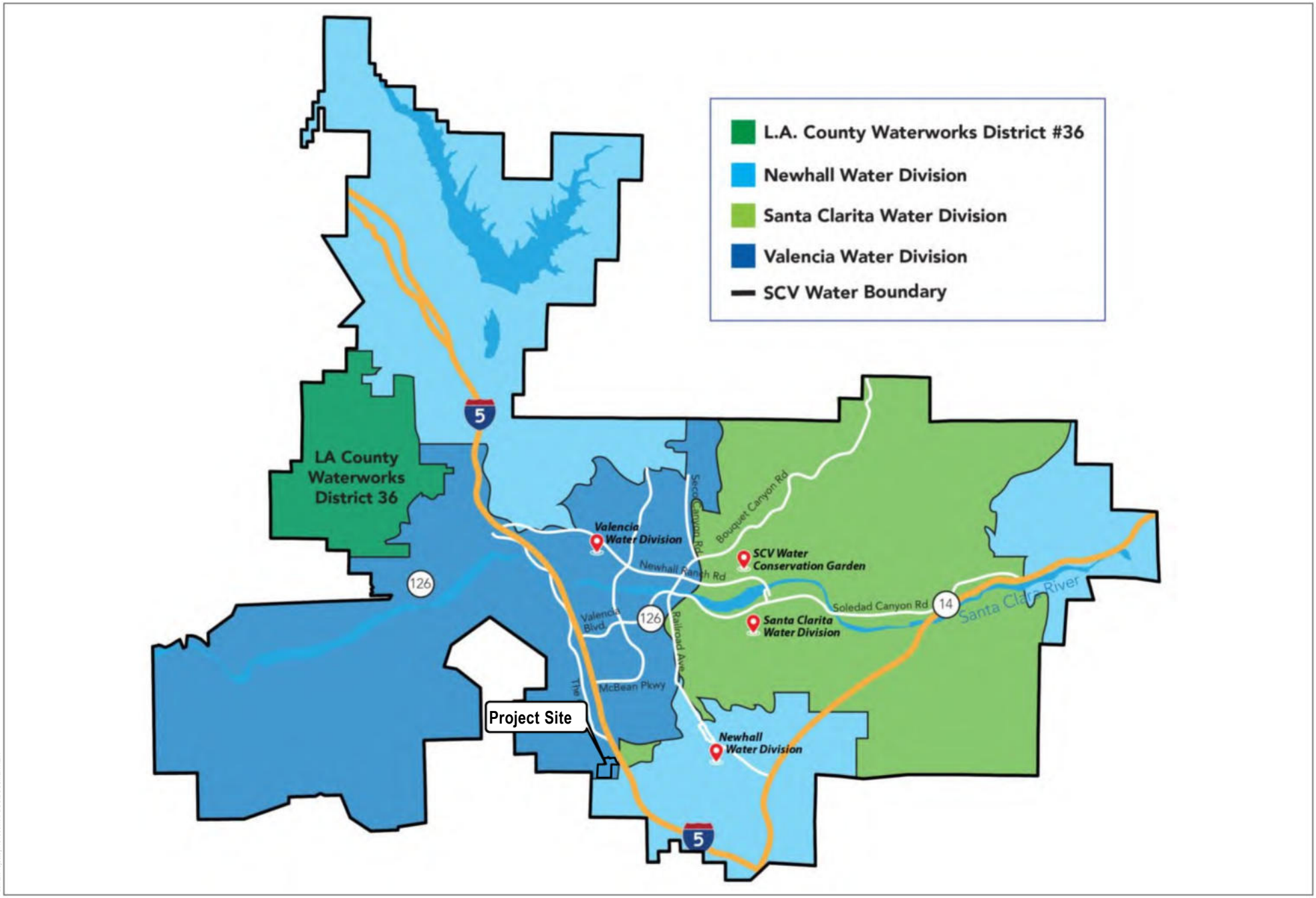
SCVGSA (Santa Clarita Valley Groundwater Sustainability Agency). 2022. *Santa Clara River Valley East Groundwater Subbasin Groundwater Sustainability Plan*. https://scvgsa.org/wp-content/uploads/2022/02/Santa-Clara-River-Valley-East-Groundwater-Subbasin-GSP.pdf.

SoCalGas (Southern California Gas Company). 2024. Company Profile. Accessed February 14, 2024. https://www.socalgas.com/about-us/company-profile.

SWRCB (State Water Resources Control Board). 2022. "Statewide Requirements for Conserving Water, State Water Board's Water Conservation Emergency Regulations of 2022, Frequently Asked Questions, Updated July 28, 2022." Accessed October 10, 2022. https://www.mpwmd.net/wp-content/uploads/FAQ-State-Restrictions.pdf.

US EPA and CIWMB (United States Environmental Protection Agency and California Integrated Waste Management Board). 2006. "Volume-to-Weight Conversion Factors." In *National Recycling Coalition Measurement Standards and Reporting Guidelines*. Accessed August 9, 2022. https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/vol-to-weight-conversion.pdf.

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SOURCE: Modified after SCV Water 2022

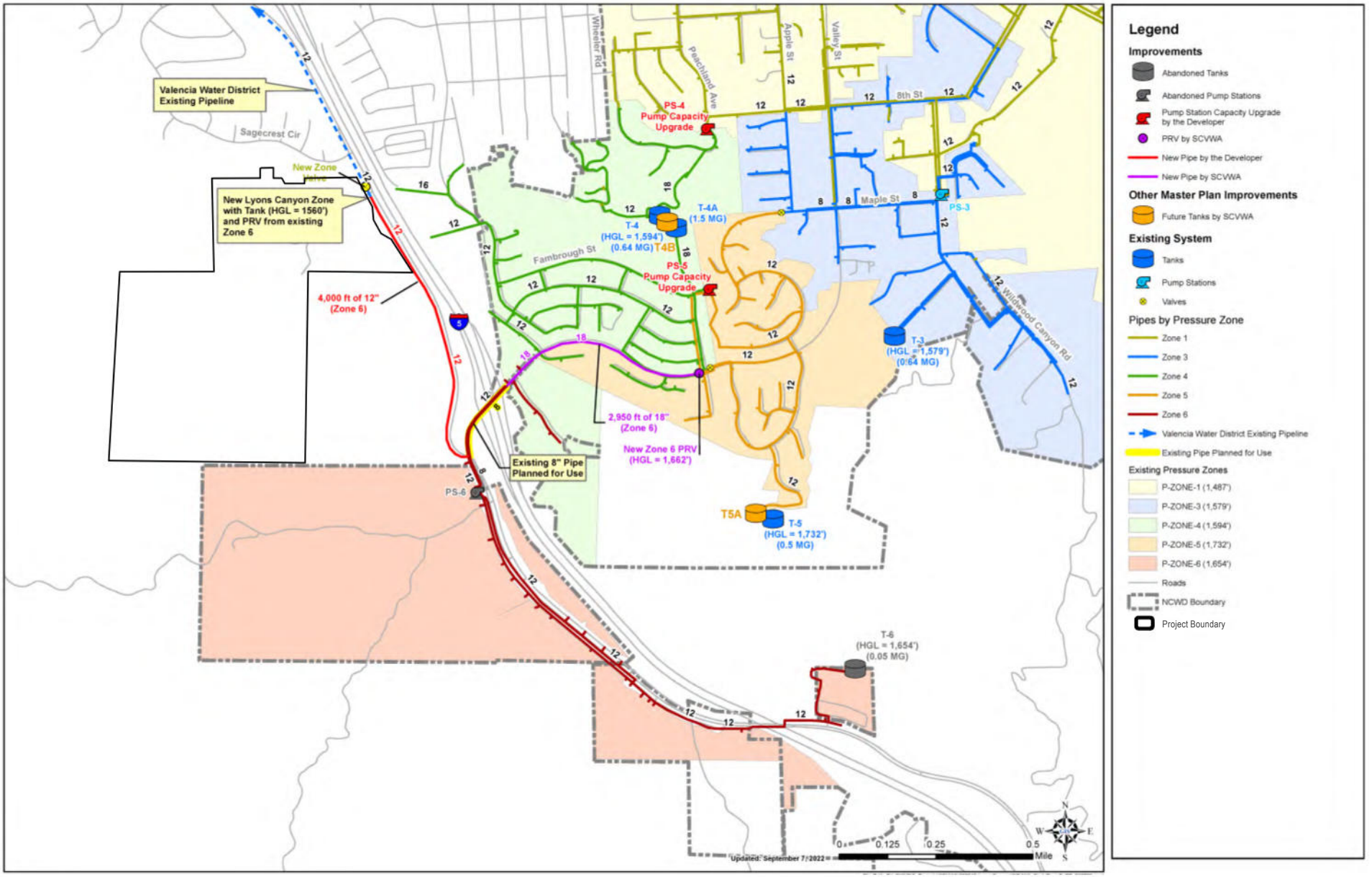
FIGURE 4.19-1

Santa Clarita Valley Water Agency

Trails at Lyons Canyon Project

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SOURCE: Modified after Appendix L-1 SCV Water 2022

FIGURE 4.19-2

Off-Site Water Infrastructure

Trails at Lyons Canyon Project

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4.20 Wildfire

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to wildfire and identifies associated regulatory requirements, thresholds of significance, methodology, impacts, cumulative impacts, mitigation measures, the level of significance after mitigation, and references. Information contained in this section is based on publicly available data and reports from the County Los Angeles (County) and the Los Angeles County Fire Department (LACoFD or Fire Department), planning documents (including the All-Hazards Mitigation Plan), and the following appendices:

Appendix E-1 Geotechnical Report, prepared by RT Frankian and Associates, February 22, 2024

Appendix G-1 Low Impact Development (LID) Report for Tract No. 83301, prepared by United Civil, Inc., dated October 3, 2024

Appendix G-3 Lyons Canyon Drainage Concept Report- Volume 1, Regional Flood Protection and Debris Management Tract No. 83301, prepared by Pacific Advanced Civil Engineering, Inc., dated September 2024.

Appendix G-4 FEMA Conditional Letter of Map Revision Request, prepared by Pacific Advanced Civil Engineering, Inc., dated September 2024

Appendix I-1 Los Angeles County Fire Department Request for Information Letter, dated June 2021

Appendix J Transportation Impact Analysis, prepared by Fehr and Peers, dated November 2023

Appendix M-1 Fire Protection Plan (FPP), prepared by Dudek, dated November 2023

Appendix M-2 Wildfire Evacuation Plan (WEP), prepared by Dudek, dated October 2023

Other sources consulted are listed in Section 4.20.9, References.

4.20.1 Existing Conditions

This section describes the existing conditions in the Project area and identifies the wildfire-related conditions that could be affected by the Project.

Regional Setting and Local Setting

Wildfire Hazards

The California Department of Forestry and Fire Protection (CAL FIRE) has mapped Fire Hazard Severity Zones (FHSZs) across California's State Responsibility Areas (SRAs) and Local Responsibility Areas (LRAs), which designates varying levels of fire hazard based on vegetation, topography, weather, and human-made structures. As shown in Figure 4.20-1, Regional Fire Hazard Zones, the Project site is within a Very High Fire Hazard Severity Zone (VHFHSZ) within an SRA, and the majority of the area surrounding the Project site is also located within a VHFHSZ, with the exception of the developed areas to the north. Further, the Project site is in an area described as a wildland–urban interface (WUI), which is the area where wildland and urban development intersect. VHFHSZ designation does not indicate that development is prohibited. Rather, it prescribes where additional fire protection measures, specifically developed for safe building in these areas, must be provided for Project approval.

Fire environments are dynamic systems and include many types of environmental factors and site characteristics. Fires can occur in any environment where conditions are conducive to ignition and fire movement. Areas of naturally vegetated open space typically consist of conditions that may be favorable to wildfire spread. The three major components of the fire environment are topography, vegetation (fuels), and climate. The state of each of these components and their interactions with each other determines the potential characteristics and behavior of a fire at any given moment. It is important to note that wildland fire may transition to urban fire if structures are receptive to ignition. The likelihood of a structure ignition depends on a variety of factors and can be prevented through a layered system of protective features, including maintenance of defensible space and fire-resistant landscapes directly adjacent to the structure(s), application of known ignition-resistant materials and methods, and installation of suitable infrastructure for firefighting purposes. Understanding the existing wildland vegetation and urban fuel conditions on and adjacent to the site is necessary to understand the potential for fire within and around the Project site. The following sections discuss the characteristics of the Project site and the surrounding region.

Vegetation and Land Cover

As described in Section 4.4, Biological Resources, of this Draft EIR, the vegetation distribution throughout the Project site varies by location and topography, and a total of 19 different vegetation alliances/land cover types were identified. The Project site primarily supports shrubland and grassland alliances, consisting mainly of chamise chaparral, upland mustards or star-thistle fields, California sagebrush (purple sage scrub), and forest/woodland alliances consisting mainly of coast live oak woodland. The adjacent undeveloped lands to the west and south have similar vegetation types, while areas to the north and east are mostly developed with urban land uses; pockets of open space and undeveloped lands are present.

Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (leaf size, branching patterns), and overall fuel loading. For example, the native shrublands that compose the chaparral and California sage scrub communities on the Project site are a high potential fire hazard based on such plant physiological criteria. Various fuel types are found adjacent to the Project's development footprint. Chamise chaparral and California sagebrush scrub can produce high heat intensity and extreme flame lengths under strong, dry wind patterns but do not typically ignite or spread as quickly as light, flashy fuels (e.g., grass, leaves). Additionally, shrublands produce higher density and longer burning embers than grasslands and other ground covers, and embers are the leading cause for home losses during wildfires. Herbaceous vegetation (e.g., upland mustards, star-thistle) are typically easily ignited, produce lower flame lengths, and have faster spread rates than sagebrush scrub and chaparral vegetation types. Woodland vegetation types typically exhibit lower flame lengths and lower spread rates relative to grassland and shrubland vegetation, assuming ladder fuels are not present to allow for transition to crown fire.

Fire presence and absence at varying cycles or regimes affect plant community succession. The succession of plant communities, most notably the gradual conversion of shrublands to grasslands with high-frequency fires and grasslands to shrublands with fire exclusion, is highly dependent on the fire regime.[1] Further, biomass and associated fuel loading increase over time, assuming that fuel reduction efforts are not diligently implemented.[2] Through manual alteration, such as fuel reduction activities, it is possible to alter successional pathways for

[1] Fire regime is the pattern, frequency, and intensity of wildfires that prevail in an area over long periods of time.
[2] In this context, "fuel" refers to flammable vegetation or other materials that would feed a wildfire.

varying plant communities. Changes in vegetation community dynamics will also alter and affect potential fire behavior and patterns.

Wildfire disturbances can also have dramatic impacts on plants themselves and plant community composition. Heat shock, accumulation of post-fire charred wood, and change in photoperiods due to removal of shrub canopies may all stimulate seed germination of certain plant species. This type of germination is common in chaparral and scrub plant communities. The post-fire response for most species is vegetative reproduction and stimulation of flowering and fruiting. The combustion of aboveground biomass alters seedbeds and temporarily eliminates competition for moisture, nutrients, heat, and light. Species that can rapidly take advantage of the available resources will flourish.

Slope/Topography

Topography influences fire risk by affecting fire spread rates. Typically, steep terrain results in faster fire spread upslope and slower spread downslope. Terrain that forms a funneling effect, such as chimneys, chutes, or saddles, on the landscape can result in especially intense fire behavior. Conversely, flat terrain tends to have little effect on fire spread, resulting in fires that are driven by vegetation and wind. From a regional perspective, the alignment of tributary canyons and dominant ridges is conducive to channeling and funneling wind, thereby increasing the potential for more extreme wildfire behavior in the region.

The Project site is located in the northern foothills of the Santa Susana Mountains and is bisected by Lyons Canyon, which is located in the central portion of the Project site, drains eastward into the South Fork of the Santa Clara River, which flows to the Santa Clara River approximately 3.75 miles northeast of the Project site. The topography of the Project site is characterized by hillside and valley terrain with moderate to steep slopes. A prominent ridgeline, as depicted in Figure 2-5, Special Management Areas, of this EIR, is designated in the southern portion of the Project site within the proposed on-site retained open space. Elevations in the Project site range from approximately 1,654 feet above mean sea level (amsl) in the southwest corner to approximately 1,300 feet amsl in the northeast corner. As discussed further below, the Project site has been previously disturbed by several fires in past years.

Climate, Weather, and Wind

The Project site, like much of Southern California, is influenced by the Pacific Ocean and a seasonal, migratory subtropical high-pressure cell known as the “Pacific High.” Wet winters and dry summers with mild seasonal changes characterize the Southern California climate. This climate pattern is occasionally interrupted by extreme periods of hot weather, winter storms, or dry, easterly Santa Ana winds. The average high temperature for the Project area is approximately 77°F, with an average temperature in the summer and early fall months (June-September) of 88°F. August is typically considered the hottest month of the year. The area is considered to be a semi-arid climate. Annual precipitation typically averages approximately 18 inches annually with the wettest months being January and February (Western Regional Climate Center 2021).

From a regional perspective, the fire risk in Southern California can be divided into three distinct “seasons” (Appendix M-1). The first season, the most active season and covering the summer months, extends from late May to late September. This is followed by an intense fall season characterized by fewer but larger fires. This season begins in late September and has historically continued into November or later. The remaining months, through May include the mostly dormant and wetter winter season. Typically, the highest fire danger in Southern California coincides with Santa Ana winds. The Santa Ana wind conditions are a reversal of the prevailing southwesterly winds that usually occur on a region-wide basis near the end of fire season during late summer

and early fall, prior to the onset of winter precipitation, but have also occurred in the spring. Santa Anas are dry, warm winds that flow from the higher desert elevations in the east through the mountain passes and canyons at average speeds of about 40 mph and peak gusts recorded at 104 mph (Sosnowski 2021). As the winds converge through the canyons, their velocities increase. Localized wind patterns on the Project site are strongly affected by both regional and local topography.

The prevailing wind pattern is from the west (onshore), but the presence of the Pacific Ocean causes a diurnal wind pattern known as the land/sea breeze system. During the day, winds are from the west–southwest (sea), and at night winds are from the northeast (land). The windier part of the year lasts from November through April with average wind speeds of 7.3 mph. The remainder of the year has wind speeds averaging around 5.8 mph (Appendix M-1). The highest wind velocities are associated with downslope, canyon, and Santa Ana winds. The Project site includes topography (e.g., steep slopes and canyons) that could funnel winds and create unusual weather conditions (e.g., high wind velocities, wind eddies); thus, the Project site is subject to periodic extreme fire weather conditions that occur throughout the foothill portions of the County. Further, the proximity of the Project site to large expanses of open space to the west and south and the terrain within the Angeles National Forest to the east and northeast of the Project site, including multiple sub-drainages and canyons, has the potential to funnel Santa Ana winds, thereby increasing local wind speeds and increasing wildfire hazard in the Project vicinity.

Fire History

CAL FIRE's Fire and Resources Assessment Program (FRAP) database provides fire history information and fire perimeter data dating to the late 1800s for all fires over 10 acres in size and some smaller fires. It should be noted that other limitations to this data source include incomplete perimeter data, especially for the first half of the twentieth century (Appendix M-1). However, the data does provide a summary of recorded fires and can be used to show whether large fires have occurred in the Project area, which provides a possible indication of future fire occurrence.

According to available data from CAL FIRE in the FRAP database, 173 fires have burned within 5 miles of the Project site since the beginning of the historical fire data record. Recorded wildfires within 5 miles of the Project site range in size from less than 0.1 acres to 115,537 acres (1970 Clampitt Fire), and the average fire size based on the average of the 173 fires is approximately 2,950 acres. When considering only fires greater than 10 acres and less than 100,000 acres, the average fire size is approximately 1,864.6 acres. The 2020 Elsmere Fire (approximately 159.2 acres), 2020 Calgrove Fire (approximately 4.2 acres), and 2019 Saddle Ridge Fire (approximately 8,799.3 acres) are the most recent wildfires within 5 miles of the Project site. Seven fires have burned on the Project site; most recently the 2016 Sage Fire (approximately 850.9 acres) burned 216.5 acres on site. LACoFD may have data regarding smaller fires (less than 10 acres) that have occurred on site that have not been included herein. Fire history for the general vicinity of the Project site is illustrated in Appendix B, Fire History, of Appendix M-1 to this EIR.

Based on an analysis of the fire history data set (Appendix M-1), specifically, the years in which the fires burned, the average interval between wildfires within 5 miles of the Project site was calculated to be less than 1 year with intervals ranging from 0 (multiple fires in the same year) to 10 years. Based on the analysis, it is expected that there will be wildland fires within 5 miles of the Project site on average every year, and at least every 10 years as observed in the fire history record. Based on fire history, wildfire risk for the Project site is associated primarily with a Santa Ana wind-driven wildfire burning or spotting on site from the northeast or east, although a fire approaching from the southwest or west during more typical onshore weather patterns is possible. The proximity of the Project site to large expanses of open space to the west and south and the terrain within the Angeles National Forest to

the east and northeast of the Project site, including multiple sub-drainages and canyons, has the potential to funnel Santa Ana winds, thereby increasing local wind speeds and increasing wildfire hazard in the Project vicinity.

Water Supply for Wildfires

The Project site does not have existing water infrastructure on site. An extension of existing water infrastructure would be required to provide service to the Project site to support domestic use and fire flows. The Project would be required to be consistent with Los Angeles County Code Section 20.16.060 for fire flow and fire hydrant requirements within a VHFHSZ. These internal waterlines would be required to supply sufficient fire flows and pressure to meet the demands for required on-site fire hydrants and interior fire sprinkler systems for all structures. Water supply must meet a 2-hour fire flow requirement of 2,500 gallons per minute with 20 pounds per square inch residual pressure, which must be over and above the daily maximum water requirements for this development.

In the event of a wildfire, CAL FIRE uses many water sources, including but not limited to municipal water sources at CAL FIRE facilities, fire hydrants, water from lakes and ponds, and water from residential or community swimming pools (SFGate 2021). Additionally, in the Project area, Castaic Lake and Lake Piru are large bodies of water that could provide water for LACoFD to use for aerial water drops in the event additional water resources are needed for wildfire suppression.

The Santa Clarita Valley Water Agency (SCV Water) states in their 2020 Urban Water Management Plan that the region is subject to wide variations in annual precipitation and experiences periodic wildfires. SCV Water also acknowledges that wildfires are of an increasing concern within the state and particularly within the Santa Clarita Valley, and while they may not have a significant impact on local water supplies, they do have the potential to impact recharge conditions and impact water quality to surface water supplies. As stated in the Urban Water Management Plan, this is a situation that SCV Water will continue to monitor and is addressed in the Local Hazard Mitigation Plan.

SCV Water's 2022 Draft Local Hazard Mitigation Plan includes an inventory of hazards associated with wildfire vulnerability and sets forth mitigation strategies for wildfires. SCV Water's goal is to ensure there is enough water available in the distribution system for firefighters in the event of a wildfire and to ensure minimal impact to the operation of its water distribution system. Wildfire mitigation projects set forth in the Draft Local Hazard Mitigation Plan include providing generators for booster stations and well sites, installing heliport/hydrant connections, clearing trees and bushes from all facilities, increasing communication with fire/police department, developing a refueling plan for generators, developing emergency regional storage, and acquiring communication equipment that is interoperable with the County (SCV Water 2022).

4.20.2 Regulatory Requirements

Federal

National Fire Plan

The Department of the Interior's National Fire Plan is intended to ensure an appropriate federal response to severe wildland fires, reduce fire impacts to rural communities, and ensure sufficient firefighting capacity in the future. The plan addresses six key points: firefighting, rehabilitation, hazardous fuels reduction, community assistance, accountability, and research and development. The Rural Fire Assistance program is funded to enhance the fire protection capabilities of rural fire districts and safe and effective fire suppression in the WUI. The program

promotes close coordination among local, state, tribal, and federal firefighting resources by conducting training, equipment purchase, and prevention activities on a cost-shared basis.

National Fire Protection Association Codes, Standards, Practices, and Guides

The NFPA is a professional association that provides recommendations for fire prevention, wildfire preparedness and electrical safety to hazardous material, community risk reduction, and public safety. The NFPA develops and updates a set of Codes and Standards that become the industry standard and serve as the leading resource on fire, electrical, and life safety guidelines and requirements. The NFPA also provides emergency response guides such as Guides for firefighting and emergency planning (NFPA 2021).

Federal Wildland Fire Management Policy

The Federal Wildland Fire Management Policy was developed in 1995 and updated in 2001 and again in 2009 by the National Wildfire Coordinating Group, a federal multi-agency group that establishes consistent and coordinated fire management policy across multiple federal jurisdictions. An important component of the Federal Wildland Fire Management Policy is the acknowledgment of the essential role of fire in maintaining natural ecosystems. The Federal Wildland Fire Management Policy and its implementation are founded on the following guiding principles, found in the Guidance for Implementation of Federal Wildland Fire Management Policy (National Wildfire Coordinating Group 2009).

- Firefighter and public safety is the priority in every fire management activity.
- The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process.
- Fire management plans, programs, and activities support land and resource management plans and their implementation.
- Sound risk management is a foundation for all fire management activities.
- Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives.
- Fire management plans and activities are based upon the best available science.
- Fire management plans and activities incorporate public health and environmental quality considerations.
- Federal, state, tribal, local, interagency, and international coordination and cooperation are essential.
- Standardization of policies and procedures among federal agencies is an ongoing objective.

International Fire Code

The International Fire Code was created by the International Code Council to address a wide variety of hazardous conditions to life and property, including fire, explosions, and hazardous materials handling or usage. Although it is not a federal regulation but a product of the International Code Council, the International Fire Code places an emphasis on prescriptive and performance-based approaches to fire prevention and fire protection systems. The International Fire Code is updated every 3 years and uses a hazard classification system to determine the appropriate measures to be incorporated to protect life and property. Other times these measures include

construction standards and specialized equipment. The International Fire Code uses a permit system based on hazard classification to ensure that the required measures are instituted.

International Wildland-Urban Interface Code

The International Wildland-Urban Interface Code is published by the International Code Council and is a model code addressing wildfire issues. The model code is intended to be adopted and used as supplemental code to building and fire codes of a jurisdiction. The goal of the International Wildland-Urban Interface Code is to establish minimum standards and regulations for protecting life and property from the intrusion of fire, wildland fire exposure, and fire exposures from adjacent structures and prevent structure fire from spreading to wildland fuels (International Code Council 2021).

State

California Department of Forestry and Fire Protection

CAL FIRE protects the people of California from fires, responds to emergencies, and protects and enhances forest, range, and watershed values providing social, economic, and environmental benefits to rural and urban citizens. CAL FIRE is the primary emergency response agency responsible for fire suppression and prevention within SRAs. CAL FIRE's firefighters, fire engines, and aircraft respond to an average of more than 5,600 wildland fires each year. The Office of the State Fire Marshal supports CAL FIRE's mission by focusing on fire prevention. It provides support through a wide variety of fire safety responsibilities, including by regulating buildings in which people live, congregate, or are confined; by controlling substances and products which may, in and of themselves, or by their misuse, cause injuries, death, and destruction by fire; by providing statewide direction for fire prevention in wildland areas; by regulating hazardous liquid pipelines; by reviewing regulations and building standards; and by providing training and education in fire protection methods and responsibilities.

CAL FIRE's Fire and Resource Assessment Program

CAL FIRE's FRAP database provides data documenting areas of substantial fire hazards throughout the state based on fuel loading, slope, fire history, weather, and other relevant factors as directed by California Public Resources Code (PRC) Sections 4201–4204 and California Government Code Sections 51175–51189.[3] The state maps the FHSZs based on fuel loading, slope, fire history, weather, and other relevant factors as directed by PRC Sections 4201–4204, and California Government Code Sections 51175–51189.[4] FHSZ levels range from moderate to very high. FHSZs are designated in three types of areas based on what level of government is financially responsible for preventing and suppressing wildfires (CAL FIRE 2024.

- **Federal Responsibility Areas:** Within Federal Responsibility Areas, the federal government is financially responsible for wildfire suppression. Federal Responsibility Areas are located in the Angeles National Forest approximately 20 miles to the east and northeast of the Project site and the Los Padres National Forest approximately 30 miles to the northwest of the Project site.
- **State Responsibility Areas:** Within SRAs, the state is financially responsible for wildfire suppression. The FHSZs in SRAs are based on potential fuels, fire weather conditions, and terrain, and represent potential

[3] These regulations are discussed in further detail below.
[4] These regulations are discussed in further detail, below, under the "State" designation header.

fire hazard exposure to structures and other human infrastructure assets. The Project site and other unincorporated lands to the west, northwest, south, southwest, and southeast are located within a SRA.

- **Local Responsibility Areas:** Within LRAs, cities or counties are financially responsible for wildfire suppression. Under the authority of California Government Code Sections 51175–51180, CAL FIRE makes recommendations of FHSZs in LRAs, which the relevant local agencies are then required to designate by ordinance. The FHSZs in LRAs are based on the same hazard model used for SRAs, but only for areas that meet the criteria for the "very high" classification (i.e., VHFHS). These areas confer similar fire safety regulations as those required in SRA FHSZs. Within LRAs in the County, LACoFD is the primary emergency response agency for fire suppression and prevention. The City of Santa Clarita (City) contains areas within a VHFHSZ as well as urban areas that are not designated as being within a FHSZ (see Figure 4.20-1). FHSZs in LRAs surrounding the Project site include an area immediately southeast of the Project site as well as areas to the north and east.

California Health and Services Code

Fire regulations for California are established in Section 13000 et seq. of the California Health and Services Code and include regulations for structural standards (similar to those identified in the California Building Code [CBC]); fire protection and public notification systems; fire protection devices, such as extinguishers and smoke alarms; standards for high-rise structures and childcare facilities; and fire suppression training. The State Fire Marshal is responsible for enforcement of these established regulations and building standards for all state-owned buildings, state-occupied buildings, and state institutions within California.

California Public Resources Code

PRC Sections 4201–4204 and California Government Code Sections 51175–51189 direct CAL FIRE to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as FHSZs, define the application of various mitigation strategies to reduce the risk associated with wildland fires.

PRC Section 4290 requires minimum fire safety standards related to defensible space that apply to residential, commercial, and industrial building construction in SRA lands and lands classified and designated as VHFHSZs. These regulations include road standards for fire apparatus access, standards for signs identifying roads and buildings, fuel breaks and green belts, and minimum water supply requirements. It should be noted that these regulations do not supersede local regulations that equal or exceed minimum regulations required by the state.

PRC Section 4291 requires a reduction of fire hazards around buildings located adjacent to a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with inflammable material. It is required to maintain a minimum of 100 feet of vegetation management around all buildings and is the primary mechanism for conducting fire prevention activities on private property within CAL FIRE jurisdiction. Further, PRC Section 4291 requires the removal of dead or dying vegetative materials from the roof of a structure, and trees and shrubs must be trimmed from within 10 feet of the outlet of a chimney or stovepipe. Exemptions may apply for buildings with an exterior constructed entirely of nonflammable materials.

In September 2020, Assembly Bill (AB) 3074 amended PRC Section 4291 to require stricter standards for fuel reduction. The amendment stipulates that within the 100 feet of structures, more intense fuel reduction is to occur between 5 and 30 feet around the structure, and within 5 feet of the structure is to be the ember-resistant zone.

Natural Resources (CCR Title 14)

Title 14, Division 1.5, Chapter 7, Subchapter 3, Fire Hazard, also sets forth requirements for defensible space if the distances specified above cannot be met. For example, options that have similar practical effects include non-combustible block walls or fences, 5 feet of noncombustible material horizontally around the structure, installing hardscape landscaping or reducing exposed windows on the side of the structure with a less-than-30-foot setback, or additional structure hardening such as those required in the CBC, California Code of Regulations Title 24, Part 2, Chapter 7A.

Public Safety (CCR Title 19)

In addition, California Code of Regulations Title 19 addresses public safety and includes State Fire Marshal requirements (CCR Title 19, Division 1), which incorporate general fire and safety standards regarding fire department access and egress, fire alarms, emergency planning, and evacuation procedures.

The Standardized Emergency Management System (SEMS) regulations are described in California Code of Regulations Title 19, Division 2, Chapter 1. The SEMS is required by the California Emergency Services Act for managing multi-agency and multi-jurisdictional responses to emergencies in California and coordinating among all levels of government and affected agencies. The SEMS unifies all elements of California's emergency management community into a single, integrated system and standardizes key elements.

As required by state law, the County and the City have adopted the SEMS. The SEMS establishes organizational levels for managing emergencies, standardized emergency management methods, and standardized training for responders and managers. When fully activated, SEMS activities occur at five levels: field response, local government, operational areas (OAs) (Countywide), Mutual Aid Regions, and state.

California Building Standards Code (CCR Title 24)

The California Building Standards Code (CCR Title 24) contains provisions for building and safety standards, including fire safety standards for new buildings that are provided in the CBC (CCR Title 24, Part 2) and the California Fire Code (CCR Title 24, Part 9). These standards apply to all occupancies in California, except where state agencies and local governing bodies adopt more stringent standards.

The CBC includes several chapters relevant to fire safety and protection that address types of construction, fire and smoke protection features, construction materials and methods, and rooftop construction. Typical California Fire Code safety requirements include fire sprinklers in all high-rise buildings; fire-resistance standards for fire doors, building materials, and particular types of construction; debris and vegetation clearance within a prescribed distance from occupied structures within wildfire hazard areas; and fire-flow requirements, fire hydrant spacing, and access road specifications.

California Building Code (CCR Title 24, Part 2)

California Code of Regulations Title 24 Part 2 contains the CBC. Chapter 7A of the CBC regulates building materials, systems, and/or assemblies used in the exterior design and construction of new buildings located within a WUI fire area. The purpose of this chapter is to establish minimum standards for the protection of life and property by increasing the ability of a building located in any FHSZ within a SRA or a WUI fire area to resist the intrusion of flames or burning embers projected by a vegetation fire and to contribute to a systematic reduction in conflagration

losses. New buildings located in such areas must comply with the ignition-resistant construction standards outlined in CBC Chapter 7A.

California Fire Code (CCR Title 24, Part 9)

The 2019 California Fire Code (CCR Title 24, Part 9) establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The California Fire Code also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The provisions of the California Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The California Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarms and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and WUI areas.

Chapter 33, Fire Safety During Construction and Demolition, of the California Fire Code prescribes minimum safeguards for construction, alteration, and demolition operations to provide reasonable safety to life and property from fire during such operations. It outlines general fire safety precautions for all structures and all occupancies during construction and demolition operations. In general, these requirements seek to maintain required levels of fire protection, limit fire spread, establish the appropriate operation of equipment, and promote prompt response to fire emergencies. Features regulated include fire protection systems, firefighter access to the site and building, means of egress, hazardous materials storage and use, and temporary heating equipment and other ignition sources.

California Government Code

California Government Code (Title 5, Part 1)

California Government Code Sections 51175–51189, included in Title 5, Part 1, Chapter 6.8, Moderate, High, and Very High Fire Hazard Severity Zones, provides guidance for classifying lands in California as fire hazard areas and requirements for management of property within those lands. CAL FIRE is responsible for classifying FHSZs based on statewide criteria and making the information available for public review. Further, local agencies must designate, by ordinance, VHFHSZs within their jurisdiction based on the recommendations of CAL FIRE.

Government Code Section 51182 sets forth requirements for maintaining property within fire hazard areas, such as defensible space, vegetative fuels management, and building materials and standards. According to the California Government Code, defensible space around structures in fire hazard areas must consist of 100 feet of fuel modification on each side of a structure, but not beyond the property line unless findings conclude that the clearing is necessary to significantly reduce the risk of structure ignition in the event of a wildfire. Clearance on adjacent property is only conducted following written consent by the adjacent owner. Further, trees must be trimmed from within 10 feet of the outlet of a chimney or stovepipe, vegetation near buildings must be maintained, and roofs of structures must be cleared of vegetative materials. Exemptions may apply for buildings with an exterior constructed entirely of nonflammable materials.

Senate Bill 1241

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 very high fire hazard or that are in SRAs unless certain findings are made prior to the 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, as follows: (1) the design and location of the subdivision and its lots are consistent with defensible space regulations found in PRC Sections 4290–4291, (2) structural fire protection services will be available for the subdivision through a publicly funded entity, and (3) ingress and egress road standards for fire equipment are met per any applicable local ordinance and PRC Section 4290.

California Government Code 66474.02

California Government Code Section 66474.02 requires that a legislative body of a county make specific findings "before approving a tentative map, or a parcel map for which a tentative map was not required, for an area located in the state responsibility area or very high fire hazard severity zone." The findings must show that "the subdivision is consistent with regulations adopted by the State Board of Forestry and Fire Protection pursuant to Sections 4290 and 4291 of the Public Resources Code or consistent with local ordinances certified by the State Board of Forestry and Fire Protection as meeting or exceeding the state regulations" (California Government Code Section 6647.02).

California Public Resources Code Section 4290.5

PRC Section 4290.5 requires the State Board of Forestry and Fire Protection to identify existing subdivisions in the SRA or VHFHSZ without secondary egress routes that are at significant fire risk. The State Board of Forestry and Fire Protection must then provide recommendations to local governments to improve safety in the identified subdivisions. This process must begin on or before July 1, 2021, and repeat every 5 years thereafter.

Senate Bill 99

SB 99 requires cities and counties to identify residential developments with less than two evacuation routes. Meanwhile, AB 747 and AB 1409 require local agencies to assess evacuation routes and locations under a range of emergency scenarios. Communities should take these planning requirements into consideration when addressing wildfire risks in the Safety Element.

Senate Bill 379

SB 379 (2015) amended California Government Code Section 65302(g)(4) to require that climate change adaptation and resilience be addressed in General Plan Safety Elements.

Assembly Bills 747 and 1409

AB 747 (2019) added and AB 1409 (2020) amended California Government Code Section 65302.15 as follows:

> (a) Upon the next revision of a local hazard mitigation plan, adopted in accordance with the federal Disaster Mitigation Act of 2000 (Public Law 106-390), on or after January 1, 2022, or, if a local jurisdiction has not adopted a local hazard mitigation plan, beginning on or before January 1, 2022, the Safety Element adopted pursuant to subdivision (g) of Section 65302 shall be reviewed and

updated as necessary to identify evacuation routes and their capacity, safety, and viability and evacuation locations under a range of emergency scenarios. A county or city that has adopted a local hazard mitigation plan, emergency operations plan, or other document that fulfills commensurate goals and objectives may use that information in the Safety Element to comply with this section and, in that event, shall summarize and incorporate into the safety element that other plan or document.

Assembly Bill 38

AB 38 (2019) established a comprehensive wildfire mitigation financial assistance program to, among other things, encourage cost-effective structure hardening and retrofitting to create fire-resistant homes, businesses, and public buildings. The bill requires the State Fire Marshal, in consultation with specified state officials, to identify building retrofits and structure hardening measures and requires CAL FIRE to identify defensible space, vegetation management, and fuel modification activities, that are eligible for financial assistance under the program. The bill specifies the types of designated wildfire hazard areas eligible for funding under the program.

California Vegetation Treatment Program

The California Vegetation Treatment Program, developed by the State Board of Forestry and Fire Protection, is a critical component of the state's multifaceted strategy to address California's wildfire crisis. The California Vegetation Treatment Program defines the vegetation treatment activities and associated environmental protections to reduce the risk of loss of lives and property, reduce fire suppression costs, restore ecosystems, and protect natural resources as well as other assets at risk from wildfire.

Assembly Bill 1823

AB 1823 (2019) amended PRC Section 4290.1 to require that, on or before July 1, 2022, the State Board of Forestry and Fire Protection must develop criteria for and maintain a list of local agencies considered to be a "Fire Risk Reduction Community" located in the SRA or VHFHSZs, identified pursuant to California Government Code Section 51178, that meet best practices for local fire planning. Criteria that must be used to develop the Fire Risk Reduction Community list include recently developed or updated community wildfire protection plans, adoption of the board's recommendations to improve the Safety Element, participation in Fire Adapted Communities and Firewise USA programs, and compliance with the State Board of Forestry and Fire Protection's minimum fire safety standards.

2018 State Hazard Mitigation Plan

Approved by the Federal Emergency Management Agency (FEMA) in September 2018, as an Enhanced State Mitigation Plan, the 2018 State Hazard Mitigation Plan update continues to build upon California's commitment to reduce or eliminate the impacts of disasters caused by natural, technological, accidental, and adversarial/human-caused hazards and further identifies and documents progress made in hazard mitigation efforts, new or revised state and federal statutes and regulations, and emerging hazard conditions and risks that affect California. Resilience depends on the whole community and is a shared responsibility for all levels of government, private and nonprofit sectors, and individuals.

California Strategic Fire Plan

Per the Executive Summary of the 2018 Strategic Fire Plan for California, this plan "reflects CAL FIRE's focus on (1) fire prevention and suppression activities to protect lives, property, and ecosystem services, and (2) natural resource management to maintain the state's forests as a resilient carbon sink to meet California's climate change goals and to serve as important habitat for adaptation and mitigation." The Strategic Fire Plan for California also "provides a vision for a natural environment that is more fire resilient; buildings and infrastructure that are more fire-resistant; and a society that is more aware of and responsive to the benefits and threats of wildland fire; all achieved through local, state, federal, tribal, and private partnerships" (State Board of Forestry and Fire Protection 2018). Plan goals include the following:

1. Identify and evaluate wildland fire hazards and recognize life, property, and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems. Facilitate the collaborative development and sharing of all analyses and data collection across all ownerships for consistency in type and kind.
2. Promote and support local land use planning processes as they relate to: (a) protection of life, property, and natural resources from risks associated with wildland fire, and (b) individual landowner objectives and responsibilities.
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 to 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.

Fire Hazard Severity Zones

CAL FIRE is responsible for the fire protection and stewardship of more than 31 million acres of privately owned California wildlands. The CAL FIRE Director's responsibilities include identifying FHSZs, transmitting that information to local agencies, and periodically reviewing the recommendations. CAL FIRE is required by PRC Sections 4201–4204 and California Government Code Sections 51175–51189 to map these areas of significant fire hazards based on vegetative fuels, terrain, weather, and other relevant factors. Areas at risk of wildland fire losses are referred to as FHSZs and fall into three categories: Moderate, High, and Very High. FHSZs reflect variations in fire behavior and exposure and are used to develop permanent engineering mitigations associated with development in fire hazard areas.

Mutual Aid Agreements

The California Disaster and Civil Defense Master Mutual Aid Agreement, as provided by the California Emergency Services Act, provides statewide mutual aid between and among local jurisdictions and the state. The statewide mutual aid system exists to ensure that adequate resources, facilities, and other supports are provided to jurisdictions whenever resources prove to be inadequate for a given situation. Each jurisdiction controls its own personnel and facilities but can give and receive help whenever needed. LACoFD participates in these mutual aid, automatic aid, and other agreements with surrounding fire departments. In some instances, the closest available resource may come from another fire department.

Regional and Local

County of Los Angeles Code

County Code Title 20, Utilities

Division 1, Water, of Title 20 of the County Code includes minimum requirements for water infrastructure, including minimum fire flow and fire hydrant requirements (Sections 20.16.060 and 20.16.140). With respect to fire flows, water pressure, and hydrant spacing, the 2020 County Fire Code requirements vary based on land use, building size, density, and terrain. Accordingly, the Project would be required to meet the minimum requirements detailed in the 2020 County Fire Code, and any deviations from the 2020 County Code would be reviewed and approved by the fire code official. Further, additional requirements for water availability in FHSZs would apply, such as the proximity of water storage.

County Code Title 26, Building Code

Title 26 of the County Code contains the Building Code, which establishes minimum standards to preserve public health, safety, and general welfare by regulating the construction, design, installation, quality of materials, use, occupancy, location, and maintenance of development activities.

County Code Title 26, Chapter 7A, Materials and Construction Methods for Exterior Wildfire Exposure

Chapter 7A of Title 26 of the County Code contains requirements for building materials, systems, and/or assemblies used in the exterior design and construction of new buildings (and additions, alterations, or repairs to existing buildings) within a WUI fire area or FHSZ. Chapter 7A sets forth specific regulations, such as requirements for ignition-resistant construction, vents, and roofing materials.

2020 County of Los Angeles Fire Code

The 2020 County Fire Code establishes standards for building construction and the design and distribution of fire prevention and suppression facilities. The requirements address a variety of issues related to fire protection and prevention, such as fire flow, public and private fire hydrants, the provision of roadway clearance (Title 32, Section 325.10), access roads (Title 32, Section 503.2), adequate road widths, and clearance of brush around structures located on or adjoining any mountainous or forest- or brush-covered land, or land covered with flammable growth (Title 32, Section 325.2.1).

To comply with the County Codes, new development within high fire hazard areas, as mapped by CAL FIRE and the County, must show proof through certification with the Fire Department that new development is located

within a designated distance of a water source, such as water supply tanks or retention basins, for emergency firefighting purposes.

Furthermore, based on 2020 County Fire Code requirements, the Project also must comply with applicable regulations related to specific fire and life safety requirements during construction and related to ingress/egress, which includes specifications for streets and driveways, all-weather access, access for road maintenance, maximum allowable grades, turning radii, building access, fire sprinkler systems, and fire hydrant installations. Additionally, all access devices/gates must meet requirements related to width, positioning, and type. Compliance with applicable requirements is determined and ensured through the Fire Department's plan check approval process.

2020 County of Los Angeles Fire Code, Title 32, Section 4908

Projects located within a designated VHFHSZ are subject to the 2020 County Fire Code regulations for fuel modification in fire hazard areas, including preparation of a fuel modification plan (FMP) (Title 32, Section 4908). An FMP must consist of a set of scaled plans, including a plot plan that shows fuel modification zones (FMZs), a detailed landscape plan, and an irrigation plan, in accordance with the County Fire Department's FMP Guidelines. The FMP must be submitted to the Fire Department's Forestry Division for review and approval prior to the issuance of building permits. The Project has prepared an FPP (Appendix M-1) that includes analysis of fire behavior across the Project site pre- and post-development in addition to the Project-specific FMP and consistent with the Safety Element's Policy S 4.18, described below.

An FMZ is a specific area where vegetation has been removed, planted, or modified to increase the likelihood that a structure will survive a wildfire; to improve defensible space around that structure needed for firefighting activities; and to prevent direct flame contact with structures. Vegetation includes native and ornamental plants, non-native naturalized annual grasses, and other invasive or naturalized species that have been modified and/or partially or totally replaced with adequately spaced drought-tolerant and fire-resistant species and thinning of existing native or ornamental species. FMZs are designed to protect structures from wildfire by limiting and reducing the amount of fuel available for a wildfire. These zones are put in place to identify the required vegetation removal and thinning on a site and to act as a guide for any currently planned or future landscaping. It should be noted that fuel modification for off-site areas is referred to as "brush thinning."

An FMZ installation per the County Fire Code consists of a 30-foot-wide Zone A, a 70-foot wide Zone B, and a 100-foot wide Zone C for the areas adjacent to natural-vegetated, open space areas, for a total of 200 feet of fuel modification. In the event the full 200 feet is not achievable on site, LACoFD requires the neighboring property to provide brush thinning to achieve the remaining fuel modification (i.e., the on-site fuel modification is 150 feet, the neighboring property would be required to provide brush thinning for the remaining 50 feet). The only exception is if the Regional Planning Department identifies endangered species or habitats that require protection.

County of Los Angeles Developer Fee Program

The County's Fire Facility Developer Fee Program (Fire Developer Fee) funds the purchase of station sites, construction of new stations and facility improvements, capital equipment. Effective April 1, 2021, the Fire Developer Fee is $1.4316 per square foot of new construction (for all land uses) within Area of Benefit 2, Santa Clarita Valley, payable at the time of building permit issuance. The Fire Department's share of local property taxes and a voter-approved Special Tax, not the Fire Developer Fee, fund staffing and operations. The Fire Developer Fee allows for funding and land dedication in lieu of fees, meaning the developer can choose to fund the construction

of a new fire station instead of paying the fee. Also, credit can be applied toward unpaid Fire Developer Fee obligations for in-lieu or in-kind considerations. Payment of the Fire Developer Fee obligation typically constitutes full mitigation for development impacts.

County of Los Angeles Fire Department Developer Fee Detailed Fire Station Plan

Pursuant to California Government Code Section 66000 et seq., LACoFD prepares and updates annually a Developer Fee Detailed Fire Station Plan (Fire Station Plan), which reflects LACoFD's fire service requirements based upon growth projections in three developer fee Areas of Benefit, including the Santa Clarita Valley. The 2021 Fire Station Plan identified 17 additional fire stations, 1 replacement station, 1 station expansion, 2 helispots, and the necessary capital equipment that will be required in the Areas of Benefit, as well as the anticipated costs and time frames, provided that development occurs as expected. LACoFD's 2022 Developer Fee Detailed Fire Station Plan identified 6 completed fire stations, 13 proposed fire stations, 1 expansion station, 3 helispots, and the necessary capital equipment that will be required for the Area of Benefit, as well as the anticipated costs and time frames, provided that development occurs as expected. The anticipated costs identified in the Fire Station Plan will be funded by developer fee revenues or funds that LACoFD has advanced from other sources. These advances will be repaid to LACoFD when sufficient developer fee revenue is generated (LACoFD 2021, 2022).

County of Los Angeles General Plan

The County of Los Angeles General Plan provides the policy framework and guides development decisions in unincorporated Los Angeles County. The Land Use Element designates the proposed general distribution and general location and extent of uses while also providing the "blueprint" for how land will be used to accommodate growth and change throughout the unincorporated areas of the County. The Safety Element of the General Plan provides an overview of fire hazards in the County, including wildland fires, flooding, and mud and debris flows. An analysis of the Project's consistency with the General Plan's goals and policies is included in Section 4.11, Land Use and Planning, of this EIR.

The following policies related to fire safety and development in fire hazard zones would be applicable to the Project (County of Los Angeles 2022a, 2022b):

Policy Land Use (LU) 1.10. Prohibit plan amendments that increase density of residential land uses within mapped fire and flood hazard areas unless generally surrounded by existing built development and the County determines the adjoining major highways and street networks can accommodate evacuation as well as safe access for emergency responders under a range of emergency scenarios, as determined by the County.

Policy LU 11.6. Ensure that subdivisions in VHFHSZs site open space to minimize fire risks, as feasible.

Policy Safety (S) 1.3. Require developments to mitigate geotechnical hazards, such as soil instability and landslides, in Hillside Management Areas through siting and development standards.

Policy S 4.1. Prohibit new subdivisions in VHFHSZs unless: (1) the new subdivision is generally surrounded by existing or entitled development or is located in an existing approved specific plan or is within the boundaries of a communities facility district adopted by the County prior to January 1, 2022, including any improvement areas and future annexation areas identified in the County resolution approving such district; (2) the County determines there is sufficient secondary egress; and (3) the

County determines the adjoining major highways and street networks are sufficient for evacuation as well as safe access for emergency responders under a range of emergency scenarios, as determined by the County. Discourage new subdivisions in all other FHSZs.

Policy S 4.2. New subdivisions shall provide adequate evacuation and emergency vehicle access to and from the subdivision on streets or street systems that are evaluated for their traffic access or flow limitations, including but not limited to weight or vertical clearance limitations, dead - end, one - way, or single lane conditions.

Policy S 4.3. Ensure that biological and natural resources are protected during rebuilding after a wildfire event.

Policy S 4.4. Reduce the risk of wildland fire hazards through meeting minimum State and local regulations for fire-resistant building materials, vegetation management, fuel modification, and other fire hazard reduction programs.

Policy S 4.5. Encourage the use of climate-adapted plants that are compatible with the area's natural vegetative habitats.

Policy S 4.6. Ensure that infrastructure requirements for new development meet minimum State and local regulations for ingress, egress, peak load water supply availability, anticipated water supply, and other standards within FHSZs.

Policy S 4.7. Discourage building mid - slope, on ridgelines and on hilltops, and employ adequate setbacks on and below slopes to reduce risk from wildfires and post - fire, rainfall - induced landslides and debris flows.

Policy S 4.8. Support the retrofitting of existing structures in FHSZs to meet current safety regulations, such as the building and fire code, to help reduce the risk of structural and human loss due to wildfire.

Policy S 4.9. Adopt by reference the County of Los Angeles Fire Department Strategic Fire Plan, as amended.

Policy S 4.10. Encourage the planting of native oaks in strategic locations and near existing oak woodlands, including those to be mapped in the Oak Woodlands Conservation Management Plan, to protect developments from wildfires, as well as to lessen fire risk associated with developments.

Policy S 4.11. Support efforts to address unique pest, disease, exotic species and other forest health issues in open space areas to reduce fire hazards and support ecological integrity.

Policy S 4.12. Support efforts to incorporate systematic fire protection improvements for open space, including the facilitation of safe fire suppression tactics, standards for adequate access for firefighting, fire mitigation planning with landowners and other stakeholders, and water sources for fire suppression.

Policy S 4.13. Encourage the siting of major landscape features, including but not limited to large water bodies, productive orchards, and community open space at the periphery of new subdivisions to

provide strategic firefighting advantage and function as lasting firebreaks and buffers against wildfires, and the maintenance of such features by respective property owners.

Policy S 4.14. Encourage the strategic placement of structures in FHSZs that conserves fire suppression resources, increases safety for emergency fire access and evacuation, and provides a point of attack or defense from a wildfire.

Policy S 4.15. Encourage rebuilds and additions to comply with fire mitigation guidelines.

Policy S 4.16. Require local development standards to meet or exceed SRA Fire Safe Regulations, which include visible home and street addressing and signage and vegetation clearance maintenance on public and private roads; all requirements in the California Building Code and Fire Code; and Board of Forestry Fire Safe Regulations.

Policy S 4.17. Coordinate with agencies, including the Fire Department and ACWM, to ensure that effective fire buffers are maintained through brush clearance and fuel modification around developments.

Policy S 4.18. Require Fire Protection Plans for new residential subdivisions in FHSZs that minimize and mitigate potential loss from wildfire exposure, and reduce impact on the community's fire protection delivery system.

Policy S 4.19. Ensure all water distributors providing water in unincorporated Los Angeles County identify, maintain, and ensure the long-term integrity of future water supply for fire suppression needs, and ensure that water supply infrastructure adequately supports existing and future development and redevelopment, and provides adequate water flow to combat structural and wildland fires, including during peak domestic demand periods.

Policy S 4.20. Prohibit new and intensification of existing general assembly uses in VHFHSZs unless: (1) the use is located in an existing approved specific plan or (2) the County determines there is sufficient secondary egress and the County determines the adjoining major highways and street networks are sufficient for evacuation, as well as safe access for emergency responders under a range of emergency scenarios, as determined by the County. Discourage new general assembly uses in all other FHSZs.

Policy S 7.1. Ensure that residents are protected from the public health consequences of natural or human-made disasters through increased readiness and response capabilities, risk communication, and the dissemination of public information.

Policy S 7.2. Support County emergency providers in reaching their response time goals.

Policy S 7.3. Coordinate with other County and public agencies, such as transportation agencies and health care providers, on emergency planning and response activities, and evacuation planning.

Policy S 7.5. Ensure that there are adequate resources, such as sheriff and fire services, for emergency response.

County of Los Angeles All-Hazards Mitigation Plan

Written in 2019, the County of Los Angeles All-Hazard Mitigation Plan replaces and updates the 2014 version. The All-Hazard Mitigation Plan's goal is to assess the risk posed by natural hazards and develop mitigation action for reducing those risks in the County. The plan identifies, assesses, and provides mitigation actions for climate change, dam failure, earthquake, flooding, landslides, wildfires, and tsunamis (County of Los Angeles 2019a).

County of Los Angeles Operational Area Emergency Response Plan

The County's Operational Area Emergency Response Plan (OAERP) guides and addresses a coordinated response to emergency events within the OA (County of Los Angeles 2012). The purpose of the OAERP is to establish an emergency management system to facilitate the prevention, protection, response, recovery, and mitigation of emergency/disaster events. The OA includes all incorporated and unincorporated areas within the County. The County will serve as the County Emergency Operations Center (CEOC) and the Operational Area Emergency Operation Center (OAEOC) to coordinate a centralized emergency operation for the OA. The County identifies wildland fires as a high priority hazard (County of Los Angeles 2014). Within the County, OA disaster routes are pre-identified freeways, highways, or arterial routes for use during a crisis. Disaster routes are not evacuation routes; their primary function is to bring in emergency personnel, equipment, and supplies to impacted areas. Interstate (I) 5 is designated as a disaster route for the entire County (Public Works 2012).

OurCounty – Los Angeles Countywide Sustainability Plan

Adopted by the Board of Supervisors in August 2019, the Los Angeles Countywide Sustainability Plan (County Sustainability Plan) is a regional sustainability plan that aims to enhance the well-being of every community in the County while reducing damage to the natural environment and adapting to the changing climate. The County Sustainability Plan outlines goals and strategies to create resilient and healthy communities and develop community capacity to respond to emergencies. Such goals and strategies include limiting large-scale development in high climate-hazard areas, such as FHSZs, as mapped by CAL FIRE (Strategy 3E). Implementing actions include evaluating options to limit new large-scale development in high climate-hazard areas (Action 56); evaluating the feasibility of programs to allow for the transfer of development rights in such areas (Action 57); and regularly updating the building code, fire code, and Hazard Mitigation Plan to reflect best practices in the WUI (Action 58) (County of Los Angeles 2019b).

The Project would result in development in a VHFHSZ. However, the County Sustainability Plan is a guidance document that presents goals and strategies for the County. VHFHSZs do not indicate that development cannot occur, but that the development must implement more restrictive site and building requirements that have been designed and proven to result in ignition-resistant projects. The Project would incorporate these requirements and would be subject to review and approval by decision makers.

County Code Title 21, Subdivisions

Title 21 of the County Municipal Code is known as the "subdivision ordinance" and implements California's Subdivision Map Act. The subdivision ordinance applies to all subdivisions within the unincorporated territory of the County, and to the preparation of subdivision maps thereof, and to other maps provided for by the Subdivision Map Act. The subdivision ordinance includes design standards, including requirements for access, local streets and ways, and lot locations and orientations. The subdivision ordinance's design standards include requirements for development located in areas that are subject to hazard from brush or forest fire.

Community Wildfire Protection Ordinance

LA County Planning is in the process of developing the Community Wildfire Protection Ordinance. The Community Wildfire Protection Ordinance was formerly named, and referenced in the General Plan, as the Reduce Damage From Wildfire Ordinance. The Community Wildfire Protection Ordinance is being drafted in response to the February 11, 2020, motion by the Los Angeles County Board of Supervisors. The Community Wildfire Protection Ordinance will amend the Title 21 and Title 22 (Planning and Zoning Code) codes to address adequate evacuation egress during wildfire events, to improve public safety, and to reduce risks to development located within VHFHSZs.

Santa Clarita Valley Area Plan, "One Valley, One Vision"

The Santa Clarita Valley Area Plan, referred to as "One Valley, One Vision" (OVOV), is a component of the General Plan and is intended to provide focused goals, policies, and maps to guide the regulation of development within the unincorporated portions of the Santa Clarita Valley. The OVOV, as it may be amended from time to time, is intended to serve as a long-term blueprint for development over the next approximately 20-year planning period (2012–2032), except where specific policies address other target dates as set forth in the plan.

4.20.3 Thresholds of Significance

In accordance with the County's Environmental Checklist Form (Initial Study) and CEQA Guidelines Appendix G, the applicable thresholds of significance with regard to wildfire are listed below.

A project may have a significant impact, if located in or near SRAs or lands classified as VHFHSZs, it would:

Threshold 4.20a: Substantially impair an adopted emergency response plan or emergency evacuation plan.

Threshold 4.20b: 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 4.20c: 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 4.20d: 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.

Threshold 4.20e: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

4.20.4 Methodology

This section of the Draft EIR is largely based on the evaluation and results of the FPP (Appendix M-1) and WEP (Appendix M-2). Each report includes a detailed methodology and approach, which is summarized below. For more information, refer to Appendices M-1 and M-2 of this Draft EIR.

The FPP was based on a review of available digital information, including topography, vegetation types, fire history, and the Project's development footprint, and a site evaluation on June 15, 2020. Although two fires have occurred

within 5 miles of the Project site since the site evaluation, neither burned on site; therefore, current conditions, at the time of this report, would largely remain similar to on-site conditions in 2020. The Project area's topography, natural vegetation, and fuel loading; surrounding land use; and general susceptibility to wildfire were evaluated, considering the results of the following field tasks:

- Topography evaluation
- Vegetation/fuel assessments
- Photograph documentation of the existing condition
- Confirmation/verification of hazard assumptions
- Off-site, adjacent property fuel and topography conditions
- Surrounding land use confirmations
- Necessary fire behavior modeling data collection
- Ingress/egress documentation
- Nearby fire station reconnaissance

Field observations were utilized to augment existing site data in generating the fire behavior models and formulating the requirements and recommendations detailed in the FPP (Appendix M-1). Following field data collection efforts and available data analysis, fire behavior modeling was conducted to document the type and intensity of the fire that would be expected adjacent to the Project site given characteristic features, such as topography, vegetation, and weather. Dudek utilized the BehavePlus Version 6 software package to analyze potential fire behavior.

Based on the anticipated pre- and post-Project vegetation conditions, six different fuel models were used in the current conditions of the fire behavior modeling effort, and two additional fuel models were used to depict a fire post construction, as presented in Appendix M-1. Modeled areas in the pre-Project condition include stands of coast live oak (*Quercus agrifolia*) with non-native chaparral and shrub understory (Fuel Model SH4 = Timber-Shrub). Canopy bulk density, the weight of canopy fuels per cubic foot of volume, is assumed to be the maximum allowable value in BehavePlus to represent broadleaf trees. For modeling the post-Project condition, fuel model assignments were re-classified to FM8, representing an irrigated landscape; Gs1, representing a low load, irrigated, grass shrub landscape; and Gs2, representing a 50% thinning grass-shrub landscape up to 150 feet from the structures.

The WEP (Appendix M-2) was based on a review of the County's OAERP and an analysis of potential evacuation events using Vissim, a microscopic, multimodal traffic flow modeling software used to simulate different traffic conditions. A total of 20 simulations were conducted to yield a reasonable sample size to determine the performance of the study area roadways and impacts during evacuation scenarios. To be conservative, a worst-case scenario in which all vehicles belonging to households in the study area would be used in the evacuation, instead of the necessary number of vehicles needed to evacuate the impacted population was used to evaluate potential Project impacts. The evacuation areas used in the analysis are assumed to utilize the following facilities as evacuation routes:

- Pico Canyon Road – Pico Canyon Road is a four-lane roadway with a raised median and a posted speed limit of 50 mph, within the County of Los Angeles. It is classified as a four-lane Major Road.
- The Old Road – Within the Project study area, The Old Road is a two-lane roadway between Pico Canyon Road and Calgrove Boulevard.

As detailed further under Section 4.20.5, Impact Analysis, and specifically under Threshold 4.20a, there are no established thresholds for determining whether evacuation times are safe; however, FEMA has provided a general guideline for reasonable community evacuations of 1 hour and 30 minutes (i.e., a total of 90 minutes). For the purposes of this Draft EIR, the County has chosen to use this quantitative FEMA guideline as the threshold of significance for evacuation. Additionally, it is noted that there have been several fires that have threatened the Project area, requiring an evacuation of existing communities that are similar in nature to the proposed Project. This includes the successful evacuation of the neighboring Stevenson Ranch community during the 2016 Sage Fire, during which approximately 750 homes were evacuated and the fire was contained without the loss of life or structures (CAL FIRE 2016). A detailed discussion of the evacuation analysis is presented in Appendix M-2.

4.20.5 Impact Analysis

Threshold 4.20a: 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?

Construction

During construction, the Project would require temporary lane closures along the segment of The Old Road in the vicinity of the Project site during some of the construction activities, which would impact access to I-5 during construction. Short-term off-site construction activities that could result in lane closures include water and sewer infrastructure improvements, widening of The Old Road, and other improvements (e.g., manufactured slopes, roadway ingress/egress, stormwater infrastructure) within Assessor's Parcel Number 2826-022-901. The County has identified The Old Road as a potential evacuation route. If an evacuation of the Project area were to occur during the installation of the proposed off-site improvements, use of The Old Road between Pico Canyon Road and Calgrove Boulevard could be limited for evacuation of existing populations, resulting in a potentially significant impact.

However, this Draft EIR requires the preparation and implementation of a construction traffic management plan, as detailed in Mitigation Measure (MM)-4.17-1 in Section 4.17, Transportation, which would reduce potential impacts to less than significant. MM-4.17-1 requires the minimization of obstructions in traffic lanes, maintenance of emergency access throughout construction activities through methods such as the use of flag persons to minimize obstructions along The Old Road, signage, scheduling of vehicle movements to ensure traffic flow, and limiting schedule of deliveries and truck traffic, among other requirements. With incorporation of MM-4.17-1 from Section 4.17 of this Draft EIR, short-term construction-related impacts related to impairment of an emergency response or evacuation plan would be less than significant.

Operation

Long-term operation of the Project would introduce a permanent resident population on the Project site that could require evacuation in the event of a wildfire emergency. Additional traffic generated by the proposed Project in an emergency evacuation could contribute to congestion on the existing roadway system, which has the potential to substantially impair emergency response plans or emergency evacuation plans. The following discussion addresses this potential impact and consists of (1) a description of applicable evacuation plans and routes, (2) a discussion of firefighting services that would be available for the Project and the Project's potential effects on associated service levels, and (3) a summary of results from detailed evacuation modeling of the Project and nearby areas.

Evacuation Plans and Evacuation Routes

The County identifies wildland fires as a high-priority hazard (County of Los Angeles 2019a). The Project site is within the service area of LACoFD, which would provide emergency operation response to the Project site. More specifically, as discussed in Section 4.20.1, Existing Conditions, and detailed further in Appendix M-2, the Project is subject to the OAERP. Currently, the County does not have a Countywide evacuation plan; rather, evacuation procedures are outlined in the OAERP. The County serves as the CEOC and the OAEOC and would coordinate a centralized emergency operation for the OA in the event of an emergency/disaster. The County sheriff serves as the Director of Emergency Operations and would facilitate the CEOC/OAEOC emergency response, including evacuation. The County sheriff would also be responsible for law enforcement response during an emergency event. In the event of an emergency, the CEOC/OAEOC gathers, analyzes, and distributes information using the SEMS to all responding agencies within the OA to support emergency response and coordinate mutual aid and evacuation. Additionally, the CEOC/OAEOC provides resources during a disaster, such as public information, evacuation orders/routes, recovery programs, and mitigation to reduce future disasters.

As stated in the recently updated General Plan Safety Element, evacuation routes are determined by emergency responders who decide at the time of the emergency the routes that should be used for evacuation after assessing the conditions and location of the emergency to avoid endangering the lives of others or causing personal injury or death. Evaluating a route for safety and viability is situational, context-specific, and subject to change. Figure 12.9 of the County's Safety Element identifies roads that are public, paved, and through-ways, which may be used for evacuation if they are viable routes during an actual emergency. These evacuation routes are not all inclusive and may not be the most suitable routes since actual emergency events necessitate day-of-event conditions and risks assessments (County of Los Angeles 2022b). In the Project area, The Old Road is designated as a potential evacuation route. If an evacuation warning or order is issued, the "Alert LA County" mass notification system would notify those who live and work in the County of the necessary information during emergency events via text, call, or email, such as disaster notifications and evacuation orders (County of Los Angeles 2018).

In the OVOV, I-5 is identified as an evacuation route for emergencies such as fire (LACDRP 2012). The OVOV Safety Element discusses emergency access within Santa Clarita Valley and identifies three major evacuation corridors, I-5 (north–south), State Route 14 (SR-14) (north–south), and State Route 126 (SR-126) (west). The Safety Element further explains that for residents of the Stevenson Ranch area alternate routes would need to be identified in the event I-5 is closed during an emergency incident due to congestion and accidents, as was the case during the 1994 Northridge Earthquake or a catastrophic multi-vehicle accident. The Los Angeles County Sheriff Traffic Division, City of Santa Clarita, California Highway Patrol, and California Department of Transportation (Caltrans) have developed three alternative routes through the City from I-5 to SR-14 to direct traffic during an emergency event, which includes the Cross Valley Connector (an extension of Golden Valley Road, a major arterial highway, from the Antelope Valley Freeway [SR-14] to the easterly extension of Newhall Ranch Road and terminating at Plum Canyon Road), which is cited as providing effective east–west routes for use in an emergency (LACDRP 2012).

The Project site is located in proximity to several of the potential evacuation routes discussed above, and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. Additionally, the Project design would provide sufficient emergency access. As a component of the Project, emergency vehicle access via "A" Street and "B" Street would be provided, in addition to the private access road that would encircle the outer edge of the development area. An ingress/egress roadway would be built to meet all minimum fire apparatus access requirements of the 2020 County Fire Code to the property west of the

Project site, proposed Tentative Tract Map 74979. Consistent with Title 21, Subdivisions, of the County Code, the Project's roadways would meet all County access requirements. The 2020 County Fire Code requirements describe the applicable County access standards (i.e., roadway widths, all-weather surface requirements, length of streets, turning requirements, grade restrictions, maintenance requirements, and parking restrictions), which would be implemented by the Project as part of code compliance.

During a wildfire emergency, circumstances may arise in which LACoFD or law enforcement determines that sheltering in place would be safer than evacuating. The Project would thus provide a temporary refuge area for firefighters, occupants, and nearby residents to shelter should LACoFD or law enforcement determine this a safer approach than evacuations. Temporary refuge areas are pre-planned areas (planned shortly after firefighters arrive on scene) where firefighters may take refuge and temporary shelter for short-term thermal relief, without using a fire shelter in the event that escape routes to an established safety zone are compromised. For the Project, temporary refuge areas would likely include navigating to the interior roadways of neighborhoods where 200-foot-wide FMZs provide defensible space and maintained landscapes are provided, along with ignition-resistant structures that offer numerous opportunities for temporary refuge. Temporary refuge areas would not replace the principles of Ready! Set! Go!, the County's public awareness and preparedness program targeted to individuals living and/or working in WUI areas, but rather would provide an additional option to aid in the safe evacuation of the Project site.

Fire Stations and Response Times

There are four LACoFD stations within approximately 6 miles of the Project site: Station 124 (approximately 2.6 miles), Station 73 (approximately 3.5 miles), Station 126 (approximately 4.6 miles), and Station 76 (approximately 6.2 miles). As discussed in Section 4.15, Public Services, in suburban areas such as the Project site, the LACoFD response standard is 8 minutes for the first arriving unit and emergency medical services and 12 minutes for paramedic units (Appendix I-1). In correspondence with the LACoFD, the department indicated that "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is the nearest to the Project site (with an average response time of 8 minutes and 36 seconds) (Appendix I-1).

A Project-specific analysis of response times was provided in Appendix M-1. The response time analysis in Appendix M-1 was conducted using travel distances that were derived from Google road data and Project development plan data. Travel times were calculated applying the distance at speed limit formula ($T = (D/S) \times 60$, where T = time, D = distance in miles, and S = speed in mph) and the nationally-recognized Insurance Services Office Public Protection Classification Program's Response Time Standard formula ($T = 0.65 + 1.7D$, where T = time and D = distance) for comparison. The Insurance Services Office response travel time formula discounts speed for intersections, vehicle deceleration, and acceleration, and does not include turnout time. The results of the emergency response time analysis using the distance at speed formula and the Insurance Services Office formula are detailed in Tables 7 and 8 of Appendix M-1, respectively. Therefore, these standard calculations indicate the Project would meet the County's response time standard for suburban areas with a total estimated response time of 7 minutes and 19 seconds from the closest fire station (Station 124)[5] (Appendix M-1). This analysis considers the response time provided by LACoFD, which exceeds the LACoFD's response time standard of 8 minutes. As stated in the LACoFD response letter included in Appendix I-1, additional information and coordination with LACoFD was requested in order to determine whether development of the Project would require additional staffing, equipment, or new or

[5] As stated in Section 4.15, Public Services, the County utilized a different method to calculate response times that resulted in8 minutes and 36 seconds.

expanded facilities. Subsequent to the LACoFD letter included in Appendix I-1, LACoFD has determined that a new fire station is not required for the Project. Therefore, although the Project would not conform to the LACoFD's standard response times per the methodology utilized by the County, LACoFD determined the Project would not require the addition of a new fire station. Additionally, the Project would be subject to a Fire Facility Fee.

As detailed in Section 4.15, the Project Applicant would pay the Fire Facility Fee, which, as detailed in the General Plan EIR, typically constitutes full mitigation for development impacts associated with the need for additional fire protection services or facilities (County of Los Angeles 2014). Consistent with the requirements of CEQA, as articulated in the California First District Court of Appeal decision in *City of Hayward v. Trustees of California State University* (2015) 242 Cal. App. 4th 833, significant impacts under CEQA involve adverse physical changes in the environment as a result of implementation of a project. Pursuant to this case, "the city has a constitutional obligation to provide adequate fire protection services," and potential effects on public safety services are not in and of themselves an environmental impact that CEQA requires a project applicant to mitigate. The Court stated that "[T]he obligation to provide adequate fire and emergency medical services is the responsibility of the city." (Cal. Const., Art. XIII, Section 35, Subd. (a)(2) ["The protection of the public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services."].) Thus, the California Constitution requires local agencies to provide public safety services, including fire protection and emergency medical services, and that it is reasonable to conclude that the County will comply with that provision to ensure that public services are provided. In addition, and as discussed above, the LACoFD participates in the California Fire Service and Rescue Emergency Mutual Aid System and thus, mutual aid agreements would ensure that the Project site would receive supplemental personnel and resources during a major emergency.

Further, LACoFD also has an automatic aid agreement with the City of Los Angeles for helicopter services (County of Los Angeles 2021), which would enable provision of a water-dropping helicopter for brush fire responses, and, if available, a subsequent second helicopter to service the Project and surrounding areas, if threatened. As such, although the Project site would not meet the County's response time standard for "suburban areas" from existing fire stations per their methodology, a new fire station would not be needed, per subsequent discussions with the County, and the Project could also be supported with water-dropping helicopter service, if needed.

The Project would result in approximately 142 new calls per year (approximately 12 calls per month) for fire services, based on the estimated Project-generated population. If the proposed Project were to rely solely on Station 124, then the Project-related calls would increase Station 124's current call volume of 6.3 calls per day to 6.7 calls per day. For reference, a busy suburban fire station typically receives 10 or more calls per day, while an average station typically receives about 5 calls per day. Therefore, the level of service demand for the Project would slightly raise overall call volume from 6.3 to 6.7 calls per day but would not substantially impact the existing fire station to a point that the station could not meet the demand. This continued provision of adequate response times from Fire Station 124 would help ensure timely support and provision of resources in the event of a fire emergency and/or evacuation.

Evacuation Modeling and Analysis

As discussed in Appendix M-2, the County has historically had success safely evacuating large numbers of people and doing so in a managed and strategic way using available technological innovations. Safely undertaking large-scale evacuations may take several hours or more and requires moving people long distances to designated areas. Further, evacuations are fluid and timeframes may vary widely depending on numerous factors, including, among

other things, the number of vehicles evacuating, the road capacity to accommodate those vehicles, residents' awareness and preparedness, evacuation messaging and direction, and on-site law enforcement control.

With the technology in use today in the County, evacuations are more strategic than in the past, evacuating smaller areas at highest risk and phasing evacuation traffic so that it flows more evenly and minimizes the surges that may slow an evacuation. Mass evacuation scenarios where large populations are all directed to leave simultaneously, resulting in traffic delays, are thereby avoided, and those populations most at risk can safely evacuate. Nevertheless, the Project would add additional vehicles to existing evacuation routes, which include The Old Road and I-5 and could result in extended evacuation times for existing residents and visitors in the Project area. Numerical time standards for determining whether an evacuation timeframe is appropriate have not been established under CEQA, nor have such standards been established by the County. As detailed in Section 4.20.3, Thresholds of Significance, the established threshold for determining significance of evacuation impacts is if a project would substantially impair an adopted emergency response plan or emergency evacuation plan. As detailed in Section 4.20.4, Methodology, there are no established thresholds for determining whether evacuation times are safe; however, FEMA has provided a general guideline for reasonable community evacuations of 1 hour and 30 minutes (i.e., a total of 90 minutes). For the purposes of this Draft EIR, the County has chosen to use this quantitative FEMA guideline as the threshold of significance for evacuation. Additionally, it is noted that there have been several fires that have threatened the Project area, requiring an evacuation of existing communities that are similar in nature to the proposed Project. This includes the successful evacuation of the neighboring Stevenson Ranch community during the 2016 Sage Fire, during which approximately 750 homes were evacuated and the fire was contained without the loss of life or structures (CAL FIRE 2016).

Appendix M-2 includes the detailed results of evacuation modeling for the Project and surrounding areas. As stated in Appendix M-2, using Vissim, a microscopic, multimodal traffic flow modeling software used to simulate different traffic conditions, it was determined that it would require 43 minutes to evacuate the existing land uses along the southern side of Pico Canyon Road and west of The Old Road, and it would require 50 minutes to evacuate just the proposed Project's population. For evacuation of the Project site, modeling assumes vehicular traffic would use both available egress routes on site and all traffic would move north along The Old Road to simulate conditions similar to the 2016 Sage Fire, which included the closure of The Old Road to southbound traffic. Under the scenario where both existing land uses and the Project site would be evacuated simultaneously, it is estimated to take 1 hour and 26 minutes to evacuate all populations. The Project would increase evacuation times for existing populations by up to 37 minutes for the surrounding land uses, when compared to existing conditions. It is important to note, the evacuation time does not depict the time for each population modeled, but rather the time needed to evacuate all populations modeled. Therefore, the evacuation times for existing land uses and the Project remain within the 90-minute timeframe. Further, the analyzed timeframe is based on a very conservative scenario, in which all vehicles belonging to households in the study area would be used in the evacuation, instead of the necessary number of vehicles needed to evacuate the impacted population; therefore, actual evacuation times would be expected to occur over a shorter time frame.

Alternatives to I-5 during an Evacuation

While the Project's WEP (Appendix M-2) includes I-5 as a major evacuation route, there are potential emergency scenarios where the primary evacuation route along I-5 would not be available due to partial closure. This situation would require alternative routing of evacuating vehicles and a more strategic, alternate approach. There are various potential scenarios that could interrupt traffic on I-5. One such example, which would not be likely to occur during a wildfire, is Los Angeles County Public Works' Operation Snowflake. Operation Snowflake provides an example of the coordination between agencies to close I-5 and reroute vehicles to maintain traffic flow. In Operation Snowflake,

when roads are shut down, Caltrans blocks the northbound lanes on I-5 at Lake Hughes Road at Castaic and the southbound lanes at Grapevine Road in Kern County. According to Caltrans, this segment is a vital freeway span linking Southern California to the Central Valley with a daily traffic average of 83,000 vehicles. If a wildfire evacuation occurred simultaneously with closure of I-5 in either direction, law enforcement and cooperating agencies would utilize all available tools to reroute vehicles, as necessary, to move those at highest risk. This is likely to result in congestion, and traffic in certain locations could be at a standstill for long periods. However, traffic that is not moving is typically not the traffic that is at risk. While traffic remains in place in areas outside of the active evacuation area, intersections are controlled, and roads are managed to move the populations that are at risk due to their potential exposure levels. There are many tools available to emergency managers to ensure at-risk populations are able to move. Another example is the addition of state-of-the-art traffic signals at crucial intersections. During a fire, people can be moved in certain directions by remotely timing signals to focus on moving traffic away from the fire area. For example, a recently installed signal at The Old Road and Parker Road in Castaic was widely applauded by City of Castaic officials and emergency responders. This technology is considered to be a considerable benefit for scenarios in which drivers are diverted off I-5 and onto surface streets, which often includes The Old Road. The technology is one way to manage the impacts of I-5 if there is an incident on I-5 because engineers can recalibrate the timing in response to increased volumes.

Additionally, law enforcement and other unified command departments and organizations use available tools to move traffic from higher risk areas to lower risk areas. For example, when schools are part of an evacuation event, school evacuation plans may be implemented and typically include moving students off site, with parent pick-up at the off-site location. Law enforcement can then determine whether incoming traffic would be allowed, limited, or sent to a pick-up location where school children are moved via busses or other means during an evacuation.

In an actual evacuation scenario, it is most likely that Los Angeles County Sheriff Department in coordination with LACoFD and the County Office of Emergency Management would implement a phased evacuation where orders are given to evacuate based on vulnerability, location, and/or other factors, which enables the subsequent traffic surges on major roadways to be smoothed over a longer timeframe, thus improving traffic flow. A phased strategy can also be used to prioritize the evacuation of certain communities that are in proximity to the immediate danger. The limitations of the model used for the evacuation analysis in Appendix M-2 are such that it cannot accurately reflect phased evacuation conditions; hence, a worst-case mass evacuation scenario was assumed in order to ensure conservative results.

Conclusion

As discussed above, detailed evacuation modeling has been prepared for the Project to determine whether the Project would adversely affect evacuations in the Project area. While the Project may increase evacuation times relative to existing conditions, the modeling results demonstrate that evacuation timeframes for Project residents and existing residents of nearby communities would fall within established guidelines for evacuation timeframes. Nevertheless, as described in Appendix M-2, a substantial level of awareness by residents is required in order to reduce and/or avoid problems with an effective evacuation, and reducing potential impediments to successful evacuations requires focused and repeated information through a strong educational outreach program. As such, to support successful evacuation from the Project site, MM-4.20-1 has been set forth and requires the preparation of Project area-specific procedures for wildfire evacuations that would be provided to homeowners. Specifically, MM-4.20-1 requires provision of biannual emails and mailers with reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires; establishment of a community website dedicated to wildfire awareness and prevention and evacuation; provision of community workshops and webinars; provision of “new resident” packets that include

information about how to build a go-bag, tools to prepare a household evacuation plan, and a list of agencies and resources for receiving trusted information; provision of emergency alert information; maintenance of trail signage for fire-safe hiking activities; and establishment of a fire safety oversight committee. Information shared with Project residents will include egress route information and instructions for following the Ready! Set! Go! model to which the County adheres. MM-4.20-1 would also ensure provision of information for the evacuation of special populations (e.g., elderly residents, disabled residents, and visitors). Specifically, MM-4.20-1 requires the Project's Homeowners' Association (HOA) to provide information to residents regarding notifying the County Office of Emergency Management and Health and Human Services of special needs residents so that accommodations for their notification (Accessible Alert LA County, CERT programs, or other), transportation, or other special requirements can be provided during an emergency evacuation. Residents will also be advised of their options during an emergency by law enforcement or fire officials. Additionally, with regard to the evacuation of pets, MM-4.20-1 requires the Project's HOA to provide information to pet owners on how to prepare for evacuation of pets and how to register for assistance with pet evacuations. Implementation of MM-4.20-1 would ensure that a strong educational outreach program for wildfire and evacuation is provided for the Project, thus supporting successful evacuations in the event of a wildfire emergency.

In summary, the Project would occur within the OAERP and is adjacent to the I-5, which is an identified evacuation route within the Stevenson Ranch area (LACDRP 2012). As discussed above, the County does not have a Countywide evacuation plan. However, the Project's WEP (Appendix M-2) is consistent with the County's OAERP and would not permanently impact identified evacuation routes. Implementation of MM-4.20-1 would ensure that the educational and awareness procedures outlined in the WEP are implemented, including educational resources for evacuating special populations and pets, consistent with the OAERP. The Project's WEP and implementation of MM-4.20-1 would ensure that the Project would be consistent with applicable General Plan policies related to access and evacuations. Therefore, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation.

Threshold 4.20b: 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?

Slope, Wind, and Vegetation

The Project site is currently undeveloped and vacant, consisting of naturally vegetated slopes and disturbed land. Elevations on the site range from 1,300 feet amsl to 1,654 feet amsl. The topography of the Project site is characterized by hillside and valley terrain with moderate to steep slopes, with the steepest hillsides and ridgelines occurring in the southern portion of the Project site. The proximity of the Project site to large expanses of open space to the west and south and the terrain within the Angeles National Forest to the east and northeast of the Project site, including multiple sub-drainages and canyons, has the potential to funnel Santa Ana winds, thereby increasing local wind speeds and increasing wildfire hazard in the Project vicinity. Due to the slopes on the Project site, wind speed in the Project area, and expansion of the WUI, the Project has the potential to expose Project occupants to pollutant concentrations due to wildfire.

The proposed development footprint would be clustered in the northeastern portion of the site and would occur on graded areas, avoiding prominent ridgelines and leaving much of the steep hillsides as open space to reduce impacts. Within the development footprint, the Project would convert all natural fuels except for preservable, fire-resistant oak trees, to development and irrigated landscaped areas within the footprint and would provide a wide,

managed FMZ separating homes from unmaintained fuel, thereby creating a condition that makes defense easier. A WUI already exists in the area adjacent to Lyons Canyon, with varying levels of maintained fuel modification buffers in the area. The newer, master planned communities in the area all include the types of protective features that reduce their vulnerability to wildfire. As discussed in detail in Appendix M-1, Lyons Canyon is a planned ignition-resistant community designed to include professionally managed and maintained fire protection components, modern fire code compliant safety features, and specific measures provided where ignitions are most likely to occur (such as roadways). Therefore, the development of the Project would not be expected to materially increase the risk of vegetation ignitions.

Once developed, the portion of the Project site proposed for development would be graded and developed with residential uses, landscaping improvements, and recreational uses. Open space areas that would remain would include natural open space, open space subject to FMZs (further discussed below), and trails. Therefore, the natural slopes and canyons adjacent to the Project site that would remain vegetated and ungraded and may serve to funnel or channel winds, thus potentially influencing wildfire behavior; however, the Project would not include features that modify the existing prevailing wind pattern. Grading within the development footprint will reduce slopes and potential for wind to exacerbate wildfire across the Project site (National Wildfire Coordinating Group 2021).

The area of the Project site that is proposed for development would be converted from vegetated open space to roads, structures, flood control facilities, and landscaped areas. Existing vegetative fuels within proposed FMZs consist primarily of grasslands and shrublands and mixed chaparral. These fuels would be modified as a result of development, altering their current structure and species composition and vulnerability to wildfire. Post-development vegetation is expected to be substantially different than current conditions and less likely to facilitate extreme fire behavior. Development of the Project would thus result in the conversion of undeveloped and vegetated land to ignition-resistant development and native trees surrounded by development, and landscaped vegetation, resulting in a highly ignition-resistant area that would not readily facilitate the spread of fire and that would present a large fuel break. The Project's fire protection and ignition analysis does not rely on the potential benefits afforded by the conversion of undeveloped, vegetated land to an ignition-resistant community, as these benefits must be balanced with the Project's addition of ignition sources (e.g., people and structures) to the Project site. While ignition sources are already present in the Project area, the Project would introduce additional sources. However, the incremental increase in potential fire ignition by adding the Project's population is demonstrably minimal.

As detailed in Section 2.2.5 of Appendix M-1, research indicates that the type of clustered, master planned developments like the Project site are not associated with increased vegetation ignitions. Syphard and Keeley (2015) summarize all wildfire ignitions included in the CAL FIRE FRAP database, dating back over 100 years. They found, in the case of one Southern California county (San Diego County), equipment-caused fires were by far the most numerous, and these also accounted for most of the area burned, followed closely by the area burned by power line fires. This pattern is consistent beyond San Diego County and is applicable in Los Angeles County. Ignitions classified as equipment-caused frequently resulted from exhaust or sparks from power saws or other equipment with gas or electrical motors, such as lawn mowers, trimmers, or tractors, and were associated with lower density housing. In San Diego County, and in areas like the Project site in Los Angeles County, ignitions were more likely to occur close to roads and structures and at intermediate structure densities. The Project will comply with LACoFD requirements for activities in hazardous fire areas and MM-4.20-4, which requires the Project to prepare a construction fire prevention plan prior to commencement of construction activities, which will designate fire safety measures to reduce the possibility of fires during the construction phase. During operation, the same protections (e.g., interior sprinklers, FMZs) serve to starve wildfires of fuels and minimize or prevent wildfire from transitioning into a higher density community or moderate density with high maintenance levels, such as the Project

site, and also serve to minimize or prevent on-site fires from transitioning into the wildlands. Moreover, there are no examples of wildfire ignitions connected to a new, ignition-resistant master planned community. Further, the Project's FMZ and conversion to managed landscapes throughout the Project site would also act in a similar manner as a fuel break and would enhance the fuel break effect achieved by the neighboring Stevenson Ranch to the north, which would also reduce the existing wildfire risk for those residents.

In summary, alterations to the Project site would also result in alterations to slope and vegetation that would reduce wildfire potential. Nevertheless, the Project would still entail development of a new community of on-site occupants that would constitute potential ignition sources, would be exposed to pollutants generated by wildfire, and/or would be subjected to the uncontrolled spread of wildfire due in part to natural hillside/slope conditions, prevailing winds, and natural vegetation. Impacts would thus be considered potentially significant.

The Project would be developed according to all existing building codes and fire codes, as indicated in the 2020 County Fire Code, which adopts with amendments the 2019 California Fire Code, Chapter 7A of the 2019 CBC, the 2019 California Residential Code (Section 237), and would be subject to the provisions in PRC Section 4291 as well as the LACoFD guidelines for FMPs. These codes include provisions for fuel modification, use of ignition-resistant building materials, and defensible space for fire prevention and safety.

In accordance with County Fire Code Section 4908.1, Fuel Modification Plan in Fire Hazard Severity Zones, site-specific FMZs must be implemented on the Project site in accordance with a detailed FMP to be reviewed and approved by the Forestry Division of LACoFD for consistency with defensible space and fire safety guidelines. An FMZ is a strip of land where combustible vegetation has been removed and/or modified and partially or totally replaced with more adequately spaced, drought-tolerant, fire-resistant plants in order to provide a reasonable level of protection to structures from wildland fire. The FMZ functions as fuel breaks, which are crucial in reducing fire risk and facilitating effective fire prevention (Wang et al. 2021). FMZs are designed to provide vegetation buffers that gradually reduce fire intensity and flame lengths from advancing fire by strategically placing thinning zones and irrigated zones adjacent to each other on the perimeter of the WUI and exposed structures. An important dual function of the FMZ is to reduce the ability of a fire igniting in developed areas and spreading into off-site wildlands (Braziunas et al. 2021). Because of the buffer between developed areas and natural areas created by the FMZs, fires that ignite in a developed area would not easily spread through a FMZ into wildlands. Therefore, should an on-site fire occur it is unlikely that it would escape the development footprint, not only due to the fuel modification adjacent to structures but also because of the layered fire protection approach and ignition management further described below. Fuel modification works by redistributing the fire risk on a landscape and altering the interaction between fire, fuels, and weather (Cochrane et al. 2012). FMZs typically target surface fires but can also reduce the likelihood of canopy fires, lower ember cast, and have a shadow effect on the untreated landscape by reducing the probability of burning and the potential fire size (Cochrane et al. 2012). The Project FMZs and fuels management would serve to create defensible space around the structures. Defensible space adjacent to structures also functions to limit the spread of fire from the built environment into off-site vegetation (Warziniack et al. 2019). Implementing defensible space would reduce the likelihood of structural ignition and support landscape-level risk reduction (Mockrin et al. 2020; Warziniack et al. 2019). All of the existing fuel on the development footprint portion of Project site and within FMZ areas would be converted into hardscape and or modified to reduce fuel densities that are managed and maintained. Although some oak trees are being preserved in place, oaks are known for their fire resistance and would be subject to crown raising and ongoing ground maintenance, which would minimize their potential fire hazard.

A typical FMZ consists of at least 100 feet of vegetation thinning or removal, measured in a horizontal plane from the exterior façade of all structures toward the undeveloped areas; however, LACoFD requires FMZs to be 200 feet.

Per LACoFD standards, which are consistent with the 2019 California Fire Code (Section 4907, Defensible Space), California Government Code Sections 51175–51189, and PRC Section 4291A, an FMZ is required around every building that is designed primarily for human habitation or use within a VHFHSZ. A typical landscape/fuel modification installation per the County Fire Code consists of a 30-foot-wide irrigated zone (Zone A) and a 70-foot-wide setback zone (Zone B) for a total of 100 feet in width on the periphery of the Project site, beginning at the structure. An additional 100-foot-wide thinning zone (Zone C) is required for the areas adjacent to natural-vegetated, open space areas, such as is found along the perimeter of the Project site. The 100 feet of thinning in the outer zone does not result in clearing of native vegetation but does include strategic thinning and removal of the most flammable species while maintaining sufficient ground cover and some habitat quality.

The FPP for the Project, which includes the proposed FMP, proposes FMZs for the Project that are in accordance with LACoFD's FMP Guidelines (LACoFD 2018) and all other applicable regulations. FMZs proposed for the Project range between 54 and 200 feet wide on site; however, as required by LACoFD, where less than 200 feet of FMZ can be provided on site, the neighboring property owners would be required to provide brush thinning to achieve the full 200 feet of FMZ. [6]

Within certain areas of the Project site, achievement of the required 200-foot FMZ would not be feasible. The development footprint would be clustered within flatter areas of the Project site to avoid prominent ridgelines; however, this configuration necessitates placement of structures closer than 200 feet to the property line, and the HOA would not have access or approvals to conduct fuel modification and vegetation thinning outside of the Project site boundaries. Areas of reduced FMZ would be generally located near the Project site's eastern boundary. The on-site FMZ in this area ranges from 54 feet to 75 feet in width. Provision of reduced on-site FMZs would be considered a significant impact, as the Project itself would not provide adequate on-site buffer to keep wildfire from encroaching on site or moving off site. However, in areas of reduced on-site FMZ, neighboring property owners would be required by LACoFD to provide brush thinning to achieve the full 200-foot FMZ for the Project. Additionally, while a majority of the FMZ is accommodated on site, where there is less than 100 feet of FMZ on site (Figure 4.20.2, Fuel Modification Plan), MM-4.20-2 has been set forth to ensure that additional fire protection measures are implemented to effectuate the same level of protection as a 200-foot on-site FMZ, even though off-site fuel modification would occur to attain the 200 feet. LACoFD recognizes the additional fire protection measures but does not provide approval of alternative materials and methods approaches to reducing FMZ, requiring the full FMZ width of 200 feet and requiring the neighboring property owner to provide that vegetation management.

Specifically, MM-4.20-2 would require enhanced construction features such as a 6-foot, heat-deflecting wall constructed of concrete masonry units between 16 on-site structures in the southern portion of the Project and adjacent open space. As indicated in Appendix M-1 and required in MM-4.20-2, the FMZs and additional fire protection measures proposed for the Project would provide wildfire buffer for structures adjacent to open space land where the full FMZ is not achievable on site. These measures are based on a variety of analysis criteria, including predicted flame length, fire intensity (British thermal unit; Btu), Project site topography and vegetation, extreme and typical weather, position of structures on pads, position of roadways, adjacent fuels, fire history, current versus proposed land use, neighboring communities relative to the Project, and type of construction. As described in detail in Appendix M-1, the fire intensity research conducted by Cohen (1995), Cohen and Butler

[6] The Project has designed the FMZ based on discussions with the County Fuel Modification Unit. Per the direction of the County Fuel Modification Unit, any off-site FMZ is the responsibility of the neighboring property owner. The Project HOA would assist with this annual maintenance to the extent the neighboring property owner allows. Additionally, LACoFD will be responsible for inspecting the FMZ annually and enforcing compliance. Further, per the Project's FPP, mitigations are being provided for the homes directly adjacent to areas where off-site FMZ is needed to achieve the full 200 feet such that the homes would be defensible and more ignition resistant even if the off-site FMZ were not provided.

(1996), and Cohen and Saveland (1997)supports the fuel modification alternative proposed for the Project since they demonstrate that as little as 33 feet of FMZ can protect an ignition-resistant structure. The Project's narrowest on-site FMZ would be 54 feet in width, and furthermore, the full 200-foot FMZ would be achieved via off-site brush thinning provided by neighboring property owners, with Project assistance as allowed, per LACoFD requirements.

The FMP for the Project is shown in Figure 4.20-2, which depicts the setback zone (Zone A) or equivalent, irrigated zone (Zone B), and thinning zone (Zone C). Zone A equivalent areas include hardscape (e.g., roads, sidewalks) and landscape that provides equivalent function as a typical Zone A within the developed portions of the Project site. The FMZs would be measured from the structure outwards toward undeveloped areas. The FMZ plan also includes roadside fuel modification from the edge of any public or private roadway, including 10 feet of horizontal clearance on each side and 20 feet of vertical clearance. The FPP for the Project requires that all landscaping within the Project boundaries be consistent with LACoFD Fuel Modification Plant Selection Guidelines (Appendix D-1 of Appendix M-1 of this Draft EIR) and the Undesirable Plant List (Appendix D-2 of Appendix M-1 of this EIR), and the planting list and spacing would be subject to LACoFD approval.

In order to ensure the effectiveness of the FMZs over the lifetime of the Project site operations, annual maintenance is required. As detailed in Appendix M-1 and MM-4.20-3, the Project's HOA shall maintain the on-site FMZ and obtain an FMZ inspection and report from a qualified LACoFD-approved third-party inspector in May/June of each year certifying that vegetation management activities throughout the Project site have been performed. If the FMZ areas are not compliant, the Project HOA would have a specified period to correct any noted issues so that a re-inspection could occur and certification can be achieved. This would ensure that the on-site FMZ would be maintained in accordance with the maintenance agreement and provide long-term fire protection both to the Project and the surrounding area. Because off-site FMZ (i.e., brush thinning) may not be controlled by the HOA due to access privileges or other constraints, off-site brush thinning would be enforced by LACoFD, and the Project HOA would assist with this annual maintenance to the extent the neighboring property owner allows. As detailed in Section 3.6.2, Other Permits and Approvals, of Chapter 3, Project Description, the Project Applicant would enter into a license agreement with the City to allow the Project's HOA to conduct off-site brush thinning on City property.

As stated in Appendix M-1, the fire behavior modeling conducted for the Project determined that the on- and off-site FMZs proposed for the Project (Figure 4.20-2) would reduce flame lengths and slow fire spread rates to a level that would be manageable by fire crews (the fire behavior modeling results are further discussed below and in Appendix M-1).

Modeling Results for the Trails at Lyons Canyon Project Under Existing Conditions

To analyze the Project site's fire behavior pre- and post-development, the BehavePlus fire modeling system was used to model on-site fire behavior. Behave Plus is composed of a collection of mathematical models that describe fire behavior and the fire environment. The program simulates rate of fire spread, spotting distance, scorch height, tree mortality, fuel moisture, wind adjustment factor, and other variables. Model inputs were determined based on on-site observations and data from nearby remote automated weather stations, which are maintained by the United States Forest Service. The location and direction of the various fire scenarios analyzed for the Project are presented in Figure 8 of the FPP (Appendix M-1). The results of the fire behavior modeling scenarios are summarized below, and further details regarding modeling inputs and results can be found in Appendix M-1.

The results of the wildfire behavior modeling for five different fire scenarios near the Project site under existing conditions are presented in Table 4.20-1. A wildfire in untreated, surface shrub and chaparral fuels south/southwest of the Project site under peak weather conditions represents the most extreme conditions

(Scenario 2). In this case, flame lengths can be expected to reach up to approximately 26 feet with 20 mph southwest wind speeds. Spread rates for high-load sagebrush scrub fuel beds were less than 2.1 mph. Spotting distances, where airborne embers can ignite new fires downwind of the initial fire, were 0.8 miles.

Table 4.20-1. BehavePlus Fire Behavior Modeling Results – Existing Conditions

Fire Scenario	Flame Length[1] (feet)	Spread Rate[1] (mph)	Fireline Intensity[1] (Btu/ft/sec)	Spot Fire[1] (miles)	Surface Fire to Tree Crown Fire	Tree Crown Fire Rate of Spread (mph)	Crown Fire Flame Length (feet)
Scenario 1: 18% slope; summer onshore wind from northwest (50th percentile)							
Coast live oak trees[2,3] (Sh4)	7.5	0.4	447	0.3	Crowning[4]	0.5	67.3
Moderate-load sagebrush scrub (Sh2)	3.6	0.1	93	0.2	Crowning[4]	0.5	68.1
Moderate-load grass-shrub (Gs2)	5.7	0.4	253	0.2	Crowning[4]	0.5	66.1
High-load grasses (Gr7)	22.7	2.0	5,014	0.6	Crowning[4]	0.5	71.9
Scenario 2: 22% slope; fall extreme offshore wind from east (97th percentile)							
Moderate load grass-shrub (Gs2)	10.7 (20.6)[5]	1.0 (4.3)	971 (4,080)	0.4 (1.4)	No	N/A	N/A
High load sagebrush scrub (Sh5)	26.3 (45.0)	2.1 (6.9)	6,914 (22,268)	0.8 (2.4)	No	N/A	N/A
Scenario 3: 16% slope; fall extreme offshore wind from southeast (97th percentile)							
Coast live oak trees[2,3] (Sh4)	12.4 (23.8)[5]	1.0 (4.2)	1,357 (5,600)	0.5 (1.6)	Crowning[4]	1.1 (4.4)	119.9 (308.3)
High load sagebrush scrub (Sh5)	25.6 (44.6)	2.0 (6.8)	6,531 (21,884)	0.8 (2.4)	Crowning[4]	1.1 (4.4)	130.8 (336.4)
Scenario 4: 17% slope; fall extreme offshore wind from south (97th percentile)							
Moderate load grass-shrub (Gs2)	12.4 (23.8)[5]	1.0 (4.2)	1,347 (5,590)	0.5 (1.6)	No	N/A	N/A
High load sagebrush scrub (Sh5)	25.5 (44.6)	2.0 (6.7)	6,486 (21,840)	0.8 (2.4)	No	N/A	N/A
Scenario 5: 9% slope; summer onshore wind from west/southwest (50th percentile)							
Moderate-load grasses (gr4)	10.7	1.4	978	0.4	No	N/A	N/A
High-load grasses (gr7)	22.6	2.0	5,002	0.6	No	N/A	N/A

Table 4.20-1. BehavePlus Fire Behavior Modeling Results – Existing Conditions

Fire Scenario	Flame Length[1] (feet)	Spread Rate[1] (mph)	Fireline Intensity[1] (Btu/ft/sec)	Spot Fire[1] (miles)	Surface Fire to Tree Crown Fire	Tree Crown Fire Rate of Spread (mph)	Crown Fire Flame Length (feet)
Moderate-load grass-shrub (Gs2)	5.7	0.4	252	0.2	No	N/A	N/A
Moderate-load sagebrush scrub (Sh2)	3.6	0.1	93	0.2	No	N/A	N/A

Source: Appendix M-1.
Notes: mph = miles per hour; Btu/ft/sec = British thermal units per foot per second, N/A = not available.
1 Wind-driven surface fire.
2 Coast live oak (*Quercus agrifolia*) understory torching increases fire intensity. Modeling included canopy fuel over Sh4, which represents surface fuels beneath the tree canopies.
3 A surface fire in the mixed coast live oak forest would transition into the tree canopies generating flame lengths higher than the average tree height (25 feet). Viable airborne embers could be carried downwind for approximately 0.7 miles and ignite receptive fuels.
4 Crowning = fire is spreading through the overstory crowns.
5 Spotting distance from a wind-driven surface fire; it should be noted that the wind mph in parenthesis represent peak gusts of 50 mph.

Post-development fire behavior was analyzed for thinned and irrigated landscaping with plants that are acceptable with LACoFD (Zones A and B, FM8), as well as in an area with 50% thinning of the existing shrubs (Zone C, SH1) under peak weather conditions. Under such conditions, the expected surface flame length would be substantially lower, with flame lengths reaching between 3 feet and 20 feet with wind speeds of 40 mph or more. Under this scenario, as presented in Table 4.20-2 (see bold text), fire line intensities are expected to reach up to 4,022 Btu/feet/second with relatively slow spread rates of up to 4.2 mph and could have a spotting distance up to 1.4 miles away; which is substantially reduced when compared to existing conditions where fire line intensities are expected to reach up to 22,268 Btu/feet/second with spread rates of up to 6.9 mph and could have a spotting distance up to 2.4 miles away.

Table 4.20-2. BehavePlus Fire Behavior Modeling Results – Post-Project Conditions

Fire Scenario	Flame Length[1] (feet)	Spread Rate[1] (mph)	Fireline Intensity (Btu/ft/sec)	Spot Fire (miles)[2]
Scenario 1: 18% slope; summer onshore wind from northwest (50th percentile)				
FMZ Zone A (FM8)	1.2	0.0	9	0.1
FMZ Zone B (Gs1)	4.0	0.3	113	0.2
FMZ Zone C (Gs2)	5.7	0.4	253	0.2
Scenario 2: 22% slope; fall extreme offshore wind from east (97th percentile)				
FMZ Zone A (FM8)	2.1 (3.0)[2]	0.1 (0.2)	28 (63)	0.1 (0.4)
FMZ Zone B (Gs1)	7.4 (14.0)	0.7 (3.0)	434 (1,763)	0.3 (1.1)
Scenario 3: 16% slope; fall extreme offshore wind from southeast (97th percentile)				
FMZ Zone A (FM8)	2.0 (3.0)	0.1 (0.2)	26 (63)	0.1 (0.4)
FMZ Zone B (Gs1)	7.2 (14.0)	0.7 (3.0)	409 (1,763)	0.3 (1.1)
FMZ Zone C (Gs2)	10.4 (20.5)	1.0 (4.2)	914 (4,022)	0.4 (1.4)

Table 4.20-2. BehavePlus Fire Behavior Modeling Results – Post-Project Conditions

Fire Scenario	Flame Length[1] (feet)	Spread Rate[1] (mph)	Fireline Intensity (Btu/ft/sec)	Spot Fire (miles)[2]
Scenario 4: 17% slope; fall extreme offshore wind from south (97th percentile)				
FMZ Zone A (FM8)	2.0 (3.0)	0.1 (0.2)	26 (63)	0.1 (0.4)
FMZ Zone B (Gs1)	7.1 (14.0)	0.7 (3.0)	406 (1,763)	0.3 (1.1)
FMZ Zone C (Gs2)	10.3 (20.5)	0.9 (4.2)	907 (4,015)	0.4 (1.4)
Scenario 5: 9% slope; summer onshore wind from west/southwest (50th percentile)				
FMZ Zone A (FM8)	1.2	0.0	9	0.1
FMZ Zone B (Gs1)	4.0	0.3	113	0.2
FMZ Zone C (Gs2)	5.7	0.4	252	0.2

Source: Appendix M-1.
Notes: mph = miles per hour; Btu/ft/sec = British thermal units per foot per second.
1 Wind-driven surface fire.
2 Spotting distance from a wind-driven surface fire; it should be noted that the wind mph in parenthesis represent peak gusts of 50 mph.
3 The bold text identifies the most extreme fire behavior onsite for post project-conditions.

Based on the fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required FMZ on and off site and would not exacerbate the fire hazard conditions. As previously stated, the Project's HOA would be responsible for the maintenance of on-site FMZ, while off-site brush thinning would be maintained by neighboring property owners with the assistance of the Project's HOA to the extent that the neighboring property owners would allow it, and enforced by LACoFD. Wildland fires are a common natural hazard in most of Southern California. Southern California landscapes include a diverse range of plant communities, including vast tracts of shrublands and grasslands, like those found on and adjacent to the Project site. The most common type of fire anticipated in the vicinity of the Project site is a wind-driven fire from the east/south/southeast, moving through the chaparral and sage scrub on the adjacent lands. With the conversion of the landscape to ignition-resistant development, wildfires may still encroach upon and drop embers on the Project site but would not be expected to burn through the developed portion of the site due to the lack of available fuels and the presence of ignition-resistant construction. The Project, once developed, would not facilitate wildfire spread and would reduce projected flame lengths to levels that would be manageable by firefighting resources for protecting the on-site structures, especially given the ignition resistance of the structures (e.g., ember resistant vents, rooves) and the planned ongoing maintenance of Project landscaping. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection described above and required through MM-4.20-2 and MM-4.20-3 as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, would also reduce potential for impacts associated with an on-site fire spreading to off-site areas.

Potential Ignition Sources

In Southern California, humans play a major role in ignitions by influencing the timing and spatial pattern of fires (Keeley and Syphard 2018). As a result, humans account for more than 95% of ignitions in the region (Keeley and Syphard 2018). However, the number of ignitions and the area burned varies by an ignition source (Appendix M-1). In Los Angeles County, a common source of wildfire ignition stems from human activities such as smoking, playing with fire, equipment use, and power lines (Keeley and Syphard 2018). The Project would introduce new potential ignition sources to the Project site. Equipment-caused ignitions frequently result from exhaust or sparks from power saws or other equipment with gas or electric motors, such as lawnmowers, trimmers, or tractors. Ignitions are also

more likely to occur close to roads and structures, and intermediate structure densities (Appendix M-1). These sources of potential fire hazard would be introduced by the Project and have the potential to exacerbate wildfire risks, and thereby potentially expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Additionally, a vast WUI already exists in the area adjacent to Lyons Canyon, with older, more fire-vulnerable structures, constructed before stringent fire code requirements were imposed on residential development, with varying levels of maintained fuel modification buffers in the area. As discussed in detail in Appendix M-1, Lyons Canyon is a planned ignition-resistant community designed to include professionally managed and maintained fire protection components, modern fire code compliant safety features, and specific measures provided where ignitions are most likely to occur (such as roadways). Also, it should be noted that development adjacent to older communities has the potential to actually reduce the risk of ignition of older developments that were not built with today's construction standards and codes (Dicus et al. 2014). While this would not be the case if new communities were developed with old building codes, expansion of new development (built to increasingly stringent codes) buffers older fire-prone communities.

To minimize the impacts related to ignition sources, the Project has designed multi-scaled fire protection features to address the existing fire hazard, reduce ignition probability, and lower the fire risk for the Project and the surrounding area. As previously identified, the most effective solution to wildfire problems in the WUI is to address the wildfire hazard through land-use planning and ignition prevention. Therefore, the Project has outlined steps in which it would implement ignition reduction from common anthropogenic ignition sources, leverage its capacity for implementing fuels reduction including defensible space, and consider both on-site and off-site wildfire risk. The analysis below describes the multi-level approach the Project would take to lower the fire risk for not only the Project but also the surrounding area.

Construction

Project construction would introduce potential ignition sources to the Project site, including the use of heavy machinery and the potential for sparks during welding activities or other hot work. This could result in an exacerbation of wildfire risk and expose the temporary Project occupants (construction workers) to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire.

The Project would be required to comply with County, state, and LACoFD requirements for construction activities in hazardous fire areas, including fire safety practices, to reduce the possibility of fires during construction activities. Prior to any ground disturbance, surveys would be conducted for utility locations within the street or right-of-way and for potential methane from any historic oil well abandonment practices. This is crucial as when exposed to air, methane can be highly flammable and explosive. The Project would comply with 2022 County Fire Code Chapter 33, Fire Safety During Construction and Demolition, designating fire safety measures to reduce the possibility of fires during all phases of construction activities. The 2022 County Fire Code Chapter 33 includes precautionary measures, such as, but not limited to, fire watch/fire guards during hot works and heavy machinery activities (e.g., welding), spark arresters on all equipment, fire access during construction, water supply via hose lines attached to hydrants or a water tender pursuant to LACoFD requirements, red flag period restrictions, on-site fire prevention resources, and others. The Project would also implement MM-4.20-5, which requires improvements within the active development area to be in place, including utilities, operable fire hydrants, an approved temporary roadway surface, and FMZs established pursuant to the Construction FPP and LACoFD requirements prior to bringing lumber onto the Project site. The Project would also comply with Title 32 Section 326 of the 2022 County Fire Code, Activities in Wildfire Risk Areas, which provides safeguards to prevent the occurrence of fire and control the spread of fires that may be caused by activities in a wildfire risk area. To prevent ignitions from construction-based machinery, the Project would adhere to Section 326.12.1 of the 2022 County Fire Code, which prohibits the use or

operation of any tractor, construction equipment, engine, machinery, or any steam, oil, or gasoline-operated stationary or mobile equipment, from which a spark or fire may originate, unless such equipment is provided with a qualified device or spark arrester installed in or attached to the exhaust pipe, which will prevent the escape of fire or sparks.

In addition to compliance with all applicable regulations described above, mitigation is required to further address the potential for construction activity-related wildfire hazards due to the Project's location in the WUI. As required in MM-4.20-4, Construction Fire Prevention Plan, fire safety measures will be implemented to reduce the possibility of fires during the construction phase. Further, MM-4.20-5, Construction-Related Fire Prevention Measures, requires vegetation management to be implemented at the start of and throughout all phases of construction, and prohibits combustible materials on site until adequate fuel modification is implemented. Combustible materials must not be brought on site without prior Fire Department approval. Further, all new permanent power lines would be undergrounded for fire safety purposes, which would eliminate the risk of ignitions via contact between transmission lines and tree canopies or other vegetation. Any temporary construction power lines would only be permitted in areas that have been cleared of vegetation to prevent ignition. The pre-construction requirements outlined in MM-4.20-4 and MM-4.20-5 would reduce the risk of wildfire ignition and spread on the Project site during construction activities. Vegetation management, as described above, would also reduce the risk of wildfire spreading from within the active construction areas to offside fuel beds. Provided site improvements and vegetation management requirements are appropriately implemented and approved by LACoFD, and upon implementation of MM-4.20-4 and MM-4.20-5, construction activities are not anticipated to exacerbate wildfire risk such that project workers would be exposed to the uncontrolled spread of a wildfire or pollutant concentrations from a wildfire.

Roadside

As previously mentioned, proximity to roadsides influences the ignition potential for vehicle-based ignitions. The Project is adjacent to The Old Road and is west of I-5 and will construct a new internal roadway system, which would be developed to be consistent with the County's roadway standards (Title 21) and the 2022 County Fire Code, Section 503. All new roads would comply with applicable LACoFD and 2022 County Fire Code requirements regarding sizing, condition, maintenance, and secured access. As shown in Figure 4.20-2, the Project would provide a minimum of 10 feet of roadside fuel modification from the edge of any public or private roadway via the removal of flammable vegetation that may be used for firefighting access. Within the 10 feet, all flammable vegetation would be removed and subject to LACoFD approval. Additionally, all landscaping, including roadside and median landscaping controlled by the Project would be consistent with Appendix D of the FPP (Appendix M-1) detailing LACoFD's Guide to Defensible Space preferred plant pallet. All roadside fuel modification and landscaping would be maintained by the Project HOA, be subject to the maintenance agreement, and adhere to the requirements set forth in MM-4.20-3. Roadside fuel modification reduces or minimizes the ability for a vehicle-related spark, catalytic converter failure, or another ignition source to ignite and spread fire from the roadsides into unmaintained fuels. Additionally, internal roads would be adjacent to 150 feet of fuel modification and ignition-resistant structures, further reducing the likelihood that a roadside or vehicle-related fire would spread on site or off site. This is due to the separation from roadside ignition sources and potential fuel beds that will not only protect the Project but also adjacent communities. Ongoing vegetation maintenance along I-5 is provided by Caltrans and is expected to continue as part of overall fire hazard reduction efforts that are beyond the control of the Project.

Power Lines

Power line–based ignitions are rightly a cause for concern as recent fires have demonstrated how the presence of power lines (particularly the lower height distribution lines) can result in major wildfire ignitions. Part of the

challenge is that as humans push into WUI areas, power lines are often located in areas where access is difficult, creating challenges for firefighting tactics (Syphard and Keeley 2015). However, this risk can be reduced by burying power lines. Burying power lines significantly eliminates a potential ignition source within the Project site and benefits the larger vicinity. Further, Southern California Edison has recently taken a very aggressive approach to reduce ignitions via their power lines, including shutting down the electrical grid in areas deemed to be potentially vulnerable to ignition.

The existing electrical transmission lines could pose a potential fire ignition threat as transmission lines could come into contact with trees and other vegetation, particularly distribution lines strung at lower heights to provide power to buildings. As a part of Project construction, these distribution lines would be removed during grading, and all new power lines would be undergrounded. Further, ongoing vegetation maintenance is currently required within the right-of-way for existing transmission lines, specifically in areas near the Project site that would not be removed and undergrounded as part of the Project, per the California Public Utilities Commission General Order 95 rules. Southern California Edison has prepared a robust wildfire mitigation plan to continue providing maintenance and over time, replace existing assets/hardware with ignition-resistant and fire prevention features. As such, there would be no change in the existing conditions, and the Project would not exacerbate the risk of wildfire associated with the existing electrical transmission lines. As detailed in Appendix M-1 and MM-4.20-5, all new permanent power lines within the Project's development area would be undergrounded for fire safety purposes. Any temporary construction power lines would only be permitted in areas that have been cleared of vegetation to prevent ignition.

Operation

Existing off-site potential ignition sources near the Project site include the existing roadway and vehicles, existing overhead 66-kilovolt Southern California Edison sub-transmission lines, recreation activities, and other human-related ignitions. As discussed in Section 4.14, Population and Housing, the population generated by the Project based on 510 housing units would result in approximately 1,520 new residents at the Project site. Development of the Project would introduce new potential sources of ignition on the Project site, including increased human activity (e.g., barbeque, smoking, outdoor mechanical equipment, and vehicles traveling on internal and external roads). The Project also includes a new trailhead near the gated connection of the access road to The Old Road at the northeastern corner of the Project site. As depicted on Figure 3-5, Conceptual Trail Map, in Chapter 3 of this Draft EIR, these on-site trails would connect to adjacent public open spaces outside of the Project's boundaries, including the City's Rivendale Park and Open Space in Towsley Canyon, which would facilitate expanded use of trails in the Project area. Additionally, as discussed in Section 4.20.1, Existing Conditions, 173 wildfires have burned within a 5-mile radius of the Project site, and 7 recent wildfires have burned onto the Project site. In summary, the Project would increase human occupation in a WUI area, which has the potential to increase on-site ignitions and expose future Project occupants to pollutant concentrations from a wildfire and the uncontrolled spread of a wildfire.

Regulations and Project design would reduce this potential impact, and mitigation is necessary to further reduce the impact to less than significant. Due to the Project's location in a VHFHSZ, the Project would be required to design, construct, and maintain structures, roadways, and facilities in compliance with applicable local, regional, state, and federal requirements related to fire safety, emergency access, and evacuation, as well as building materials, setbacks, and defensible space requirements for development in fire hazard areas. The local, state, and federal rules, regulations, and policies set forth minimum standards for development strategies, building materials, systems, and fire prevention strategies for development in the WUI and fire hazard areas to reduce the risk of wildfire damage and losses.

In WUI areas, homes can be considered fuel and can be an ignition point for wildfires; therefore, the best mitigation is to reduce the likelihood of building ignition occurring (Zhou 2013). Research has found that structural characteristics, especially roofing, play a major role in reducing a structure's vulnerability to fire and the likelihood of burning (Gorte 2011; Knapp et al. 2021; Kolden and Henson 2019; Manzello et al. 2011; Syphard et al. 2017; Zhou 2013). Preventing the ignition of structures can result in the reduction of fire spread in surrounding WUI areas (Maranghideset al. 2012). With the incorporation of ignition-resistant construction in compliance with applicable regulations, the likelihood of structural ignition occurring within the Project site is minimized. Ignition-resistant construction is critical to preventing building ignitions from windblown embers. The Project would comply with Chapter 7A of the Los Angeles County Building Code (Title 26, Chapter 7A), "Materials and Construction Methods for Exterior Wildfire Exposure" so that the buildings are resistant to ignitions from direct flames, heat, and embers.

The Project would be required to include the latest ignition- and ember-resistant construction materials and methods for roof assemblies, walls, vents, windows, and appendages, as mandated by LACoFD and the County's Fire and Building Codes (e.g., Chapter 7A). The structure design is crucial against wind-driven fires, and newer homes are more likely to survive. Dual-paned windows protect against thermal exposure (Syphard et al. 2017). This lowers the threat from on-site fires impacting off-site areas as the structures themselves are very unlikely to act as fuel, which will minimize the potential for home-to-home ignitions, reducing the likelihood of an on-site fire spreading within the community or toward open space. The Project also includes vent coverings to prevent ember intrusion. The buildings would have National Fire Protection Association 13, 13R, or 13D automatic sprinklers (the type would be based on the type of structure and code requirements). Automatic sprinklers have an extremely high success rate of controlling or suppressing interior structure fires as they can isolate a fire to the point of origin, limit its ability to spread to the rest of the building, and even extinguish a fire before the responding firefighters arrive, thus damping the likelihood of ember production (NFPA 2021). This also reduces impacts on fire response capacity as the automatic sprinklers will allow firefighters to focus on reducing additional ignitions beyond the point of origin. Additionally, the adjacent fuel modification will aid in isolating on-site structure fires or accidental ignitions to the Project area should they occur. As such, the Project is inclusive of both protection measures including components to resist ignitions from wildland fuels, and the built environment.

As discussed above, fire behavior modeling was conducted (using BehavePlus software package) as part of the FPP to document the type and intensity of the fire that would be expected to occur from east, south, and southeast of the Project site. Pre- and post-Project site characteristics were considered in fire behavior modeling inputs (i.e., topography, vegetation, and weather). The modeled fire behavior indicated that post-Project buildout, the existing potential fire behavior would be reduced and would not facilitate wildfire spread. The analysis also showed that post-development would reduce projected flame lengths to levels that would be manageable by firefighting resources for protecting the Project site's structures, especially given the ignition resistance of the structures and the planned ongoing maintenance of the entire site landscape. Further, the Project's on-site roads and defensible space would be able to provide sufficient access for fire apparatus into a high-risk area that was previously limited. The modeling assumes the implementation of appropriate FMZs and fire protection, as required by the 2022 County Fire Code and MM-4.20-2, which must continue to be maintained in perpetuity, as required by MM-4.20-3. As detailed in Appendix M-1 and MM-4.20-5, all new permanent power lines within the Project's development area would be undergrounded for fire safety purposes, which would eliminate the risk of ignitions via contact between transmission lines and tree canopies or other vegetation.

The Project also provides water supply and fire flow through the construction of off-site and on-site water delivery system improvements with adequate water reserve, further improving firefighting resources in the area. Project water supply would be provided by one 2-million-gallon aboveground water storage tank at the southwest portion

of the developed area of the Project site. Other water supply would meet a 2-hour fire flow requirement of 2,500 gallons per minute with 20 pounds per square inch residual pressure. In addition to providing water supplies to the Project site, the Project's FMZs/defensible space areas would allow firefighters to safely position themselves at the development edge and begin tactical protection efforts (Warziniack et al. 2019). This would allow firefighters to not only readily protect structures and reduce the likelihood of home-to-home spread but would also provide a safe position to respond to off-site wildfires. Research has found that houses that were not defensible were almost three times more likely to be impacted by fire when compared to homes where defensible space and wildfire preparedness were implemented (Price et al. 2021). Using the Project's fire protection features, firefighters would be able to use the Project site as a tactical resource for not only protecting the on-site structures but also protecting open space areas and adjacent communities, whether it be from an on-site or off-site fire. The Project would create additional access for fire apparatus that did not previously exist and would enhance firefighters' ability to respond to an incident, thus increasing their ability to suppress a fire whether on site or off site.

As detailed in MM-4.20-1, signage would be placed at the new trailhead at the northeastern portion of the Project site, which would provide all users with information about how to safely use the trail, including restrictions on smoking and firearm usage. Trails within the control of the Project would be maintained by the County (as the trails would be dedicated with a 20-foot easement to the County); however, some of the existing trails outside of the Project's boundary are within the jurisdiction of the Los Angeles County Parks and Recreation Department and City of Santa Clarita Department of Parks, Recreation, and Community Services. Trails outside of the Project control would be maintained in accordance with Los Angeles County Parks and Recreation standards or City of Santa Clarita Department of Parks, Recreation, and Community Services. The implementation of the Project would improve access to these trails not only for recreational users but also for fire apparatuses in the event of a fire. This is due to the Project constructing a private access road along the outer northern and western edge of the development and increasing water resources in the area, which are critical to firefighting.

A key piece to the Project approach to lower the potential fire risk is to take steps to create a community that is fire-hardened and built with fire in mind. While this includes features such as defensible space, ignition reduction, construction management, and ignition-resistant construction, it also includes high fire risk awareness among residents.

MM-4.20-1 requires implementation of a robust homeowner education program about fire safety. The Project HOA would provide residents and occupants ongoing education regarding wildfire and the FPP's requirements. The educational information would include maintaining the landscape and structural components according to the appropriate standards designed for the community. Per MM-4.20-1, education would be provided in the form of mailers, emails, a community website, workshops and webinars, and a resident information pack. LACoFD would review and approve all wildfire educational material/programs before printing and distribution. Additionally, the education program would create a community volunteer fire watch group that would be trained to maintain vigilance for potential fires, alerting LACoFD of a potential fire and aiding in the implementation of fire-safe practices and red flag warning restrictions. The HOA Fire Safety Committee, described in MM-4.20-1, would be responsible for coordinating all fuel modification vegetation management for all common areas of the Project site, including roadsides clearance and FMZs, resident reports of fire hazards, FMZ inspection, and education. MM-4.20-1 would account for ongoing education and create a heightened level of wildfire risk awareness and readiness, elevating the fire prevention efforts and creating a populace that understands the risks, how to reduce them, and what to do if a fire should occur. The HOA would ensure private homeowner lots comply with the FPP initially and on an ongoing basis. Additionally, the HOA would be responsible for ensuring long-term funding and ongoing compliance with all provisions of the FPP, including vegetation planting, fuel modification on the perimeter, and maintenance

requirements on all common areas and roadsides. Maintaining wildfire risk awareness and fire protection measures through the HOA would further lower the impact of the Project on surrounding areas by raising wildfire awareness and thereby reducing the probability of ignition occurring and preventing spread off-site through the managed and maintained landscapes and perimeter managed FMZs. Finally, should ignition occur, residents would be trained on the appropriate response, and fire would be unlikely to spread off site due to the presence of fire-resistant landscaping, ignition-resistant construction, and FMZs.

Summary

Project construction would introduce potential ignition sources to the Project site, including the use of heavy machinery and the potential for sparks during welding activities or other hot work. This could result in an exacerbation of wildfire risk and expose the temporary Project occupants (construction workers) to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire. However, with implementation of the pre-construction requirements outlined in MM-4.20-4 and MM-4.20-5, the Project would reduce the risk of wildfire ignition and spread on the Project site during construction activities, and the impact would be less than significant.

Each of the fire protection features provided as part of the code requirements or customized for the Project are the result of the FPP's evaluation, and they would work to protect the site, its structures, and its occupants from wildfires. These features have a similar positive impact on the potential for wildfire ignitions caused by the Project and its inhabitants. The ignition-resistant landscapes and structures and the numerous specific requirements would minimize the ability for an on-site fire to spread to off-site fuels, as follows:

- **Ignition-resistant, planned, and maintained landscape:** All site landscaping of common areas and FMZs will be subject to strict plant types that are lower ignition plants with those closest to structures requiring irrigation to maintain high plant moistures, which equates to difficult ignition. These areas are closest to structures, where ignitions would be expected to be highest, but will be prevented through these ongoing maintenance efforts.
- **FMZ around perimeter of Project:** Where achievable on site, the FMZ is a minimum of 200 feet and where not achieved on site, the adjacent property owner will be required to provide brush clearing to achieve the full 200 feet. The on-site FMZ for the majority of the Project (varying between 54 and 200 feet wide) includes specifically selected plant species, very low fuel densities (only 30% retention of native plants in outer zones and irrigated inner zones), and ongoing HOA-funded and -applied maintenance, resulting in a wide buffer between the developed areas and the off-site native fuels. Where less than 100 feet of on-site FMZ is provided, additional fire protection features are provided even though a total of 200 feet of FMZ will be provided when the off-site area is included. Off-site brush thinning will be established and maintained by the neighboring property owner, with Project HOA assistance to the extent the neighboring property owner allows, and inspected and enforced by LACoFD annually.
- **Annual FMZ inspections:** The Trails at Lyons Canyon HOA's Covenants, Conditions, and Restrictions shall require annual fuel modification inspections to be conducted to confirm and document compliance with fuel modification maintenance requirements, as defined in the LACoFD-approved FMP. The HOA shall obtain an FMZ inspection and report in May/June of each year to document and certify that vegetation management activities throughout the Project site have been performed. If the FMZ areas are not compliant, the HOA shall have a specified period to correct any noted issues, and re-inspection shall be required to achieve the annual certification of compliance. Documentation of compliance shall be retained by the HOA.

- **Ignition resistant structures:** All structures will be built to the Chapter 7A (CBC) ignition-resistant requirements that have been developed and codified as a direct result of after fire save and loss assessments. These measures result in homes that are designed, built, and maintained to withstand fire and embers associated with wildfires. It must be noted that the wide FMZs would not result in wildfire directly next to these structures. Homes and buildings can be built in the VHFHSZs and WUI areas when they are part of an overall approach that contemplates wildfire and provides design features that address the related risk. A structure within a VHFHSZ that is built to these specifications can be at lower risk than an older structure in a non-FHSZ. The ignition resistance of on-site structures would result in a low incidence of structural fires, further minimizing potential for Project-related wildfires.
- **Interior fire sprinklers:** Sprinklers in single and multifamily residences are life safety systems designed to provide additional time for occupants to escape the home. The common benefit of fire sprinklers is that they are very successful at assisting responding firefighters by either extinguishing a structural fire or at least containing the fire to the room of origin and delaying flash over. This benefit also reduces the potential for an open space vegetation ignition by minimizing the possibility for structure fires to grow large and uncontrollable, resulting in embers that are blown into wildland areas. This is not the case with older existing homes in the area that do not include interior sprinklers.
- **Fire access roads:** Roads provide access for firefighting apparatus. Project roads provide code-consistent access throughout the community. Better access to wildland areas may result in faster wildfire response and continuation of the fire agencies' successful control of wildfires at small sizes.
- **Power lines:** All new permanent power lines would be undergrounded for fire safety purposes, which would eliminate the risk of ignitions via contact between transmission lines and tree canopies, other vegetation, etc.
- **Water:** Providing firefighting water throughout the Project with hundreds of fire hydrants accessible by fire engines is a critical component of both structural and vegetation fires. The Project provides firefighting water volume, availability, and sustained pressures to the satisfaction of LACoFD. Water accessibility helps firefighters control structural fires and helps protect structures from and extinguish wildfires.

Once the Project is developed, the fire spread patterns on the Project site would be altered, since the Project would result in fuel modification to maintained structures and landscaping, substantially interrupting the continuous fuels across the Project site. The fire behavior modeling indicated that the projected flame lengths would be reduced to levels that would be manageable by firefighting resources. Additionally, the Project would be required to comply with all provisions in the Los Angeles County Code regulating development in a VHFHSZ. With the conversion of the undeveloped landscape to ignition-resistant development and landscaping, wildfires may still encroach upon and drop embers on the Project site but would not be expected to burn through the Project site due to the lack of available readily ignitable fuels (e.g., all site landscaping will be low fire ignition potential, irrigated, and maintained versus unmaintained native vegetation) and the typical ember decay rate. Further, in the event of a fire starting on the Project site, the fire would not be anticipated to result in a wildfire that would spread to off-site wildlands due to the buffer created by the proposed FMZs, ignition-resistant construction, landscape requirements, improvement of firefighting access, and increased wildfire risk awareness.

The Project has the potential to be exposed to wildfires due to existing slopes, prevailing winds, and other factors that are conducive to the spread of a wildfire. However, the Project would result in the conversion of readily ignitable fuels to irrigated/thinned landscaping and development. Structures would not be sited on the steeper areas of the Project site. The proposed structures for the Project would be built using ignition-resistant materials pursuant to the County Fire and Building Codes (Chapter 7A – focusing on structure ignition resistance from flame impingement

and flying embers in areas designated as high fire hazard areas), which are based on the amended California Fire and Building Codes and MM-4.20-2 (requires 6-foot wall between on-site structures adjacent to 16 lots in the extreme southern portion of the Project [refer to Project's Fuel Modification Figure 10 in Appendix M-1]). This would be complemented by improved water availability, capacity, and delivery system; Project area firefighting resources; fire department access throughout the developed areas; monitored defensible space/fuel modification; interior, automatic fire sprinkler systems in all structures; monitored interior sprinklers in applicable structures; and other components that would provide properly equipped and maintained structures with a high level of fire ignition resistance. With adherence to the County Code, regulatory requirements, and MM-4.20-1 through MM-4.20-5, the Project would not facilitate wildfire spread or exacerbate wildfire risk, as demonstrated by the fire behavior modeling analysis presented above and in the FPP.

In the event of a wildfire requiring evacuation of the Project site, evacuation of occupied residences could be delayed, potentially exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. As such, the Project would potentially expose occupants to wildfire, and the impact is potentially significant. However, the Project's WEP (Appendix M-2) determined that the Project and existing land uses would be able to evacuate within identified potential evacuation routes available to residents and provides emergency preparedness resources (refer to Appendices A1, A2, and B-1 through B-4 of Appendix M-2) to support situational awareness and household preparedness. As discussed in Appendix M-2 and detailed in MM-4.20-1, the HOA would be responsible for educating Project occupants about the local wildfire risks and the County's Ready! Set! Go! model of evacuation that encourages early evacuation of residents. MM-4.20-1 through MM-4.20-5 would ensure that the Project would not conflict with applicable General Plan policies as listed in Section 4.20.2, Regulatory Requirements, above, and as analyzed in Table 4.11-1 in Section 4.11 of this Draft EIR. Therefore, with implementation of MM-4.20-1 through MM-4.20-5, the Project would not constitute a potentially dangerous fire hazard and would not exacerbate wildfire risk and thereby expose Project occupants to pollutant concentrations from wildfire smoke, and the impacts related to Project would be less than significant with mitigation.

Threshold 4.20c: 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?

The Project would involve the development of 510 residential units, a recreation center, flood control lots, open space, internal roadways and trails, and a water tank. The Project would include approximately 150 acres of natural open space. The Project would involve installation and maintenance of associated infrastructure, including FMZs, roads and trails, service utilities (e.g., water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications services), water drainage, and water quality improvements (e.g., stormwater basins). Infrastructure installation would include off-site connections.

Construction

A system of roads and trails, FMZs, water quality improvements, and service utilities would be installed as part of Project construction, and construction activities would temporarily introduce potential ignition sources to the area (e.g., through grubbing, heavy machinery hot work, combustion engines in construction equipment). The Project would comply with 2022 County Fire Code Chapter 33, Fire Safety During Construction and Demolition, designating fire safety measures to reduce the possibility of fires during construction activities. Chapter 33 of the 2022 County Fire Code includes the following measures: fire watch/fire guards during hot works and heavy machinery activities (e.g., welding), spark arresters on all equipment, fire access during construction, water supply via hose lines

attached to hydrants or a water tender pursuant to LACoFD requirements, red flag period restrictions, on-site fire prevention resources, and others. The Project would also comply with Title 32 Section 326 of the 2022 County Fire Code, Activities in Wildfire Risk Areas, which provides safeguards to prevent the occurrence of fire and control the spread of fires that may be caused by activities in a wildfire risk area. As described above, the Project would be subject to regulations, which would reduce impacts; however, impacts would remain potentially significant prior to mitigation. Therefore, implementation of MM-4.20-5 is required. As outlined in MM-4.20-5, fuel modification requirements would be implemented at the start of and throughout all phases of construction, and combustible materials would not be brought on site until site adequate fuel modification is created around all grading, site work, and other construction activities in areas where there is flammable vegetation. Combustible materials would not be brought on site without prior fire department approval. Further, as detailed in MM-4.20-5, all new permanent power lines would be undergrounded for fire safety purposes, all but eliminating the risk of ignitions via contact between transmission lines and tree canopies, other vegetation, etc., before combustibles are brought on site. Any temporary construction power lines would only be permitted in areas that have been cleared of vegetation to prevent ignition. All regulatory requirements and MM-4.20-4 and MM-4.20-5 would be adhered to in all phases of construction on site and off site. Therefore, with implementation of the regulatory standards and MM-4.20-4 and MM-4.20-5, installation or maintenance of infrastructure associated with the Project would not increase the risk of wildfire ignition and spread on the Project site that could exacerbate wildfire risk during construction activities; therefore, impacts would be less than significant with mitigation.

Operation

As discussed above, the Project would require installation or maintenance of roads, fuel breaks, emergency water sources, power lines, and other utilities that may exacerbate fire risk. During operations, use of internal roadways and maintenance roads could result in vehicle-related sparks, catalytic converter failure, or another ignition source, which could ignite and spread fire from the roadsides into unmaintained fuels. Additionally, FMZs that are not regularly maintained would eliminate the buffer from unmaintained fuels, increasing risk of wildfire encroaching on the Project. Further, power line–based ignitions can result in significant wildfire ignitions, as seen throughout the state.

Fuel Modification Zones

An important component of a fire protection system for the Project is the provision of ignition-resistant landscapes and modified vegetation buffers. FMZs are designed to provide vegetation buffers that gradually reduce fire intensity and flame lengths from advancing fire (on site or off site) by strategically placing thinning zones, restricted vegetation zones, and irrigated zones adjacent to each other on the perimeter of the WUI exposed structures. Fuel modification redistributes risk on a landscape and alter the interaction between fire, fuels, and weather (Cochrane et al. 2012). Fuel modification also results in a shadow effect on the untreated landscape by altering the probability and timing of burning and affecting wildfire size (Cochrane et al. 2012).

The Project would be exposed to naturally vegetated and undeveloped open space areas along the perimeter of the Project site. As previously discussed, the Project site is located in a VHFHSZ, and implementation of an FMP is required. An FMP, as depicted in Figure 4.20-2, has been prepared for the Project, as part of the Project's FPP (Appendix M-1), in accordance with the provisions of the 2022 County Fire Code. The FMP for the Project must be reviewed and approved by the Forestry Division of LACoFD for consistency with defensible space and fire safety guidelines. In accordance with 2022 County Fire Code provisions, the FMP would include the vegetation management activities described below.

Per the 2022 County Fire Code (Title 32, Fire, Section 4908), an FMZ that consists of a 30-foot-wide Zone A and a 70-foot-wide Zone B for a total of 100 feet, and an additional 100-foot-wide Zone C is required around all habitable structures and for areas adjacent to natural-vegetated open space. As previously described above, the Project's FMZs range between 54 and 200 feet wide on site between the natural open spaces along the Project perimeter and where structures are exposed to open space areas (Figure 4.20-2) with the majority of the Project including most of the FMZ on site. As stated above, LACoFD requires neighboring property owners to provide brush thinning to achieve the full 200 feet of FMZ, which will be inspected and enforced annually by LACoFD. The Project's HOA would cooperate with the neighboring property owner to the extent they allowed in performing annual maintenance activities. The HOA would automatically schedule the off-site FMZ thinning work along with the on-site maintenance under such an arrangement. LACoFD's FMP Guidelines (Appendix D-1 of Appendix M-1 of this Draft EIR) provides a representative sample of which types of plants are appropriate for each zone considering their size, moisture content, leaf litter production, and chemical composition. Furthermore, Zones A and B will be irrigated and, in combination with a wide thinning zone (Zone C), will provide a significant buffer between a house or other landscape fire and native vegetation. An FMZ can have the same benefit of buffering-preserved open space areas from accidental ignitions within communities while also having positive ecological impacts (Wang et al. 2021).

Vegetation management within on-site FMZs would be the responsibility of the Project's HOA and maintenance would occur on an annual basis (by May 1st of each year) and more often, as needed, for fire safety, as determined by LACoFD. The Project would adhere to MM-4.20-3, which requires the HOA to conduct annual FMZ inspections to ensure the FMZs maintain functionality. All off-site brush thinning will be established and maintained by the property owner with assistance by the Project's HOA, per a license agreement with the City. Inspection and enforcement will be by LACoFD annually.

Road Width and Circulation

The Project would involve the installation of an interior circulation network. New roadways would introduce vehicles to the area, which could increase fire risk from vehicle-related sparks, catalytic converter failure, or another ignition source, which could ignite and spread fire from the roadsides into unmaintained fuels. However, managed roadside landscape and hardscape would minimize the potential that these ignition sources would result in a fire. Internal circulation consists of a loop roadway system that connects both the primary and secondary access points along The Old Road, which satisfies secondary access requirements detailed in Los Angeles County Code of Ordinances Title 21, Chapter 21.24, Design Standards, Part 1, Access. All interior circulation roads include all roadways that are considered common or primary roadways for traffic flow through the Project site and for fire department access serving all proposed residential lots. The road system will be developed to be consistent with the County's roadway standards (Title 21) and the 2022 County Fire Code, Section 503. All roads would comply with applicable LACoFD and 2022 County Fire Code requirements regarding size, condition, maintenance, and secured access.

As required under the 2022 County Fire Code, fire engine apparatus access roads, where a fire hydrant is located, shall be constructed to a minimum unobstructed road width of 26 feet, exclusive of shoulders, and shall be improved with aggregate cement or asphalt paving materials. Further, all fire access roads, including those along the northern boundary of the development footprint, would be maintained with a minimum 20-foot-wide roadway that is clear to the sky, and all flammable vegetation or other combustible growth would be removed for a minimum of 10 feet on each side of the roadway (Title 32, Section 325.10). Additionally, fire access roadways that allow parking shall provide a minimum clear width of not less than 34 feet for parking on one side and a clear width of not less than 42 feet for parking on both sides. The interior residential access roads will be designed to accommodate a minimum of a 75,000-pound fire apparatus load. All private and public roads that may be used for fire access must be cleared of all flammable growth. The presence of vehicles and human activity along newly

installed roads would introduce new potential ignition sources to the Project area; however, adherence to these regulatory requirements would reduce the risk of fire ignition along roadways and ensure ease of accessibility for ingress and egress of fire apparatus. Further, as described above, the Project would be improving fire department access to an area with previously limited access, creating improved firefighter resources, and the roads would be adjacent to ignition-resistant construction and 150-feet of fuel modification. Thus, the new roads would not significantly exacerbate fire risk.

Utilities

The installation and maintenance of utilities for the Project has the potential to increase fire risk within the Project area. As discussed above, power line–based ignitions are rightly a cause for concern as recent fires have demonstrated how the presence of power lines (particularly the lower height distribution lines) can result in significant wildfire ignitions. Additionally, without a sufficient supply of water for the required fire flows and pressure to meet the demands for fire hydrants and interior fire sprinkler systems for all structures, the Project could exacerbate wildfire risk, which would create a potentially significant impact.

As part of the Project, utility service lines, including those for water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications services, would be extended from their current locations to the Project structures, as further discussed in Section 4.19, Utilities and Services Systems, of this EIR. Utility installation would include off-site utility connections. As described in MM-4.20-5, all new power lines and existing power lines on site would be installed underground for fire safety purposes and to reduce the fire risk associated with power line ignition. In addition, if temporary construction power lines are installed, this would only be done so in allowed areas that have been cleared of combustible vegetation. Undergrounding power lines, both new and old, would significantly reduce fire risk on site and in the larger area. Further, prior to the undergrounding of any utilities, the Project would survey for utility collections and adhere to all regulations to ensure methane safety before grading or ground disturbance, as failure to do so would create the potential for wildfire to start on site.

The water purveyor for the Project is SCV Water. The Project would construct or fund the construction of off-site and on-site infrastructure improvements to the existing water delivery system with adequate water reserve, including a new 2-million-gallon water tank. The water tank would be constructed at an elevation, which would allow for continuous, gravity-fed water supply in the event of power failure. The water tank's chemical feed building would be provided 100 feet of FMZ ,and the tank access road would be provided 10 feet of FMZ. Water utilities will be connected prior to any construction. Internal waterlines will also supply sufficient fire flows and pressure to meet the demands for required on-site fire hydrants and interior fire sprinkler systems for all structures. Per Section 20.16.060 of the County Municipal Code, the Project includes a 2-million-gallon aboveground water storage tank and associated equipment at the southwest of the development area, which will be accessed via a newly constructed, code-compliant interior roadway. Water supply would meet a 2-hour fire flow requirement of 2,500 gallons per minute with 20 pounds per square inch residual pressure unless otherwise determined by LACoFD. The water storage tank would meet the fire flow requirements and water storage requirements per Section 20.16.060 of the County Municipal Code. Fire hydrants would be installed in compliance with Appendix B and Appendix C of the 2022 County Fire Code. The Project would be increasing water connections and availability in an area where they were previously limited, including fire hydrants. Additionally, in the Project area, Castaic Lake and Lake Piru are large bodies of water that would serve as an additional emergency water supply, which LACoFD could use for aerial water drops in the event additional water resources are needed. Water is a crucial firefighting resource, and the Project fire flow could be used for both on-site fires and off-site fires.

As related to the operation of the Project, with implementation of the regulatory standards and MM-4.20-3 and MM-4.20-5, the installation or maintenance of infrastructure associated with the Project would not increase the risk of wildfire ignition and spread on the Project site that could exacerbate wildfire risk during operational activities; therefore, the impact would be less than significant with mitigation.

Summary

As discussed above, a system of roads and trails, FMZs, water quality improvements, and service utilities would be installed as part of Project construction, and the associated construction activities would temporarily introduce potential ignition sources to the area (e.g., heavy machinery hot work). During operations, use of internal roadways and maintenance roads could result in vehicle-related sparks, catalytic converter failure, or another ignition source that could ignite and spread fire from the roadsides into unmaintained fuels. Additionally, FMZs that are not regularly maintained would eliminate the buffer from unmaintained fuels, increasing risk of wildfire encroaching on the Project. Further, power line–based ignitions can result in significant wildfire ignitions, as seen throughout the state.

FMZs and other vegetation management activities that would occur at the start of construction and throughout the life of the Project are designed to provide vegetation buffers that gradually reduce fire intensity and flame lengths from an advancing fire. FMZs that are strategically designed with proper placement of fuel treatments can also facilitate fire suppression within a landscape (Braziunas et al. 2021). By reducing the potential for wildfire in open space areas, there is a corresponding reduction in potential negative impacts on existing communities that are situated within or at the edge of the greater open space/fuel bed. Consequently, the Project would not exacerbate fire risk, provided that FMZs and other vegetation management activities are implemented and enforced according to LACoFD requirements. The proposed FMZs and other vegetation management activities would reduce the fire risk by thinning or removing combustible vegetation and implementing a landscape plan with more adequately spaced, drought-tolerant, low-fuel-volume plants to provide a reasonable level of protection to structures from wildland fire. As described in MM-4.20-5, vegetation management for the Project area shall be performed pursuant to the FPP and LACoFD requirements on all building locations prior to the start of other construction activities and prior to any import of combustible construction materials. Adequate fuel modification must be created around all grading, site work, and other construction activities in areas where there is flammable vegetation. Combustible materials would not be brought on site without prior fire department approval. With implementation of MM-4.20-4 and MM-4.20-5, impacts associated with potential exacerbation of fire risk would be reduced to less than significant. Installation of Project roads, service utilities, FMZs, drainage, water quality improvements, and other associated infrastructure would not exacerbate wildfire risks provided that the appropriate fire prevention, access, and vegetation management activities, as outlined throughout the FPP in Appendix M-1 and described above, are implemented. Further, the Project's FPP details measures to enhance structure ignition resistance for any structure subject to less than 100 feet of on-site FMZ. These enhancements increase the time necessary for exposure to wildfire to result in ignition beyond the timeframe that the nearest wildland fuels would be sustained and are determined to meet the intent of providing a full 200 feet of FMZ. Off-site brush thinning will be established and maintained by the neighboring property owner with Project HOA assistance to the extent the neighboring property owner allows and will be inspected and enforced by LACoFD annually. Therefore, in the unlikely scenario where the off-site FMZ maintenance is delayed by the neighboring property owner, the buildings exposed to the off-site area are designed, constructed, and maintained for fire safety regardless of the off-site FMZ completion.

Given that the activities involved with installation or maintenance of associated infrastructure would require ground disturbance and the use of heavy machinery associated with trenching, grading, site work, and other construction and maintenance activities, the installation of related infrastructure could potentially result in temporary or ongoing

impacts to the environment. However, the installation and maintenance of roads, FMZs, service utilities, and drainage and water quality improvements are part of the Project analyzed herein. As such, any potential temporary or ongoing environmental impacts related to these components of the Project were already accounted for and have been analyzed in this EIR as part of the impact assessment conducted for the entirety of the Project. Additionally, the Project would be required to comply with all regulatory requirements and MM-4.20-4 and MM-4.20-5 outlined within this EIR for the purposes of mitigating impacts associated with trenching, grading, site work, and the use of heavy machinery. No adverse physical effects beyond those already disclosed in this Draft EIR would occur as a result of the implementation of the Project's associated infrastructure, and impacts would be less than significant after mitigation.

Threshold 4.20d: 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 downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Topography influences fire risk by affecting fire spread rates. Typically, steep terrain results in faster fire spread upslope and slower spread downslope. Terrain that forms a funneling effect, such as chimneys, chutes, or saddles, on the landscape can result in especially intense fire behavior. Conversely, flat terrain tends to have little effect on fire spread, resulting in fires that are driven by vegetation and wind. Vegetation plays a vital role in maintaining existing drainage patterns and the stability of soils. Plant roots stabilize the soil, and leaves, stems, and branches intercept and slow water, allowing it to more effectively percolate into the soil. Removal of surface vegetation reduces the ability of the soil surface to absorb rainwater and can allow for increased runoff that may include large amounts of debris and mudflows. If hydrophobic conditions exist post-fire, the rate of surface water runoff is increased since water percolation into the soil is reduced (Moench and Fusaro 2012). The potential for surface runoff and debris flows, therefore, increases significantly for areas recently burned by large wildfires (Moench and Fusaro 2012).

In addition to the Project's location in a fire-prone area of Southern California, the Project site and surrounding area are topographically diverse, with slope gradients ranging from moderate to steep. Lyons Canyon is partially within the Project site, which is within the foothills of the Santa Susana Mountains. Steep hillsides and ridgelines are found across the Project site. Elevations on the site range from 1,654 feet amsl in the southwestern portion of the Project site to 1,300 feet amsl along The Old Road (Appendix E-1). On-site slope gradients vary from approximately 3:1 (horizontal to vertical), which equates to a percentage slope of 33.5% (or 18.5-degree slope) to a ratio of 0.75:1, which equates to a percentage slope of 133% (or 53-degree slope), see Figure 2-5. The potential for debris flows exists anywhere that a moderate to thick accumulation of residual soil, slope wash, or weathered bedrock materials occur on moderate to steep slopes, as shown in Figure 4.7-1, Site Geologic Map, of Section 4.7, Geology and Soils. Such areas have a maximum estimated thickness of debris flows up to 16 feet deep (Section 4.7 and Appendix E-1).

Slope failures, mudflows, and landslides are common in areas where steep hillsides and embankments are present, and such conditions would be exacerbated in a post-fire environment where the vegetative cover has been removed. Vegetation removal as a result of vegetation management, such as that proposed for the Project, could result in changes to drainage patterns and slope stabilization. The Project site has been previously disturbed by several fires in past years. As discussed above and shown in Appendix B in Appendix M-1, the 2020 Elsmere Fire (approximately 159.2 acres), 2020 Calgrove Fire (approximately 4.2 acres), and 2019 Saddle Ridge Fire (approximately 8,799.3 acres) are the most recent fires. Seven fires have burned on the Project site; most recently the 2016 Sage Fire (approximately 850.9 acres) burned 216.5-acres on site. Given the Project's location in fire-prone Southern California, Project occupants and structures have the potential to be exposed to downslope or downstream flooding

or landslides as a result of post-fire conditions. Additionally, the Project has the potential to exacerbate a wildfire and expose people and structures off site to downslope or downstream flooding or landslides. Therefore, the Project could have potentially significant impacts related to downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Construction

Construction activities have the potential to start a wildfire on site that could spread and greatly reduce the amount of vegetation from hillsides. Plant roots stabilize the soil, and aboveground plant structures slow water, allowing it to percolate into the soil. Removal of surface vegetation as a result of wildfire reduces the ability of the soil surface to absorb rainwater and can allow for increased runoff that may include large amounts of debris. If burned or exposed soil conditions exist post-fire, the rate of surface water runoff and debris flow increases as water percolation into the soil is reduced. The potential for surface runoff and debris flow increases significantly for areas recently burned by large wildfires (Moench and Fusaro 2012). During construction activities, the Project has the potential to exacerbate wildfire risk and expose people and structures off site to downslope or downstream flooding or landslides. Therefore, as a result of runoff, post-fire slope instability, or drainage changes, the Project could have potentially significant impacts related to downslope or downstream flooding or landslides.

As described in Section 4.7, construction activities on the Project site must adhere to the recommendations of the Geotechnical Report (Appendix E-1), which includes detailed requirements for grading. Prior to issuance of the grading permit, a final geotechnical report would be submitted to the County based on the final design and development plan. All design, development, and monitoring requirements identified would be incorporated as conditions of approval. All grading would be regulated by Chapter 70 of Title 26 of the Los Angeles County Building Code, including requirements for issuance of a grading permit (i.e., a conditional use permit for grading and for development in a hillside management area). As described in Section 4.7, prior to performing earthwork, the existing vegetation and any deleterious debris would first be removed from the site. All unsuitable soils in the areas of grading that would receive fill would be removed to competent bedrock materials and replaced with engineered fill. After the site is cleared and excavated as recommended, the exposed subgrade soils would be brought to the optimum moisture content and rolled with heavy compaction equipment. Existing landslide areas on the Project site would be removed in their entirety and replaced with stability fill. Development of the Project site would require 12 cut slopes, some of which would require overexcavation and recompaction with stability fill, construction of retaining walls across the toe of the cut slope, and/or terrace drains. Rough grades would be sloped so as not to direct water flow over slope faces, and the pad gradients would not slope toward any descending slopes in order to reduce the potential for surficial erosion (Appendix E-1).

The Project would be subject to requirements to reduce erosion per the grading permit, conditional use permit, and the final geotechnical report. The Project design will account for the areas where soil erosion is a concern and will avoid construction activities proximate to prominent ridgelines and steep slopes. Additionally, as described above, loose soil material will be replaced with engineered fill to provide a stable base. Therefore, compliance with current regulatory requirements would reduce any adverse geological impacts. The Project would be designed to remove unstable soils, stabilize potential landslide areas, and compact engineered fill to meet County grading and soil compaction requirements. As described above and in Section 4.7, with adherence to regulatory requirements and County-specific grading requirements, impacts associated with potential landslides would be less than significant.

Regarding the potential for erosion and/or flooding during construction, as discussed in Section 4.10, Hydrology and Water Quality, the Project would require construction activities, including grading and removing vegetation, that would alter existing drainage patterns and flows within the Project site, increase erosion and the rate of surface

flows, and contribute to flooding during construction activities. However, the development footprint of the Project within the 233.49-acre site would minimize impacts by clustering the development toward the northeast portion of the Project site and including approximately 150 acres of natural open space in the southern portion of the Project site.

The Project design includes features that would manage runoff, which would reduce post-fire slope instability, reducing impacts from downslope or downstream flooding or landslides. Additionally, County Code Appendix J, Grading, and construction general permit requires preparation of a site-specific stormwater pollution prevention plan (SWPPP) and erosion and sediment control plan (ESCP), which would be prepared prior to all earthwork activities in compliance with applicable state and County regulations and would be implemented during Project construction and grading activities, including the grading activities of the existing flood zone. The ESCP must include best management practices (BMPs) to address transport of sediment and protect properties from erosion, flooding, and deposition of mud or debris. The SWPPP must include BMPs, including erosion control measures, which would reduce impacts related to post-fire slope instability. The SWPPP would be subject to review and approval by the County for compliance with the County Public Works Construction Site Best Management Practices Manual (Public Works 2010). Additionally, all Project construction activities are required to comply with the Public Works grading permit regulations, which require the implementation of grading measures, including a wet weather erosion control plan if construction occurs during the rainy season, as well as inspections to ensure that sedimentation and erosion are minimized.

As described in Section 4.10, the Project's construction must be implemented in accordance with County Code Appendix J, Grading, which sets forth detailed requirements for site grading activities, including the requirement to submit a grading plan to the satisfaction of the County's Building Official, which must be based on an approved geotechnical report. As described in Section 4.7 of this Draft EIR, the County Code Appendix J (see J104.2.2, Regular Grading Requirements) sets forth detailed grading requirements that address the contours, flow areas, elevations, or slopes that define existing and proposed drainage patterns; the location of all recorded floodways as established by Chapter 11.60 of Title 11, Health and Safety, of the County Code; and the location of all Special Flood Hazard Areas as designated and defined in Title 44 of the Code of Federal Regulations. Further, as required by County Code Appendix J, Section J105.11, routine inspection reports must be prepared and filed with the County's Building Official to ensure requirements with all applicable County Code mandates. Therefore, the Project would be constructed in a manner that requires removal of on-site landslide areas, implementation of SWPPP and ESCP BMPs to address surface runoff during construction activities, and compliance with the approved grading plan in accordance with the grading permit restrictions, which would ensure that the Project would not result in significant on-site or off-site landslides, erosion, or flooding.

Therefore, with compliance with applicable regulations, short-term construction activities would not 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, and impacts would be less than significant.

Operation

The Project would include approximately 150 acres of natural open space, which would include steep hillsides and vegetation that contain existing fire risks. The Project would introduce new populations into the WUI; therefore, the Project could have the potential to result in potentially significant impacts through exposure of 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.

However, the Project would implement the Project's grading plan, which has been prepared in compliance with all applicable regulations, and due to the development of the Project site in compliance with the Geotechnical Report (see Section 4.7), the development of the Project would not result in significant long-term operational impacts related to landslides. Specifically, as described above under "Construction" and as further detailed in Section 4.7, cut slopes within the Project site would be designed to ensure appropriate drainage and long-term stability. Furthermore, as stated in Section 4.7, licensed geotechnical engineers have determined that the proposed building lots have acceptable separation, either vertical or horizontal, from natural slopes and potential debris flow source areas, indicating that the potential for adverse effects from existing debris flow was determined to be minimal.

Regarding the potential for flooding, as described in Section 4.10, during storm events, all stormwater flows from outside of the Project's developed footprint would be directed into two larger regional debris basins (Basins A and B) and five smaller basins (Basins C, E, F, G, and J), which would allow for settlement of debris and would then pass clear flows into the on-site storm drainage system to the outfall in the existing reinforced concrete box culvert at The Old Road. The Project would not alter the potential for soil erosion or siltation from areas outside of the graded/developed footprint, as discussed in Section 4.10, of this Draft EIR. The proposed water quality BMP and storm drainage system design would ensure that there would be no contact between stormwater from the developed Project site and the adjacent undeveloped land, thereby ensuring that no undeveloped areas would be subject to erosion or associated siltation due to Project operations. Further, the proposed water quality BMPs would be sized to have sufficient capacity to treat 1.5 times the design volume generated on site, based on the 85th percentile rainfall, which would ensure adequate treatment capacity in accordance with the County's Low Impact Development Manual requirements (Appendix G-1, Low Impact Development [LID] Report) and would ensure that off-site areas would not be affected. The larger debris basins would be maintained by the Los Angeles County Flood Control District, and other pervious areas would be maintained by the HOA to ensure that long-term operations on the site are conducted in accordance with the requirements of the Municipal Separate Storm Sewer System permit. Debris basins require periodic removal of accumulated sediment and debris, which would be conducted as needed by the Los Angeles County Flood Control District and HOA in accordance with County Code requirements for infrastructure maintenance. The Project's Drainage Concept Report determined that the proposed basins would reduce the existing 50-year peak flow rate at the Caltrans culvert under I-5 from 1,656 cubic feet per second (cfs) to 1,218 cfs, a reduction of 438 cfs(Appendix G-3). A CLOMR will be processed through and approved by FEMA prior to the approval of storm drain plans and construction of the proposed channel and basins (Appendix G-4). Additionally, the proposed basins would remove 48.8 acre-feet of sediment from the previously burned areas, which currently burdens the downstream drainage network. The proposed basins would reduce the potential for sediment to impact the capacity of the downstream drainage network. Therefore, the Project would not substantially increase the rate, amount, or depth of surface runoff in a manner that could result in flooding on or off site. As a result, the Project is not anticipated to expose people or structures to significant risks, including downslope or downstream flooding due to drainage changes as the Project is improving the existing drainage pattern.

The Project would require fuel modification, which would alter vegetation surrounding the development footprint. Caution must be used to avoid causing erosion, ground (including slope) instability, or water runoff due to vegetation removal, vegetation management, maintenance, landscaping, or irrigation. However, all fuel modification activities would be conducted in compliance with the County's Fire Code requirements, which does not require elimination of vegetation or root structures, which serve to stabilize soils. In Zones A and B, vegetation would be replaced with fire-resistant species, and in Zone C, vegetation would be thinned. Regular maintenance of the FMZs is required by the FPP (Appendix M-1) and per MM-4.20-3 would be inspected annually to ensure proper functionality and appropriate removal of vegetation. Based on field surveys conducted by Dudek in 2020 (see Appendix C, Fire Behavior Analysis, of Appendix M-1), because the vegetation communities in the Project area are composed of

native species that have adapted to periodic fires and thus can rapidly regenerate after a fire, vegetation has regenerated since the 2016 Sage Fire, thereby aiding in stabilizing surrounding slopes.

Apart from post-fire slope instability, the potential for landslides, runoff, flooding, drainage changes, and water quality improvements has been analyzed in this Draft EIR. In summary, development areas within the Project site would be stabilized during construction when there is a higher likelihood of erosion due to exposed soils through the use of drainage improvements and bank stabilization. During operation, hardscape, managed landscape, and managed slopes would have low erosion potential. The Project would also adhere to design and siting requirements to avoid erosion, unstable slopes, and significant ridgelines. As discussed in Section 4.10 and in the Section 4.7 of this Draft EIR, with implementation of the Geotechnical Report's recommendations and compliance with all applicable regulations, the Project would not result in new or increased impacts related to landslides, flooding, runoff, changes in drainage patterns, or slope stabilization. Further, as determined in Threshold 4.20b, with the implementation of MM-4.20-1 through MM-4.20-3, the Project would reduce potential exposure of Project occupants to the uncontrolled spread of wildfire or significantly exacerbate wildfire risk to less than significant. Therefore, with mitigation the Project would reduce impacts related to exposing 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 to less than significant.

Threshold 4.20e: 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, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The Project would involve the development of 510 residential units, a recreation center, flood control lots, open space, internal roadways and trails, and a water tank. Additionally, the Project would involve installation and maintenance of associated infrastructure, including FMZs, roads and trails, service utilities (e.g., water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications services), water drainage, and water quality improvements (e.g., stormwater basins). As previously stated, construction activities and the operation of the Project have the potential to increase wildfire risk on site. Therefore, the Project could expose people and structures, directly and indirectly, to a significant risk of loss, injury or death involving wildfires, and impacts could be potentially significant.

As discussed in Threshold 4.20b, once the Project is developed, the fire spread patterns on the Project site would be altered, since the Project would result in the conversion of substantial fuel breaks to maintained structures and landscaping, significantly interrupting the continuous fuels across the Project site. The FMP proposes an FMZ for the Project that ranges between 54 and 200 feet wide on site. Where the full 200 feet is not able to be provided on site, neighboring property owners will be required to provide brush thinning for the remaining portion (i.e., where the FMZ is 54 feet, 146 feet of brush thinning will be provided by the neighboring property owner with Project HOA assistance if acceptable to the neighboring property owner). The vast majority of the FMZ is provided on site; where the FMZ is less than 100 feet on site, the Project will provide enhanced construction features as described in MM-4.20-2. The fire behavior modeling indicated that the projected flame lengths would be reduced to levels that would be manageable by firefighting resources. Additionally, the Project would be required to comply with all provisions in the County Code regulating development in a VHFHSZ. With the conversion of the undeveloped landscape to ignition-resistant development and landscaping, wildfires may still encroach upon and drop embers on the Project site but would not be expected to burn through the Project site due to the lack of available fuels and the typical ember decay rate. Further, in the event of a fire starting on the Project site, the fire would not be anticipated to result in a wildfire that would spread to off-site wildlands due to the buffer created

by the proposed FMZs, ignition-resistant construction, landscape requirements, improvement of firefighting access, and increased wildfire risk awareness.

The Project has the potential to be exposed to wildfires due to existing slopes, prevailing winds, and other factors that are conducive to the spread of a wildfire. However, the Project would result in the conversion of readily ignitable fuels to irrigated/thinned landscaping and development. Structures would not be sited on the steeper areas of the Project site. The proposed structures for the Project would be built using ignition-resistant materials pursuant to the County Fire and Building Codes (Chapter 7A, focusing on structure ignition resistance from flame impingement and flying embers in areas designated as high fire hazard areas), which are based on the amended California Fire and Building Codes. This would be complemented by an improved water availability, capacity, and delivery system; Project area firefighting resources; fire department access throughout the developed areas; monitored defensible space/fuel modification; interior, automatic fire sprinkler systems in all structures; monitored interior sprinklers in applicable structures; and other components that would provide properly equipped and maintained structures with a high level of fire ignition resistance. Further, as discussed in Threshold 4.20b, each of the fire protection features provided as part of the code requirements or customized for the Project are based on the FPP's evaluation work to protect the site, its structures, and its occupants from wildfires. These features have a similar positive impact on the potential for wildfire ignitions caused by the Project and its inhabitants. The ignition-resistant landscapes and structures and the numerous specific requirements would minimize the ability for an on-site fire to spread to off-site fuels. Therefore, with adherence to the County Code, regulatory requirements, and mitigation measures, the Project would not be anticipated to facilitate wildfire spread or exacerbate wildfire risk, as demonstrated by the fire behavior modeling analysis presented above and in the FPP (Appendix M-1).

Further, as discussed in Threshold 4.20c, FMZs and other vegetation management activities that would occur prior to the start of construction and throughout the life of the Project are designed to provide vegetation buffers that gradually reduce fire intensity and flame lengths from an advancing fire. FMZs that are strategically designed with proper placement of fuel treatments can also facilitate fire suppression within a landscape (Braziunas et al. 2021). By reducing the potential for wildfire in open space areas, there would be a corresponding reduction in potential negative impacts on existing communities that are situated within or at the edge of the greater open space/fuel bed. Consequently, new infrastructure would not exacerbate fire risk, provided that FMZs and other vegetation management activities are implemented and enforced according to LACoFD requirements. The proposed FMZs and other vegetation management activities would reduce the fire risk by thinning or removing combustible vegetation and implementing a landscape plan with more adequately spaced, drought-tolerant, low-fuel-volume plants to provide a reasonable level of protection to structures from wildland fire. Installation of Project roads, service utilities, FMZs, drainage, water quality improvements, and other associated infrastructure would not exacerbate wildfire risks, provided that the appropriate fire prevention, access, and vegetation management activities, as outlined throughout the FPP in Appendix M-1 and described above, are implemented.

With implementation of the regulatory standards and MM-4.20-1, Wildfire Education Program, which requires an emphasis on education and preparedness for wildfire and evacuation; MM-4.20-2, Alternative Materials and Methods, which requires enhanced construction features to protect homes where the FMZ is less than 100 feet within the Project site; MM-4.20-3, Annual Fuel Modification Zone Inspection, which requires the maintenance of the Project's buffer between structures and unmaintained open space; and MM-4.20-4, Construction Fire Prevention Plan, and MM-4.20-5, Construction-Related Fire Prevention Measures, both of which detail measures to reduce the risk of ignition on the Project site during construction, the Project would reduce the exposure of people and structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires to less than significant with mitigation.

4.20.6 Cumulative Impact Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., related projects) used for this analysis are presented in Table 2-2, List of Cumulative Projects and in Figure 2-8, Cumulative Projects, of Section 2.6, Cumulative Projects, of Chapter 2, Environmental Setting, of this Draft EIR. The cumulative area that is relevant to the topic of wildfires includes the Santa Clarita Valley and the nearby canyons, hillsides, and open space wildland areas that surround the Project site, including Pico, Lyons, and Towsley Canyons and the Santa Susana Mountains.

Threshold 4.20a: 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?

The Project combined with other projects and planned development in the region would increase population and/or activities and potential ignition sources in a VHFHSZ, which may increase the potential of a wildfire and/or the need for evacuations during wildfire event. Many of the Cumulative Projects are located within SRA-designated VHFHSZs with unincorporated County lands. Similarly, a number of the Cumulative Projects within the City are located within VHFHSZs of SRAs or LRAs. Many of these Cumulative Projects are residential projects that would introduce new populations into the area. Additional new residents would create additional demands for evacuations during wildfire emergencies. However, individual projects located in the area would be required to comply with applicable fire and building codes, which include mandatory fire prevention and protection features that reduce the likelihood of a fire igniting and spreading to off-site vegetated areas. Further, for the Cumulative Projects that are located in VHFHSZs, each would be required to comply with vegetation clearance and fuel modification requirements, as mandated by the County's or City's Fire Code or LACoFD. These codes also protect projects from wildfires that may occur in the area through the implementation of fuel management zones, ensuring adequate water supply, preparation of FPPs, and other measures.

Figure 4.20-1 shows the categorization of fire hazard zones in areas surrounding the Project site. As shown, the Project site is within and immediately surrounded by VHFHSZs. As discussed above, the County sheriff would be responsible for response during an emergency event and coordinating evacuation. If an evacuation warning or order is issued, Alert LA County, the mass notification system for the County, would notify those who live and work in the County of the necessary information during emergency events, such as disaster notifications and evacuation orders (Appendix M-1). Additionally, OVOV identifies I-5 as the primary evacuation for the Stevenson Ranch area. The Project, combined with other development in the area, would contribute to an increase in population that would have a cumulative impact on the ability of established evacuation routes to provide for safe and timely evacuation of affected residents.

As discussed under Threshold 4.20a above and in Appendix M-2, it was determined that it would require 43 minutes to evacuate the existing land uses along the southern side of Pico Canyon Road and west of The Old Road, and it would require 50 minutes to evacuate just the proposed Project's population. Under the scenario where both existing land uses and the Project would be evacuated simultaneously, it would require 1 hour and 20 minutes to evacuate the surrounding land uses and 1 hour and 26 minutes to evacuate the proposed Project site. This would be an increase of 37 minutes for the surrounding land uses, when compared to existing conditions. Therefore, the evacuation times for existing land uses and the Project remain within the 90-minute timeframe. When considering the cumulative projects analyzed in the Transportation Impact Analysis (i.e., Cumulative Projects LA1, LA2, and SC1), it was determined it would take 57 minutes to evacuate existing conditions plus Cumulative Projects and 1 hour and 38 minutes to evacuate existing conditions plus cumulative plus the Project, an increase of 37 minutes for

the surrounding land uses when compared to the cumulative without Project conditions (Appendix J, Appendix M-2). Evacuation of existing conditions, the Project, and cumulative projects did not consider the paved extension that would allow for potential future access to off-site property, Tentative Tract Map 74979 (Cumulative Project LA2). Given Cumulative Project LA2's proximity to Stevenson Ranch, it is unlikely that Cumulative Project LA2 would be evacuated through the Project via the proposed paved extension, which would require evacuating vehicles to traverse open space that is proximate to unmaintained fuels. Additionally, evacuation would likely be phased in an early evacuation scenario, which would allow vehicles to evacuate via primary evacuation routes. However, in the event of a short-term evacuation notice, some evacuation traffic could use the paved extension, but the number of vehicles would be low and impacts would not be significant. With the addition of evacuation traffic from cumulative projects, the Project and cumulative projects west of I-5 would substantially conform to the 90-minute timeframe established by FEMA.

The Project would implement MM-4.17-1, which requires the minimization of obstructions in traffic lanes, maintenance of emergency access throughout construction activities through methods such as the use of flag persons to minimize obstructions along The Old Road, signage, scheduling of vehicle movements to ensure traffic flow, and limiting schedule of deliveries and truck traffic, among other requirements. The Project would also implement MM-4.20-1, which requires the preparation of Project area-specific procedures for wildfire evacuations that would be provided to homeowners.

The County Fire and Building Codes, along with project-specific needs assessments and fire prevention plan requirements, would ensure that all the Cumulative Projects approved for construction include adequate emergency access. Roads for the Project and all Cumulative Projects are required to meet minimum widths, have an all-weather surface, and be capable of supporting the imposed loads of responding emergency apparatus. The Project would include fire access and circulation throughout the Project site, including emergency access and on-site shelter-in-place areas in an area where access was previously limited.

Further, the Los Angeles County Sheriff Traffic Division, City of Santa Clarita, California Highway Patrol, and Caltrans have developed alternative routes, such as the new Cross Valley Connector, which is cited as providing effective east–west routes for use in an emergency (LACDRP 2012). The Project would include fire access and circulation throughout the Project site, including emergency access and on-site shelter-in-place areas. Although the Project is not designated as a shelter-in-place community, given the enhanced construction (i.e., CBC Chapter 7A) that would be implemented as part of the Project, LACoFD could choose to direct residents of the Project to shelter-in-place to reduce congestion related to evacuation of the area. The same would be true for other Cumulative Projects that are within a VHFHSZ. The Project's contribution to the potential to impair emergency evacuation, in combination with Cumulative Projects, would not be cumulatively considerable because the WEP determined that the Project and Cumulative Projects/area would evacuate within the FEMA timeframe, the Project would include on-site locations to safely shelter in place and improved road conditions, and the Project and Cumulative Projects would be required to adhere to all state building codes to minimize the spread of a wildfire. Therefore, the cumulative impact would be less than significant with mitigation.

Threshold 4.20b: 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?

Construction

The Project site and several of the Cumulative Project sites are in areas designated as VHFHSZs within SRAs or LRAs. During short-term construction activities, the use of heavy machinery and the potential for sparks during welding activities or other hot work on the Project and other Cumulative Projects could result in an exacerbation of wildfire risk and expose the temporary Project occupants (construction workers) and occupants of other nearby developed areas to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire, which would be a significant impact.

There is a possibility that the Project and one or more of the Cumulative Projects would be constructed simultaneously; however, as all of the Cumulative Projects within the County's jurisdiction are in areas designated VHFHSZs all Cumulative Projects within the County would be subject to the same County, state, and LACoFD regulatory requirements as the proposed Project, which includes but is not limited to 2022 County Fire Code Chapter 33, Title 32 Section 326 of the 2022 County Fire Code, and Section 326.12.1 of the County Fire Code, which prohibits the use of any equipment from which a spark or fire may originate unless there is a spark arrester. For Cumulative Projects within the City's jurisdiction, Cumulative Projects will be required to comply with Title 22, City Fire Code, of the City's Municipal Code, which adopts the 2022 California Fire Code and all amendments adopted by the County Fire Code.

In addition to compliance with all applicable regulations described above, the Project would implement mitigation to further address the potential for construction activity-related wildfire hazards. MM-4.20-4, which designates fire safety measures to reduce the possibility of fires during the construction phase, and MM-4.20-5, which requires vegetation management during all grading, site work, and other construction activities in areas where there is flammable vegetation, would reduce the Project's potential for impacts to less than significant. Therefore, due to compliance with robust regulatory requirements that are applied to all new development projects within a VHFHSZ, and due to the Project-specific mitigation applicable to the Project site, short-term construction activities would not result in cumulatively considerable impacts that could expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

Operations

In the long-term, the Project, combined with other projects in the region, would increase the population and/or activities and potential ignition sources in the Santa Clarita Valley and adjacent mountainous areas, which increases the potential to be exposed to wildfires due to existing slopes, prevailing winds, and other factors that are conducive to the spread of a wildfire.

Individual projects located within the County and individual projects located within the City are required to comply with applicable state, County, and City fire and building codes, which include fire prevention and protection features that reduce the likelihood of a fire igniting in a specific project and spreading to off-site vegetated areas. These codes also protect projects from wildfires that may occur in the area through the implementation of brush management and fuel management zones, ensuring adequate water supply, preparation of FPPs, and other measures.

The placement of new residential projects in the WUI has not been proven to increase risk of fire ignition based on available research. No large fires in Southern California since 1990 were determined to have been started within a nearby master-planned, ignition-resistant subdivision or neighborhood, as described in Appendix M-1, regarding all wildfire ignitions included in the CAL FIRE FRAP database dating back over 100 years. Research indicates that in San Diego County (similar to the Los Angeles County fire environment), equipment-caused fires were by far the most numerous, and these also accounted for most of the area burned; power line fires were a close second. Ignitions classified as equipment-caused frequently resulted from exhaust or sparks from power saws or other equipment with gas or electric motors, such as lawnmowers, trimmers, or tractors (Appendix M-1). However, the Project would not only bury new power lines but also existing power lines on the Project site, thereby removing significant ignition sources in the region. Further, all future projects would have to comply with Section 326.12.1 of the County Fire Code and City Fire Code, which prohibits the use or operation of any tractor, construction equipment, engine, machinery, or any steam, oil, or gasoline-operated stationery or mobile equipment, from which a spark or fire may originate, unless such equipment is provided with a qualified device or spark arrester installed in or attached to the exhaust pipe, which will prevent the escape of fire or sparks. Additionally, on a state level, SB 1346 was signed into law in 2021, prohibiting the sale of small gas-powered engines, such as lawnmowers, power saws, and other equipment that can result in potential fires by 2024.

Housing density directly influences susceptibility to fire because in higher density developments, there is one interface (the community perimeter) with the wildlands, whereas lower density development creates more structural exposure to wildlands, less or no ongoing landscape maintenance (an intermix rather than interface), and consequently more difficulty for limited fire resources to protect well-spaced homes. The intermix includes housing amongst the unmaintained fuels, whereas the proposed Project converts all fuels within the footprint and provides a wide, managed FMZ separating homes from unmaintained fuel and creating a condition that makes defense easier. Syphard and Keeley (2015) go on to state that "[t]he WUI, where housing density is low to intermediate is an apparent influence in most ignition maps," further enforcing the conclusion that lower density housing poses a higher ignition risk than higher density communities. Syphard et al. (2013) state that "[d]evelopment of low-density, exurban housing may also lead to more homes being destroyed by fire." In the Southern California study, ignitions were more likely to occur close to roads and structures, and intermediate structure density (Appendix M-1). This is likely because lower density housing creates a wildland-urban intermix and is often part of unplanned developments with differences in code compliance, building materials, and defensible space implementation. The Project would convert all fuels within the footprint and provides a wide, managed FMZ separating homes from unmaintained fuel. New development is also required to adhere to stricter code requirements for building materials and defensible space implementation. Neither of these studies considered the fire hazard and risk reduction associated with HOA-managed fire modification zones and ignition-resistant structures as described above. In addition, another study found that frequent fires and lower density housing growth may lead to the expansion of highly flammable exotic grasses that can further increase the probability of ignitions (Appendix M-1). This is not the case with the Project, where the landscapes would be managed and maintained to remove vegetative fuels in compliance with the fuel modification requirements and annual FMZ inspection (MM-4.20-3), which would ensure the reduction of vegetative fuel loads around the Project site.

Further, MM-4.20-1 would require that signage would be placed at the new trailhead at the northeastern portion of the Project site, which would provide all users with information about how to safely use the trail, including restrictions on smoking and firearm usage. MM-4.20-1 also requires implementation of a robust homeowner education program about fire safety. The Project HOA would provide residents and occupants ongoing education regarding wildfire and the FPP's requirements. The Project would implement appropriate FMZs and fire protection, as required by the 2022 County Fire Code and MM-4.20-2, which must continue to be maintained in perpetuity,

as required by MM-4.20-3. Off-site brush thinning will be established and maintained by the neighboring property owner with Project HOA assistance to the extent the neighboring property owner allows, and inspected and enforced by LACoFD annually. As required by MM-4.20-5, all new permanent power lines within the Project's development area would be undergrounded for fire safety purposes, which would eliminate the risk of ignitions via contact between transmission lines and tree canopies or other vegetation.

The existing standards for future development that would maintain an appropriate level of fire protection would continue to be derived from the CBC and the 2022 County Fire Code and City Fire Code, which adopts the County Fire Code. Payment of the Fire Developer Fee, which funds the purchase of station sites, the construction of new stations, and facility improvements, and the funding of capital equipment would be required for all future development projects in the area, which would facilitate adequate response from LACoFD fire stations and reduce community exposure to uncontrolled wildfire.

In summary, based on the research of the relevant literature, there is no substantial evidence that new residential neighborhoods built to the requirements of the County's Fire and Building Codes increase the risk of wildfire ignition. Rather, the data indicate that roadways, electrical distribution lines, and lower density residential projects (that do not have HOA-enforced restrictions and annual inspections) are the primary causes of increased wildfire ignition. Furthermore, the Cumulative Projects within the County would be required to comply with the County's vegetation clearance requirements, as outlined in the 2022 County Fire Code, which is also adopted by the City and would apply also to Cumulative Projects within the City. Therefore, because all cumulative projects are required to comply with these requirements, and due to the implementation of the mitigation measures summarized above, cumulative impacts related to potential exposure of people to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be less than significant.

Threshold 4.20c: 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?

Construction

The Project and the majority of Cumulative Projects, particularly within unincorporated County lands, would require installation and maintenance of FMZs, roads and trails, service utilities (e.g., water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications services), water drainage, and water quality improvements (e.g., stormwater basins). Infrastructure installation would likely include off-site connections. Construction of any development would require the use of heavy equipment and other small engine tools that could create heat, sparks, or flames and therefore, if not properly handled, could result in vegetation ignitions. Therefore, construction of these projects may exacerbate fire risk, which could result in a potentially significant cumulative impact.

For all Cumulative Projects within the County, all construction activities would need to comply with regulations, including the 2022 County Fire Code Chapter 33, Fire Safety During Construction and Demolition, designating fire safety measures to reduce the possibility of fires during construction activities. The 2022 County Fire Code Chapter 33 includes the following measures: fire watch/fire guards during hot works and heavy machinery activities (e.g., welding), spark arresters on all equipment, fire access during construction, water supply via hose lines attached to hydrants or a water tender pursuant to LACoFD requirements, red flag period restrictions, on-site fire prevention resources, and others. The Project would also comply with Title 32 Section 326 of the 2022 County Fire Code,

Activities in Wildfire Risk Areas, which provides safeguards to prevent the occurrence of fire and control the spread of fires that may be caused by activities in a wildfire risk area. For Cumulative Projects within the City's jurisdiction, Cumulative Projects will be required to comply with Title 22, City Fire Code, of the City's Municipal Code.

The Project-specific FMZs and other vegetation management activities that would occur prior to the start of construction and throughout the life of the Project are designed to provide vegetation buffers that gradually reduce fire intensity and flame lengths from an advancing fire. FMZs that are strategically designed with proper placement of fuel treatments can also facilitate fire suppression within a landscape (Braziunas et al. 2021). By reducing the potential for wildfire in open space areas and along roadways, there is a corresponding reduction in potential negative impacts on existing communities that are situated within or at the edge of the greater open space/fuel bed. Additionally, as discussed above, the Project would be required to underground new and existing power lines (MM-4.20-5), which would reduce the likelihood of on-site ignitions. Consequently, new infrastructure would not exacerbate fire risk, provided FMZs and other vegetation management activities are implemented and enforced according to LACoFD requirements. The construction of Project roads, service utilities, FMZs, drainage, and water quality improvements, and other associated infrastructure would not exacerbate wildfire risks, provided that the appropriate fire prevention, access, and vegetation management activities are implemented, as required through MM-4.20-4 and MM-4.20-5, and thus, would not contribute a cumulatively considerable wildfire impact during construction activities.

Operation

The Project and Cumulative Projects would require installation or maintenance of roads, fuel breaks, emergency water sources, power lines, and other utilities that may exacerbate fire risk. During operations, use of internal roadways and maintenance roads could result in vehicle-related spark, catalytic converter failure, or another ignition source to ignite and spread fire from the roadsides into unmaintained fuels. Additionally, FMZs that are not regularly maintained would eliminate the buffer from unmaintained fuels, increasing risk of wildfire. Further, power line–based ignitions can result in significant wildfire ignitions, as seen throughout California over the last decade. Therefore, the operation of these projects, prior to compliance with regulations, may exacerbate fire risk, which could result in a potentially significant cumulative impact.

The Project and Cumulative Projects within the County are required to comply with all applicable state, 2022 County Fire Code and Building Code requirements, which include wildfire measures for projects within VHFHSZs. Cumulative Projects within the City will also be required to comply with all applicable City Fire Code and Building Code. New projects within VHFHSZs would be required to include the latest ignition- and ember-resistant construction materials and methods for roof assemblies, walls, vents, windows, and appendages, as mandated by LACoFD and the County Fire and Building Codes (e.g., Chapter 7A) and the City Fire and Building Codes. New projects within VHFHSZs would be built using ignition-resistant materials pursuant to the County Fire and Building Codes (Chapter 7A, focusing on structure ignition resistance from flame impingement and flying embers in areas designated as high fire hazard areas) and City Fire Code, Title 22, which are based on the amended California Fire and Building Codes.

Internal circulation roadways would be required to satisfy secondary access requirements, if applicable, detailed in County Code Title 21, Section 21.24, Design Standards, Part 1, Access. All road systems would be developed to be consistent with the County's roadway standards (Title 21) and the 2022 County Fire Code, Section 503. Fire-flow requirements and water storage requirements would be required per County Code Title 20, Section 20.16.060. Internal waterlines must supply sufficient fire flows and pressure to meet the demands for required on-site fire hydrants and interior fire sprinkler systems for all structures.

Further, the ongoing maintenance of roads, FMZs, service utilities, and drainage and water quality improvements are required for all Cumulative Projects, and as such, the ongoing operation of these infrastructure requirements would serve to minimize risks associated with wildfires. Cumulative Projects within an area designated as a VHFHSZ or High FHSZ would be required to implement and maintain similar fuel modification, underground utilities, and comply with all other regulatory requirements. Therefore, the installation and maintenance of associated infrastructure for the Project and cumulative projects would not exacerbate wildfire risk, and cumulative impacts would be less than significant.

Threshold 4.20d: 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 downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Construction

Construction activities for the Project and Cumulative Projects have the potential to start a wildfire on site that could spread and greatly reduce the amount of vegetation from hillsides. During construction activities, the Project has the potential to exacerbate a wildfire and expose people and structures off site to downslope or downstream flooding or landslides. Therefore, the Project and cumulative projects could result in runoff, post-fire slope instability, or drainage changes and have potentially significant cumulative impacts related to downslope or downstream flooding or landslides.

All Cumulative Projects would be required to comply with the conditions mandated by the County's Public Works Geotechnical Materials Engineering Division. Final Geotechnical Engineering Investigation reports, which are required by the Los Angeles County Building Code and CBC, would be based on the final design and would require approval by the Geotechnical Materials Engineering Division prior to issuance of a grading permit to ensure that all geotechnical requirements are appropriately incorporated into project designs. Therefore, compliance and implementation of geotechnical design standards that address landslides, slope stability, etc., as required by the latest Standard Specifications for Public Works Construction (Greenbook) and the LACBC and CBC, would minimize potential structural failures.

Regarding the potential for erosion and/or flooding during construction, the County Code Appendix J, Grading, requires preparation of a site-specific SWPPP and ESCP, which would be prepared prior to all earthwork activities and would be implemented during Project construction and grading activities, including the grading activities of the existing flood zone. The ESCP must include BMPs to address transport of sediment and protect properties from erosion, flooding, and deposition of mud or debris. Additionally, the SWPPP must include BMPs, including erosion control measures. All project construction activities are required to comply with the grading permit regulations, which require the implementation of grading measures, including a wet weather erosion control plan if construction occurs during the rainy season, as well as inspections to ensure that sedimentation and erosion are minimized. Therefore, with compliance with applicable regulations, short-term construction activities at Cumulative Project sites would not 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, and impacts would be less than significant.

Operation

The Project and several of the Cumulative Projects (particularly LA1 through LA13) are surrounded by vast areas of open space, which includes steep hillsides and vegetation that would exacerbate fire risk. As detailed in Section 4.20.5, above, the Project could have the potential to 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, and impacts could be potentially significant prior to mitigation.

The Project would require ongoing fuel modification in perpetuity, which would alter vegetation surrounding the development footprint. Fuel modification must be implemented in a manner to avoid causing erosion, ground (including slope) instability, or water runoff due to vegetation removal, vegetation management, maintenance, landscaping, or irrigation. As the Project and all Cumulative Projects are within areas designated as VHFHSZs, each would need to comply with the 2022 County Fire Code, other relevant County Code requirements, and other applicable local codes and regulations related to fire safety, building construction, access, fire flow, and fuel modification. For Cumulative Projects within the City's jurisdiction, Cumulative Projects will be required to comply with the City Fire Code, Title 22. Further, all other future development projects in the service area would also be required to comply with these requirements.

All fuel modification activities for Cumulative Projects would be conducted in compliance with County or City Fire Code requirements, which does not require elimination of vegetation or root structures, which serve to stabilize soils. In Zones A and B, vegetation would be replaced with fire-resistant species, and in Zone C, vegetation would be thinned. Apart from post-fire slope instability, the potential for landslides, runoff, flooding, drainage changes, and water quality improvements must be addressed for Cumulative Projects in compliance with applicable regulations. Cumulative Projects must adhere to design and siting requirements to avoid erosion and unstable slopes. Further, as determined in Threshold 4.20b, with the implementation of the MM-4.20-1 through 4.20-3, the Project would reduce potential exposure of Project occupants to the uncontrolled spread of wildfire to less than significant. Therefore, the Project and Cumulative Projects would reduce impacts related to exposing 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 compliance with relevant regulations, and cumulative impacts would be reduced to less than significant.

Threshold 4.20e: 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, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The Project and several of the Cumulative Projects are proposed to be developed in areas designated as VHFHSZs (within an SRA or LRA). Development in these areas inherently exposes people and structures, directly and indirectly, to a significant risk of loss, injury, or death involving wildfires; therefore, cumulative impacts could be potentially significant.

As discussed above, the Project and Cumulative Projects LA1 through LA14 would be required to comply with all provisions in the County Code regulating development in a VHFHSZ. For Cumulative Projects within the City's jurisdiction, Cumulative Projects will be required to comply with the City Fire Code, Title 22. With the conversion of the undeveloped landscape to ignition-resistant development and landscaping, wildfires may still encroach upon and drop embers on the Project site but would not be expected to burn through the Project site due to the lack of available fuels and the typical ember decay rate. Further, in the event of a fire starting on the Project site, the fire would not be anticipated to result in a wildfire that would spread to off-site wildlands due to the buffer created by the proposed FMZs, ignition-resistant construction, landscape requirements, improvement of firefighting access, and increased wildfire risk awareness.

The Project has the potential to be exposed to wildfires due to existing slopes, prevailing winds, and other factors that are conducive to the spread of a wildfire. However, the Project would result in the conversion of readily ignitable

fuels to irrigated/thinned landscaping and development. Structures would not be sited on the steeper areas of the Project site. The proposed structures for the Project would be built using ignition-resistant materials pursuant to the County Fire and Building Codes (Chapter 7A, focusing on structure ignition resistance from flame impingement and flying embers in areas designated as high fire hazard areas), which are based on the amended California Fire and Building Codes. This would be complemented by improved water availability, capacity, and delivery system; Project area firefighting resources; fire department access throughout the developed areas; monitored defensible space/fuel modification; interior, automatic fire sprinkler systems in all structures; monitored interior sprinklers in applicable structures; and other components that would provide properly equipped and maintained structures with a high level of fire ignition resistance. With adherence to the County Code, regulatory requirements, and mitigation measures, the Project would not be anticipated to facilitate wildfire spread or exacerbate wildfire risk, as demonstrated by the fire behavior modeling analysis presented above and in the FPP (Appendix M-1).

As discussed in Threshold 4.20c, FMZs and other vegetation management activities that would occur prior to the start of construction and throughout the life of the Project are designed to provide vegetation buffers that gradually reduce fire intensity and flame lengths from an advancing fire. FMZs that are strategically designed with proper placement of fuel treatments can also facilitate fire suppression within a landscape (Braziunas et al. 2021). By reducing the potential for wildfire in open space areas, there is a corresponding reduction in potential negative impacts on existing communities that are situated within or at the edge of the greater open space/fuel bed. Consequently, new infrastructure would not exacerbate fire risk, provided that FMZs and other vegetation management activities are implemented and enforced according to LACoFD requirements. The proposed FMZs and other vegetation management activities would reduce the fire risk by thinning or removing combustible vegetation, and implementing a landscape plan with more adequately spaced, drought-tolerant, low-fuel-volume plants to provide a reasonable level of protection to structures from wildland fire. Installation of Project roads, service utilities, FMZs, drainage, water quality improvements, and other associated infrastructure would not exacerbate wildfire risks, provided that the appropriate fire prevention, access, and vegetation management activities, as outlined throughout the FPP (Appendix M-1) and described above, are implemented.

The installation and maintenance of roads, FMZs, service utilities, and drainage and water quality improvements as part of Cumulative Projects are required to be analyzed and mitigated. As stated above, Cumulative Projects within an area designated as a VHFHSZ or High FHSZ would be required to implement and maintain similar fuel modification, underground utilities, and comply with all other regulatory requirements. Therefore, cumulative impacts related to exposing people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires would be less than significant.

4.20.7 Mitigation Measures

MM-4.20-1 Wildfire Education Program. The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions for the Project shall require that the HOA prepare an educational program with wildfire-related information to be provided to all residents and occupants, including the Wildfire Evacuation Plan (WEP) and the Fire Protection Plan (FPP) requirements. The Covenants, Conditions, and Restrictions will be submitted to the County of Los Angeles (County) prior to issuance of certificate of occupancy. The educational program shall be prepared in easy-to-understand, graphically based

materials and shall be annually reviewed and updated, as appropriate, in order to maintain high wildfire awareness. Program features shall include, but may not be limited to, the following:

1. Biannual email and mailers: Residents and occupants shall be provided with biannual emails and mailers in April and in August that include information such as reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires. Links to various resources on where to get trusted information, such as the Los Angeles County Fire Department (LACoFD), 211 Los Angeles County, and Ready Los Angeles County, shall be provided and updated annually, as necessary. Additionally, at least once a year, information on the following shall be provided in the email and mailer: (1) how to notify the County Office of Emergency Management (OEM) and Health and Human Services of special needs and/or required accommodations (Accessible Alert LA County, CERT programs, or other), for transportation or other special services; and (2) how to prepare for evacuation of pets and how to register for assistance with pet evacuations.
2. Website: A dedicated community website shall be developed and maintained with more detailed information and resources about wildfire awareness, prevention, and evacuation. The website shall serve as a centralized resource for the fire and evacuation education program and include information from the FPP and WEP. In addition to general emergency preparedness education, the website shall include information that is included in emails, mailers, and workshops/webinars. The website shall have up-to-date fire watch and red flag warning alerts, as well as information on restrictions during fire weather conditions. Residents shall also be able to use the website to sign up for an annual residential defensible space inspection from the HOA fire safety committee.
3. New resident packet: All residents and new residents in the future shall be presented with a wildfire awareness and safety package upon purchase or rental of a residence. Within the package will be a USB drive with the WEP, FPP (which includes information on the regional fire hazard, how to build a go-bag, and tools to prepare a household evacuation plan), and a list of agencies and resources for receiving trusted information.
4. Emergency alert campaign: Residents shall be encouraged to sign up for Alert LA County. Alert LA County is the mass notification system for emergency alerts, weather alerts, health notifications, building alerts, and other updates from County, state, and federal agencies. Reminders shall be sent out in the biannual mailers and emails, on the community website, in the workshops, and in the new resident package.
5. Trail signage: Signs shall be placed at the new trailhead to provide all users with information about how to safely use the trail and shall include restrictions on smoking and firearm usage. Signs shall be evaluated annually to ensure proper maintenance.
6. HOA fire safety committee: The HOA shall establish a fire safety committee responsible for overseeing the maintenance of community-wide fire protection features. Residents will be able to report fire hazards or hazardous fuel conditions to the HOA committee for remediation. The committee shall be responsible for the coordination of the third party fuel modification zone (FMZ) inspections and the volunteer residential defensible space inspections. The committee shall also be responsible for the creation and distribution of the educational program for the Project. The committee shall serve as a communication link between LACoFD and the community.

MM-4.20-2 Alternative Materials and Methods. Prior to the execution of any contract with a construction contractor, the Project Applicant/Developer shall ensure that the following requirements shall be placed on the construction contractor's contract specification:

All residential structures shall be built using ignition-resistant materials pursuant to the most recent Los Angeles County (County) Fire and Building Codes (Chapter 7A, focusing on structure ignition resistance from flame impingement and flying embers in areas designated as high fire hazard areas). The following are additional ignition-resistant construction requirements, beyond existing code requirements:

1. The 16 residences included in the southeastern portion of the Project site (within Lot 5 of the Tentative Tract Map) adjacent to the off-site open space area shall include the following features for additional fire prevention, protection, and suppression (Figure 4.20-2, Fuel Modification Zones, of the Draft EIR):
    i. Windows on structures facing the open space areas shall include dual panes, with both panes tempered.
    ii. Exterior walls and doors shall be constructed to a standard of minimum 1-hour fire rated with one layer of 5/8-inch type X gypsum sheathing applied behind the exterior covering or cladding on the exterior side of the framing, from the foundation to the roof, for all exterior walls of each building.
    iii. Exterior vents shall be ember-resistant (recommend BrandGuard, O'Hagin, or similar vents approved by LACoFD).
    iv. A solid 6-foot-tall wall shall be constructed of concrete masonry units between on-site structures and off-site open space.

Proof of compliance shall be provided to the County prior to issuance of a certificate of occupancy for homes that require these additional fire prevention, protection, and suppression features.

MM-4.20-3 Annual Fuel Modification Zone Inspection. The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions shall require annual fuel modification inspections to be conducted to confirm and document compliance with fuel modification maintenance requirements, as defined in the Los Angeles County Fire Department (LACoFD) approved fuel modification plan. The HOA shall obtain a fuel modification zone (FMZ) inspection and report in May/June of each year to document and certify that vegetation management activities throughout the Project site have been performed. If the FMZ areas are not compliant, the HOA shall have a specified period to correct any noted issues, and re-inspection shall be required to achieve the annual certification of compliance. Documentation of compliance shall be retained by the HOA and provided to LACoFD upon request.

MM-4.20-4 Construction Fire Prevention Plan. Prior to the commencement of construction activities, the Project Applicant/Developer shall prepare a construction fire protection plan (FPP) that requires the training of construction personnel and provides details related to fire-suppression procedures and equipment to be used on-site during construction. The construction FPP shall be consistent with the requirements in California Building Code Chapter 33 and California Fire Code Chapter 33,

shall be subject to review and approval of the Los Angeles County Fire Department (LACoFD), and shall include the following:

- Protocols for conducting mandatory Project-specific environmental awareness training for all on-site construction workers, including the requirement to conduct the training prior to any grubbing or ground disturbance, and requirements for ongoing training to occur prior to commencement of each phase of construction
- Requirements to conduct and document construction worker trainings, which shall include protocols for minimizing potential ignition activities, vegetation clearing, parking requirements/restrictions, equipment/vehicle idling restrictions, smoking restrictions, initial attack firefighting, proper use of gas-powered equipment and storage of flammable fuels, use of spark arrestors, fire reporting, and hot work restrictions
- LACoFD-approved construction work restrictions during red flag warnings and high to extreme fire danger days
- Specifications for access to adequate water supplies and/or water trucks to service construction activities
- Documentation of emergency contact information and protocols for on-site emergency response communication to on-site workers, coordination with local fire agencies, and reporting/documentation procedures for actions taken
- Designation of an on-site fire awareness coordinator with itemized description of their role and responsibility for ensuring compliance with the construction FPP, including demonstration of compliance with applicable plans and policies established by state and local agencies and documentation of completion of required construction worker trainings

MM-4.20-5 Construction-Related Fire Prevention Measures. Prior to the execution of any contract with a construction contractor and issuance of grading permits, the Project Applicant/Developer shall ensure that the following requirements shall be placed on the construction contractor's contract specification:

- All required fuel modification for each phase of construction activity shall be implemented prior to commencement of that phase and prior to combustible building materials being delivered to the site.
- Prior to bringing lumber onto the Project site, improvements within the active development area shall be in place, including utilities, operable fire hydrants, an approved, temporary roadway surface, and fuel modification zones (FMZs) established pursuant to the construction fire protection plan (FPP) and Los Angeles County Fire Department (LACoFD) requirements.
- All temporary construction power lines shall only be allowed in areas that have been cleared of combustible vegetation.
- All-new permanent power lines shall be installed underground for fire safety purposes.

4.20.8 Level of Significance After Mitigation

With incorporation of MM-4.17-1 in Section 4.17, Transportation, and MM-4.20-1, the Project would not substantially impair an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant after mitigation.

With incorporation of MM-4.20-1 through MM-4.20-5, due to slope, prevailing winds, and other factors, the Project would not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, and impacts would be less than significant after mitigation.

With incorporation of MM-4.20-3 through MM-4.20-5, the Project's installation or maintenance of associated infrastructure (such as roads, emergency water sources, power lines, or other utilities) would not exacerbate fire risk or result in temporary or ongoing impacts to the environment, and impacts would be less than significant after mitigation.

With incorporation of MM-4.20-1 through MM-4.20-3, the Project would not 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, and impacts would be less than significant after mitigation.

With incorporation of MM-4.20-1 through MM-4.20-5, the Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires, and impacts would be less than significant after mitigation.

4.20.9 References

Braziunas, K.H., R. Seidl, W. Rammer, and M.G. Turner. 2021. "Can We Manage a Future with More Fire? Effectiveness of Defensible Space Treatment Depends on Housing Amount and Configuration." *Landscape Ecology* 36(2): 309–330. https://doi.org/10.1007/s10980-020-01162-x.

CAL FIRE (California Department of Forestry and Fire Protection), 2016. "2016 Wildfire Activity Statistics." https://www.incidents.fire.ca.gov/media/10060/2016_redbook_final.pdf.

CAL FIRE (California Department of Forestry and Fire Protection), 2024. Fire Hazard Severity Zones. https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones.

Cochrane, M.A., C.J. Moran, M.C. Wimberly, A.D. Baer, M.A. Finney, K.L. Beckendorf, J. Eidenshink, and Z. Zhu. 2012. "Estimation of Wildfire Size and Risk Changes Due to Fuels Treatments." *International Journal of Wildland Fire* 21: 357–367. https://doi.org/10.1071/WF11079.

Cohen, J.D. 1995. "Structure Ignition Assessment Model (SIAM)." In *Proceedings of the Biswell Symposium: Fire Issues and Solutions in Urban Interface and Wildland Ecosystems*, 85–92. Gen. Tech. Rep. PSW-GTR-158. Albany, California: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture.

Cohen, J.D., and B.W. Butler. 1996. "Modeling Potential Ignitions from Flame Radiation Exposure with Implications for Wildland/Urban Interface Fire Management." In *Proceedings of the 13th Conference on Fire and Forest Meteorology*. International Association of Wildland Fire.

Cohen, J.D., and J. Saveland. 1997. "Structure Ignition Assessment Can Help Reduce Fire Damages in the W-UI." *Fire Management Notes* 57(4): 19–23.

County of Los Angeles. 2012. *Los Angeles County Operational Area Emergency Operations Plan*.

County of Los Angeles. 2018. “Alert LA County.” https://lacounty.gov/emergency/alert-la/.

County of Los Angeles. 2019a. *2019 County of Los Angeles All-Hazards Mitigation Plan*.

County of Los Angeles. 2021. Los Angeles County Fire Department 2021 Strategic Plan.

County of Los Angeles. 2022a. “Land Use Element.” In *County of Los Angeles General Plan*. Last updated July 2022.

County of Los Angeles. 2022b. “Safety Element.” In *County of Los Angeles General Plan*. Last updated July 2022.

Dicus, C.A., N.C. Leyshon, and D.B. Sapsis. 2014. “Temporal Changes to Fire Risk in Disparate WUI Communities in Southern California, USA.” In *Advances in Forest Fire Research*. edited by D.X. Viegas, 969-978. University of Coimbra Press.

Gorte, R.W. 2011. “Wildfire Protection in the Wildland-Urban Interface.” In *Wildfires and Wildfire Management*.

International Code Council. 2021. *2021 International Wildland-Urban Interface Code*. International Code Council.

Keeley, J.E., and A.D. Syphard. 2018. “Historical Patterns of Wildfire Ignition Sources in California Ecosystems.” *International Journal of Wildland Fire.*, 27(12): 781–799. https://doi.org/10.1071/WF18026.

Knapp, E.E., Y.S. Valachovic, S.L. Quarles, and N.G. Johnson. 2021. “Housing Arrangement and Vegetation Factors Associated with Single-Family Home Survival in the 2018 Camp Fire, California.” *Fire Ecology* 17(25). https://doi.org/10.1186/s42408-021-00117-0.

Kolden, C., and C. Henson. 2019. “A Socio-Ecological Approach to Mitigating Wildfire Vulnerability in the Wildland Urban Interface: A Case Study from the 2017 Thomas Fire.” *Fire* 2(1): 9. https://doi.org/10.3390/fire2010009.

LACDRP (Los Angeles County Department of Regional Planning). 2012. *Santa Clarita Valley Area Plan, One Valley One Vision*.

LACoFD (Los Angeles County Fire Department). 2018. Fuel Modification Plan Notes. https://fire.lacounty.gov/wp-content/uploads/2020/05/Plan-Notes.pdf.

LACoFD (Los Angeles County Fire Department). 2021. Developer Fee Detailed Fire Station Plan Update – September 2021. https://fire.lacounty.gov/wp-content/uploads/2022/01/2021-Five-Year-Plan-Update-Attachment-A.pdf

LACoFD (Los Angeles County Fire Department). 2022. Developer Fee Detailed Fire Station Plan Update – October 2022. https://fire.lacounty.gov/wp-content/uploads/2022/12/2022-Fire-Station-Plan-Update_Attachment-A_update_Final-Copy_PDF.pdf

Manzello, S.L., S. Suzuki, Y. and Hayashi. 2011. *Summary of Full-Scale Experiments to Determine Vulnerabilities of Building Components to Ignition by Firebrand Showers*. NIST Special Publication 1126. National Institute of Standards and Technology. https://doi.org/10.6028/NIST.SP.1126.

Maranghides, A., D. McNamara, W. Mell, J. Trook, B. and Toman. 2012. *A Case Study of a Community Affected by the Witch and Guejito Fires*. NIST Technical Note 1796. National Institute of Standards and Technology. http://nvlpubs.nist.gov/nistpubs/TechnicalNotes/NIST.TN.1796.pdf.

Mockrin, M.H., H.K. Fishler, and S.I. Stewart. 2020. "After the Fire: Perceptions of Land Use Planning to Reduce Wildfire Risk in Eight Communities Across the United States." *International Journal of Disaster Risk Reduction* 45: 101444. https://doi.org/10.1016/j.ijdrr.2019.101444.

Moench, R. and J. Fusaro. 2012. "Soil Erosion Control after Wildfire." Fact Sheet No. 6.308. *Colorado State Extension.*

National Wildfire Coordinating Group. 2009. *Guidance for Implementation of Federal Wildland Fire Management Policy*. February 13, 2009.

National Wildfire Coordinating Group. 2021. "Estimating Winds for Fire Behavior." Last Modified July 8, 2021. Accessed November 2023. https://www.nwcg.gov/publications/pms437.

NFPA (National Fire Protection Association). 2021. "U.S. Experience with Sprinklers, NFPA Research, 1-18." https://www.nfpa.org/education-and-research/research/nfpa-research/fire-statistical-reports/us-experience-with-sprinklers?l=212.

NFPA (National Fire Protection Association). "Lists of Codes and Standards." https://www.nfpa.org/For-Professionals/Codes-and-Standards/List-of-Codes-and-Standards.

Price, O.F., J. Whittaker, P. Gibbons, and R. Bradstock. 2021. "Comprehensive Examination of the Determinants of Damage to Houses in Two Wildfires in Eastern Australia in 2013." *Fire* 4(3): 1–18. https://doi.org/10.3390/fire4030044.

Public Works (Los Angeles County Department of Public Works). 2010. *Construction Site Best Management Practices (BMPs) Manual*. http://dpw.lacounty.gov/cons/specs/bmpmanual.pdf.

Public Works. 2012. Disaster Routes With Road Districts Los Angeles County Map. https://pw.lacounty.gov/dsg/DisasterRoutes/.

SCV Water (Santa Clarita Valley Water Agency). 2022. *Draft 2022 Local Hazard Mitigation Plan*. Accessed March 27, 2023. https://www.yourscvwater.com/sites/default/files/SCVWA/SCV-Water-Local-Hazard-Mitigation-Plan-FINAL-20220425.pdf.

SFGate. 2021. "Where the Water Used for Fighting California Wildfires Comes From." August 18, 2021. Accessed March 27, 2023. https://www.sfgate.com/california-wildfires/article/where-does-water-come-from-fighting-fires-hydrant-16395574.php.

Sosnowski, A. 2021. *What are Santa Ana winds?* AccuWeather, Inc. Retrieved July 7, 2021. https://www.accuweather.com/en/weather-news/what-are-santa-ana-winds-2/343027.

State Board of Forestry and Fire Protection. 2018. *2018 Strategic Fire Plan for California.* August 22, 2018. https://bof.fire.ca.gov/media/hu2al23d/2018-strategic-fire-plan-approved-08_22_18.pdf.

Syphard, A.D., and J.E. Keeley. 2015. "Location, Timing and Extent of Wildfire Vary by Cause of Ignition." *International Journal of Wildland Fire*. 11 pp.

Syphard, A.D., A. Bar Massada, V. Butsic, and J.E. Keeley. 2013. "Land Use Planning and Wildfire: Development Policies Influence Future Probability of Housing Loss." *PLoS ONE* 8(8): e71708. https://doi.org/10.1371/journal.pone.0071708.

Syphard, A.D., T.J. Brennan, and J.E. Keeley. 2017. "The Importance of Building Construction Materials Relative to Other Factors Affecting Structure Survival during Wildfire." *International Journal of Disaster Risk Reduction* 21: 140–147. https://doi.org/10.1016/j.ijdrr.2016.11.011.

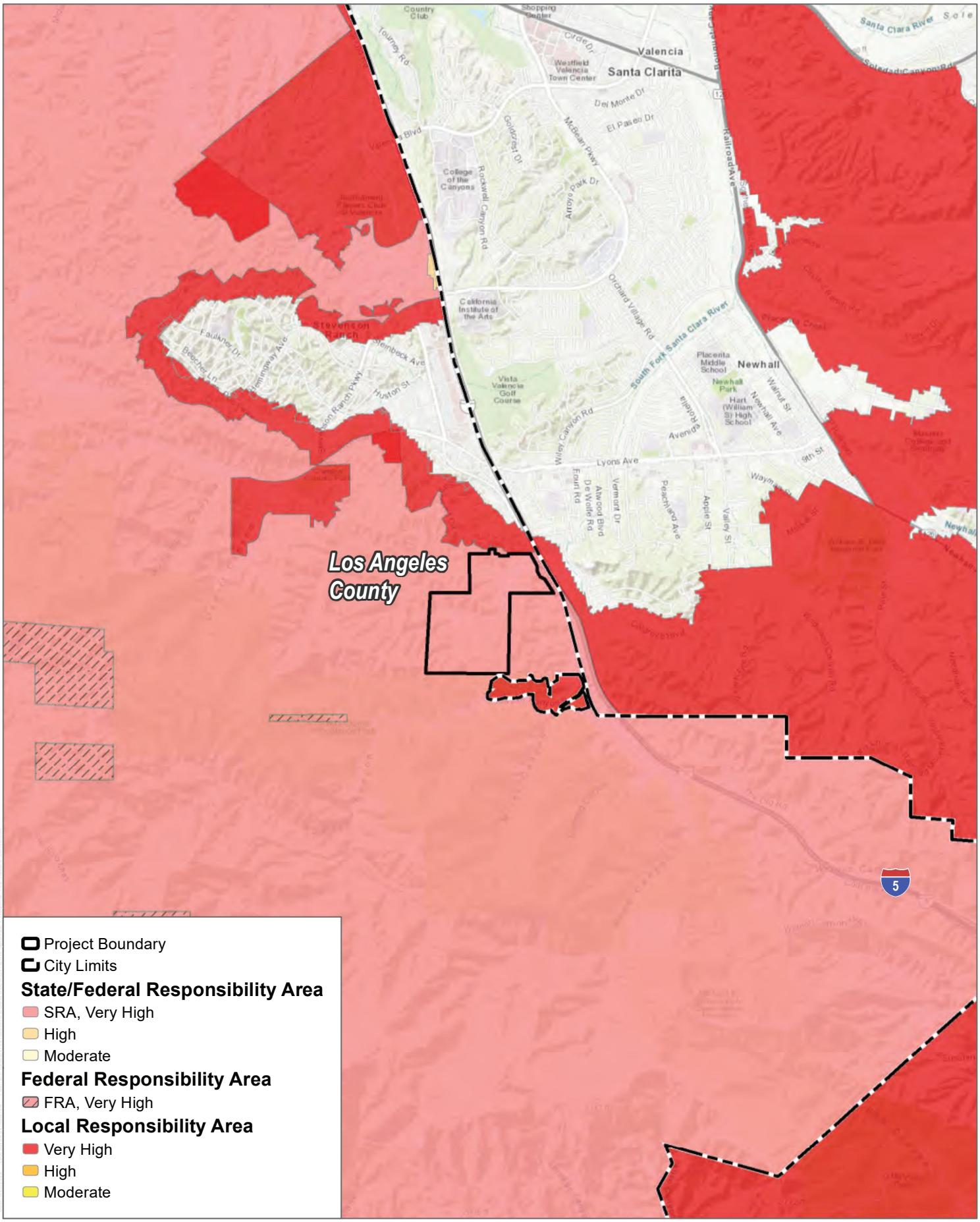
Wang, H.H., M.A. Finney, Z.L. Song, Z.S. Wang, and X.C. Li. 2021. "Ecological Techniques for Wildfire Mitigation: Two Distinct Fuelbreak Approaches and Their Fusion." *Forest Ecology and Management* 495: 119376. https://doi.org/10.1016/j.foreco.2021.119376.

Warziniack, T., P. Champ, J. Meldrum, H. Brenkert-Smith, C.M. Barth, and L.C. Falk. 2019. "Responding to Risky Neighbors: Testing for Spatial Spillover Effects for Defensible Space in a Fire-Prone WUI Community." *Environmental and Resource Economics* 73(4): 1023–1047. https://doi.org/10.1007/s10640-018-0286-0.

Western Regional Climate Center 2021. "Western U. S. Local Climate Data (LCD)". https://wrcc.dri.edu/Climate/west_lcd.php.

Zhou, A. 2013. "Performance Evaluation of Ignition-Resistant Materials for Structure Fire Protection in the WUI." In *Fire and Materials 2013 - 13th International Conference and Exhibition, Conference Proceedings*, *January 2013*, 355–366.

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SOURCE: ESRI World Topographic Map, FRAP

DUDEK

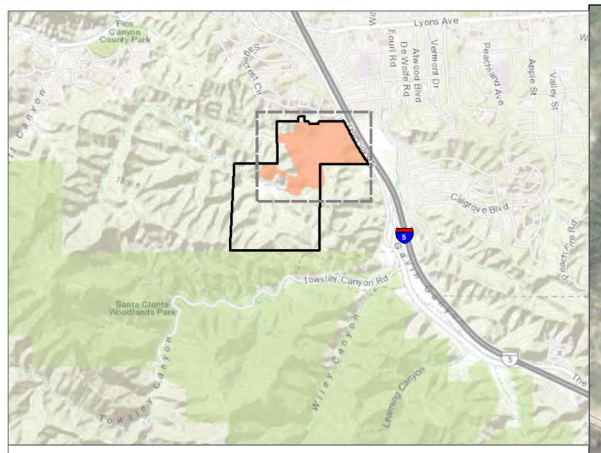
0 2,100 4,200 Feet

FIGURE 4.20-1

Regional Fire Hazard Zones

Trails at Lyons Canyon Project

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- Project Boundary
- Structure
- Enhanced Ignition Resistant Construction
- 6-Ft High Fire Wall
- Water Tank Access Retaining Wall
- 30-Ft Buffer
- 100-Ft Bufer
- 150-Ft Buffer
- 200-Ft Buffer
- FMZ Reduction
- FMZ Dimension

Fuel Modification Zone

- Onsite FMZ Equivalent
- Zone A - Setback Zone
- Zone B - Irrigated Zone
- Zone C - Manufactured Slope Thinning
- Zone C - Native Brush Thinning Zone
- Fire Access Roadway Zone
- Water Quality Basin (Annual Maintenance Required)
- Drainage Channel (Annual Maintenance Required)
- Offsite FMZ Equivalent

Land Use

- Fire Lane Access
- Driveway/Roadway Access
- Graded Area
- Trail/Access Road
- Park
- Manufactured Slope

NO REDUCTION OF 200-FT FUEL MOD WAS MADE IF REDUCTION CALCULATION IS UNDER 5 FEET. ONSITE ZONE C NOW EXTENDS TO 200 FEET UNLESS NOTED OTHERWISE.

SOURCE: AERIAL- BING MAPPING SERVICE; DEVELOPMENT-ALLIANCE ENGINEERING 2023

DUDEK 0 62.5 125 250 Feet

FIGURE **4.20-2**

Fuel Modification Plan

Trails at Lyons Canyon Project

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5 Other CEQA Considerations

This Chapter of the Environmental Impact Report (EIR) for the Trails at Lyons Canyon Project (Project) has been prepared in furtherance of the content requirements set forth in the California Environmental Quality Act (CEQA) Guidelines Section 15126.2. As such, this Chapter discusses:

- Significant and Unavoidable Adverse Impacts (Section 5.1)
- Significant and Irreversible Environmental Effects (Section 5.2)
- Growth Inducing Impacts (Section 5.3)
- Potential Secondary Effects of Mitigation Measures (Section 5.4)
- Impacts Found Not to Be Significant (Section 5.5)
- References (Section 5.6)

5.1 Significant and Unavoidable Adverse Impacts

Section 15126.2(c) of the State CEQA Guidelines (Guidelines) (California Code of Regulations [CCR] Title 14, Section 15000 et seq.) requires than an EIR describe any significant impacts which cannot be avoided. Specifically, Section 15126.2(c) states:

> Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.

While implementation of the Project-specific mitigation measures identified in Chapter 4, Environmental Analysis, of this Draft EIR would reduce the level of impact to less than significant, the impact in the following topic would remain significant, unavoidable, and adverse after mitigation measures are applied: Transportation. The specific significant and unavoidable impacts are detailed below.

Section 4.17, Transportation

The Project would conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) related to the Threshold 4.17(b), resulting in a potentially significant impact under baseline conditions. Under baseline conditions (year 2022), the Project's VMT per capita (without mitigation) is 20.4. Mitigation Measure (MM)-4.17-2 requires a Transportation Demand Management (TDM plan) that would detail additional program elements beyond the regulatory and site design features described above to reduce vehicle miles traveled (VMT) impacts. The TDM plan would be required to discourage single-occupancy vehicle trips and encourage alternative modes of transportation, such as carpooling, taking transit, walking, and biking for residents. With implementation of MM-4.17-2, the Project's VMT per capita would be reduced to 19.0. However, the VMT reductions associated with the TDM plan would not reduce the daily residential VMT per capita to a level below the significance threshold under baseline conditions (year 2022) (i.e., 16.8% below the baseline conditions of 12.7 VMT per capita, or 10.6 VMT per capita). Therefore, the Project impact is considered significant and unavoidable regarding the potential to conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). However, under cumulative conditions, the baseline VMT per capita is 18.4 (year 2040), which is higher than the existing (year 2022) baseline VMT per capita.

Furthermore, under cumulative conditions, the baseline VMT is the same as the cumulative threshold (not 16.8% below). Thus, per the County's TIA Guidelines, while cumulative Project VMT needs to be below 18.4 to avoid a cumulatively considerable impact, it does not need to be 16.8% below. As shown in the in the Transportation Impact Assessment prepared by Fehr & Peers (Appendix J, Fehr and Peers 2023) and in Section 4.17, Transportation, of this Draft EIR, the Project's cumulative VMT is 18.7. However, with implementation of MM-4.17-2, cumulative Project VMT per capita would be reduced to 17.7. Therefore, with implementation of MM-4.17-2, the Project's cumulative VMT per capita would be less than 18.4, and the cumulative impact would be less than significant.

5.2 Significant and Irreversible Environmental Impacts

Section 15126.2(d) of the Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the Project. Specifically, Section 15126.2(d) states:

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Generally, a project would result in significant irreversible environmental changes if any of the following would occur:

- Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely;
- The primary and secondary impacts of the project would generally commit future generations of people to similar uses;
- Irreversible damage from environmental accidents associated with the project;
- The proposed consumption of resources is not justified (e.g., the project results in wasteful use of energy).

Determining whether the Project could result in significant and irreversible effects requires a determination of whether key resources would be degraded or destroyed in such a way that there would be little possibility of restoring them.

The Project would consume limited, slowly renewable, and nonrenewable resources, resulting in irreversible environmental changes. This consumption would occur during construction of the Project and would continue throughout the Project's operational lifetime. The development of the Project would require a commitment of resources that would include: (1) building materials and associated solid waste disposal effects on landfills; (2) water; (3) and energy resources (e.g., petroleum-based fuels) for electricity, natural gas, and transportation; and (4) environmental hazards. In addition, the Project would be designed and constructed to support the objectives of County and regional planning programs that emphasize sustainability and reduce Project greenhouse gas (GHG) emissions. As demonstrated below, the Project would consume a limited amount of natural resources and would not result in significant irreversible environmental changes.

Large Commitment of Non-Renewable Resources

Examples of irretrievable commitments provided in the Guidelines include the use of nonrenewable resources (e.g., natural gas and other fossil fuels, lumber, and steel) during initial and continued phases of Project construction and operation. The Project's potential energy consumption is discussed in greater detail in Section 4.6, Energy, of this Draft EIR. Resources such as lumber and other forest products may be considered renewable resources because wood is a naturally renewable resource. Water is a limited, slowly renewable resource that would be consumed during Project construction. Nonrenewable resources, such as natural gas, petroleum products, asphalt, petrochemical construction materials, steel, copper, other metals, sand, and gravel are considered to be commodities which are available in a finite supply. Nonrenewable resources are regenerated over a long period of time.

The Project would consume limited, slowly renewable, and nonrenewable resources; however, the amount and rate of consumption of these resources would not result in significant environmental impacts related to the unnecessary, inefficient, or wasteful use of resources (see Sections 4.6, Energy and 4.19, Utilities and Service Systems, of this Draft EIR). As concluded in Section 4.10, Hydrology and Water Quality, and Section 4.19, Utilities and Service Systems, water use during Project construction would be limited to minor amounts of water required for various uses, such as dust suppression. Water use would be minor to negligible when compared to the operational demands of the Project, as well as the operational demands of the land uses to the north and east of Interstate (I) 5. With regard to building materials, the Project would be constructed with durable materials with a significant lifespan, such as cast in place concrete and precast concrete, which would improve building longevity. As such, even though construction would result in the commitment of building materials, the materials are not expected to require replacement during the Project's estimated operational lifespan. Furthermore, Sections 4.408 and 5.408 (Construction Waste Reduction, Disposal and Recycling) of the California Green Building Standards Code (CALGreen) (CCR Title 24, Part 11), require that 65% of all demolition and construction materials must be recycled, as demonstrated in an approved construction waste management plan. These regulations would ensure that portions of the existing materials on site are reused. In the event that the Project uses were to be demolished at a future time, these regulations would ensure that a majority of the materials are recycled. In addition, construction activities related to the reasonably expected development would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobile and construction equipment. However, use of such resources would not be unusual as compared to other construction projects and would not substantially affect the availability of such resources.

With respect to operational activities, water and non-renewable energy resources (such as petroleum) would be committed for heating and cooling of buildings, lighting, and transportation. However, compliance with applicable building codes such as the California Building Standards Code (CCR Title 24), inclusive of CALGreen and the California Energy Code (CCR Part 6 Title 24), and Title 31 (Green Building Standards Code) of the Los Angeles County Code (County Code), as well as required mitigation measures discussed in Chapter 4 of this Draft EIR, would ensure that natural resources are conserved or recycled to the maximum extent feasible. As described in Section 4.6, Energy, and Section 4.8, Greenhouse Gas Emissions, of this Draft EIR, the Project would be designed to include numerous energy-saving features that would allow the Project to comply with energy conservation standards found in CALGreen code. Implementation of MM-4.8-3, Energy Conservation, details energy conservation measures, such as installation of Energy-Star-related heating, cooling, lighting, and appliances, installation of a 7-kilowatt (kW) solar photovoltaic electric generating system at the recreation center, installation of cool pavement, and light emitting diodes (LED) or other high-efficiency lightbulbs outdoors.

Mitigation measures required in Section 4.8, Greenhouse Gas Emissions, would change the energy demand profile of the Project by eliminating natural gas in residential development (MM-4.8-2, Electrify Buildings) and replacing that energy demand with electricity. In addition, the Project's operational petroleum consumption is anticipated to be reduced as a result of MM-4.8-5 (Encourage Electric Vehicles), which requires installation of electric vehicle (EV) chargers. Greater use of EVs and elimination of natural gas would result in a greater consumption of electricity; however, electricity would partially be provided through onsite solar, thereby reducing or the use of fossil-fuel for residential or recreational uses on-site. Per MM-4.8-4 (Utilize 100% Zero-Carbon Electricity), the Project uses would be required to use 100% zero-carbon electricity procured through an electricity provider for the residences and recreational center. The California Energy Code requires all new low-rise residential buildings to install photovoltaic (PV) panels that can generate an output greater than or equal to the amount of electricity that a home would consume in one year. In accordance with CALGreen, the Project would have mandatory inspections of energy systems to ensure optimal working efficiency and would use low pollutant-emitting exterior and interior finish materials.

In addition to applicable code and mitigation requirements, it is also likely that in response to GHG emissions reduction plans (including the County's Community Climate Action Plan, the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS], and the California Air Resources Board Scoping Plan) new technologies or systems will emerge, or will become more cost-effective or user-friendly, that will further reduce the Projects operational reliance on nonrenewable natural resources (refer to Section 4.8, Greenhouse Gas Emissions, for further discussion of applicable plans and specific GHG reduction mandates). However, even with implementation of conservation measures, consumption of natural resources would generally increase with implementation of the Project due to population and activity increases. Although the Project would see an increase in petroleum use during construction and operation, vehicles would use less petroleum due to advances in fuel economy.

The Project's water use is discussed in detail in Section 4.19, which concluded that the Project would require approximately 215 acre-feet per year in an average/normal year during operation. As discussed in that section, the Project would implement water conservation practices that would reduce both indoor and outdoor irrigation demands, including landscaping designed in accordance with the Model Water Efficient Landscape Ordinance standards (CCR Title 23, Division 2, Chapter 2.7). Additionally, as required with implementation of MM-4.8-6, Water Use Efficiency and Water Conservation, in Section 4.8, Greenhouse Gas Emissions, the Project would include other water conservation measures, such as low-flow or high-efficiency water fixtures, high -efficiency appliances to reduce water use, and drought-tolerant plantings. Further, as indicated by Santa Clarita Valley Water (SCV Water) in their Project specific Water Supply Assessment, the projected water supplies available to the SCV Water service area are sufficient to meet the projected demands associated with Project, in addition to existing and other planned future uses, including agricultural and industrial uses, throughout the Santa Clarita Valley (refer to Appendix L-2, Water Supply Assessment, of the Draft EIR for further details regarding existing and projected water supplies available within the SCV Water service area).

In addition to the above considerations, State and local laws and regulations would further reduce the Project's use of nonrenewable resources over time. Specifically, electricity consumed at the Project site would be increasingly sourced from renewable energy, pursuant to Senate Bill (SB) 100. SB 100, which passed in 2018, states that 44% of the total electricity sold to retail customers in California per year must be secured from qualifying renewable energy sources by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. SB 100 also sets forth a State policy that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California and requires that achieving 100% zero-carbon electricity does not increase

carbon emissions elsewhere in the western grid or is not fulfilled through resource shuffling. As such, the Project's consumption of nonrenewable energy is anticipated to significantly decrease over time, as SB 100 is implemented statewide and overall nonrenewable energy consumption decreases.

Similarly, the vehicles that would travel to and from the Project site would be subject to increasingly stringent emissions standards over time, which would reduce the amount of fossil fuel consumed per vehicle (see Section 4.8, Greenhouse Gas Emissions, for additional details). Furthermore, the County and State have policies in place to support decreased use of personal vehicles. As such policies are carried out, the number of vehicles traveling to and from the site may decrease over time.

In summary, implementation of the Project would involve irreversible environmental changes to existing natural resources, such as the commitment of non-renewable energy and water resources as a result of the operation and maintenance of the Project. However, the implementation of Project would not involve wasteful or unjustifiable use of energy or other resources, and energy conservation efforts would occur with new construction. The Project would be constructed and operated in accordance with specifications contained CALGreen, the California Energy Code, and the County Code, as discussed in Sections 4.6, Energy, and 4.8, Greenhouse Gas Emissions. Therefore, the use of energy related to the Project would occur in an efficient manner.

Commitment to Future Uses

As discussed above, implementation of the Project would require and facilitate the use/consumption of water and non-renewable resources (e.g., natural gas, petroleum-based fuels). The Project would develop a mix of residential uses (including affordable senior housing), recreational facilities, and other utilities/ancillary uses on a previously undeveloped site, thus facilitating consumption of resources where resources are not currently being consumed and, by converting the Project site from open space to the proposed uses, committing future generations to similar uses. While the Project proposes improvements along The Old Road and new, internal roads to support emergency access, on-site circulation, and ingress/egress to The Old Road, the Project would not construct any highways which provide access to previously inaccessible areas thus committing future generations to similar uses.

As discussed in further detail below, while the primary impacts of the Project would result in commitment of future generations of people to similar uses, the commitment to resources would be justified and in accordance with planned growth for the region pursuant to General Plan land use and other applicable regional projections (refer to "Commitment of Resources Justified", below).

Irreversible Damage from Environmental Accidents

As discussed in Sections 4.7, Geology and Soils, 4.9, Hazards and Hazardous Materials, and 4.20 Wildfire, given compliance with all proposed State and County requirements measures related to the on-site plugged oil well and land management within a Very High Fire Hazard Severity Zone (VHFHSZ) and Hillside Management Area (HMA), including an approved Fuel Modification Plan, Fire Protection Plan, Geotechnical Report, Phase I Environmental Site Assessment, and with implementation of required mitigation, the Project would not create significant hazardous impacts. The Project would be constructed in compliance with the most recently adopted fire and building codes. The former oil well would be remediated and re-abandoned consistent with these requirements. The Project's Approved Fuel Modification Plan would minimize potential wildland fire risk by altering fuel modification zones for this VHFHSZ. The Project would incorporate infrastructure to ensure fire safety, including a new water tank to assure a reliable fire flow water pressure for the new residential structures, fire hydrants, and an emergency access road. Development of the proposed dwelling units and buildings on-site would be required to comply with Chapter 7 of

the California Fire Code (CFC) (as adopted and amended by Title 32, Fire Code, of the County Code), which requires the use of ignition resistant building materials, smoke barriers, sprinkler systems, fire protection systems, and door and window designs to avoid ember intrusion. The Project's Wildfire Evacuation Plan (Appendix M-2) determined that the Project and existing land uses would be able to evacuate within identified potential evacuation routes available to residents and provides emergency preparedness resources to support situational awareness and household preparedness. As discussed in Appendix M-2 and detailed in MM-4.20-1 of Section 4.20, Wildfire, the Homeowners' Association would be responsible for educating Project occupants about the local wildfire risks and the County's "Ready!, Set!, Go!" model of evacuation that encourages early evacuation of residents.

In addition, operation of the Project would only require limited use of commercially available hazardous materials, including janitorial and landscaping products. Should the amount of on-site hazardous materials, including hazardous wastes, be greater than reporting thresholds (55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas), a Hazardous Material Business Plan would be required under California Health and Safety Code Division 20, Chapter 6.11, Sections 25404–25404.9. The Hazardous Material Business Plan, which would be submitted to the Los Angeles County Fire Department (the local Certified Unified Program Agency) via the California Environmental Reporting System, would include emergency and spill prevention and response measures, thereby reducing the potential for an upset or accident condition. Use of extremely hazardous materials and accumulation of acutely hazardous wastes are not anticipated. Thus, with compliance with applicable State and County requirements and implementation of the mitigation measures discussed in Sections 4.7, Geology and Soils, 4.9, Hazards and Hazardous Materials, and 4.20, Wildfire, of this Draft EIR, the Project would not increase potential wildland fire or geological hazards, create a special fire protection requirement, or create indirect oil well effects on the Project site that would pose a threat to the area's occupants. Project operational impacts are not anticipated to result in irreversible damage due to environmental accidents.

Consumption of Resources Justified

While the Project would increase resource consumption during construction and operation, according to the Southern California Association of Governments (SCAG) 2020-2045 RTP/SCS, the demand for slowly renewable and nonrenewable resources is expected to increase in the region regardless of whether the Project is developed. The 2020-2045 RTP/SCS indicates that the population and employees in the unincorporated County area will increase by 20 percent and 19 percent, respectively, by 2045 over base-year 2016 (SCAG 2020). These increases will directly result in the need for more housing and services to accommodate the anticipated growth. If not consumed by this Project, slowly renewable and nonrenewable resources would likely be committed to other projects in the region intended to meet this anticipated growth. Furthermore, the investment of resources in the Project would be typical of the level of investment normally required for a project of this scale.

As discussed in Section 4.14, Population and Housing, of this Draft EIR, the Project would not exceed SCAG's or the County's General Plan population, housing, or employment growth projections for the unincorporated County area or Santa Clarita Valley Planning Area, respectively. The Project would help the County achieve its regional housing needs consistent with the County's Housing Element Update and the Regional Housing Needs Assessments' (RHNA's) 6th Cycle determination for the unincorporated County. Therefore, the Project's proposed development—and resulting commitment to future uses—would be in support of planned growth for the County and Santa Clarita Valley Planning Area and would provide much-needed housing to address the housing crisis in Southern California. Thus, while the Project's proposed uses would result in consumption of slowly renewable and non-renewable resources, these uses would be in support of planned growth for the region and would not result in future consumption of resources above and beyond what is necessary (per RHNA) or anticipated to occur (per the General

Plan and 2020-2045 RTP/SCS). For these reasons, the irretrievable commitment of resources attributable to the Project would not be significant.

5.3 Growth-Inducing Impacts

CEQA requires a discussion of ways in which the Project could be growth inducing. The CEQA Guidelines identify a project as growth inducing if it fosters economic or population growth or results in the construction of additional housing, either directly or indirectly, in the surrounding environment (14 CCR 15126[e]). New population from residential development, such as this Project, represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area. A project could indirectly induce growth by reducing or removing barriers to growth or by creating a condition that attracts additional population or new economic activity. However, a project's potential to induce growth does not automatically result in growth. Growth can only happen through capital investment in new economic opportunities by the private or public sectors.

Indirect growth-inducing impacts are commonly associated with the extension of new public services, utilities, and roads into areas that have previously been undeveloped. The extension of such infrastructure into a non-serviced area can represent the elimination of a growth-limiting factor, thereby inducing growth. Increases in the population may tax existing community service facilities, requiring construction of new facilities and ultimately resulting in an increase in the pace of development or the density of the existing surrounding development. Indirect growth-inducing impacts include an increased demand for housing, commodities, and services that new development causes or attracts by increasing the population or job growth in an area.

The Project would incorporate infrastructure to ensure fire safety, including a new water tank with up to two million gallons of water capacity to assure a reliable fire flow water pressure for the new residential structures on-site. Similarly, the Project would require various off-site water infrastructure improvements, including a new Zone Valve in The Old Road, construction of 4,000 linear feet of pipe in The Old Road, and upgrades to two existing pump stations east of I-5. However, these off-site improvements would be required specifically to accommodate the Project site, and therefore, would not result in direct or indirect growth-inducing impacts.

The Project is located adjacent to existing roadway infrastructure and residential/commercial development, where existing utility infrastructure and connections are in place and available to serve the Project site and future residents. Further, as discussed in Section 4.15, Public Services, of this Draft EIR, the Project would not require the expansion of existing sheriff protection, school, park, or library facilities, and as such, the Project would not facilitate additional growth in the region.

The Project would include two streets that connect to The Old Road to provide public access into the site, with an internal roadway network to provide access to all lots within the Project site. This would not result in indirect growth impacts, as these two public roads would facilitate off- to on-site circulation only for future residents and visitors to the site. A private access road would be gated at its connection to The Old Road at the northeastern-most portion of the Project site and would be available for pedestrian, hiking, and bicycling access but would not be generally available for vehicular access by future residents and would not be available for public vehicular access. The private access road would be used as a fire road, for emergency or maintenance vehicular access, connecting The Old Road to the future on-site dedicated trails. The termini of the private access road would connect to two proposed trail-realignments to be dedicated with a 20-feet easement to the County of Los Angeles. This roadway would provide emergency and maintenance access for future dedicated trails within the Project site.

However, from the Project's private access road, the Project would provide an easement for secondary access on Lots 14, 22, and 24 to allow for potential future access from an off-site property, Tentative Tract Map (TTM) 74979, located adjacent to the northwestern portion of the Project site. TTM 74979 is included as Cumulative Project LA2, as detailed in Chapter 2.0, Environmental Setting, of this EIR. Cumulative Project LA2 is considered inactive and consideration of a potential need for a future secondary access road would be uncertain. As such, implementation of this secondary access road is not reasonably foreseeable. The Project may facilitate access and connection to a potential future project, but the entitlement, design, and construction of a secondary access road with the easement would be the responsibility of the project applicant of Cumulative Project LA2. Nonetheless, because the proposed Project is allowing for a potential future connection to this adjacent property, this easement is considered a growth-inducing impact for Cumulative Project LA2, as it would remove an obstacle to growth by providing for a potential future secondary vehicular access that could allow for construction of TTM 74979. However, this growth-inducing impact would be limited to residential lots on Cumulative Project LA2 in an area bordered with residential uses to the north of the Project and TTM 74979, and as such, would not be considered substantial growth on a regional basis. Therefore, although the Project would result in growth inducing impacts due to removal of obstacles to the future development of TTM 74979, it would not facilitate development of the TTM 74979, which would be subject to a project-specific discretionary review. TTM 74979 would be subject to local land use plans, zoning restrictions, County Code, local and State laws and regulations, discretionary review, permitting, and environmental evaluation pursuant to CEQA. Additionally, Chapter 4.0, Environmental Impact Analysis, analyzes the potential cumulative impacts from Cumulative Project LA2.

The Project would result in improvements to The Old Road as required by the conditions of approval by Los Angeles County Public Works (Public Works). These improvements would include the following: (1) widening of The Old Road by 47 feet at the frontage of the Project site within Assessor's Parcel Number 2826-022-901 to create a total 68-foot-wide curb to curb road within an 80-foot right of way; (2) a new 8-foot-wide concrete sidewalk would be installed along the western frontage of the Project site; and (3) an approximately 4-foot-tall retaining wall would be constructed adjacent to the sidewalk. This width expansion of The Old Road would be limited to a portion of the northwestern frontage of the Project site along The Old Road and would return to its existing width immediately north and south of the Project's frontage to The Old Road. This expansion would be required specifically to facilitate vehicular access to the Project site to meet Public Works requirements, and as such, it would not be a growth-inducing impact.

The proposed sidewalk would connect to an existing sidewalk at the northeast corner of the Project site, would continue southward along The Old Road to the southeast corner of the Project site, ultimately terminating near the entrance of the Rivendale Park and Open Space trailhead/parking lot. As the sidewalk would provide permanent pedestrian connectivity and access to an existing use (i.e., Rivendale Park and Open Space trailhead/parking lot) that previously did not have paved sidewalk access to its location, this is anticipated to facilitate trail use by eliminating a potential barrier to access. Additional use of the existing and proposed trail systems in the Project area are discussed in Section 4.16, Recreation, of this Draft EIR. Increased use of the trail system would not be growth-inducing because no future structures or facilities are expected; rather it is anticipated that the existing trail system in combination with the proposed Project's on-site trail system, would be better accessed and utilized by the public. This increased use would not be considered growth-inducing pursuant to CEQA (14 CCR 15126[e]).

Additionally, a portion of the paved private access road would align with the existing Lyons Ranch pathway. Lyons Ranch is an unpaved dirt and gravel pathway that traverses through the Project site from the northeastern end, traveling south and eventually west, and continuing off-site. Lyons Ranch is currently used as an emergency access road and non-dedicated trail. Other than the future potential off-site connection to TTM 74979 through an access

easement, as described above, the Project would not extend new roadways off-site with inclusion of the private access road. Because the Project is formally allowing for public access on Lyons Ranch and within the Project site, the private access allows for facilitated emergency access to the on-site trail system for safety purposes. Therefore, the roadways located on-site would not result in indirect growth-inducing impacts. In addition, the Project would directly induce growth through the proposed residential development. Therefore, the Project is directly and indirectly growth-inducing pursuant to CEQA (14 CCR 15126[e]).

Approval of the Project would not set a precedent that could encourage and facilitate other activities that could significantly affect the environment. As discussed in Chapter 3, the purpose of the Project is to provide a diverse mix of housing units in various typologies proximate to convenient freeway access and existing roadway infrastructure, that would assist the County in obtaining its RHNA goals, in keeping with the recently updated General Plan Housing Element (County of Los Angeles 2022). Pressures to develop in the surrounding areas may derive from regional economic conditions and market demands for housing. However, the Project would be consistent with the applicable Residential 2 (H2) General Plan land use designation, and—with approval of the required CUPs (as listed in Section 3.2.1, Land Use Entitlements of Chapter 3, Project Description, of this Draft EIR)—would not conflict with the zoning designations for the Project site.

5.4 Potential Secondary Effects of Mitigation Measures

Section 15126.4(a)(1)(D) of the CEQA Guidelines states that "if a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but, in less detail, than the significant effects of the project as proposed." With regard to this section of the Guidelines, the potential impacts that could result with the implementation of each mitigation measure proposed for the Project were reviewed. The following provides a discussion of the potential secondary impacts that could occur as a result of the implementation of the proposed mitigation measures, listed by environmental issue area.

Aesthetics

MM-4.1-1, Visual Shielding Plan, would require the establishment of one or more designated construction staging areas as well as visual shielding in the form of temporary, opaque fencing and/or cloth screening along the Project-site boundary fronting The Old Road as well as in the vicinity of the Taylor Trailhead and where the western leg of the Taylor Trail intersects with the Project site. Temporary, opaque fencing and/or cloth screening would also be required around the designated construction staging areas(s). While visual shielding would block certain immediate views of the Project site, more distant mid- and long-range views of hillsides and significant ridgelines would still be visible in the background. Therefore, the Visual Shielding Plan, as required by MM-4.1-1, would not cause any significant environmental impacts.

Air Quality

MM-4.3-1, Construction Equipment, would require that 50 horsepower or greater diesel-powered equipment be powered with California Air Resources Board (CARB)-certified Tier 4 Final engines, and fugitive dust-related reductions. This mitigation measure identifies a substantive requirement (i.e., use of Tier 4 Final-engines) to reduce air quality impacts associated with oxides of nitrate emissions. The use of Tier 4 Final-engines instead of standard construction equipment, as required by MM-4.3-1, would not cause any significant adverse environmental impacts.

Biological Resources

MM-4.4-1, On-Site Habitat Preservation, would require execution of a conservation easement that permanently preserves on-site habitat and preparation of a Conservation Management Plan (CMP). It should be noted that conservation of open space is required by Section 22.102.090 (SEA Development Standards) of the County Code, and as such, the Project will avoid impacts to 150.31 acres on site (of which 144.43 acres would be preserved within a conservation easement). However, the preservation of 144.43 acres (approximately 62 percent) of natural open space on-site within a conservation easement does not meet the requirements of Section 22.102.090 of the County Code, which requires that 75% of the original undivided parcels to be preserved as natural open space. Therefore, the Project would require implementation of MM-4.4-9, Off-Site Habitat Preservation (discussed below), which would allow the Project to meet and exceed the requirements of Section 22.102.090. MM-4.4-1 is proposed to create a conservation easement and preserve and manage on-site biological resources including native arid scrub, chaparral, and grassland communities. The CMP would require monitoring and maintenance efforts during Project operation. Additional impacts associated with vehicle trips for workers (e.g., emissions, vehicle miles travels [VMT], and noise) were accounted for in the analyses provided in Section 4.3, Air Quality, Section 4.6, Energy, Section 4.8, Greenhouse Gas Emissions, and Section 4.13, Noise of this EIR. Therefore, preservation of open space within a conservation easement in perpetuity, as required by MM-4.4-1, would not result in any significant adverse environmental impacts.

MM-4.4-2, Habitat Mitigation and Monitoring Plan, would require development of a Habitat Mitigation and Monitoring Plan (HMMP) including monitoring methods, monitoring schedules, and applicable performance standards. Any remedial measures required would serve to reduce potential, adverse biological-resource impacts. The requirement for a biologist to implement the HMMP in compliance with MM-4.4-11 would result in additional worker(s) traveling to and from the Project site during construction, but this activity would be temporary and would not result in any significant adverse environmental impacts, as the impacts of these worker trips have been analyzed throughout the Draft EIR, as detailed above.

MM-4.4-3, Special-Status Plants Seed and Bulb Survey, Salvage and Translocation, would require bulbs be salvaged and/or seeds collected from the Project site and replanted in the on-site conservation area. MM-4.4-2 would also require that the CMP required pursuant to MM-4.4-1 include a Special-Status Plant Mitigation and Monitoring Plan (SSPMMPMM-4) to preserve and manage special status plant species including the Peirson's morning glory, Plummer's mariposa lily, scarlet keckiella, and slender mariposa lily. The requirement for a biologist(s) to salvage and translocate these species in compliance with MM-4.4-2 would result in additional worker(s) traveling to and from the Project site during construction. Impacts associated with vehicle trips during the Project's construction phase (e.g., emissions, VMT, and noise) were accounted for in Draft EIR, as discussed above. As such, MM-4.4-3 would not result in any significant adverse environmental impacts.

MM-4.4-4, Biological Monitoring, would require a Biological Monitor to be present during Project construction to monitor construction activities and to ensure compliance with all mitigation measures. The requirement for a Biological Monitor in compliance with MM-4.4-5 would result in additional worker(s) traveling to and from the Project site during construction, but this activity would be temporary and would not result in any significant adverse environmental effects. Additionally, the impacts of these trips were accounted for in the Draft EIR, as discussed above.

MM-4.4-5, Demarcation of Disturbance Limits, is intended to prevent inadvertent disturbance to sensitive vegetation communities by requiring that these communities be clearly demarcated (e.g., installation of flagging or temporary high visibility construction fence) prior to ground disturbance activities. Placement and maintenance of

temporary flagging in accordance with MM-4.4-4 could be conducted by the contracted construction workers for the Project and would not result in any significant adverse environmental impacts.

MM-4.4-6, Invasive Species Prevention, would require that the Project's landscaping pallet exclude invasive plant species listed on Appendix C of the SEA Ordinance Implementation Guide and in the California Invasive Plant Council inventory, as well as actions to ensure that invasive plant species are not inadvertently introduced or reintroduced to the Project site. MM-4.4-6 would require water use to wash vehicles traveling from the Project sites upland areas, but this wash-water would be negligible for the purpose of eliminating seeds on tires and would not result in any significant adverse environmental effects. The trucks required to dispose of vegetative materials are accounted for in the air quality impacts analysis in Section 4.3, Air Quality, of this Draft EIR.

MM-4.4-7, Landscaping Plan, would require preparation of a Landscaping Plan for the Homeowners' Association maintained areas. The Landscaping Plan would outline the plant species and the locations of plantings and irrigation throughout the HOA maintained areas of the Project site. Compliance with these requirements would ensure the appropriate selection and layout of plant species/irrigation methods. Impacts associated with implementation of the Landscaping Plan, including water use for landscaping irrigation, were accounted for in the Draft EIR, including Section 4.10, Hydrology and Water Quality, and Section 4.19, Utilities. Therefore, the Landscaping Plan, as required by MM-4.4-7, would not result in any significant adverse environmental impacts.

MM-4.4-8, Crotch Bumble Bee Habitat Preservation and Minimization Measures, would require consultation with the California Department of Fish and Wildlife on obtaining an Incidental Take Permit, and a pre-construction survey for Crotch bumble bee within the construction footprint occurring during the Crotch bumble bee nesting period (February 1 through October 31). The surveyors (and Biological Monitor required per MM-4.4-4) would result in additional worker(s) traveling to and from the Project site during construction, but this activity would be temporary and would not result in any significant adverse environmental impacts. Additionally, the impacts of these trips were accounted for in the Draft EIR, as discussed above.

MM-4.4-9, Off-Site Habitat Preservation, would require preparation of a CMP and execution of a conservation easement that permanently preserves off-site habitat. MM-4.4-9 is proposed to preserve and manage off-site biological resources including native shrubland, forest, woodland, and herbaceous communities. The CMP would require a biological resources assessment for any parcel proposed for preservation, as well as a Biological Monitor in accordance with MM-4.4-4. The assessment and monitoring would result in additional worker trips to and from the parcel(s) proposed for preservation. These trips would be temporary and would not result in any significant adverse environmental impacts. Additionally, the impacts of these trips were accounted for in the Draft EIR, as discussed above.

MM-4.4-10, Special-Status Wildlife Relocation Plan, would require development of a Preconstruction Wildlife Survey and Relocation Plan for terrestrial reptiles, including the California newt, two-striped garter snake, Southern California legless lizard, and coastal whiptail. The Special-Status Wildlife Relocation Plan would include pre-construction surveys, relocation of encountered species, and a Biological Monitor in accordance with MM-4.5-4, which would generate additional vehicle trips. These trips would be temporary and would not result in any significant adverse environmental impacts. Additionally, the impacts of these trips were accounted for in the Draft EIR, as discussed above.

MM-4.4-11, Nesting Birds Avoidance, would require actions be taken during the Project's construction phase to avoid disturbance of nesting birds. MM-4.4-11 would implement temporary procedures to reduce potential impacts to nesting birds, such as establishing suitable buffers around identified nesting areas. The requirement for a

biologist to monitor for nesting birds in compliance with MM-4.4-4 would result in additional worker(s) traveling to and from the Project site during construction, but this activity would be temporary and would not result in any significant adverse environmental impacts. Additionally, the impacts of these trips were accounted for in the Draft EIR, as discussed above.

MM-4.4-12, Lighting Plan, would require compliance with the lighting requirements outlined in the Chapter 22.80 (Rural Outdoor Lighting District) of the County Code. Compliance with these requirements would limit light trespass and reduce potential nuisances associated with outdoor lighting, which would reduce potential adverse impacts related to both aesthetics and biological resources. MM-4.4-12 would not result in any significant adverse environmental impacts.

MM-4.4-13, Homeowners' Association Covenants, Conditions, and Restrictions, would mandate the inclusion of specific requirements as part of the Covenants, Conditions, and Restrictions for the Homeowner's Association. These requirements would reduce potential human impacts on adjacent habitats and wildlife species, such as prescribed prohibitions of invasive plant species, feeding of mule deer, and homeowner reprisals against wildlife. Installation of public signage at the Project's trailhead and recreation facility has already been analyzed in this Draft EIR as a part of the proposed improvements for the Project. Therefore, the requirements prescribed in accordance with MM-4.4-13 would not result in any significant adverse environmental impacts.

MM-4.4-14, Jurisdictional Waters Compensation, would require on-site enhancement of the Project site's remaining jurisdictional waters and/or off-site acquisition, program funding, and/or mitigation bank credits. Waters preservation would not result in any adverse environmental impacts. The requirement for a biologist to implement Waters enhancement activities in compliance with MM-4.4-13 would result in additional worker(s) traveling to and from the Project site during construction, but this activity would be temporary and would not result in any significant adverse environmental impacts, as the impacts of these worker trips have been analyzed throughout the Draft EIR, as detailed above.

MM-4.4-15, Roosting Bat Surveys, would require a pre-construction roosting bat survey within one week prior to the start of construction-related activities. The Biological Monitor would result in an additional worker traveling to and from the Project site prior to construction activities, but this activity would be temporary and would not result in any significant adverse environmental impacts. Additionally, the impacts of these trips were accounted for in the Draft EIR, as discussed above.

MM-4.4-16, SEA Protected Trees Replacement/Compensation, would require replacement tree plantings (or payment of in-lieu fees) for any Significant Ecological Area projected trees removed or damaged because of Project implementation. The requirement for a biologist to plant trees in compliance with MM-4.4-16 would result in additional worker(s) traveling to and from the Project site during construction. Impacts associated with vehicle trips during the Project's construction phase (e.g., emissions, VMT, noise) are accounted for in the Draft EIR, as discussed above. Therefore, MM-4.4-16 would not result in any significant adverse environmental impacts.

Cultural Resources

MM-4.5-1, Archeological Monitoring, would require that a Principal Investigator/Archaeologist be retained prior to ground disturbance activities for the Project to (1) compose a Cultural and Paleontological Resource Monitoring and Inadvertent Discovery Plan (Plan); (2) manage archaeological monitoring; and (3) address any inadvertent discoveries identified during Project implementation. MM-4.5-2, Workers Environmental Awareness Program (WEAP) Training, requires that a WEAP be prepared by the retained archaeologist (MM-4.5-1) to inform all personnel

working on the Project site about the archaeological sensitivity of the area. The requirement for an archaeologist to be periodically onsite in compliance with MM-4.5-1 would result in additional worker(s) traveling to and from the Project site during construction, but this activity would be temporary and would not result in any significant adverse environmental impacts, as the impacts of these worker trips have been analyzed throughout the Draft EIR, as detailed above.

Geology and Soils

MM-4.7-1, Paleontological Monitoring, would require that, prior to ground disturbance activities, the Applicant and/or subsequent responsible parties retain a Qualified Paleontologist that meets the standards of the Society for Vertebrate Paleontology (2010). The Qualified Paleontologist would do the following: (1) compose a Paleontological Resource Monitoring and Inadvertent Discovery Plan (Plan); (2) manage paleontological monitoring; and (3) address any inadvertent discoveries identified during Project implementation.

MM-4.7-2, Workers Environmental Awareness Program (WEAP) Training, requires that a WEAP be prepared by a Principal Investigator/Qualified Paleontologist to inform all personnel working on the Project site about the paleontological sensitivity of the area. The requirement for a Qualified Paleontologist to be periodically onsite in compliance with MM-4.7-1 would result in additional worker(s) traveling to and from the Project site during construction, but this activity would be temporary and would not result in any significant adverse environmental impacts, as the impacts of these worker trips have been analyzed throughout the Draft EIR, as detailed above.

Greenhouse Gas Emissions

MM-4.8-1, Construction Emission Reductions, would require steps to reduce construction-related emissions, including use of electric or hybrid powered equipment, use of cleaner-fuel equipment, reduced idling time of heavy-duty trucks, and use of local construction contractors. This mitigation measure calls for procedural actions that would not result in physical changes in the environment and would therefore not result in significant adverse environmental impacts.

MM-4.8-2, Electrify Buildings, would require that all the Project's buildings be powered fully by electricity, with no natural gas infrastructure or appliances. MM-4.8-2 would reduce energy-related operational GHG emissions by replacing natural gas with electricity as electricity is a less GHG-intensive power source that also has the potential to be provided by renewable, zero-emission sources. The electricity on-site would be through on-site solar photovoltaics (through implementation of Title 24 Building Energy Efficiency Standards), solar photovoltaic electric-generating system at the recreation center, and 100% Zero-Carbon electricity (through implementation of MM-4.8-4). Overall, although the replacement of natural gas with electricity would increase electrical consumption, the energy would be provided by renewable, zero-emission sources, and therefore, would not result in physical changes in the environment that could result in secondary impacts. Implementation of this measure would have a beneficial impact through the reduction of operational GHG emissions and would not result in significant adverse environmental impacts.

MM-4.8-3. Energy Conservation, would require that the Project implement strategies to conserve energy, including installation of Energy Star rated heating, cooling, lighting, and appliances indoors, LED or other high-efficiency lightbulbs outdoors, and "cool pavements" in place of dark pavements. This mitigation measure calls for procedural actions that would not result in physical changes in the environment and would therefore not result in significant adverse environmental impacts.

MM-4.8-4, Utilize 100% Zero-Carbon Electricity, would require that the Project use 100% zero-carbon electricity procured through Southern California Edison (SCE) (SCE Green Rate) or other electricity provider. This mitigation measure is a procedural action that would not result in physical changes in the environment and would therefore not result in significant adverse environmental impacts.

MM-4.8-5, Encourage Electric Vehicles, would require installation of electrical vehicle charging stations at 92 of market-rate units. The charging stations would be installed and operated in accordance with Article 85 (Electric Vehicle Charging Stations) of the County's Electrical Code (Title 27 of the County Code), including mandatory compliance with the most current version of the "Zero-Emission Vehicles in California: Community Readiness Guidebook" published by the Governor's Office of Planning and Research (Electrical Code Section 85-7[b]). Compliance with permitting conditions and existing governmental regulations would ensure that installation of the charging stations and associated equipment would not have a substantial adverse environmental effect. Additionally, the charging stations would be powered by on-site photovoltaic panels (per Title 24 standards) and zero-carbon electricity (MM-4.8-4), which would result in renewable, zero-emission sources. This mitigation measure would not result in significant adverse environmental impacts.

MM-4.8-6, Water Use Efficiency and Water Conservation, would require that the Project incorporate water use efficiency and conservation measures, including high-efficiency appliances/fixtures, low-flow or high-efficiency water fixtures, water-efficient landscapes, planting of drought-tolerant species only, and the provision of educational materials to future tenants and building occupants about water saving behaviors and water-conserving landscaping. This mitigation measure calls for procedural actions that would not result in physical changes in the environment and would therefore not result in significant adverse environmental impacts.

MM-4.8-7, Solid Waste Reduction, would require that the Project provide storage areas for recyclables and green waste in new construction, and food waste storage, if a pick-up service is available. This mitigation measure calls for procedural actions that would not result in physical changes in the environment and would therefore not result in significant adverse environmental impacts.

MM-4.8-8, Landscape Maintenance Equipment Emission Reduction, would require that the Project implement landscape maintenance equipment reduction measures including the installation of electrical outlets on the exterior of structures to facilitate use of electrical lawn and garden equipment and encouragement of using existing yard equipment exchange and rebate programs. When conventional gasoline-powered yard equipment (e.g., lawn mowers, leaf blowers and vacuums, shredders, trimmers, and chain saw) are exchanged for electric and rechargeable battery-powered yard equipment, direct GHG emissions from fossil-fuel combustion are displaced by indirect GHG emissions associated with the generation of electricity used to power the equipment. However, electricity can be provided through on-site solar and zero-emission carbon (MM-4.8-4), thereby reducing or negating the use of fossil-fuel for uses on-site. As such, this mitigation measure is proposed to reduce potential impacts associated with GHG emissions and would not result in significant adverse environmental impacts.

Hazards and Hazardous Materials

MM-4.9-1, Soil Management Plan, would require that, prior to issuance of a grading permit, the Applicant retain a Qualified Environmental Specialist to prepare a Soil Management Plan (SMP) that addresses the protocols for all earthwork activities and the potential to encounter previously unidentified hazardous materials or wastes on the Project site as well as within off-site disturbance areas.

MM-4.9-2, Well Assessment, ensures that evaluation of the abandonment of the existing plugged oil well on the Project site is documented and approved by Public Works for safety, which would ensure compliance with Section 110.4 of the Los Angeles County Building Code. MM-4.9-3, Methane Gas Survey and Remediation, requires that the Applicant conduct a methane gas survey for the presence of methane within 300 feet of the plugged oil well. The methane survey would inform the requirements for the closure and removal of the plugged oil well. Should the results of field surveys indicate additional hazards to future occupants of the Project site, the Project Applicant would be required to install a gas protection system for all future habitable structures within 300 feet of the plugged oil well, and within areas with hazardous methane levels (as detailed in MM-4.9-3). Construction and earthwork activities associated with the well and the SMP have been accounted for in the overall short-term impacts analysis associated with site development, as assessed throughout this Draft EIR, and these measures would not result in additional significant adverse environmental impacts.

Noise

MM-4.13-1 through MM-4.13-4 would be required to reduce impacts from construction activity to less than significant. Upon implementation of these mitigation measures, impacts regarding generation of substantial temporary increases in ambient noise levels in the vicinity of the Project in excess of established standards would be less than significant. The noise barriers required by MM-4.13-3 and MM-4.14-4 would have the added benefit of screening construction equipment from view, thereby minimizing aesthetic impacts. Other requirements, such as distancing construction equipment from sensitive receptors, would not result in environmental impacts or in physical changes in the environment. Construction activities associated with the noise barriers have been accounted for in the overall short-term impacts analysis associated with site development, as assessed throughout this Draft EIR, and these measures would not result in additional significant adverse environmental impacts.

Transportation

MM-4.17-1, Construction Traffic Management Plan, would require development and implementation of a construction traffic control plan to reduce construction-related impacts to less than significant. Implementation of the plan would require safe detours and protocols for implementing the following, if determined necessary and feasible: temporary traffic controls (e.g., a flag person) during construction to maintain smooth traffic flow; dedicated transport routes for heavy equipment and hauls trucks; scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours; and coordination with adjacent property owners and emergency service providers to ensure adequate access to the Project site and surrounding uses. These requirements to reduce potential impacts related to ingress/egress and circulation during construction would be short-term in nature. This mitigation measure calls for procedural actions that would not result in physical changes in the environment and would therefore not result in significant adverse environmental impacts.

MM-4.17-2, Transportation Demand Management (TDM) Program, is aimed at discouraging single-occupancy vehicle trips and encouraging alternative modes of transportation, such as carpooling, taking transit, walking, and biking for residents. This would result in reduced dependence on single-occupancy vehicles, which would result in reduced GHG emissions associated with mobile uses. This mitigation measure calls for procedural actions that would not result in physical changes in the environment and would therefore not result in significant adverse environmental impacts.

Tribal Cultural Resources

MM-4.18-1, Retention of Native American Monitoring, would require retention of a Native American monitor/entity procured by the Fernandeño Tataviam Band of Mission Indians. The Native American monitor would be present during initial ground disturbance occurring from one foot above native soils and up to five feet below the surface of native soil. More than one monitor may be required if multiple areas within the Project site are simultaneously exposed to initial ground disturbance.

MM-4.18-2, Workers Environmental Awareness Program, requires that the monitor(s) be notified of the Workers Environmental Awareness Program (required by MM-4.5-2) no later than 72 hours prior to its scheduled occurrence. The required monitoring would result in additional worker trips to and from the Project site during the construction phase. Potential environmental impacts associated with worker trips (e.g., emissions, VMT, and noise) are accounted for in the Draft EIR, as discussed above. As such, these measures would not result in significant adverse environmental impacts.

MM-4.18-3, Inadvertent Discovery Clause, would require that, in the event that potential prehistoric or historic-era Native American/Tribal resources are exposed during construction activities for the Project, all construction work occurring within 60 feet of the find shall immediately stop and the retained Native American monitor/entity procured by the Fernandeño Tataviam Band of Mission Indians (as detailed in MM-4.18-1) must be notified promptly. The find would be assessed by the retained Principal Investigator/Archaeologist (as detailed in MM-4.5-1) in consultation with the retained Native American monitor/entity. In the event that human remains and associated funerary objects are inadvertently encountered during construction activities, the most likely descendants would be granted access to the site to complete an inspection. These requirements would result in additional trips to and from the Project site. However, as discussed above, the environmental impacts of vehicles traveling to and from the Project site have been addressed in this EIR. Therefore, MM-4.18-3 would not result in significant adverse environmental impacts.

Wildfire

MM-4.20-1, Wildfire Education Program, would require implementation of a robust homeowner education program about fire safety. Required signage placed at the new trailhead has been accounted for in this EIR as part of Project buildout. Other required procedural actions would not result in physical changes in the environment. Therefore, MM-4.20-1 would not result in significant adverse environmental impacts.

MM-4.20-2, Alternative Materials and Methods, would require the use of ignition resistant construction materials beyond existing code requirements, as well as a 6-foot heat deflecting wall constructed of concrete masonry units between on-site structures and adjacent unmaintained open space for the boundary of a portion of the Project site. Construction activities associated with the wall and building structures have been accounted for in the overall short-term impacts analysis associated with site development, as assessed throughout this Draft EIR, and these measures would not result in additional significant adverse environmental impacts.

MM-4.20-3, Annual Fuel Modification Zone Inspection, would require annual fuel modification inspections be conducted to confirm and document compliance with fuel modification maintenance requirements, as defined in the Los Angeles County Fire Department-approved Fuel Modification Plan.

The pre-construction requirements outlined in MM-4.20-4, Construction Fire Prevention Plan, and MM-4.20-5, Construction Related Fire Prevention Measures, would reduce the risk of wildfire ignition and spread on the Project

site during construction activities. Short-term construction and long-term operational impacts are assessed throughout this Draft EIR and specifically in Sections 4.3, Air Quality, 4.4, Biological Resources, 4.6, Energy, 4.8 Greenhouse Gas, and 4.13, Noise, which account for construction impacts and long-term maintenance of FMZs. As such, implementation of these mitigation measures would not result in significant adverse environmental impacts.

5.5 Impacts Found Not to Be Significant

California Public Resources Code Section 21003(f) states: "…it is the policy of the state that… [a]ll persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment." This policy is reflected in the Guidelines Section 15126.2(a), which states that "[a]n EIR shall identify and focus on the significant environmental impacts of the proposed project" and Section 15143, which states that "[t]he EIR shall focus on the significant effects on the environment". The Guidelines allow use of an Initial Study to document project effects that are less than significant (Guidelines Section 15063[a]). Guidelines Section 15128 requires that an EIR contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the Draft EIR.

As described in the Notice of Preparation prepared for the Project, all categories have been evaluated in the Draft EIR.

5.6 References

County of Los Angeles. 2022. "Revised Housing Element." Department of Regional Planning. Accessed May 2022. https://planning.lacounty.gov/wp-content/uploads/2022/11/housing-element-20220517.pdf.

SCAG (Southern California Association of Governments). 2020. *Demographics and Growth Forecast (Connect SoCal Technical Report)*. Adopted September 3, 2020.

SVP (Society of Vertebrate Paleontology). 2010. "Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources." SVP, Impact Mitigation Guidelines Revision Committee. http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx.

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6 Alternatives

This Chapter describes and evaluates alternatives to the proposed Trails at Lyons Canyon Project (Project). This chapter implements the requirements set forth in the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15126.6, Consideration and Discussion of Alternatives to the Proposed Project), and identifies the Environmentally Superior Project Alternative, as required by CEQA Guidelines Section 15126.6(e)(2). Information contained in this section is based on the following:

Appendix A-2 Notice of Preparation Comment Letters

Appendix B-1 Air Quality and Greenhouse Gas Emission Calculations, prepared by Dudek, dated November 2023

Appendix J Transportation Impact Analysis, prepared by Fehr & Peers, dated November 2023

Appendix N-1 Lyons Canyon—Alternative Project Site, letter from Chaparral Land Company, dated October 21, 2022

Appendix N-2 Output file of County of Los Angeles VMT Tool Version 1.0, Project Name: Lyons Canyon, Parcel Number 2826022027, prepared by Fehr & Peers, dated September 15, 2022.

Appendix N-3 Memorandum for Vehicle Miles Traveled Analysis for Lyons Canyon Mixed Use Alternative, prepared by Fehr and Peers, dated October 3, 2022

Appendix N-4 Significant Ecological Areas Technical Advisory Committee Draft Meeting Minutes, dated June 3, 2024

Other sources consulted are listed in Section 6.8, References.

6.1 Introduction

CEQA requires that Environmental Impact Reports (EIRs) "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (14 CCR 15126.6[a]).

Pursuant to Section 15126.6(b) of the CEQA Guidelines, an alternatives discussion must focus on "alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."

Pursuant to Section 15126.6(c) of the CEQA Guidelines, the "range of potential alternatives to the Project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead

agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination."

The CEQA Guidelines direct that the selection of alternatives be governed by "a rule of reason" (14 CCR 15126.6[a] and [f]). As defined by the CEQA Guidelines (14 CCR 15126.6[f]):

> The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the Lead Agency determines could feasibly attain most of the basic objectives of the project.

As such, this Draft EIR includes the analysis of three alternatives to the Project:

- **Alternative A** – No Project/Current Land Use Buildout
- **Alternative B** – Mixed Use Project
- **Alternative C** – Reduced Footprint

6.2 Project Objectives

CEQA Guidelines Section 15124(b) requires an EIR to include a statement of objectives sought by the Project, including the underlying purpose of the Project. As noted in Chapter 3, Project Description, of this Draft EIR, the Project's specific objectives are as follow:

1. Provide a diverse mix of housing units in various typologies that would assist the County in obtaining its Regional Housing Needs Allocation (RHNA) goals, including very low-income housing and moderate/middle-income households.
2. Provide housing opportunities consistent with the Los Angeles County General Plan 2035 and the Santa Clarita Valley Area Plan, One Valley One Vision, a component of the General Plan and applicable to the unincorporated portions of the Santa Clarita Valley.
3. Provide a mix of housing types proximate to convenient freeway access and existing roadway infrastructure.
4. Provide substantial homeownership opportunities for middle-income families in an area proximate to existing residential uses and infrastructure.
5. Provide a mix of housing types within a clustered development to limit the amount of the site subject to disturbance, limit the amount of urban wildland interface areas, preserve significant ridgelines, preserve biological resources, and provide a substantial amount of natural open space within the Project site.
6. Provide a comprehensive trail network, including publicly accessible trailhead, that provides connections for the public to access existing open space areas and established trails.

6.3 Summary of Environmental Impacts

As presented in prior sections of this Draft EIR, the Project would result in one significant and unavoidable impact after implementation of all mitigation measures, as summarized in Table 6-1, Summary of Environmental Impacts, below.

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
4.1. Aesthetics		
4.1a. Would the project have a substantial adverse effect on a scenic vista?	**MM-4.1-1**: *Visual Shielding Plan*. **MM-4.3-1:** *Construction Methods*	Less Than Significant with Mitigation
4.1b. Would the project be visible from or obstruct views from a regional riding, hiking, or multi-use trail?	No mitigation measures are required.	Less Than Significant
4.1c. Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No mitigation measures are required.	Less Than Significant
4.1d. Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings because of height, bulk, pattern, scale, character, or other features and/or conflict with applicable zoning and other regulations governing scenic quality? (Public views are those that are experienced from publicly accessible vantage point)	**MM-4.1-1**: *Visual Shielding Plan.* **MM-4.4-16**: *SEA Protected Trees Replacement/Compensation*.	Less Than Significant with Mitigation
4.1e. Would the project create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area?	No mitigation measures are required.	Less Than Significant
Cumulative: Would the project have a cumulative effect related to aesthetic impacts?	**MM-4.1-1**: *Visual Shielding Plan*. **MM-4.17-2**: *Transportation Demand Management (TDM) Program*.	Less Than Significant with Mitigation
4.2. Agriculture and Forest		
4.2a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No mitigation measures are required.	No Impact
4.2b. Would the project conflict with existing zoning for agricultural use, with a designated Agricultural Resource Area, or with a Williamson Act contract?	No mitigation measures are required.	Less Than Significant
4.2c. 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	No mitigation measures are required.	No Impact

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?		
4.2d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?	**MM-4.4-16:** *SEA Protected Trees Replacement/Compensation*.	Less Than Significant with Mitigation
4.2e. 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?	**MM 4.4-1:** *On-Site Habitat Preservation.* **MM-4.4-16**: *SEA Protected Trees Replacement/Compensation*.	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect on agriculture and forestry resources?	**MM 4.4-1:** *On-Site Habitat Preservation.* **MM-4.4-16**: *SEA Protected Trees Replacement/Compensation*.	Less Than Significant with Mitigation
4.3. Air Quality		
4.3a. Would the project conflict with or obstruct implementation of applicable air quality plans of either the South Coast AQMD (SCAQMD) or the Antelope Valley AQMD (AVAQMD)?	**MM-4.3-1:** *Construction Equipment.*	Less than Significant with Mitigation
4.3b. 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?	**Construction:** **MM-4.3-1:** *Construction Equipment.* **MM-4.8-1:** *Construction Emission Reductions.* **Operation:** **MM-4.8-2:** *Electrify Buildings.* **MM-4.8-3:** *Energy Conservation.* **MM-4.8-5:** *Encourage Electric Vehicles.* **MM-4.8-8:** *Landscape Maintenance Equipment Emission Reduction.* **MM-4.17-2:** *Transportation Demand Management (TDM) Program.*	Less than Significant with Mitigation
4.3c. Would the project expose sensitive receptors to substantial pollutant concentrations?	**MM-4.3-1:** *Construction Equipment.*	Less than Significant with Mitigation
4.3d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	No mitigation measures are required.	Less Than Significant

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
Cumulative: Would the project have a cumulative effect related to air quality?	**MM-4.3-1:** *Construction Equipment*.	Less than Significant with Mitigation
4.4. Biological Resources		
4.4a. 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 (CDFW) or U.S. Fish and Wildlife Service (USFWS)?	**MM-4.4-1:** *On-Site Habitat Preservation*. **MM-4.4-2**: *Habitat Mitigation and Monitoring Plan.* **MM-4.4-3:** *Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation*. **MM-4.4-4:** *Biological Monitoring.* **MM-4.4-5:** *Demarcation of Disturbance Limits.* **MM-4.4-6:** *Invasive Species Prevention.* **MM-4.4-7:** *Landscaping Plan.* **MM-4.4-8:** *Crotch's Bumble Bee Habitat Preservation and Minimization Measures.* **MM-4.4-9:** *Off-Site Habitat Preservation.* **MM-4.4-10:** *Special-Status Wildlife Relocation Plan.* **MM-4.4-11:** *Nesting Bird Avoidance.* **MM-4.4-12:** *Lighting Plan.* **MM-4.4-13:** *Homeowners' Association Covenants, Conditions, and Restrictions.*	Less than Significant with Mitigation
4.4b. Would the project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?	**MM-4.4-1**: *On-Site Habitat Preservation*. **MM-4.4-2**: *Habitat Mitigation and Monitoring Plan*. **MM-4.4-4**: *Biological Monitoring*. **MM-4.4-5**: *Demarcation of Disturbance Limits*. **MM-4.4-6**: *Invasive Species Prevention*. **MM-4.4-7**: *Landscaping Plan*. **MM-4.4-9:** *Off-Site Habitat Preservation*. **MM-4.4-13:** *Homeowners' Association Covenants, Conditions, and Restrictions.*	Less than Significant with Mitigation

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
4.4c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	**MM-4.4-1**: *On-Site Habitat Preservation*. **MM-4.4-3:** *Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation.* **MM-4.4-4**: *Biological Monitoring*. **MM-4.4-5**: *Demarcation of Disturbance Limits*. **MM-4.4-6**: *Invasive Species Prevention*. **MM-4.4-7**: *Landscaping Plan*. **MM-4.4-9:** *Off-Site Habitat Preservation.* **MM-4.4-14:** *Jurisdictional Waters Compensation.*	Less than Significant with Mitigation
4.4d. 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?	**MM-4.4-1**: *On-site Habitat Preservation*. **MM-4.4-4**: *Biological Monitoring*. **MM-4.4-15:** *Roosting Bat Survey.* **MM-4.4-12**: *Lighting Plan*.	Less than Significant with Mitigation
4.4e. Would the project convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or other unique native woodlands (juniper, Joshua, southern California black walnut, etc.).	**MM-4.4-1**: *On-Site Habitat Preservation*. **MM-4.4-2**: *Habitat Mitigation and Monitoring Plan*. **MM-4.4-4**: *Biological Monitoring*. **MM-4.4-5**: *Demarcation of Disturbance Limits*. **MM-4.4-6**: *Invasive Species Prevention*. **MM-4.4-7**: *Landscaping Plan*. **MM-4.4-9:** *Off-Site Habitat Preservation*. **MM-4.4-16:** *SEA Protected Trees Replacement / Compensation*.	Less than Significant with Mitigation
4.4f. Would the project conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A. County Code, Title 22, Ch. 22.174), the Significant Ecological Areas (SEAs) (L.A. County Code, Title 22, Ch. 102), Specific Plans (L.A. County Code, Title 22, Ch. 22.46), Community Standards Districts (L.A. County Code, Title 22, Ch. 22.300 et seq.), and/or Coastal Resource Areas (L.A. County General Plan, Figure 9.3)?	**MM-4.4-1**: *On-Site Habitat Preservation*. **MM-4.4-2**: *Habitat Mitigation and Monitoring Plan*. **MM-4.4-4**: *Biological Monitoring*. **MM-4.4-5**: *Demarcation of Disturbance Limits*. **MM-4.4-6**: *Invasive Species Prevention*. **MM-4.4-7**: *Landscaping Plan*. **MM-4.4-8**: *Crotch's Bumble Bee Habitat Preservation and Minimization Measures*.	Less than Significant with Mitigation

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
	MM-4.4-9: *Off-Site Habitat Preservation*. **MM-4.4-10**: *Special-Status Wildlife Relocation Plan*. **MM-4.4-12**: *Lighting Plan*. **MM-4.4-13:** *Homeowners' Association Covenants, Conditions, and Restrictions.* **MM-4.4-16:** *SEA Protected Trees Replacement/Compensation.*	
4.4g. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved state, regional, or local habitat conservation plan?	No mitigation measures are required.	No Impact
Cumulative: Would the project have a cumulative effect on biological resources?	**MM-4.4-1**: *On-Site Habitat Preservation*. **MM-4.4-2**: *Habitat Mitigation and Monitoring Plan*. **MM-4.4-3**: *Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation*. **MM-4.4-4**: *Biological Monitoring*. **MM-4.4-5**: *Demarcation of Disturbance Limits*. **MM-4.4-6**: *Invasive Species Prevention*. **MM-4.4-7**: *Landscaping Plan*. **MM-4.4-8**: *Crotch's Bumble Bee Habitat Preservation and Minimization Measures*. **MM-4.4-9:** *Off-Site Habitat Preservation*. **MM-4.4-10**: *Special-Status Wildlife Relocation Plan*. **MM-4.4-11**: *Nesting Bird Avoidance*. **MM-4.4-12**: *Lighting Plan*. **MM-4.4-13:** *Homeowners' Association Covenants, Conditions, and Restrictions*. **MM-4.4-14**: *Jurisdictional Waters Compensation*. **MM-4.4-15:** *Roosting Bat Survey.* **MM-4.4-16**: *SEA Protected Trees Replacement/Compensation.*	Less than Significant with Mitigation

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
4.5. Cultural Resources		
4.5a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	**MM-4.5-1:** *Archaeological Monitoring.* **MM-4.5-2:** *Workers Environmental Awareness Program (WEAP) Training.*	Less than Significant with Mitigation
4.5b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	**MM-4.5-1:** *Archaeological Monitoring.* **MM-4.5-2:** *Workers Environmental Awareness Program (WEAP) Training.*	Less Than Significant with Mitigation
4.5c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	**MM-4.5-1:** *Archaeological Monitoring.* **MM-4.5-2:** *Workers Environmental Awareness Program (WEAP) Training.*	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect on cultural resources?	**MM-4.5-1:** *Archaeological Monitoring.* **MM-4.5-2:** *Workers Environmental Awareness Program (WEAP) Training.*	Less Than Significant with Mitigation
4.6. Energy		
4.6a. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No mitigation measures are required.	Less Than Significant
4.6b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No mitigation measures are required.	Less Than Significant
Cumulative: Would the project have a cumulative effect on energy resources?	No mitigation measures are required.	Less Than Significant
4.7. Geology and Soils		
4.7a. Would the project 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 active fault trace? Refer to Division of Mines and Geology Special Publication 42?	No mitigation measures are required.	Less Than Significant
ii. Strong seismic ground shaking?	No mitigation measures are required.	Less Than Significant

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
iii. Seismic related ground failure including liquefaction and lateral spreading?	No mitigation measures are required.	Less Than Significant
iv. Landslides?	No mitigation measures are required.	Less Than Significant
4.7b. Would the project result in substantial soil erosion or the loss of topsoil?	No mitigation measures are required.	Less Than Significant
4.7c. 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?	No mitigation measures are required.	Less Than Significant
4.7d. Would the project 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?	No mitigation measures are required.	Less Than Significant
4.7e. Would the project have soils incapable of adequately supporting the use of onsite wastewater treatment systems where sewers are not available for the disposal of wastewater?	No mitigation measures are required.	No Impact
4.7f. Would the project conflict with the Hillside Management Area Ordinance (L.A. County Code, Title 22, Ch. 22.104)?	No mitigation measures are required.	Less Than Significant
4.7g. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**MM-4.7-1:** *Paleontological Monitoring.* **MM-4.7-2:** *Workers Environmental Awareness Program (WEAP) Training.*	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect related to geology and soils?	No mitigation measures are required.	Less Than Significant
4.8. Greenhouse Gas Emissions		
4.8a. Would the project generate greenhouse gas emissions (GHGs), either directly or indirectly, that may have a significant impact on the environment?	**MM-4.8-1:** *Construction Emission Reductions*. **MM-4.8-2:** *Electrify Buildings.* **MM-4.8-3:** *Energy Conservation*. **MM-4.8-4:** *Utilize 100% Zero-Carbon Electricity.* **MM-4.8-5:** *Encourage Electric Vehicles.* **MM-4.8-6:** *Water Use Efficiency and Water Conservation*. **MM-4.8-7:** *Solid Waste Reduction.*	Less Than Significant with Mitigation

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
	MM-4.8-8: *Landscape Maintenance Equipment Emission Reductions*. **MM-4.17-2**: *Transportation Demand Management (TDM) Program*.	
4.8b. Would the project conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	**MM-4.8-1:** *Construction Emissions Reductions*. **MM-4.8-2**: *Electrify Buildings*. **MM-4.8-3**: *Energy Conservation*. **MM-4.8-4**: *Utilize 100% Zero-Carbon Electricity*. **MM-4.8-5**: *Encourage Electric Vehicles*. **MM-4.8-6**: *Water Use Efficiency and Water Conservation*. **MM4.8-7**: *Solid Waste Reduction*. **MM-4.8-8**: *Landscape Maintenance Equipment Emission Reduction*. **MM-4.17-2**: *Transportation Demand Management (TDM) Program*.	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect related to greenhouse gas emissions?	**MM-4.8-1:** *Construction Emissions Reductions*. **MM-4.8-2**: *Electrify Buildings*. **MM-4.8-3**: *Energy Conservation*. **MM-4.8-4**: *Utilize 100% Zero-Carbon Electricity*. **MM-4.8-5**: *Encourage Electric Vehicles*. **MM-4.8-6**: *Water Use Efficiency and Water Conservation*. **MM4.8-7**: *Solid Waste Reduction*. **MM-4.8-8**: *Landscape Maintenance Equipment Emission Reduction*. **MM-4.17-2**: *Transportation Demand Management (TDM) Program*.	Less Than Significant with Mitigation
4.9. Hazards and Hazardous Materials		
4.9a. Would the project create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials?	No mitigation measures are required.	Less Than Significant

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
4.9b. 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 or waste into the environment?	**MM-4.9-1**: *Soil Management Plan (SMP)*.	Less Than Significant with Mitigation
4.9c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of sensitive land uses?	**MM-4.9-1**: *Soil Management Plan (SMP)*.	Less Than Significant with Mitigation
4.9d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	**MM-4.9-2:** *Well Assessment*. **MM-4.9-3**: *Methane Gas Survey and Remediation*.	Less Than Significant with Mitigation
4.9e. 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?	No mitigation measures are required.	No Impact
4.9f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	**MM-4.17-1**: *Construction Traffic Management Plan*. **MM-4.20-1:** *Wildfire Education Program*.	Less Than Significant with Mitigation
4.9g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires because the project is located:		
i. within a high fire hazard area with inadequate access?	**MM-4.17-1**: *Construction Traffic Management Plan*. **MM-4.20-1:** *Wildfire Education Program*. **MM-4.20-4**: *Construction Fire Prevention Plan*. **MM-4.20-5**: *Construction-Related Fire Prevention Measures*.	Less Than Significant with Mitigation
ii. within an area with inadequate water and pressure to meet fire flow standards?	**MM-4.20-4**: *Construction Fire Prevention Plan*. **MM-4.20-5**: *Construction-Related Fire Prevention Measures*.	Less Than Significant with Mitigation
iii. within proximity to land uses that have the potential for dangerous fire hazard?	**MM-4.20-4**: *Construction Fire Prevention Plan*. **MM-4.20-5**: *Construction-Related Fire Prevention Measures*.	Less Than Significant with Mitigation

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
4.9h. Does the proposed use constitute a potentially dangerous fire hazard?	**MM-4.20-1:** *Wildfire Education Program*. **MM-4-20-2:** *Alternative Materials and Methods.* **MM-4.20-3:** *Annual Fuel Modification Zone Inspection*. **MM-4.20-4:** *Construction Fire Prevention Plan*. **MM-4.20-5:** *Construction-Related Fire Prevention Measures.*	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect related to hazards and hazardous materials?	**MM-4.9-1:** *Soil Management Plan (SMP).* **MM-4.9-2:** *Well Assessment*. **MM-4.9-3:** *Methane Gas Survey and Remediation.* **MM-4.17-1**: *Construction Traffic Management Plan*. **MM-4.20-1:** *Wildfire Education Program*. **MM-4-20-2:** *Alternative Materials and Methods.* **MM-4.20-3:** *Annual Fuel Modification Zone Inspection*. **MM-4.20-4:** *Construction Fire Prevention Plan*.	Less Than Significant with Mitigation
4.10. Hydrology and Water Quality		
4.10a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	**MM-4.4-14:** *Jurisdictional Waters Compensation.*	Less Than Significant with Mitigation
4.10b. 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?	No mitigation measures are required.	Less Than Significant
4.10c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of a Federal 100-year flood hazard area or County Capital Flood floodplain; the alteration of the course of a stream or river; or through the addition of impervious surfaces, in a manner which would:	No mitigation measures are required.	Less Than Significant

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
i. Result in substantial erosion or siltation on or off site?	No mitigation measures are required.	Less Than Significant
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?	No mitigation measures are required.	Less Than Significant
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	No mitigation measures are required.	Less Than Significant
iv. Impede or redirect flood flows which would expose existing housing or other insurable structures in a Federal 100-year flood hazard area or County Capital Flood floodplain to a significant risk of loss or damage involving flooding?	No mitigation measures are required.	Less Than Significant
4.10d. Would the project otherwise place structures in Federal 100-year flood hazard or County Capital Flood floodplain areas which would require additional flood proofing and flood insurance requirements?	No mitigation measures are required.	Less Than Significant
4.10e. Would the project conflict with the Los Angeles County Low Impact Development Ordinance (L.A. County Code, Title 12, Ch. 12.84)?	No mitigation measures are required.	Less Than Significant
4.10f. Would the project use onsite wastewater treatment systems in areas with known geological limitations (e.g. high groundwater) or in close proximity to surface water (including, but not limited to, streams, lakes, and drainage course)?	No mitigation measures are required.	No Impact
4.10g. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?	No mitigation measures are required.	Less Than Significant
4.10h. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No mitigation measures are required.	Less Than Significant
Cumulative: Would the project have a cumulative effect related to hydrology or water quality?	No mitigation measures are required.	Less Than Significant
4.11. Land Use and Planning		
4.11a. Would the project physically divide an established community?	No mitigation measures are required.	Less Than Significant
4.11b. Would the project cause a significant environmental impact due to a conflict with any County land use plan, policy, or regulation	**MM-4.3-1:** *Construction Equipment.* **MM-4.4-1**: *On-Site Habitat Preservation*.	Less Than Significant with Mitigation

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
adopted for the purpose of avoiding or mitigating an environmental effect?	**MM-4.4-2**: *Habitat Mitigation and Monitoring Plan*. **MM-4.4-3**: *Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation*. **MM-4.4-4**: *Biological Monitoring*. **MM-4.4-5**: *Demarcation of Disturbance Limits*. **MM-4.4-6**: *Invasive Species Prevention*. **MM-4.4-7**: *Landscaping Plan*. **MM-4.4-8**: *Crotch's Bumble Bee Habitat Preservation and Minimization Measures*. **MM-4.4-9:** *Off-Site Habitat Preservation*. **MM-4.4-10:** *Special-Status Wildlife Relocation Plan*. **MM-4.4-11:** *Nesting Bird Avoidance.* **MM-4.4-12**: *Lighting Plan*. **MM-4.4-13:** *Homeowners' Association Covenants, Conditions, and Restrictions*. **MM-4.4-14:** *Jurisdictional Waters Compensation*. **MM-4.4-16:** *SEA Protected Trees Replacement/Compensation.* **MM-4.5-1:** *Archaeological Monitoring.* **MM-4.5-2:** *Workers Environmental Awareness Program (WEAP) Training.* **MM-4.7-1:** *Workers Environmental Awareness Program (WEAP) Training.* **MM-4.7-2:** *Paleontological Monitoring.* **MM-4.8-1:** *Construction Emission Reductions*. **MM-4.8-2:** *Electrify Buildings*. **MM-4.8-3:** *Energy Conservation*. **MM-4.8-4:** *Utilize 100% Zero-Carbon Electricity*. **MM-4.8-5:** *Encourage Electric Vehicles*. **MM-4.8-6:** *Water Use Efficiency and Water Conservation*.	

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
	MM-4.8-7: *Solid Waste Reduction*. **MM-4.8-8**: *Landscape Maintenance Equipment Emission Reduction*. **MM-4.13-1:** *Simultaneous Equipment Operation Limit for Portion of Lot 22.* **MM-4.13-2:** *Staging Areas & Stationary Equipment*. **MM-4.13-3:** *Stationary Equipment Construction Noise Barrier*. **MM-4.13-4:** *Temporary Noise Barrier for On-Site Phases*. **MM-4.17-1:** *Construction Traffic Management Plan*. **MM-4.17-2:** *Transportation Demand Management (TDM) Program.* **MM-4.20-1**: *Wildfire Education Program.* **MM-4.20-2**: *Alternative Materials and Methods.* **MM-4.20-3:** *Annual Fuel Modification Zone Inspection.* **MM-4.20-4:** *Construction Fire Prevention Plan.* **MM-4.20-5**: *Construction-Related Fire Prevention Measures.*	
4.11c. Would the project conflict with the goals and policies of the General Plan related to Hillside Management Areas or Significant Ecological Areas?	**MM-4.4-1:** *On-Site Habitat Preservation*. **MM-4.4-2:** *Habitat Mitigation and Monitoring Plan*. **MM-4.4-3:** *Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation*. **MM-4.4-4:** *Biological Monitoring.* **MM-4.4-5:** *Demarcation of Disturbance Limits.* **MM-4.4-6:** *Invasive Species Prevention.* **MM-4.4-7:** *Landscaping Plan.* **MM-4.4-8:** *Crotch's Bumble Bee Habitat Preservation and Minimization Measures.*	Less Than Significant with Mitigation

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
	MM-4.4-9: *Off-Site Habitat Preservation*. **MM-4.4-10:** *Special-Status Wildlife Relocation Plan*. **MM-4.4-11:** *Nesting Bird Avoidance.* **MM-4.4-12:** *Lighting Plan.* **MM-4.4-13:** *Homeowners' Association Covenants, Conditions, and Restrictions.* **MM-4.4-14:** *Jurisdictional Waters Compensation*. **MM-4.4-16:** *SEA Protected Trees Replacement/Compensation.*	
Cumulative: Would the project have a cumulative effect related to land use and planning?	**MM-4.3-1:** *Construction Equipment.* **MM-4.4-1**: *On-Site Habitat Preservation*. **MM-4.4-2**: *Habitat Mitigation and Monitoring Plan*. **MM-4.4-3**: *Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation*. **MM-4.4-4**: *Biological Monitoring*. **MM-4.4-5**: *Demarcation of Disturbance Limits*. **MM-4.4-6**: *Invasive Species Prevention*. **MM-4.4-7**: *Landscaping Plan*. **MM-4.4-8**: *Crotch's Bumble Bee Habitat Preservation and Minimization Measures*. **MM-4.4-9:** *Off-Site Habitat Preservation*. **MM-4.4-10:** *Special-Status Wildlife Relocation Plan*. **MM-4.4-11:** *Nesting Bird Avoidance.* **MM-4.4-12**: *Lighting Plan*. **MM-4.4-13:** *Homeowners' Association Covenants, Conditions, and Restrictions*. **MM-4.4-14:** *Jurisdictional Waters Compensation*. **MM-4.4-16:** *SEA Protected Trees Replacement/Compensation.*	Less Than Significant with Mitigation

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
	MM-4.5-1: *Archaeological Monitoring.* **MM-4.5-2:** *Workers Environmental Awareness Program (WEAP) Training.* **MM-4.7-1:** *Workers Environmental Awareness Program (WEAP) Training.* **MM-4.7-2:** *Paleontological Monitoring.* **MM-4.8-1:** *Construction Emission Reductions*. **MM-4.8-2:** *Electrify Buildings*. **MM-4.8-3:** *Energy Conservation*. **MM-4.8-4:** *Utilize 100% Zero-Carbon Electricity*. **MM-4.8-5:** *Encourage Electric Vehicles*. **MM-4.8-6:** *Water Use Efficiency and Water Conservation*. **MM-4.8-7:** *Solid Waste Reduction*. **MM-4.8-8**: *Landscape Maintenance Equipment Emission Reduction*. **MM-4.13-1:** *Simultaneous Equipment Operation Limit for Portion of Lot 22.* **MM-4.13-2:** *Staging Areas & Stationary Equipment*. **MM-4.13-3:** *Stationary Equipment Construction Noise Barrier*. **MM-4.13-4:** *Temporary Noise Barrier for On-Site Phases*. **MM-4.17-1:** *Construction Traffic Management Plan*. **MM-4.17-2:** *Transportation Demand Management (TDM) Program.* **MM-4.20-1**: *Wildfire Education Program.* **MM-4.20-2**: *Alternative Materials and Methods.* **MM-4.20-3:** *Annual Fuel Modification Zone Inspection.* **MM-4.20-4:** *Construction Fire Prevention Plan.*	

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
	MM-4.20-5: *Construction-Related Fire Prevention Measures.*	
4.12. Mineral Resources		
4.12a. 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?	No mitigation measures are required.	No Impact
4.12b. 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?	No mitigation measures are required.	No Impact
Cumulative: Would the project have a cumulative effect on mineral resources?	No mitigation measures are required.	No Impact
4.13. Noise		
4.13a. 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 County General Plan or noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08), or applicable standards of other agencies?	**MM-4.13-1:** *Simultaneous Equipment Operation Limit for Portion of Lot 22.* **MM-4.13-2:** *Staging Areas & Stationary Equipment*. **MM-4.13-3:** *Stationary Equipment Construction Noise Barrier*. **MM-4.13-4:** Temporary Noise Barrier for On-Site Phases	Less Than Significant with Mitigation
4.13b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	No mitigation measures are required.	Less Than Significant
4.13c. 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 expose people residing or working in the project area to excessive noise levels?	No mitigation measures are required.	No Impact
Cumulative: Would the project have a cumulative effect related to noise?	**MM-4.13-1:** *Simultaneous Equipment Operation Limit for Portion of Lot 22.* **MM-4.13-2:** *Staging Areas & Stationary Equipment*.	Less Than Significant with Mitigation

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
	MM-4.13-3: *Stationary Equipment Construction Noise Barrier*. **MM-4.13-4:** Temporary Noise Barrier for On-Site Phases	
4.14. Population and Housing		
4.14a. 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)?	No mitigation measures are required.	Less Than Significant
4.14b. Would the project displace substantial numbers of existing people or housing, especially affordable housing, necessitating the construction of replacement housing elsewhere?	No mitigation measures are required.	No Impact
Cumulative: Would the project have a cumulative effect related to population and housing?	No mitigation measures are required.	No Impact
4.15. Public Services		
4.15a. Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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:		
i) Fire protection?	**MM-4.17-1**: *Construction Traffic Management Plan*. **MM-4.20-1:** *Wildfire Education Program*. **MM-4.2-2:** *Alternative Materials and Methods.* **MM-4.20-3:** *Annual Fuel Modification Zone Inspection*. **MM-4.20-4:** *Construction Fire Prevention Plan*. **MM-4.20-5:** *Construction-Related Fire Prevention Measures.*	Less Than Significant with Mitigation
ii) Sherriff protection?	**MM-4.1-1:** *Visual Shielding Plan.* **MM-4.17-1**: *Construction Traffic Management Plan.*	Less Than Significant with Mitigation

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
iii) Schools?	**MM-4.17-1**: *Construction Traffic Management Plan*.	Less Than Significant with Mitigation
iv) Parks?	**MM-4.17-1**: *Construction Traffic Management Plan*.	Less Than Significant with Mitigation
v) Libraries?	No mitigation measures are required.	Less Than Significant
vi) Other public facilities?	**MM-4.17-1**: *Construction Traffic Management Plan*.	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect on public services?	**MM-4.17-1**: *Construction Traffic Management Plan*.	Less Than Significant with Mitigation
4.16. Recreation		
4.16a. 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?	No mitigation measures are required.	Less Than Significant
4.16b. Does the project include neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities which might have an adverse physical effect on the environment?	No mitigation measures are required.	Less Than Significant
4.16c. Would the project interfere with regional trail connectivity?	No mitigation measures are required.	Less Than Significant
Cumulative: Would the project have a cumulative effect on recreational facilities?	No mitigation measures are required.	Less Than Significant
4.17. Transportation		
4.17a. Would the project conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	**MM-4.17-1:** *Construction Traffic Management Plan.* **MM-4.17-2**: *Transportation Demand Management (TDM) Program*.	Less Than Significant with Mitigation
4.17b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	**MM-4.17-2**: *Transportation Demand Management (TDM) Plan*.	**Significant and Unavoidable**
4.17c. Would the project substantially increase hazards due to a road design feature (e.g., sharp curves) or incompatible uses (e.g., farm equipment)?	**MM-4.17-1**: *Construction Traffic Management Plan*.	Less Than Significant with Mitigation

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
4.17d. Would the project result in inadequate emergency access?	**MM-4.17-1**: *Construction Traffic Management Plan*. **MM-4.20-1:** *Wildfire Education Program*.	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect related to transportation?	**MM-4.17-1**: *Construction Traffic Management Plan*. **MM-4.17-2**: *Transportation Demand Management (TDM) Program*.	Less Than Significant with Mitigation
4.18. Tribal Cultural Resources		
4.18a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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:		
i. 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 § 5020.1(k)?	**MM-4.18-1**: *Retention of Native American Monitoring*. **MM-4.18-2**: *Workers Environmental Awareness Program*. **MM-4.18-3**: *Inadvertent Discovery Clause*.	Less Than Significant with Mitigation
ii. 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?	**MM-4.18-1**: *Retention of Native American Monitoring*. **MM-4.18-2**: *Workers Environmental Awareness Program*. **MM-4.18-3**: *Inadvertent Discovery Clause*.	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect on tribal cultural resources?	**MM-4.18-1**: *Retention of Native American Monitoring*. **MM-4.18-2**: *Workers Environmental Awareness Program*. **MM-4.18-3**: *Inadvertent Discovery Clause*.	Less Than Significant with Mitigation

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
4.19. Utilities and Service Systems		
4.19a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	No mitigation measures are required.	Less Than Significant
4.19b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	No mitigation measures are required.	Less Than Significant
4.19c. 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?	No mitigation measures are required.	Less Than Significant
4.19d. 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?	No mitigation measures are required.	Less Than Significant
4.19e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No mitigation measures are required.	Less Than Significant
Cumulative: Would the project have a cumulative effect on utilities and service systems?	No mitigation measures are required.	Less Than Significant
4.20. Wildfire		
4.20a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?	**MM-4.17-1:** *Construction Traffic Management Plan*. **MM-4.20-1**: *Wildfire Education Program*.	Less Than Significant with Mitigation
4.20b. 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?	**MM-4.20-1:** *Wildfire Education Program.* **MM-4.20-2**: *Alternative Materials and Methods*. **MM-4.20-3**: *Annual Fuel Modification Zone Inspection*. **MM-4.20-4:** *Construction Fire Prevention Plan*.	Less Than Significant with Mitigation

Table 6-1. Summary of Environmental Impacts

Environmental Topic	Mitigation Measure(s)	Significance Determination
	MM-4.20-5: *Construction-Related Fire Prevention Measures.*	
4.20c. 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?	**MM-4.20-3:** *Annual Fuel Modification Zone Inspection*. **MM-4.20-4:** *Construction Fire Prevention Plan*. **MM-4.20-5:** *Construction-Related Fire Prevention Measures.*	Less Than Significant with Mitigation
4.20d. Would the project 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?	**MM-4.20-1:** *Wildfire Education Program.* **MM-4.20-2:** *Alternative Materials and Methods*. **MM-4.20-3**. *Annual Fuel Modification Zone Inspection*.	Less Than Significant with Mitigation
4.20e. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	**MM-4.20-1:** *Wildfire Education Program.* **MM-4.20-2:** *Alternative Materials and Methods*. **MM-4.20-3:** *Annual Fuel Modification Zone Inspection*. **MM-4.20-4:** *Construction Fire Prevention Plan*. **MM-4.20-5:** *Construction-Related Fire Prevention Measures.*	Less Than Significant with Mitigation
Cumulative: Would the project have a cumulative effect related to wildfire?	**MM-4.17-1:** *Construction Traffic Management Plan*. **MM-4.20-1:** *Wildfire Education Program.* **MM-4.20-2:** *Alternative Materials and Methods*. **MM-4.20-3**. *Annual Fuel Modification Zone Inspection*. **MM-4.20-4**. *Construction Fire Prevention Plan*. **MM-4.20-5:** *Construction-Related Fire Prevention Measures.*	Less Than Significant with Mitigation

The Project would result in one significant and unavoidable impact, regarding inconsistency with CEQA Guidelines section 15064.3(b) as a result of the vehicle miles traveled (VMT) generated by the proposed Project compared to baseline conditions, as detailed under Threshold 4.17b of Section 4.17, Transportation, of this Draft EIR. Even with implementation of MM-4.17-2, which requires implementation of a Transportation Demand Management (TDM) program, the impact would not be reduced to a level of less than significant. However, it should be noted that the Project's cumulative impacts with regard to VMT, as detailed in Threshold 4.17b of Section 4.17, would be less than significant with mitigation.

Consistent with CEQA, the analysis presented in this chapter considers a reasonable range of alternatives to the Project and evaluates their comparative environmental impacts. The selection of alternatives and their discussion must "foster informed decision making and public participation" (14 CCR 15126.6[a]). Therefore, this chapter identifies potential alternatives to the Project and evaluates them, as required by CEQA.

The inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact "feasible." The final decision regarding the feasibility of alternatives lies with the decision maker(s) for a given project, who must make the necessary findings addressing the potential feasibility of an alternative, including whether it meets most of the basic project objectives (further described in Section 6.2, Project Objectives) or reduces the severity of significant environmental effects pursuant to CEQA (California Public Resources Code, Section 21081; see also 14 CCR 15091).

6.4 Alternatives Considered and Eliminated During the Planning Process

CEQA Guidelines Section 15126.6(c) recommends that an EIR identify alternatives that were considered for analysis but rejected as infeasible and briefly explain the reasons for their rejection. According to the CEQA Guidelines, among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts. With regard to feasibility, Section 15126.6(f)(1) states, "among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plan or regulatory limitations, jurisdictional boundaries, and whether the applicant can reasonably acquire, control, or otherwise have access to the alternative site."

The following three alternatives for the Project were considered, but ultimately rejected from further analysis, consistent with Section 15126.6(c) of the CEQA Guidelines:

- Alternative Site
- Previously Approved Project—Lyons Canyon Ranch Project
- Elimination of VMT Significant and Unavoidable Impact

The EIR need not discuss every alternative to the Project. A range of alternatives that are "reasonable" for analysis have been evaluated and are discussed below in Section 6.5, Alternatives Selected for Further Analysis. A description of the potential alternatives considered, but not carried forward, and the rationale for rejection is provided below.

6.4.1 Alternative Site

Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the County considered the potential for alternative locations to the Project. As stated in Section 15126.6(f)(2)(A), the key question and first step in analyzing alternative sites is whether any of the significant effects of a project would be avoided or substantially lessened by putting that project in another location. Only locations that would avoid or substantially lessen any of the significant effects of a project need to be considered in the EIR.

The Project would result in one significant and unavoidable impact, regarding inconsistency with CEQA Guidelines section 15064.3(b) resulting in a potentially significant impact under baseline conditions for VMT on a Project level, as detailed under Threshold 4.17b of Section 4.17, Transportation, of this Draft EIR. However, the Project's cumulative impacts with regard to VMT, as detailed in Threshold 4.17b of Section 4.17, would be less than significant with mitigation. It should be noted that even if there was an alternative site in northern unincorporated Los Angeles County, such as the Santa Clarita Valley, available for development of the Project, the Project-level VMT impact would likely be comparable at this alternative site. The Santa Clarita Valley is a suburban area with predominantly single-family housing and limited trip destinations and transit options nearby. Therefore, all residential projects within the unincorporated portion of the Santa Clarita Valley would likely result in a higher baseline VMT than projects situated near a highly metropolitan area, such as Downtown Los Angeles. However, Downtown Los Angeles, and its surrounding communities, are highly built-out and would not be able to facilitate the Project's development on a 233.49-acre site while meeting the Project's objectives, and therefore, would not be considered feasible. Nevertheless, for purposes of this analysis, the Project Applicant sought the possibility of acquiring an alternative site, as discussed below.

One of the factors for feasibility of an alternative is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." The Project site is located within unincorporated Santa Clarita Valley region of Los Angeles County. The Project Applicant inquired with a licensed real estate broker based in the Santa Clarita Valley for the possibility of an available alternative site of approximately 233 acres, that could accommodate the Project's 510 residential units and allow for the preservation of protected open space in the Santa Clarita Valley. Per the real estate broker, no similar alternative site, which is proximate to freeway access, existing roadway infrastructure, and developed areas, is available for sale in the Santa Clarita Valley (Appendix N-1). Since the Santa Clarita Valley area is largely built-out or has approved projects pending, and the Project site would require at least 83 acres of developable land, no available properties of similar size as the Project site, with proximity to freeway access, existing roadway infrastructure, and developed areas, exist for the Project within the unincorporated Santa Clarita Valley region. Further, according to the real estate broker, the property is unique in its proximity to the freeway infrastructure, topography, and residential land use designation. Much of the land in the immediate Project vicinity is currently under conservation or public ownership and is not available for development, is already developed, or has a development application pending for the property, limiting the options for an alternative site within the unincorporated region of Los Angeles County of Santa Clarita Valley. As such, an alternative site would not be considered feasible and was ultimately rejected from further analysis in the EIR.

6.4.2 Elimination of VMT Significant and Unavoidable Impact

As previously discussed, the Project would result in one significant and unavoidable impact, regarding a project-level inconsistency with CEQA Guidelines section 15064.3(b) as a result of the VMT generated by the Project compared to baseline conditions, as detailed under Threshold 4.17b of Section 4.17, Transportation, of this Draft EIR. Even with implementation of MM-4.17-2, which requires implementation of a TDM program, the impact would

not be reduced to a level of less than significant. As such, consideration of alternatives that eliminated this significant impact have been considered.

Per the Los Angeles County Public Works (Public Works) Transportation Impact Analysis (TIA) Guidelines and a preliminary sensitivity analysis using the County's VMT Calculator, it was determined that a less than significant impact regarding project-level VMT impacts could be possible for the following scenarios (Lin, pers. comm., 2023; Public Works 2020):

- A project that includes 100% affordable housing;
- A retail-only project that proposes less than 50,000 square feet of retail.
- A project that generates fewer than 110 daily trips, which is generally equivalent to the following independent land uses, when accounting for the Project site's location and operational year:
  - 11,000 square feet of general office; or
  - 62,000 square feet of warehousing; or
  - 22,000 square feet of light industrial; or
  - 11-unit single family housing; or
  - 20-unit multi-family housing.

It should be noted that the alternative land use scenarios should consider each land use on its own, and not combined. As such, upon evaluation of the alternative land use scenarios that would eliminate the significant unavoidable impact associated with Project-level VMT, it was determined that the Project site could be developed with up to the above-mentioned land use scenarios (i.e., alternative land use scenarios) for development. As demonstrated below, it was determined that the alternative land use scenarios would either (A) not reduce VMT impacts or (B) not attain most of the basic Project objectives.

A. 100% Affordable Housing Scenario

As detailed above and per the County's TIA Guidelines, if a project in unincorporated Los Angeles County requires a discretionary action, and 100% of the units (excluding manager's units) are set aside for lower income households, then a less than significant CEQA determination can be made (Public Works 2020). As such, this scenario proposes 100% affordable housing, with no stipulations on minimum or maximum density for the Project site.

The Project site is not located within a Transit Priority Area, which is defined as an area within one-half mile of a major transit stop that is existing or planned (Pub. Resources Code, Section 21099, subds. [a][7], [b][1]). Accordingly, there are limited transit options near the Project site. Therefore, incorporation of 100% affordable housing, without a robust transit network to support future lower-income residents, would result in comparable driving patterns and VMT for the future lower-income residents as it would for proposed Project residents. As such, even though CEQA impacts on VMT would be reduced to less than significant in accordance with the County's TIA Guidelines under the proposed scenario of 100% affordable housing, the actual VMT impacts would be comparable to the proposed Project and there would be no reduction of environmental impacts related to VMT under this alternative scenario. Additionally, a 100% affordable housing development would not substantially reduce any other type of environmental impact, due to the comparable nature of the land use (i.e., housing) within the same Project location.

Section 15126.6 of the CEQA Guidelines details that an EIR shall describe a range of reasonable alternatives "which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project". As the scenario of 100% affordable housing would not avoid or substantially lessen the significant effect of project-level VMT, as described above, this potential alternative scenario is considered and eliminated from further consideration.

It should be noted that the Project meets the requirements of the Inclusionary Housing ordinance (for a total of 24 dwelling units of deed-restricted affordable for moderate- or middle-income households) and proposes 47 units that would be deed-restricted for very-low-income seniors, which is beyond the requirements of the County's Inclusionary Housing ordinance. In total, the Project would provide a total of 71 deed-restricted units for affordable housing, representing approximately 14% of the Project's total dwelling units.

B. VMT-Reducing Alternative Land Use Scenario

This analysis below determines if the VMT-Reducing Land Uses Scenario, detailed above, and hereinafter referred to as the "alternative land use scenarios", can meet the Project objectives. The following alternative land use scenarios are considered:

- A retail-only project that proposes less than 50,000 square feet of retail; or
- A project that generates fewer than 110 daily trips, which is generally equivalent to the following independent land uses, when accounting for the Project site's location and operational year:
  - 11,000 square feet of general office; or
  - 62,000 square feet of warehousing; or
  - 22,000 square feet of light industrial; or
  - 11-unit single family housing; or
  - 20-unit multi-family housing.

Upon evaluation of the alternative land use scenarios, below, it is determined that all of the alternative land use scenarios were determined to be infeasible, as the alternative land use scenarios described herein do not feasibly attain most of the basic objectives of the Project.

Ability to Meet Project Objectives

1. Provide a diverse mix of housing units in various typologies that would assist the County in obtaining its RHNA goals, including very low-income housing and moderate/middle-income households.
   a. ***The alternative land use scenarios would not satisfy this Project Objective.*** The retail, general office, warehouse, or light industrial alternative scenarios would not provide housing, and as such, would not satisfy this Project Objective. The 11 single family homes or 20 multi-family unit alternative scenarios would not provide a diverse mix of housing units in various typologies. Additionally, the 11 single-family-unit or 20 multi-family unit alternative scenarios would only be required to provide up to 1 deed-restricted middle-income unit, based on the County's Inclusionary Housing ordinance, which would only require 5% of units to be deed-restricted middle-income. Therefore, the residential alternative scenarios would not satisfy this Project Objective.

2. Provide housing opportunities consistent with the Los Angeles County General Plan 2035 and the Santa Clarita Valley Area Plan, One Valley One Vision, a component of the General Plan and applicable to the unincorporated portions of the Santa Clarita Valley.
    a. ***The alternative land use scenarios would not satisfy this Project Objective.*** The retail, general office, warehouse, and light industrial use alternative scenarios would not provide housing opportunities, and as such, would not satisfy this Project Objective. The 11-single-family-unit or 20-multi-family-unit alternative scenarios would not provide adequate housing under the intent of the County's General Plan or OVOV, which contains goals and policies for density-controlled development. Additionally, the existing zoning of A-2 would allow for substantially more dwelling units than proposed under these residential alternative scenarios, and as such, the 11- or 20-unit housing scenarios would result in an inefficient use of the approximately 233-acre Project site that would not meaningfully assist the County toward accomplishing its Regional Housing Needs Allocation. Therefore, the alternative land use scenarios would not satisfy this Project Objective.
3. Provide a mix of housing types proximate to convenient freeway access and existing roadway infrastructure.
    a. ***The alternative land use scenarios would partially satisfy this Project Objective.*** The retail, general office, warehouse, or light industrial alternative scenarios would not provide housing, and therefore would not satisfy this Project Objective. The 11-single-family-unit or 20-multi-family-unit scenarios would provide a substantially reduced number of units and would not provide a mix of housing types. However, the housing would be proximate to convenient freeway access and existing roadway infrastructure. Therefore, these residential alternative scenarios would partially satisfy this Project Objective.
4. Provide substantial homeownership opportunities for middle-income families in an area proximate to existing residential uses and infrastructure.
    a. ***The alternative land use scenarios would not satisfy this Project Objective.*** The retail, general office, warehouse, or light industrial alternative scenarios would not provide housing, and therefore would not satisfy this Project Objective. The 11-single-family-unit or 20-multi-family-unit alternative scenarios would not provide substantial homeownership opportunities for middle-income families, as the County's Inclusionary Housing ordinance would only require 5% of units to be deed-restricted middle-income, which would result in up to 1 deed-restricted middle-income dwelling unit for sale. Therefore, these residential alternative scenarios would not satisfy this Project Objective.
5. Provide a mix of housing types within a clustered development to limit the amount of the site subject to disturbance, limit the amount of urban wildland interface areas, preserve significant ridgelines, preserve biological resources, and provide a substantial amount of natural open space within the Project site.
    a. ***The potential alternative scenarios would partially satisfy this Project Objective.*** The retail, general office, warehouse, or light industrial alternative scenarios would not provide housing opportunities, and therefore would not satisfy this Project Objective. The 11-single-family-unit or 20-multi-family-unit alternative scenarios would provide housing but would not provide a mix of housing types. The development of 11 single family units or 20 multi-family units would substantially reduce the amount of earthwork required to develop the land uses. Additionally, the reduced footprint under the residential alternative scenarios would preserve biological resources and maximize natural open space within the Project site. Therefore, the residential alternative scenarios would partially satisfy this Project Objective.
6. Provide a comprehensive trail network, including publicly accessible trailhead, that provides connections for the public to access existing open space areas and established trails.

a. ***The alternative land use scenarios would not satisfy this Project Objective.*** Due to the reduced grading and size of the alternative land use scenarios, the proposed land use alternative scenarios would not include construction of a trail network or otherwise enhance existing trail connections. Therefore, overall, the alternative land use scenarios would not satisfy this Project Objective.

6.4.3 Previously Approved Project–Lyons Canyon Ranch Project

An EIR (State Clearinghouse No. 2003031086) was certified in August 2009 for the Lyons Canyon Ranch Project (hereinafter, referred to as the "Previously Approved Project") located at the same Project site (Los Angeles County Project Tentative Tract Map [TTM] No. 53653, Conditional Use Permit R200500088, and Oak Tree Permit ROAK200500039) (County of Los Angeles 2009). The conceptual site plan for the Previously Approved Project is shown on Figure 6-1, Previously Approved Project Site Plan. The Previously Approved Project included 93 single-family detached residential units, 93 senior units, approximately 129 acres of natural open space lots, and 1.39 acres of recreation lots. An additional 46.67 acres would remain as disturbed open space (i.e., graded cut and fill-slope areas, recreation areas, detention/debris basin lots, and on-site trails), for a total of approximately 170 acres of total on-site disturbed/undisturbed open space. The Previously Approved Project required a zone change for 9.3 acres from A-2-1 and A-2-2 to C-3-DP (Unlimited Commercial Development Program). The project required TTM approval for subdividing the site into 107 lots, and conditional use permits to ensure compliance with the requirements of Hillside Management Areas (HMAs), development within a Significant Ecological Area (SEA), and 46% density bonus request. An oak tree permit was required to allow the removal of 162 oak trees (including 13 heritage oaks) and encroachment into the protected zone of 52 oak trees (including six heritage oaks), for the total removal or encroachment of up to 226 oak trees. The Previously Approved Project included an approximately 2-acre site for a new fire station, which was intended to serve the proposed development and surrounding areas. The EIR was certified in August 2009 and the project proponent initiated the process to record the approved tract map. However, the property was sold before completion of the tract map recordation, and as such, the Previously Approved Project cannot be constructed as the TTM has not been recorded. The zone change of A-2-1/A-2-2 to C-3-DP was completed, and as such, the current Project site has 9.3 acres of C-3-DP zoning on-site.

While the Previously Approved Project was previously approved by the County, this alternative was eliminated from further analysis as an alternative to the Project because, although the Previously Approved Project would partially satisfy the Project Objectives overall, it would not avoid the significant unavoidable VMT impact that would result from the Project. Although the Previously Approved Project would have fewer dwelling units, the Previously Approved Project would also result in more significant environmental impacts than the Project.

Ability to Meet Project Objectives

1. Provide a diverse mix of housing units in various typologies that would assist the County in obtaining its RHNA goals, including very low-income housing and moderate/middle-income households.
   a. ***The Previously Approved Project would partially satisfy this Project Objective.*** The Previously Approved Project would partially provide for a diverse mix of housing units (i.e., single family residential and senior units), but would not include very low-income housing and moderate/middle-income households.
2. Provide housing opportunities consistent with the Los Angeles County General Plan 2035 and the Santa Clarita Valley Area Plan, One Valley One Vision, a component of the General Plan and applicable to the unincorporated portions of the Santa Clarita Valley.
   a. ***The Previously Approved Project would not satisfy this Project Objective.*** The Previously Approved Project was approved prior to adoption of the Los Angeles County General Plan 2035 (General Plan)

and Santa Clarita Valley Area Plan, One Valley One Vision (OVOV). According to the 2021-2029 Housing Element of the General Plan, the strategies emphasize housing affordability and availability, natural resource protection, and open space preservation on-site (County of Los Angeles 2022). Additionally, the OVOV encourages density-controlled development (Policy LU-1.3.5; County of Los Angeles 2012), in hillside areas and affordable housing for very low-, low-, and moderate-income classifications (Policy LU-3.1.5; County of Los Angeles 2012). Although the Previously Approved Project would provide housing opportunities at the Project site, no affordable housing was included, and the site plan did not utilize density-controlled development clustering, and as such, the Previously Approved Project would not provide housing consistent with the General Plan and OVOV.

3. Provide a mix of housing types proximate to convenient freeway access and existing roadway infrastructure.
    a. ***The Previously Approved Project would satisfy this Project Objective.*** The Previously Approved Project would provide for housing opportunities proximate to convenient freeway access and existing roadway infrastructure.
4. Provide substantial homeownership opportunities for middle-income families in an area proximate to existing residential uses and infrastructure.
    a. ***The Previously Approved Project would not satisfy this Project Objective.*** The Previously Approved Project would not provide substantial homeownership opportunities for middle-income families.
5. Provide a mix of housing types within a clustered development to limit the amount of the site subject to disturbance, limit the amount of urban wildland interface areas, preserve significant ridgelines, preserve biological resources, and provide a substantial amount of natural open space within the Project site.
    a. ***The Previously Approved Project would partially satisfy this Project Objective.*** The Previously Approved Project would not use a clustered development footprint. Instead, the development footprint would encompass 105 acres and extend in the southwestern portion of the site. When compared to the Project, the overall grading would be increased due to increased development area (approximately 106 acres developed for the Previously Approved Project versus 83 acres for the Project). The Previously Approved Project would preserve significant ridgelines. However, due to the increased site coverage of the Previously Approved Project and extension into the southwestern portion of the site, the Previously Approved Project would not maximize natural open space, would fragment local wildlife movement, and would result in impacts to biological resources that would not occur with the Project. Additionally, this extension into the southwestern portion of the site would result in increased urban wildland interface areas into an area that is surrounded by open space in all directions.
6. Provide a comprehensive trail network, including publicly accessible trailhead, that provides connections for the public to access existing open space areas and established trails.
    a. ***The Previously Approved Project would partially satisfy this Project Objective.*** Although existing informal/non-dedicated trails exist at the Project site, the Previously Approved Project would result in development over most of the existing non-dedicated trails on-site. However, the Previously Approved Project would include a 12-foot-wide Gavin Canyon Trail Easement (to be maintained by the County), a designated trailhead, and on-site trail alignments to connect the Previously Approved Project's proposed on-site streets to off-site trails at three connection points. As such, the Previously Approved Project would satisfy a component of this Project Objective by including a publicly accessible trailhead that provides connections for the public to access existing open space areas and established trails off-site. However, the Previously Approved Project would result in less on-site trails than the Project, as the development footprint would extend southwest into the Project site, thereby providing physical barriers of connectivity for trails throughout the southern portion of the site. As such, the Previously Approved

Project would not satisfy the part of the Project Objective to provide a comprehensive trail network, but would satisfy a component of the Project Objective.

Comparison of the Effects of the Previously Approved Project to the Project

Pursuant to Section 15126.6(c) of the CEQA Guidelines, although the Previously Approved Project would partially satisfy the Project Objectives overall, it is considered and eliminated from further analysis because it is unable to avoid significant environmental impacts and notwithstanding its lower residential density would result in more significant environmental impacts than the Project. The Project would result in a single significant and unavoidable project-level impact to Transportation, and specifically, regarding inconsistency with CEQA Guidelines Section 15064.3(b) as a result of the VMT generated by the project compared to baseline conditions, as detailed under Threshold 4.17b of Section 4.17, Transportation, of this Draft EIR. As detailed below, the Previously Approved Project would not reduce impacts regarding inconsistency with CEQA Guidelines Section 15064.3(b) (Threshold 4.17b of Section 4.17, Transportation, of this Draft EIR) to less than significant, and would not substantially reduce the magnitude of impacts under this threshold. In addition, the EIR for the Previously Approved Project determined that the following topical areas would result in significant and unavoidable impacts: Aesthetics/Visual Resources; Air Quality; Biological Resources; Geology, Soils, and Seismicity; Noise; Sheriff Services; and Solid Waste. Therefore, the Previously Approved Project would result in more significant and unavoidable impacts than the Project.

As stated previously, the Project would result in a significant and unavoidable impact regarding VMT, even with implementation of a mitigation measure, which requires TDM measures to reduce the impact. Prior to mitigation, the Project would result in a rate of 20.5 VMT per capita. However, even with implementation of mitigation, which would result in a 7.45% reduction of VMT, the Project would result in 19.2 residential VMT per capita with Mitigation, which would exceed the 10.6 residential VMT per capita threshold (Table 4.17-5 of Section 4.17, Transportation).

Since adoption of the EIR for the Previously Approved Project, transportation analyses for CEQA shifted from a traffic analysis to an analysis of transportation impacts using VMT metrics instead of level of service (LOS), which was previously the metric used for CEQA traffic analyses. As such, the EIR for the Previously Approved Project did not include a VMT analysis pursuant to Section 15064.3(b). Section 15064.3(b)(1) of the State CEQA Guidelines refers to evaluating transportation impacts using VMT for land use projects. However, for purposes of a comparative analysis, the County's VMT tool was used to determine the estimated VMT for the Previously Approved Project, assuming the same parameters used in the VMT analysis in the TIA prepared for the Project (Fehr and Peers 2023; Appendix J). Per the County's VMT Tool, the Previously Approved Project would result in 20.4 Residential VMT per capita prior to mitigation, which would be 0.1 residential VMT per capita less than the Project (Appendix N-2). This 0.1 residential VMT reduction does not represent a meaningful reduction in VMT impacts and would still result in a significant and unavoidable impact when compared to the 10.6 residential VMT per capita threshold as used for the Project.

Additionally, even assuming the same percent reduction of VMT from MM-4.17-2 that was deducted from the Project (7.45% reduction, per TDM measures), the Previously Approved Project would result in 19.1 residential VMT per capita. Therefore, even with mitigation, the Previously Approved Project would still exceed the 10.6 residential VMT per capita threshold and would therefore also result in a significant and unavoidable impact regarding inconsistency with Section 15064.3(b) of the CEQA Guidelines (Appendix N-2). The residential VMT of the Previously Approved Project would result in comparable impacts to the Project, due to the location of the Project site and its surrounding land uses; the Project site is situated within a suburban area with predominantly single-family housing with limited trip destinations and transit options nearby. As the Project's significant and unavoidable impact would not be reduced under the Previously Approved Project, the Previously Approved Project is considered and eliminated

from further analysis within this Draft EIR. However, further comparison of impacts of both projects is provided below for other topical areas within the respective EIRs.

As stated above, the Previously Approved Project would result in several more significant and unavoidable impacts than the Project. This can partially be attributed to the development footprint approved for the Previously Approved Project, which encompassed approximately 105 acres across the northern and southern portions of the site, whereas the Project would encompass approximately 83 acres generally concentrated in the northern portion of the Project site. The Project would result in approximately 24 acres of less development footprint for the Project than the Previously Approved Project and would allow for 47 acres of more open space footprint than the Previously Approved Project. The Project's development would develop the site in a configuration defined by the County as "density-controlled development" (Section 22.140.170, Density-Controlled Developments, of the County's Zoning Code) to concentrate its footprint within the northeasterly portion of the Project site. According to the OVOV, within land designated Residential 2 (H2), such as the Project site, density-controlled development is encouraged on lands with significant environmental and/or topographical features or resources, in order to preserve open space for protection of these natural features or resources (County of Los Angeles 2012). This configuration allows for preservation of the majority of the site as contiguous open space and would situate Project development proximate to existing off-site infrastructure and residences. Although the Project would result in more dwelling units than proposed for the Previously Approved Project, when compared to the significant and unavoidable impacts for the Previously Approved Project, the Project's density-controlled development configuration would reduce some long-term impacts, including those related to aesthetics (scenic vistas/resources), unique geologic features (avoidance of significant ridgelines) and biological resources.

As detailed above, as the TTM for the Previously Approved Project had not been recorded prior to the property being sold, the Previously Approved Project cannot be constructed. Additionally, because the Project's significant and unavoidable impact would not be reduced or eliminated with implementation of the Previously Approved Project, and because the Previously Approved Project would result in more significant and unavoidable impacts than the Project, the Previously Approved Project alternative is ultimately rejected from further analysis in the EIR. Additionally, the Previously Approved Project did not move forward with development of the site and furthermore, the design was more environmentally impactful when compared to the Project.

6.5 Alternatives Selected for Further Analysis

This section discusses a reasonable range of alternatives to the Project, including a no project alternative in compliance with CEQA Guidelines Section 15126.6(e). These alternatives include the following:

- **Alternative A** – No Project/No Build Alternative
- **Alternative B** – Mixed Use Project Alternative
- **Alternative C** – Reduced Footprint Alternative

Pursuant to Section 15126.6(d) of the CEQA Guidelines, each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less than, similar to, or greater than the corresponding impacts of the Project. Each alternative is also evaluated to determine whether the Project objectives would be substantially attained.

For purposes of comparison, Table 6-2 provides a summary of the Project and Alternatives A through C.

Table 6-2. Summary of Project and Alternatives Characteristics

Land Use	Project	Alternative A – No Project/No Build Alternative	Alternative B – Mixed Use Project Alternative	Alternative C – Reduced Footprint Alternative
Dwelling Unit (#)	510	0	361	504
Dwelling Unit Type	Detached and attached units (to buy) and 48 apartments (to rent)	N/A	Townhome/Attached rental units	Multi-family (apartment) rental units
Affordable Housing (#/type)	47 very-low-income senior units, one manager's unit, and 24 deed-restricted units for moderate- or middle-income households	0	37 very-low-income units	51 very-low-income units
Maximum Building Height (feet)	45	0	38	56
Development footprint, including HOA open space (acres)	83.18	0	85.07	28.0
Natural Open Space (acres)	150.31	233.49	148.11	205.18
Public Trailhead/Trails On-site?	Yes	No	Yes	No
Retail Use (square feet)	0	0	49,000	0
Recreation Center (acres)	1.13	0	1.08	1.08
Off-site Improvements	The Old Road, water infrastructure improvements, fuel modification zones	N/A	The Old Road, water infrastructure improvements, fuel modification zones	The Old Road, water infrastructure improvements
Zone Change	N/A	N/A	N/A	28 acres to R-3
General Plan Amendment	N/A	N/A	N/A	28 acres to H-18

Notes: N/A: Not Applicable; HOA: Homeowners' Association; C-3-DP: Unlimited Commercial Development Program, A-2-1: Heavy Agriculture, one-acre minimum lot size

6.5.1 Alternative A – No Project/No Build Alternative

Alternative Description

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate a "no project" alternative along with its impact. As stated in this section of the CEQA Guidelines, the purpose of describing and analyzing a no project

alternative is to allow decision makers to compare the impacts of approving a project with the impacts of not approving a project. As stated in Section 15126.6(e)(3)(A), when a project is the revision of an existing land use or regulatory plan or policy or an ongoing operation, the no project alternative will be the continuation of the plan, policy, or operation into the future. Section 15126.6(e)(3)(B) further states that "in certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained." Accordingly, Alternative A assumes the Project would not proceed, no new permanent development or land uses would be introduced within the Project site, and the existing environment would be maintained. The existing uses would continue to operate as they do currently. The Project site is currently undeveloped with no habitable structures or paved roads on-site. Miscellaneous structures on the Project site include fencing, a metal frame bridge, a billboard, an abandoned water tank, water wells, metal drainage pipe, irrigation lines, non-dedicated trails, electrical distribution lines, dirt roads, and an abandoned and plugged oil well. The miscellaneous structures would remain, and no on-site landscaping improvements or pedestrian connections would occur. Additionally, all on-site trees would be preserved under this alternative.

As detailed in the following discussion, although Alternative A would not fully satisfy any of the Project Objectives, it would avoid the significant unavoidable VMT impact that would result from the Project.

Ability to Meet Project Objectives

1. Provide a diverse mix of housing units in various typologies that would assist the County in obtaining its RHNA goals, including very low-income housing and moderate/middle-income households.
    a. ***Alternative A would not satisfy this Project Objective.*** Alternative A would not provide for housing units, and therefore, would not provide new very-low-income housing and moderate/middle-income residential housing that could help meet the County's RHNA requirements.
2. Provide housing opportunities consistent with the Los Angeles County General Plan 2035 and the Santa Clarita Valley Area Plan, One Valley One Vision, a component of the General Plan and applicable to the unincorporated portions of the Santa Clarita Valley.
    a. ***Alternative A would not satisfy this Project Objective.*** Alternative A would not provide for housing opportunities, and therefore, would not provide housing opportunities consistent with the General Plan and the OVOV.
3. Provide a mix of housing types proximate to convenient freeway access and existing roadway infrastructure.
    a. ***Alternative A would not satisfy this Project Objective.*** Alternative A would not provide for housing opportunities, and therefore, would not provide housing proximate to convenient freeway access and existing roadway infrastructure.
4. Provide substantial homeownership opportunities for middle-income families in an area proximate to existing residential uses and infrastructure.
    a. ***Alternative A would not satisfy this Project Objective.*** Alternative A would not provide for housing opportunities, and therefore, would not provide homeownership opportunities for middle-income families in an area proximate to existing residential uses and infrastructure.
5. Provide a mix of housing types within a clustered development to limit the amount of the site subject to disturbance, limit the amount of urban wildland interface areas, preserve significant ridgelines, preserve biological resources, and provide a substantial amount of natural open space within the Project site.
    a. ***Alternative A would not satisfy this Project Objective.*** Although Alternative A would limit the amount of the site subject to disturbance, minimize grading, minimize urban wildland interface areas, preserve

significant ridgelines, preserve biological resources, and maximize natural open space within the Project site, Alternative A would not provide for housing opportunities on-site. Therefore, it would not satisfy this Project Objective.

6. Provide a comprehensive trail network, including publicly accessible trailhead, that provides connections for the public to access existing open space areas and established trails.
    a. ***Alternative A would not satisfy this Project Objective.*** Although existing informal/non-dedicated trails exist at the Project site, the Project site is privately owned, and use of these on-site trails constitutes trespassing. Therefore, under Alternative A, the existing trails would not be managed or made available for use to the public. Additionally, a publicly accessible trailhead would not be provided to facilitate connections for the public to access existing open space areas and established trails off-site through the Project site.

Comparison of the Effects of Alternative A to the Project

Aesthetics

The Project's construction and operational impacts regarding a scenic highway, views from a regional trail, lighting/glare/shadow, applicable zoning, and compliance with other regulations governing scenic quality would be less than significant. Construction impacts regarding scenic vistas and the existing visual character or quality of public views would be less than significant with mitigation incorporated. Operational impacts regarding scenic vistas and the existing visual character or quality of public views would be less than significant.

Alternative A analyzes the effects of continued operations of the Project site. Since no changes would occur under Alternative A, the existing site would continue to be open space with existing miscellaneous, non-habitable structures on-site. Because Alternative A would not involve new development or any changes to the physical characteristics of the Project site, no impacts on views of the site would occur during construction or operation of Alternative A. Under Alternative A, the Project site would still be visible from a regional riding, hiking, or multi-use trail, but as Alternative A does not propose buildings, aesthetic impacts would be less than those anticipated for the Project. Also, because no new sources of light and glare would be introduced to the area, there would be no impacts. However, it should be noted that there would be no Homeowners' Association (HOA) to maintain or improve the existing site, and as such, there would be no aesthetic improvements to the site under Alternative A. Therefore, the miscellaneous structures, including fencing, a metal frame bridge, a billboard, an abandoned water tank, water wells, metal drainage pipe, irrigation lines, non-dedicated trails, abandoned electrical distribution lines and an abandoned and plugged oil well would remain; however, none of the mitigation measures set forth in Section 4.3, Air Quality, would be required under Alternative A. Because there would be no changes to existing setting related to aesthetics under Alternative A, there would be no impact, and aesthetic impacts under Alternative A would be **less than** those anticipated from the Project.

Agriculture/Forest Resources

The Project would result in no impacts regarding conversion of Farmland to a non-agricultural use; conflicts with existing zoning for forest land, timberland, or timberland zoned Timberland Production, or the potential to cause the rezoning of forest land, timberland, or timberland zoned Timberland Production; and changes in the existing environment which could result in conversion of Farmland to non-agricultural. The Project would result in less than significant impacts regarding conflict with existing zoning for agricultural use, with a designated ARA or Williamson Act contract. With implementation of mitigation, the Project would result in less than significant impacts regarding

loss of forest land or conversion of forest land to non-forest use and changes in the existing environment which could result in conversion of forest land to non-forest use.

Alternative A would not result in impacts related to the conversion and/or loss of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; conflict with existing zoning for forest land, timberland, or timberland zoned Timberland protection; and changes in the existing environment which could result in conversion of Farmland to agriculture. The Project site does not contain land designated as an Agricultural Resource Area or lands under Williamson Act contracts. The Project site supports scattered communities of native tree cover throughout at least 10% of the Project site. Thus, as defined by California Public Resources Code (PRC) Section 12220(g), the Project site contains forest land. As Alternative A would not result in development of the Project site, it would not result in loss of forest land, and therefore, there would be no impacts under Alternative A. None of the mitigation measures set forth in Section 4.2, Agriculture/Forest, would be required under Alternative A. Therefore, under Alternative A, impacts related to agriculture/forest resources would be **less than** the Project.

Air Quality

Construction and operation of the Project would result in a net increase of air pollutant emissions at the Project site. Construction emissions would exceed the SCAQMD's mass daily regional thresholds and localized significance thresholds (LSTs), and therefore, mitigation (i.e., tiered construction equipment) to reduce pollutant emissions during construction is required. However, the Project's operational emissions would be under the SCAQMD's mass daily regional thresholds and LSTs without mitigation. As detailed in Section 4.3, Air Quality, the Project would result in a less than significant impact with mitigation regarding potential to conflict with the SCAQMD 2022 AQMP; cumulatively considerable increases of criteria air pollutants during construction and operation of the Project; and exposure of sensitive receptors to substantial pollutant concentrations. The Project would result in a less than significant impact regarding other emissions, including those leading to odors, during construction and operation of the Project.

There would be no direct construction or operational air quality impacts associated with Alternative A, since the site would remain in its current, undeveloped state and no construction would occur. The Project would result in air pollutant emissions due to construction and operational of the Project and would have less than significant impacts with implementation of mitigation regarding potential to conflict with the South Coast Air Quality Management District (SCAQMD) 2022 Air Quality Management Plan (AQMP). Since Alternative A would not result in the increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP, or exceed the assumptions in the AQMP due to no change in existing conditions, there would be no impact. Impacts under Alternative A regarding conflict with an applicable AQMP would be less than the Project.

Although the Project would result in less-than-significant impacts associated with air quality with mitigation, no impact would occur under Alternative A because no development would occur on the Project site. None of the mitigation measures set forth in Section 4.3, Air Quality, would be required under Alternative A. Additionally, Alternative A would result in no operational impact. Therefore, impacts to cumulatively considerable increases of criteria air pollutants, exposure of sensitive receptors to substantial pollutant concentrations, and other emissions (including odors) under Alternative A would be **less than** the Project.

Biological Resources

Implementation of the Project would result in significant direct and indirect temporary impacts to biological resources prior to mitigation due to the construction of a new housing development on the currently undeveloped Project site. With the inclusion of mitigation measures, the Project would have less than significant impacts on all thresholds in Section 4.4, Biological Resources.

Under Alternative A, the Project site would remain in its existing condition and potential temporary and permanent impacts to biological resources would not occur. None of the mitigation measures set forth in Section 4.4, Biological Resources, would be required under Alternative A. Because Alternative A would result in no impacts to biological resources, short-term and long-term impacts under Alternative A would be **less than** anticipated under the Project.

Cultural Resources

The Project would result in less than significant impacts with mitigation regarding the potential to cause a substantial adverse change in the significance of a historical resource or archaeological resource pursuant to CEQA Guidelines § 15064.5. In addition, the Project would result in a less than significant impact with mitigation regarding disturbance of any human remains, including those interred outside of dedicated ceremonies.

Alternative A would not impact culturally significant resources because no ground disturbance would occur on the Project site. The Project site would remain as is and potential construction impacts (including ground-disturbing activities such as grading or other earthwork) that could risk potential disturbance of previously unknown historical or archaeological resources or unique geologic features or human remains, would not occur. None of the mitigation measures set forth in Section 4.3, Cultural Resources, related to historical or archaeological resources would be required under Alternative A. All impacts to cultural resources under Alternative A would be **less than** the anticipated under the Project.

Energy

Although the Project would increase energy use during construction and operation, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and Project impacts would be less than significant and no mitigation measures are required. Under Alternative A, there would be no construction activity and no temporary use of electricity, natural gas, and petroleum under and therefore, no impact would occur. Therefore, short-term impacts under this alternative would be less than those anticipated from the Project.

Electricity and natural gas usage would not increase under Alternative A when compared to the existing condition. Although the Project would be constructed in compliance with applicable regulations governing energy efficiency, Energy impacts would be less than significant, and no mitigation measures are required to reduce energy impacts. The Project would result in an increase in population and intensity of energy use. Therefore, impacts under Alternative A would be **less than** those anticipated from the Project.

Geology and Soils

The Project would result in less than significant impacts without mitigation for the following impacts: directly or indirectly causing potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides; substantial soil erosion or the loss of topsoil; potential for on- or off-site landslides,

lateral spreading, subsidence, liquefaction, location on a geologic unit or soil that is unstable; expansive soils; and the potential to conflict with the HMA ordinance. The Project would result in no impact regarding 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. The Project would not directly or indirectly impact a unique geologic resource. With implementation of mitigation, the Project would result in less than significant impacts to the paleontological resources.

Alternative A would not result in erosion or loss of topsoil because no ground disturbance would occur on the Project site. Alternative A would not introduce new development to the Project site, and therefore, would not introduce new earthwork or structures that could have the potential to exacerbate geologic hazards. The Project site would remain undeveloped and potential construction impacts (including grading, excavations, and trenching) that could exacerbate existing geologic hazards would not occur. None of the mitigation measures set forth in Section 4.7, Geology and Soils, would be required under Alternative A. Therefore, there would be no impacts regarding geology and soils under Alternative A and impacts under Alternative A would be **less than** those anticipated from the Project.

Greenhouse Gas Emissions

Construction and operation of the Project would result in a net increase in GHG emissions. To reduce potentially significant GHG impacts, mitigation measures are identified to reduce Project-generated construction and operational GHG emissions from various Project emission sources, including construction, energy, water, solid waste, and landscaping. As described in Section 4.8, Greenhouse Gas Emissions of the Draft EIR, the Project would result in less than significant impacts with mitigation regarding the potential to generate GHG emissions that may have a significant effect on the environment, and the potential to conflict with an applicable plan, policy, or regulation adopted for reducing GHG emissions. Alternative A would not change the existing land uses or result in any development, and therefore would not conflict with any applicable plans or increase GHG emissions when compared to existing conditions. As such, none of the mitigation measures set forth in Section 4.8, Greenhouse Gas Emissions, would be required under Alternative A. Thus, GHG impacts associated with Alternative A would be **less than** the Project.

Hazards and Hazardous Materials

The Project would result in less than significant impacts with no mitigation required regarding the routine transport, use, or disposal of hazardous materials, and the Project would have no impacts regarding safety hazards or excessive noise for people residing or working in the Project area due to proximity within a public airport. However, mitigation measures are required to reduce hazards and hazardous material impacts to less than significant with regard to accident conditions involving the release of hazardous materials; hazardous emissions within one-quarter-mile of sensitive land uses; the Project site's location on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5; emergency response plan; significant risk of loss or death involving fires; and the Project's potential use as constituting a dangerous fire hazard.

As no construction would occur, Alternative A would not result in any potential impacts associated with hazards or hazardous materials. Compared to the Project, Alternative A would not introduce future residents to potential hazards or hazardous materials during operation, including wildfires, because no development would occur. Hazards and hazardous materials would be less than significant with mitigation under the Project, therefore, impacts associated with hazards and hazardous materials, including wildfire hazards, under Alternative A, would be **less than** the Project. None of the mitigation measures set forth in Section 4.9, Hazards and Hazardous Materials, would be required under Alternative A.

Hydrology and Water Quality

As discussed in Section 4.10, Hydrology and Water Quality of this Draft EIR, the Project would result in less than significant impacts related to a violation of water quality standards, a substantial decrease in groundwater supplies, a substantial alteration of an existing drainage pattern, the placement of structures in a flood hazard, consistency with the County's Low Impact Development Ordinance, the use of onsite wastewater treatment systems, the risk of pollutant release due to inundation, and consistency with a water quality control plan. Alternative A would not alter the existing condition of the Project site or require any construction activities, and, therefore, would not generate any short-term construction-related or long-term operational hydrology or water quality impacts. None of the mitigation measures set forth in Section 4.10, Hydrology and Water Quality, would be required under Alternative A. As such, impacts under Alternative A would be **less than** those anticipated under the Project.

Land Use and Planning

As discussed in Section 4.11, Land Use and Planning of this Draft EIR, while the Project includes a new development on an undisturbed site, it would not construct a linear feature, remove access on the Project site, or impair mobility within an existing community. Therefore, the Project would result in less than significant impacts regarding physical division of an established community. Regarding the potential to conflict with any County land use plan, policy, or regulation adopted for the purposes of mitigating or avoiding an environmental effect, the Project would result in less than significant impacts with mitigation regarding potential to conflict with the General Plan, Santa Clarita Valley Area Plan, and the Zoning Code. Although Project construction and operation would result in development within an HMA and SEA, and therefore would have impacts to HMAs and SEAs, with applicable mitigation measures from Section 4.4, Biological Resources, the Project would result in less than significant impacts regarding the potential to conflict with the goals and policies of the General Plan related to HMAs or SEAs.

As Alternative A would result in no development on-site, and there would be no impact under Alternative A. Alternative A would not conflict with the County's General Plan and the OVOV, because no development would occur, and there would be no impact under Alternative A. Additionally, although Alternative A is within the Santa Susana/Simi Hills SEA (SEA) and an HMA, there would be no development within the SEA and HMA under Alternative A, and as such, there would be no impact to this threshold under Alternative A. Therefore, impacts under Alternative A would be **less than** the Project. None of the mitigation measures required to reduce Land Use and Planning impacts would be required under Alternative A.

Mineral Resources

As discussed in Section 4.12, Mineral Resources of this Draft EIR, the Project would not result in the loss of availability of a known mineral resource and there would be no impact. Additionally, there are no known significant mineral resources present on the Project site, and the Project would not result in a loss of availability of locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plans, and there would be no impact. As Alternative A would not result in any construction or operational activities and the site does not contain known mineral resources, Alternative A would not impact mineral resources. Impacts under Alternative A would be **similar to** the Project.

Noise

Regarding generation of substantial temporary increase in ambient noise levels in the vicinity of the Project, mitigation would be required to reduce Project impacts from construction activity to less than significant. Upon

implementation of these mitigation measures, impacts regarding generation of substantial temporary increases in ambient noise levels in the vicinity of the Project in excess of standards established in the County's General Plan and noise ordinance would be less than significant. The Project would result in less than significant impacts regarding generation of excessive groundborne vibration or groundborne noise levels. The Project would result in no impacts regarding excessive noise levels due to proximity to a private airstrip, airport land use plan, public airport, or public use airport.

Alternative A would not involve construction that could result in noise from the temporary use of heavy-duty construction equipment or generation of construction traffic, including worker and haul truck trips to the Project site. Because Alternative A would result in no short-term impacts to noise and vibration, construction impacts under Alternative A would be less than those anticipated from the Project. Under Alternative A, the operational state of the Project site would remain the same as in existing conditions. Addition of Project traffic to the roadway network would not result in a discernable increase in noise, and Project noise impacts from increased stationary operational noise would be less than significant. However, there would be no additional on- or off-site noise resulting from Alternative A. Therefore, operational impacts on noise under this alternative would be **less than** those anticipated from the Project. None of the mitigation measures required to reduce noise impacts would be required under Alternative A.

Population and Housing

As detailed in Section 4.14, Population and Housing, the Project would introduce 1,785 residents and 10 employees, and would result in temporary part-time and full-time jobs associated with construction activities. However, although the Project would have the potential to directly (in the form of proposing new housing) and indirectly (by installing internal roadways and other infrastructure on site) induce population growth on the Project site, as the Project is consistent with its General Plan designation of Residential 2 (H2), and with approval of CUPs, the Project would result would not induce unplanned population growth in the Project site's local vicinity, and impacts would be less than significant. Additionally, given that the Project is proposed on an existing undeveloped site with no known habitable structures, the Project would not result in the need for the construction of replacement housing outside of the Project site's boundaries, and no impact would occur.

Alternative A would not generate part-time and full-time jobs associated with construction, because no construction would occur, whereas the Project would require a temporary construction and permanent workforce. Under Alternative A, no change from the existing conditions would occur, and therefore, no population growth or new residential units would result as part of implementing Alternative A. Because Alternative A would result in no changes to population and housing, and therefore, would not induce unplanned population growth and displacement of people, impacts under Alternative A would be **less than** those anticipated from the Project.

Public Services

For the Project, temporary Project construction impacts regarding capacity problems, service level problems, and/or the provision of a new or physically altered governmental facility related to fire protection, sheriff protection, schools; parks, and other facilities would be less than significant within implementation of mitigation. Operational Project impacts regarding capacity problems, service level problems, and/or the provision of a new or physically altered governmental facility related to fire protection, sheriff protection, schools, parks, and other facilities would be less than significant, and no mitigation is required. The Project's construction and operational impacts regarding capacity problems, service level problems, and/or the provision of a new or physically altered governmental facility related to libraries would be less than significant, and no mitigation is required.

Alternative A would not alter the existing condition of the Project site or require any construction activities, and, therefore, would not generate increased demand for fire protection and police services, or parks and library services. Alternative A would not result in changes to existing uses on the Project site. The Project site currently places some demand on fire protection due to the Project site's location within a Very High Fire Hazard Severity Zone (VHFHSZ). The Project would increase demands relative to existing conditions for all public services; however, impacts would be less than significant, and no mitigation is required, as detailed above. Because Alternative A would result in no impacts to public services, impacts under Alternative A would be **less than** those anticipated from the Project. None of the mitigation measures required to reduce Public Service impacts would be required under Alternative A.

Recreation

The Project would increase use of existing neighborhood and regional parks due to the introduction of approximately 1,785 residents to the site through proposed dwelling units; however, impacts would be less than significant because access to a multitude of existing neighborhood and regional parks or other recreational facilities in the local vicinity (as discussed above), as well as the substantial amount of open space and trails that would be provided on-site, together, would ensure that the 1,785 new residents would not result in, or accelerate, substantial physical deterioration of any given facility or facilities. Additionally, the construction of recreational facilities on-site would result in less than significant impacts. As Alternative A would not introduce residences to the site or require construction of a recreational facility, Alternative A would result in no impact regarding the increase of existing neighborhood and regional parks such that substantial physical deterioration would occur, or inclusion of neighborhood and regional parks that require the construction or expansion of such facilities which may have an adverse physical effect on the environment. Therefore, impacts under Alternative A regarding existing neighborhood and regional parks and inclusion of recreational facilities which may have an adverse physical effect on the environment would be less than the Project.

As detailed in Section 4.16, Recreation, of this Draft EIR, on-site trails proposed by the Project increase connectivity to the existing public trail system by providing a critical "missing link" in connectivity, specifically, Trail Network Gap #7, from Towsley Canyon Road to Lyons Ranch road (i.e., the Project's proposed paved access road) as identified in the Santa Susana Mountains Trails Master Plan. This regional trail connectivity would not be possible at the site without implementation of the Project. Additionally, the Project would provide recreational facilities on-site in addition to the trails. The existing, non-dedicated and informal trails on-site would be made public with the Project, and a new trailhead would be constructed near the gated connection of the access road to The Old Road at the northeastern corner of the Project site, providing public access. As Alternative A would remain a private site, use of the site would remain restricted. Therefore, although Alternative A would not interfere directly with regional trail connectivity, it would not facilitate the connection as would occur under the Project. Therefore, impacts under Alternative A for regional trail connectivity would be greater than the Project. As recreation impacts would be reduced and increased under Alternative A, as detailed above, it is determined that overall impact levels under Alternative A would ultimately be **similar to** the Project.

Transportation

As detailed in Section 4.17, Transportation, there are no pedestrian or transit facilities adjacent to the Project site that could potentially be blocked during construction activities. However, there are trails nearby the Project site. Therefore, with preparation and implementation of mitigation (a Construction Traffic Management Plan), the impacts of the Project's short-term construction activities related to a conflict with the County's TIA Guidelines would be less than significant. The Project's construction and operational impacts related to SCAG's 2020-2045 Regional

Transportation Plan/Sustainable Communities Strategy, the County of Los Angeles General Plan, the County's TIA Guidelines, and the OVOV related to impacts to the circulation system, including transit, roadway, bicycle, and pedestrian facilities, would be less than significant, with implementation of mitigation. As Alternative A would not result in construction or operational activities and would remain an undeveloped site, Alternative A would result in no impacts, and impacts under Alternative A would be less than the Project. Mitigation measures set forth in Section 4.17, Transportation, would not be required under Alternative A.

The Project would result in a significant and unavoidable Project-level impact regarding inconsistency with CEQA Guidelines section 15064.3(b) resulting in a potentially significant impact under baseline conditions for VMT, as detailed under Threshold 4.17b of Section 4.17, Transportation, of this Draft EIR. However, the Project's cumulative impact to this topic would be less than significant with mitigation. Under Alternative A, the operational state would remain the same as in existing conditions (i.e., no trips), whereas the Project would generate new vehicle trips from the Project site. As Alternative A would result in no development and is currently an unoccupied site, Alternative A would result in no impacts. As such, there would be no VMT, and Alternative A would **eliminate the significant and unavoidable impact** of the Project. Mitigation measures set forth in Section 4.17, Transportation, would not be required under Alternative A.

Tribal Cultural Resources

The Project would result in a less than significant impact regarding the potential to cause a substantial adverse change in the significance of a Tribal Cultural Resource (TCR) that is listed or eligible in the California Register of Historical resources, as no significant cultural resource has been identified within the Project site. The Project would result in less than significant impacts with mitigation regarding the potential to cause a substantial adverse change in the significance of a TCR that is a resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. No TCRs, as defined in Public Resources Code Section 21074 and pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, were identified as a result of the Assembly Bill (AB) 52 tribal consultation conducted for this Project. However, as previously established, there is potential for unknown resources to be encountered during Project implementation that may meet the criteria of a TCR set forth in CEQA. To ensure unknown TCRs that are inadvertently encountered during Project implementation are assessed, evaluated (if necessary) and treated in accordance with CEQA, mitigation measures have been developed and will be required of the Project if approved. As such, the Project would result in less than significant impacts with implementation of mitigation regarding the potential to cause a substantial adverse change in the significance of a TCR pursuant to CEQA.

Alternative A would not impact significant TCRs that is listed or eligible, as there are none located at the Project site. This impact would be similar to the Project. Additionally, because no ground disturbance would occur on the Project site under Alternative A, the Project site would remain as is and potential construction impacts (including ground-disturbing activities such as grading or other earthwork) that could risk potential disturbance of previously unknown TCRs, would not occur. Therefore, Alternative A would not result in impacts regarding the potential to cause a substantial adverse change in the significance of a TCR that is a resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. None of the mitigation measures set forth in Section 4.18, Tribal Cultural Resources, would be required under Alternative A. Therefore, impacts regarding the potential to cause a substantial adverse change in the significance of a TCR that is a resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1under Alternative A would be **less than** the anticipated under the Project.

Utilities and Service Systems

As discussed in Section 4.19, Utilities and Service Systems, of this Draft EIR, the Project would result in less than significant impacts related to water and sewer infrastructure capacity, the availability of sufficient water supplies, the adequate capacity of wastewater treatment services, the generation of solid waste, and the compliance with management and reduction regulations of solid waste. Alternative A would require no potable water, generate no wastewater, and generate no solid waste when compared to the Project due to no development on-site. Therefore, there would be no impacts to utilities and service systems under Alternative A and impacts under Alternative A would be **less than** the Project.

Wildfire

The Project site is located within in a VHFHSZ. However, Project impacts would be less than significant with mitigation regarding the following: the impairment of an adopted emergency response plan or emergency evacuation plan; exacerbation of wildfire risk, due to slope, prevailing winds, and other factors; the exacerbation of wildfire risk related to the installation or maintenance of associated infrastructure; and the facilitation of wildfire spread or exacerbation of wildfire risk or expose people or structures. Alternative A would result in no construction or introduction of residences, structures, and other uses which could increase wildfire risks, and mitigation measures set forth in Section 4.20, Wildfire, would not be required under Alternative A. However, Alternative A would also not include fuel modification zones (FMZs) or other fire attenuation features, as proposed for the Project, which would promote wildfire protection for the Project and for nearby uses. Nevertheless, there would be no wildfire impacts under Alternative A. Therefore, impacts under Alternative A would be **less than** the Project. None of the mitigation measures required to reduce Wildfire impacts would be required under Alternative A.

6.5.2 Alternative B - Mixed Use Project

Alternative Description

As depicted on Figure 6-2, Alternative B Site Plan of Development Footprint, Alternative B would include 361 townhomes/attached rental dwelling units, 49,000 square feet of retail uses, a recreational center, on-site trails, and the same overall development footprint and natural open space as assumed for the Project. Alternative B development would be situated in the northeastern portion of the Project site. It should be noted that Figure 6-2 only depicts the proposed development footprint of Alternative B, the rest of the Project site (south and west of the developed portion) would be maintained as open space, consistent with the Project. Overall, the development footprint would be approximately 83 acres, and total preserved open space would be approximately 150 acres. The 361 dwelling units would include 324 townhomes/attached units, and 37 very-low-income rental units, as required per the County's inclusionary housing ordinance. Because all units would be rental units, there would be no HOA management of the residential units and on-site uses; all units would be managed through a leasing office. The 49,000 square feet of retail uses would be situated on land currently zoned "C-3-DP" (Unlimited Commercial – Development Program) and consist of uses such as a shopping center, restaurants, and other related retail uses and would include associated surface parking. It is assumed that the on-site retail uses would result in internal vehicle trip-capture benefits for future residents at the Project site under Alternative B, as residents would visit on-site retail uses versus traveling to further retail establishments.

Project infrastructure would include internal roadways, trails and a new trailhead, a new water tank, and seven Los Angeles County Flood Control District (LACFCD) lots with debris and desilting basins, consistent with the Project. Comparable off-site improvements to the Project would also be necessary for Alternative B. These would include

development of an 8-foot-wide sidewalk along The Old Road fronting the Project site to provide pedestrian access into the site and widening The Old Road along the Project site frontage to include a total of 80-foot right of way, including sidewalk, curb, and gutter, and off-site fuel modification adjacent to the Project site. Between the proposed sidewalk and the portion of the Project site's eastern boundary (adjacent to The Old Road), the Project proposes a retaining wall of a maximum of 4 feet in height. In addition to improvements to The Old Road, Alternative B would include off-site utility infrastructure components, including utility water line, booster station, and water tank infrastructure improvements, consistent with the Project.

Alternative B would not require a zone change to implement, as the existing zone designation of C-3-DP would accommodate retails uses associated with the 49,000 sf of retail uses. All other discretionary actions of the Project would be required for Alternative B.

As detailed in the following discussion, although Alternative B would partially satisfy the Project Objectives overall, it would not avoid the significant unavoidable VMT impact that would result from the Project.

Ability to Meet Project Objectives

1. Provide a diverse mix of housing units in various typologies that would assist the County in obtaining its RHNA goals, including very low-income housing and moderate/middle-income households.
   a. ***Alternative B would partially satisfy this Project Objective.*** Alternative B would provide townhomes/attached dwelling units, and 37 dwelling units would be very-low-income units. However, this alternative would not include housing for moderate/middle-income households.
2. Provide housing opportunities consistent with the Los Angeles County General Plan 2035 and the Santa Clarita Valley Area Plan, One Valley One Vision, a component of the General Plan and applicable to the unincorporated portions of the Santa Clarita Valley.
   a. ***Alternative B would satisfy this Project Objective.*** Alternative B would provide housing opportunities consistent with the General Plan and the OVOV, although Alternative B would provide less housing than the Project.
3. Provide a mix of housing types proximate to convenient freeway access and existing roadway infrastructure.
   a. ***Alternative B would satisfy this Project Objective.*** Alternative B would provide for housing opportunities proximate to convenient freeway access and existing roadway infrastructure.
4. Provide substantial homeownership opportunities for middle-income families in an area proximate to existing residential uses and infrastructure.
   a. ***Alternative B would not satisfy this Project Objective.*** Alternative B would not provide substantial homeownership opportunities for middle-income families, as all dwelling units in Alternative B would be rental units.
5. Provide a mix of housing types within a clustered development to limit the amount of the site subject to disturbance, limit the amount of urban wildland interface areas, preserve significant ridgelines, preserve biological resources, and provide a substantial amount of natural open space within the Project site.
   a. ***Alternative B would satisfy this Project Objective.*** Alternative B would provide housing opportunities within a clustered development and would be situated in the northeastern portion of the Project site, and therefore minimizing grading and urban wildland interface areas, preserving significant ridgelines and biological resources, and maximizing natural open space within the Project site.

6. Provide a comprehensive trail network, including publicly accessible trailhead, that provides connections for the public to access existing open space areas and established trails.
    a. ***Alternative B would satisfy this Project Objective.*** Alternative B would have a new trailhead constructed near the gated connection of the access road to The Old Road at the northeastern corner of the Project site. The private access road for Alternative B would connect to on-site trails, which would provide connections to off-site dedicated trails.

Comparison of the Effects of Alternative B to the Project

Aesthetics

The Project's construction and operational impacts regarding views from a regional trail, lighting/glare/shadow, applicable zoning, and compliance with other regulations governing scenic quality would be less than significant. Construction impacts regarding scenic vistas and the existing visual character or quality of public views would be less than significant with mitigation incorporated. Operational impacts regarding scenic vistas and the existing visual character or quality of public views would be less than significant. While development of the Project site as proposed would alter the character of existing hillside and valley terrain and would require the removal of on-site vegetation communities in development areas to accommodate future residential and associated uses, no corridor protection program has been developed or implemented for I-5, and thus, it has not been officially designated as scenic by the State, and as such, the Project would result in less than significant impacts regarding substantial damage to scenic resources within a state scenic highway.

Under Alternative B, the overall development footprint would remain the same as the Project and the same mitigation measure as the Project would be required to reduce potential construction impacts to less than significant. Future development of Alternative B components would be implemented in accordance with the existing zoning and land use designation regulations governing visual character and scenic quality, similar to the Project, and impacts would be less than significant. Construction impacts regarding the existing visual character or quality of public views would be less than significant with mitigation incorporated, similar to the Project. Additionally, similar to the Project, future development impacts relative to scenic vistas would be less than significant with mitigation and views from regional riding, hiking, or multi-use trails would be less than significant, as both the Project and Alternative B would develop the site within the same footprint, similar aesthetic characteristics, and height of buildings and uses. The glare and shade/shadow impacts of Alternative B would be less than significant and would be comparable to the Project due to similar proposed uses with implementation of Alternative B. However, signage and lighting associated with retail uses would be introduced to the Project site under Alternative B, which would be brighter than those associated with residential uses. This lighting could be visible from nearby off-site trails, I-5 (an eligible scenic highway), and other public views into the site. However, it is likely that due to the location of the retail uses (internal to the Project site), light and glare impacts would remain less than significant under Alternative B. Therefore, impacts related to aesthetics under Alternative B would be **slightly greater than** those anticipated from the Project.

Agriculture/Forest Resources

The Project site is primarily zoned A-2, Heavy Agricultural but is not currently used for agriculture. The Project site does not contain timberland and is not zoned as forestland or timberland. The Project would result in no impact regarding conversion of Farmland to a non-agricultural use; conflicts with existing zoning for forest land, timberland, or timberland zoned Timberland Production, or the potential to cause the rezoning of forest land, timberland, or timberland zoned Timberland Production; and changes in the existing environment which could result in conversion

of Farmland to non-agricultural. The Project would result in less than significant impacts regarding conflict with existing zoning for agricultural use, with a designated ARA or Williamson Act contract. With implementation of mitigation, the Project would result in less than significant impacts regarding loss of forest land or conversion of forest land to non-forest use and changes in the existing environment which could result in conversion of forest land to non-forest use.

As Alternative B proposes the same footprint as the Project, it would also result in no impacts related to the conversion and/or loss of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; conflict with existing zoning for forest land, timberland, or timberland zoned Timberland protection; and changes in the existing environment which could result in conversion of Farmland to agriculture. The Project site does not contain land designated as an ARA or lands under Williamson Act contracts; therefore, neither Alternative B nor the Project would conflict with a designated ARA or with a Williamson Act contract. The Project site supports scattered communities of native tree cover throughout at least 10% of the Project site. Therefore, as defined by PRC Section 12220(g), the Project site contains forest land. Development of the Project and Alternative B would result in the loss or conversion of forestland to non-forest use because the Project is located within the SEA; it would be subject to the provisions of the SEA Ordinance and would result in a less than significant impact with mitigation. The same mitigation measure applicable to the Project would be required under Alternative B to reduce potential impacts to forestry resources to less than significant. Overall, under Alternative B, impacts related to Agriculture/Forest resources would be **the same as** the Project.

Air Quality

Construction and operation of the Project would result in a net increase of air pollutant emissions at the Project site. During the site preparation and grading phases of the Project, Project construction would exceed the SCAQMD's mass daily regional thresholds and localized significance thresholds, and therefore, mitigation (i.e., tiered construction equipment) to reduce pollutant emissions during construction is required. The Project would result in this potentially significant impact during the first year of construction activity, during which site preparation and grading activities would occur, but impacts would be reduced to less than significant upon implementation of mitigation. The Project's operational emissions would be under the SCAQMD's mass daily regional thresholds and LSTs without mitigation. As detailed in Section 4.3, Air Quality, the Project would result in a less than significant impact with mitigation regarding potential to conflict with the SCAQMD 2022 AQMP; cumulatively considerable increases of criteria air pollutants during construction and operation of the Project; and exposure of sensitive receptors to substantial pollutant concentrations. The Project would result in a less than significant impact regarding other emissions, including those leading to odors, during construction and operation of the Project.

Alternative B would result in construction of 143 less dwelling units than the Project but would also include construction of 49,000 square feet of retail uses and associated surface parking. Associated site preparation and grading impacts would be the same as the Project due to the same overall development footprint impacts. Overall, gross square footage of development on-site would be less under Alternative B than the Project. As there would likely be less gross square footage of development, the building construction and architectural coating phases would likely be less time intensive and require less equipment than the Project, which could result in lower construction emissions under Alternative B when compared to the Project. However, as Alternative B would result in comparable site preparation and grading impacts as discussed above, mitigation would also be required for implementation of Alternative B. As such, Alternative B would result in less than significant impacts with mitigation regarding potential to conflict with the SCAQMD 2022 AQMP; cumulatively considerable increases of criteria air pollutants during construction and operation of the Project; and exposure of sensitive receptors to substantial

pollutant concentrations. In other words, while the magnitude of emissions may be slightly less under Alternative B during certain phases of construction, the significance finding under Alternative B would be the same.

Regarding long-term impacts, Alternative B would result in 4,303 average daily trips (Appendix N-3) for total residential and mixed-use trips, whereas the Project would result in 4,239 average daily trips for total residential trips (Appendix B-1). Therefore, Alternative B would result in slightly more trips and therefore more vehicle emissions during operation. As such, operational air quality emissions under Alternative B would be slightly greater than the Project, but likely still less than significant, similar to the Project.

In general, a project would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook). As detailed above, the Project would be consistent with the underlying regional plans to develop the AQMP, and as such, would be consistent with the criterion. Because Alternative B is consistent with the General Plan and zoning designations on-site, Alternative B would also be within the SCAG's growth projections. Therefore, the employment projection increase from Alternative B (from the 49,000-square foot retail uses on-site) would be within the SCAG's growth projections for the Santa Clarita Valley Planning Area. Under Alternative B, the same mitigation measures as the Project would be required to reduce potential air quality impacts to less than significant. Overall, impacts to air quality under Alternative B would be **similar to** the Project.

Biological Resources

Implementation of the Project would result in potentially significant direct and indirect temporary impacts to biological resources prior to mitigation due to the construction of a new housing development on the currently undeveloped Project site. With the inclusion of mitigation measures, the Project would have less than significant impacts on all thresholds in Section 4.4, Biological Resources.

Under Alternative B, future development would have the same development footprint as proposed for the Project. Therefore, all potential biological resource impacts for Alternative B would be the same as the Project, and all mitigation measures necessary to reduce impacts to less than significant for the Project would also be applicable to Alternative B. All biological resource impacts under Alternative B would be less than significant with mitigation. Therefore, impacts under Alternative B relative to biological resources would be **the same as** the Project.

Cultural Resources

The Project would result in less than significant impacts with mitigation regarding the potential to cause a substantial adverse change in the significance of a historical resource or archaeological resource pursuant to CEQA Guidelines § 15064.5. In addition, the Project would result in a less than significant impact with mitigation regarding disturbance of any human remains, including those interred outside of dedicated ceremonies.

Under Alternative B, future development would have the same development footprint as proposed for the Project, and therefore, it could be assumed that Alternative B would have similar ground disturbance impacts to potential historical or archaeological resources, and human remains at the Project site or in off-site impact areas. Therefore, all anticipated cultural resource impacts for Alternative B would be the same as the Project, and all mitigation measures necessary to reduce impacts to less than significant for the Project would also be applicable to Alternative B. It is anticipated that Alternative B would result in less than significant impacts with mitigation regarding the potential to cause a substantial adverse change in the significance of a historical resource or archaeological resource pursuant to CEQA Guidelines § 15064.5, and that Alternative B would result in a less than significant

impact with mitigation regarding disturbance of any human remains, including those interred outside of dedicated ceremonies. Therefore, impacts under Alternative B relative to cultural resources would be **the same as** the Project.

Energy

Although the Project would increase energy use during construction and operation, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and Project impacts would be less than significant and no mitigation measures are required. The Project would be constructed in compliance with applicable regulations governing energy efficiency, energy impacts would be less than significant, and no mitigation measures are required to reduce energy impacts. Similar to the Project, implementation of Alternative B would increase the demand for electricity, gasoline, and diesel consumption in the Project site during construction and operation of future development. As detailed in Air Quality, above, the construction activity under Alternative B would be slightly less intensive than the Project, and as such, energy consumption during construction would be slightly less under Alternative B when compared to the Project. As operational trips would increase under Alternative B (as detailed in Air Quality, above), energy consumption of associated sources (electricity, gasoline, and diesel) would also increase. As such, Alternative B would result in a less than significant impact regarding wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, operational energy consumption may be slightly greater than the Project under Alternative B. However, due to the decrease in construction energy consumption and increase in operational energy consumption under Alternative B, the overall magnitude of energy consumption under Alternative B would likely be comparable to the Project.

The Project's construction equipment used would be consistent with the energy standards applicable to construction equipment including limiting idling fuel consumption and using contractors that comply with applicable CARB regulatory standards that affect energy efficiency. Operationally, the Project would comply with Title 24, Part 6 and Part 11, of the California Building Code and other applicable regulations. The Project would result in less than significant impacts regarding the potential to conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As with the Project, Alternative B would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operations, as the Project's construction and operational characteristics would be comparable to the Project (with the addition of retail uses). Therefore, Alternative B would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and would result in a less than significant impact, consistent with the Project. All Project mitigation measures necessary to reduce potential energy impacts to less than significant would also be required under Alternative B. Thus, impacts under Alternative B would be **similar to** those anticipated with the Project.

Geology and Soils

The Project would result in less than significant impacts without mitigation for the following impacts: directly or indirectly causing potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides; substantial soil erosion or the loss of topsoil; potential for on- or off-site landslides, lateral spreading, subsidence, liquefaction, location on a geologic unit or soil that is unstable; expansive soils; and the potential to conflict with the HMA ordinance. The Project would result in no impact regarding 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. The Project would not directly or indirectly impact a unique geologic resource. With implementation of mitigation, the Project would result in less than significant impacts to the paleontological resources.

Alternative B would result in future development within the same on-site and off-site Project site limits as the Project. Comparable site coverage would occur with implementation of Alternative B as the Project. Grading and ground-disturbance activities at the Project site would be comparable for Alternative B, since the Project's development footprint would require similar grade requirements and the overall development footprint would be the same under Alternative B. Consistent with the Project, Alternative B would be subject to the requirements of a geotechnical report which would be specific to Alternative B, and therefore, impacts to geology and soils would be less than significant for Alternative B, consistent with the Project. As it would be anticipated that grading and related ground-disturbing activities for Alternative B would be comparable to the Project, impacts regarding a unique paleontological resource or site or unique geologic feature would be similar to the Project, and would be less than significant with mitigation incorporated. All Project mitigation measures necessary to reduce potential geology and soils impacts to less than significant would also be required under Alternative B. For these reasons, it is likely that geology and soils impacts for Alternative B would be **the same as** the Project.

Greenhouse Gas Emissions

Construction and operation of the Project would result in a net increase in GHG emissions. The Project would support achievement of Senate Bill (SB) 32 and Executive Order (EO) S-3-05 goals through compliance with the GHG reducing plans and potential to conflict with the strategies identified in SCAG's 2020-2045 RTP/SCS to reduce per capita GHG emissions. As detailed in Section 4.8, Greenhouse Gas Emissions, with mitigation, the Project would result in a GHG emissions efficiency less than the significance threshold established by the County. This 2029 efficiency metric threshold reflects the trajectory planned for in the State's Scoping Plan and 2022 Scoping Plan Update (i.e., AB 32, SB 32, and AB 1279). Since the Project's efficiency, with mitigation, would be below the 2029 efficiency metric threshold, it would not interfere with attainment of the 2030, 2045, and 2050 statewide emission reduction targets, and therefore, would not interfere with the State's and the County's ability to achieve the mid-term and long-term GHG reduction targets. To reduce potentially significant GHG impacts, mitigation measures are identified to reduce Project-generated construction and operational GHG emissions from various Project emission sources, including construction, energy, water, solid waste, and landscaping. As such, the Project would result in less than significant impacts with mitigation regarding the potential to generate GHG emissions that may have a significant effect on the environment, and to conflict with an applicable plan, policy, or regulation adopted for reducing GHG emissions.

As detailed under Air Quality, above, under Alternative B, while construction emissions would slightly decrease due to the decrease in gross square footage of development, operational emissions would slightly increase due to an increase in vehicle trips. As GHG construction emissions are amortized over 30 years, the decrease in construction emissions associated with Alternative B would be marginal. As with air quality emissions, most operational emissions for the Project would be from mobile source emissions (i.e., vehicular travel), and trips under Alternative B would increase when compared to the Project (see Air Quality analysis above). Therefore, operational emissions under Alternative B would be slightly greater than the Project. In order to reduce direct or indirect GHG emissions from Alternative B, it is likely that all mitigation measures required to reduce impacts to the Project would also be required to reduce impacts under Alternative B, and potentially more mitigation due to the increase in operational emissions. Alternative B would be a mixed-use project that would align with the overall goals of providing complementary uses within proximity to each other to reduce GHG emissions. Therefore, it is anticipated that Alternative B would also result in a less than significant impact with mitigation regarding potential to generate GHG emissions that may have a significant effect on the environment and to conflict with an applicable plan, policy, or regulation adopted for reducing GHG emissions. All Project mitigation measures necessary to reduce potential GHG

impacts to less than significant would also be required under Alternative B. Therefore, impacts under this alternative would be **similar to** the Project.

Hazards and Hazardous Materials

The Project would result in less than significant impacts with no mitigation required regarding the routine transport, use, or disposal of hazardous materials, and the Project would have no impacts regarding safety hazards or excessive noise for people residing or working in the Project area due to proximity within a public airport. However, mitigation measures are required to reduce hazards and hazardous material impacts with regard to accident conditions involving the release of hazardous materials; hazardous emissions within one-quarter-mile of sensitive land uses; the Project site's location on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5; emergency response plan; significant risk of loss or death involving fires; and the Project's potential use as constituting a dangerous fire hazard.

Alternative B would result in future development within the same on-site and off-site Project site limits as the Project. Comparable site coverage would occur with implementation of Alternative B as the Project. Consistent with the Project, Alternative B would likely site residential units on or near the abandoned and plugged oil-well on-site, and as such, Alternative B would be required to implement mitigation measures to reduce impacts to less than significant. Regarding potential fire hazards, the Project and Alternative B would be subject to the fire flow requirements of the Los Angeles County Fire Department (LACoFD), fuel modification plans, and mitigation measures as detailed in Section 4.20, Wildfire. Therefore, it is anticipated that Alternative B would result in less than significant impacts with no mitigation required regarding the routine transport, use, or disposal of hazardous materials, and would have no impacts regarding safety hazards or excessive noise for people residing or working in the Project area due to proximity within a public airport. Additionally, it is anticipated that Alternative B would require mitigation measures to reduce hazards and hazardous material impacts to less than significant with regard to accident conditions involving the release of hazardous materials; hazardous emissions within one-quarter-mile of sensitive land uses; the Project site's location on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5; emergency response plan; significant risk of loss or death involving fires; and the Project's potential use as constituting a dangerous fire hazard. All Project mitigation measures necessary to reduce potential hazards and hazardous materials impacts to less than significant would also be required under Alternative B. Therefore, under Alternative B, impacts related to hazards and hazardous materials would be **the same as** the Project.

Hydrology and Water Quality

As discussed in Section 4.10 of this Draft EIR, the Project would result in less than significant impacts related to a violation of water quality standards, a substantial decrease in groundwater supplies, a substantial alteration of an existing drainage pattern, the placement of structures in a flood hazard zone, consistency with the County's Low Impact Development Ordinance, the use of onsite wastewater treatment systems, the risk of pollutant release due to inundation, and consistency with a water quality control plan. Under this alternative, similar buildout potential would be anticipated within the same footprint of development when compared to the Project. However, as Alternative B would result in increased surface parking to accommodate the retail uses, there would be a slight increase in impervious surfaces under Alternative B, as there would be more landscaping (i.e., pervious surfaces) associated with residential uses under the Project scenario. The storm water infrastructure requirements, including the retention basins and proposed storm drain system, would be slightly increased under Alternative B when compared to the Project, due to increased impervious surfaces on-site. However, it is anticipated that this would not require mitigation, and as such, it is likely that Alternative B would result in less than significant impacts related

to a violation of water quality standards, a substantial decrease in groundwater supplies, a substantial alteration of an existing drainage pattern, the placement of structures in a flood hazard zone, consistency with the County's Low Impact Development Ordinance, the use of onsite wastewater treatment systems, the risk of pollutant release due to inundation, and consistency with a water quality control plan. Moreover, compliance with existing regulatory requirements and policies would reduce impacts from adverse effects related to hydrology and water quality. Therefore, impacts to hydrology and water quality under Alternative B would be **similar to** those anticipated under the Project.

Land Use and Planning

As discussed in Section 4.11, Land Use and Planning of this Draft EIR, while the Project includes a new development on an undisturbed site, it would not construct a linear feature, remove access on the Project site, or impair mobility within an existing community. Therefore, the Project would result in less than significant impacts regarding physical division of an established community. Regarding the potential to conflict with any County land use plan, policy, or regulation adopted for the purposes of mitigation or avoiding an environmental effect, the Project would result in less than significant impacts with mitigation regarding potential to conflict with the General Plan, Santa Clarita Valley Area Plan, and the Zoning Code. Although Project construction and operation would result in development within an HMA and SEA, and therefore would have impacts to HMAs and SEAs, with applicable mitigation measures from Section 4.4, Biological Resources, the Project would result in less than significant impacts regarding the potential to conflict with the goals and policies of the General Plan related to HMAs or SEAs.

Alternative B would not result in impacts associated with the physical division of established communities, similar to the Project, due to the development of the Project site in the same footprint as the Project. All Project mitigation measures necessary to reduce potential land use and planning impacts to less than significant would also be required under Alternative B. As Alternative B would be consistent with the land use and zoning of the site, and would implement all applicable mitigation as required for the Project, Alternative B would result in less than significant impacts with mitigation regarding potential to conflict with any County land use plan, policy, or regulation adopted for the purposes of mitigation or avoiding an environmental effect. Regarding the potential of Alternative B to conflict with the goals and policies of the General Plan related to HMAs or SEAs, Alternative B would also be subject to the same mitigation measures as required to reduce impacts to less than significant for Biological Resources due to the same development footprint assumptions and associated biological resource impacts, and as such, impacts would be less than significant with mitigation under Alternative B. Therefore, impacts to land use and planning under Alternative B would be **the same as** those anticipated under the Project.

Mineral Resources

As discussed in Section 4.12 of this Draft EIR, the Project would result in no impacts related to the loss of availability of a known regionally- and locally-important mineral resource, as there are no mineral resources located on-site. As Alternative B would be developed within the same development footprint as the Project, Alternative B would also not result in mineral resource impacts. As such, mineral resource impacts anticipated under Alternative B would be **the same as** the Project.

Noise

Regarding generation of substantial temporary increase in ambient noise levels in the vicinity of the Project, mitigation would be required to reduce Project impacts from construction activity to less than significant. Upon implementation of these mitigation measures, impacts regarding generation of substantial temporary increases in

ambient noise levels in the vicinity of the Project in excess of standards established in the County's General Plan and noise ordinance would be less than significant. The Project would result in less than significant impacts regarding generation of excessive groundborne vibration or groundborne noise levels. The Project would result in no impacts regarding excessive noise levels due to proximity to a private airstrip, airport land use plan, public airport, or public use airport.

Alternative B would generally result in similar construction noise and vibration construction characteristics as the Project, although as the gross square footage of development on-site would be less under Alternative B, it is anticipated that the noise associated with the building construction and architectural coating phases would be slightly less than the Project under Alternative B. However, during construction of the Project, as the overall development footprint for Alternative B would be the same as the Project, it is anticipated that the same mitigation would be required to reduce temporary construction noise impacts to less than significant due to the same distance of proposed uses to off-site sensitive receptors. Similarly, groundborne vibration characteristics of the Project and Alternative B would likely be the same as the Project. As such, Alternative B's impacts regarding generation of substantial temporary increases in ambient noise levels in the vicinity of the Project in excess of standards established in the County's General Plan and noise ordinance would be less than significant, consistent with the Project. Therefore, under Alternative B, temporary increases in ambient noise levels in the vicinity of the Project site would be similar to the Project.

As shown in Figure 6-2, the proposed retail uses under Alternative B would be located proximate to existing off-site residences north of the Project site, as near as 350 feet from existing residential uses. Therefore, the retail uses associated with Alternative B would likely result in higher operational noise levels than those assumed for residential uses, due to increased trips of retail uses when compared to residential uses (as detailed under "Transportation", below), increased noise associated with trucks at loading docks nearest the residences (idling, loading/unloading merchandise, back-up alarms), slamming of vehicle doors within the associated surface parking lots of the retail uses, vehicles operating in the parking lot, and additional noise from conversations and shopping carts in the parking lot. Therefore, it is possible that operational noise impacts under Alternative B would be greater than the Project, and that additional mitigation would be required to reduce permanent increases in ambient noise levels in the vicinity of the Project site to less than significant. As operational impacts would be permanent (and construction impacts, although similar to the Project), would be short-term, overall, Alternative B would result in noise and vibration impacts **greater than** the Project.

Population and Housing

As discussed in Section 4.14 of this Draft EIR, the Project would not result in substantial unplanned housing growth, thus, less than significant impacts would occur and no mitigation would be required. The population generated by the Project would result in approximately 1,785 new residents based on 510 dwelling units. However, although the Project would have the potential to directly (in the form of proposing new housing) and indirectly (by installing internal roadways and other infrastructure on site) induce population growth on the Project site, as the Project is consistent with its General Plan designation of Residential 2 (H2), and with approval of CUPs, the Project would not induce unplanned population growth in the Project site's local vicinity, and impacts would be less than significant. Additionally, given that the Project is proposed on an existing undeveloped site with no known habitable structures, the Project would not result in the need for the construction of replacement housing outside of the Project site's boundaries, and no impact would occur.

The population for Alternative B would be 1,264 new residents[1], based on the average of 3.5 persons person per household in the unincorporated County, per the County's Housing Element Update (County of Los Angeles 2022). As such, Alternative B would result in less residents and population growth than the Project. Alternative B, which proposes less dwelling units than the Project, would also result in less than significant impacts, consistent with the Project. Impacts under Alternative B, regarding the potential to induce direct or indirect substantial unplanned population growth in an area would be less than significant and would be less than the Project.

Alternative B would result in increased employment when compared to the Project due to the retail component of Alternative B. Alternative B would result in 126 new employees[2] for the retail uses and recreational center compared to the 10 new employees proposed by the Project. Per Table 4.14-4 of Section 4.14, Population and Housing, 84,411 new employees are projected to be employed in the Santa Clarita Valley Planning Area by 2035. As such, Alternative B would result in a nominal contribution to the Project site vicinity's employment growth projections. Therefore, Alternative B, consistent with the Project, would not result in substantial unplanned employment growth and less than significant impacts would occur. Employment impacts under Alternative B would be **slightly greater than** the Project, but would remain less than significant, consistent with the Project.

Public Services

For the Project, temporary Project construction impacts regarding capacity problems, service level problems, and/or the provision of a new or physically altered governmental facility related to fire protection, sheriff protection, schools; parks, and other facilities would be less than significant within implementation of mitigation. Operational Project impacts regarding capacity problems, service level problems, and/or the provision of a new or physically altered governmental facility related to fire protection, sheriff protection, schools, parks, and other facilities would be less than significant, and no mitigation is required. The Project's construction and operational impacts regarding capacity problems, service level problems, and/or the provision of a new or physically altered governmental facility related to libraries would be less than significant, and no mitigation is required.

All Project mitigation measures necessary to reduce potential construction impacts related to public services would also be required under Alternative B. For example, similar to the Project, mitigation under Alternative B would require preparation of a Construction Traffic Management Plan, prepared in accordance with the County's Traffic Control Requirements, to provide temporary traffic controls and access within the County public rights-of-way when temporary disruption of traffic is anticipated. The increase of employees and decrease of residents under Alternative B would result in comparable fire and sheriff protection needs and impacts to the Project because the overall development footprint would remain the same, and all mitigation applicable to fire and sheriff protection would be applicable to Alternative B. Therefore, fire and sheriff protection impacts under Alternative B would be less than significant and similar to the Project.

Alternative B would result in slightly less school-aged residents than the Project due to the reduced unit count when compared to the Project. Similar to the Project, Alternative B would be required to pay requirement school districts' development impact fees to ensure that impacts to service capacities of schools would be less than significant. As such, school impacts under Alternative B would be less than the Project.

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1 361 dwelling units x 3.5 persons per household = 1,264 residents

2 ((49,000 square feet for retail uses + 4,540 square feet for recreational center) x 1/424 square feet per employee) = 126 new employees. The anticipated employees are conservatively estimated based on a ratio of 424 square feet per employee for the "Other Retail/Services" land use category (SCAG 2001).

As Alternative B would introduce new residents that would utilize parks and other public facilities (such as trails), pursuant to the County's Quimby Code, Alternative B would be required to pay an in-lieu fee, which could be used for the purpose of acquiring local park land or developing new or rehabilitating existing parks. However, as with the Project, Alternative B would include on-site pocket-parks and other park-like amenities (including open space, dedicated trails, and recreational facilities), and residents would be provided with access to these facilities on-site. Therefore, similar to the Project, Alternative B would not be anticipated to create capacity or service level problems relative to parks, and it is anticipated that such impacts would be less than significant for Alternative B. Since Alternative B would introduce fewer residents that could use surrounding parks to the Project site than the Project, impacts from park use would be less than the Project.

As Alternative B would introduce new residents that would utilize public libraries, as with the Project, Alternative B would be required to pay a Library Facilities Mitigation Fee payment to ensure the impact on the library system would be less than significant. However, as Alternative B would introduce fewer residents to the site than the Project that could use library services, impacts to library services would be less than the Project.

Overall, as detailed above, impacts under Alternative B would be **less than** the Project.

Recreation

The Project would increase use of existing neighborhood and regional parks due to the introduction of approximately 1,785 residents to the site through proposed dwelling units; however, impacts would be less than significant because access to a multitude of existing neighborhood and regional parks or other recreational facilities in the local vicinity (as discussed above), as well as the substantial amount of open space and trails that would be provided on-site, together, would ensure that the 1,785 new residents would not result in, or accelerate, substantial physical deterioration of any given facility or facilities. Additionally, the construction of recreational facilities on-site would result in less than significant impacts.

Similar to the Project, under Alternative B, the inclusion of on-site open space with trails would serve to provide important missing linkages in the existing dedicated trail network within the Santa Clarita Valley and would expand trail facilities consistent with the objectives of the Santa Susana Trails Master Plan. However, it is anticipated that Alternative B would result in slightly less use of existing neighborhood and regional parks due to the introduction of less residents (i.e., 1,264 residents under Alternative B compared to the Project's 1,785 residents). Alternative B would also be required to pay an in-lieu fee for its development (i.e., in accordance with Quimby Act and Sections 21.24.340, 21.240.350, and 21.28.140 of the County Code), and impacts to recreation would be less than significant. Under Alternative B, impacts to recreation would be **similar to** the Project.

Transportation

As discussed in Section 4.17, Transportation, of this Draft EIR, with preparation and implementation of mitigation (a Construction Traffic Management Plan), the impacts of the Project's short-term construction activities related to a conflict with the County's TIA Guidelines would be less than significant. This mitigation would be applicable to Alternative B, as the intensity and characteristics of construction activities would be comparable to the Project, although Alternative B would have slightly less trips during the building construction and architectural coating phases of construction. The Project's and Alternative B's impacts related to SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, the County of Los Angeles General Plan, the County's TIA Guidelines, and the OVOV related to impacts to the circulation system, including transit, roadway, bicycle, and pedestrian facilities, would be less than significant with implementation mitigation. Furthermore, this alternative

would not result in significant impacts related to the increase of design feature hazards nor would a significant impact occur relative to inadequate emergency access with implementation of mitigation due to similar site configuration, consistent with the Project. As Alternative B would result in the same development footprint (with reduced residential units but inclusion of retail uses), impacts under Alternative B for these thresholds would be similar to the Project.

As stated previously, the Project would result in a significant and unavoidable project-level impact regarding VMT, even with implementation of mitigation, which requires TDM measures to reduce impacts. Prior to mitigation, the Project would result in a rate of 20.5 VMT per capita. However, even with implementation of mitigation, which would result in a 7.45% reduction of VMT, the Project would result in 19.2 residential VMT per capita with mitigation, which would exceed the 10.6 residential VMT per capita threshold (Table 4.17-5 of Section 4.17, Transportation). In order to reduce impacts to less than significant, the Project would require a 48% reduction in VMT per capita, and per the TIA prepared for the Project (Fehr and Peers 2023; Appendix J), no combination of feasible mitigation measures would reduce the impact below the County's threshold of significance.

For purposes of a comparative analysis, a VMT memorandum was prepared by Fehr and Peers to analyze VMT under Alternative B (Appendix N-3). As detailed in the memorandum, as Alternative B would include mixed uses, Alternative B is expected to generate 4.2% fewer vehicle trips with the mixed-use program than trips generated from each individual land use in isolation. Alternative B characteristics (e.g., mixed land uses, its proximity of nearby destinations, pedestrian and bicycle connections, etc.) would encourage localized trips and trips made by walking, biking, or carpool. Alternative B would result in 16.3 Residential VMT per capita prior to mitigation, compared to the Project's 20.5 Residential VMT per Capita without mitigation (Appendix N-3). No mitigation was proposed within the VMT memorandum prepared for Alternative B. However, for purposes of comparison, if the same reduction as mitigation was taken for Alternative B (i.e., 7.45% reduction), Alternative B would result in 15.2 Residential VMT per capita with mitigation compared to the Project's 19.2 Residential VMT per capita with mitigation. As the threshold is 10.6 VMT per capita, Alternative B would exceed the threshold and would therefore also result in a significant and unavoidable impact. Although Alternative B would result in an approximately 21% reduction in VMT when compared to the Project, the baseline residential VMT per capita would be **less than** the Project but **remain significant and unavoidable** under Alternative B.

Tribal Cultural Resources

The Project would result in a less than significant impact regarding the potential to cause a substantial adverse change in the significance of a TCR that is listed or eligible in the California Register of Historical resources, as no significant cultural resource has been identified within the Project site. The Project would result in less than significant impacts with mitigation regarding the potential to cause a substantial adverse change in the significance of a TCR that is a resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. No TCRs, as defined in Public Resources Code Section 21074 and pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, were identified as a result of the AB 52 tribal consultation conducted for this Project. However, as previously established, there is potential for unknown resources to be encountered during Project implementation that may meet the criteria of a TCR set forth in CEQA. To ensure unknown TCRs that are inadvertently encountered during Project implementation are assessed, evaluated (if necessary) and treated in accordance with CEQA, mitigation measures have been developed and will be required of the Project if approved. As such, the Project would result in less than significant impacts with implementation of mitigation regarding the potential to cause a substantial adverse change in the significance of a TCR pursuant to CEQA.

Under Alternative B, future development would have the same development footprint as proposed for the Project, and therefore, it could be assumed that Alternative B would have similar ground disturbance impacts to potential TCRs at the Project site or in off-site impact areas. Therefore, all anticipated TCR impacts for Alternative B would be the same as the Project, and all mitigation measures necessary to reduce impacts to less than significant for the Project would also be applicable to Alternative B. Therefore, impacts under Alternative B relative to TCRs would be less than significant than significant for Alternative B, and would be **the same as** the Project.

Utilities and Service Systems

As discussed in Section 4.19, Utilities and Service Systems, of this Draft EIR, the Project would result in less than significant impacts related to water and sewer infrastructure capacity, the availability of sufficient water supplies, the adequate capacity of wastewater treatment services, the generation of solid waste, and the compliance with management and reduction regulations of solid waste would be less than significant under the Project. The new development associated with Alternative B would result in new water service connections, sewer laterals, on-site stormwater infrastructure, and underground utility conduit systems for electricity and telecommunications, similar to the Project, and off-site improvements would also be required to serve the demands for utility and service systems under Alternative B. Although residential unit count would be reduced under Alternative B, Alternative B would include retail uses instead, which could result in comparable demands for utilities and service systems on-site and off-site. Therefore, under Alternative B, impacts would be less than significant and **similar to** the Project.

Wildfire

The Project would be constructed in a VHFHSZ. However, Project impacts would be less than significant with mitigation regarding the following: the impairment of an adopted emergency response plan or emergency evacuation plan; exacerbation of wildfire risk, due to slope, prevailing winds, and other factors; the exacerbation of wildfire risk related to the installation or maintenance of associated infrastructure; and the facilitation of wildfire spread or exacerbation of wildfire risk or expose people or structures. Alternative B would not change the Project site's boundaries as proposed under the Project and discussed in Section 4.20 of this Draft EIR, and as such, all FMZs would remain the same as the Project. Alternative B would be required to implement all the same mitigation measures as the Project to ensure adequate fire protection and evacuation precautions. However, the mechanism for implementation certain mitigation would not be viable under Alternative B, as Alternative B would not have an HOA to facilitate management or wildfire educational programs. However, it is plausible that an apartment management company, as would be included with Alternative B, would likely ensure maintenance and monitoring of the FMZs necessary to reduce wildfire impacts to less than significant. Therefore, impacts to wildfire under Alternative B would be **similar to** the Project regarding exacerbation of fire risks, installation or maintenance of associated infrastructure, exposure of people or structures to significant risks, and exposure of people or structures to significant wildfire risk.

6.5.3 Alternative C – Reduced Footprint Alternative

Alternative Description

As detailed in Chapter 1, Introduction, the County circulated a Notice of Preparation (NOP) for a 30-day public review. The NOP was sent to the State Clearinghouse, public agencies, special districts, responsible and trustee agencies, and other interested parties. The purpose of the NOP is to formally convey that the County, as the lead agency, solicited input regarding the scope and proposed content of the Draft EIR. In response to this solicitation, the California Department of Fish and Wildlife (CDFW) and the Santa Monica Mountains Conservancy (SMMC)

submitted NOP comment letters. These comment letters are summarized in Table 1-1 of Chapter 1 and are included in full in Appendix A-2 of this Draft EIR.

In their comment letter, CDFW recommended that analysis of an alternative be included in the Draft EIR to "avoid or otherwise minimize direct and indirect impacts on biological resources" (Appendix A-2, CDFW Comment Letter, p. 14). CDFW recommended setbacks from sensitive and special status biological resources and recommended "reducing or clustering a development footprint to retain unobstructed spaces for vegetation and wildlife and provide connections for wildlife between properties and minimize obstacles to open space" (Appendix A-2, CDFW Comment Letter, p.14). Additionally, CDFW recommended that, "where the Project may impact aquatic and riparian resources, CDFW recommends DRP select Project designs and alternatives that would fully avoid impacts to such resources [and] an alternative that would not impede, alter, or otherwise modify existing surface flow, watercourse and meander, and water-dependent ecosystems and natural communities. Project designs should consider elevated crossings to avoid channelizing or narrowing of watercourses. Any modifications to a river, creek, or stream may cause or magnify upstream bank erosion, channel incision, and drop in water level and cause the watercourse to alter its course of flow" (Appendix A-2, CDFW Comment Letter, p.15).

Additionally, SMMC recommends that the Draft EIR include analysis of "at least one project alternative that requires neither grading the oak studded hill in the southeast property corner or requires any substantive streambed alteration impact to the main [United States Geological Survey] USGS blueline channel of Lyons Creek or the USGS blueline channel tributary that joins it within the northern part of APN 2826-002-026" (Appendix A-2, SMMC Comment Letter, p.72).

In addition to the above-referenced NOP comment letters requesting analysis of an alternative for reduced biological impacts, the County provided recommendations to the Significant Ecological Areas Technical Advisory Committee (SEATAC) for a reduced-footprint alternative to be analyzed within the Draft EIR at their June 3, 2024 meeting. Specifically, in their recommendations to SEATAC, the County requested that the alternative analyzed in the Draft EIR address the following: a modified proposed Project design, features, and footprint to substantially reduce impacts to native habitats, rare plants, protected trees, and oak woodlands (with priority to avoidance and on-site mitigation and use of off-site mitigation if avoidance and on-site mitigation is infeasible); and a modified Project design, features, and footprint to maximum use of existing natural buffers on-site. The SEATAC Meeting Minutes are included as Appendix N-4 to this Draft EIR. This alternative satisfies the County-provided recommendations to SEATAC and SEATAC's recommendations as provided in their Draft Meeting Minutes (Appendix N-4).

Although all Project impacts to biological resources would be less than significant with implementation of all mitigation measures, Alternative C is included to specifically address concerns to biological resource impacts, as detailed above.

As depicted on Figure 6-3, Alternative C Site Plan of Development Footprint, Alternative C would include 510 multi-family dwelling units in mid-rise apartment complexes and a recreational center. This alternative would include avoidance of most riparian habitat and non-riparian streams, and substantial avoidance of other biological resources, including native habitats, protected trees, oak woodlands, special-status plants, and rare plants. It should be noted that Figure 6-3 only depicts the development footprint of Alternative C—the rest of the approximately 205 acres of the Project site (south and west of the development footprint) would be preserved as natural open space. Additionally, the green layer on Figure 6-3 represents CDFW jurisdictional delineation features such as non-riparian streams and riparian habitat. Grading activities would not be balanced on-site under Alternative C as the total acres developed would not be able to accommodate balancing of materials on-site; approximately 136,000 cubic yards would be exported off-site. This could result in 8,500 round truck-trips or,

17,000 one-way truck trips, assuming a 16-cubic-yard truck. Most development would be concentrated within the northeastern corner of the Project site, on approximately 28 acres, except for siting of a water tank located west of the development footprint proposed for Alternative C. To assure a reliable fire flow water pressure for the proposed development of Alternative C, a water tank is sited in a location that meets design requirements for hydraulic grade elevation. As depicted on Figure 6-3, a paved access road would connect Alternative C development to the water tank. The approximately 28-acres of development represents a 67% reduction in the development footprint when compared to the Project. Therefore, the remaining approximately 205 acres would be included as natural open space within the southwestern portion of the site. The inclusion of a publicly-accessible trailhead would require the development of a separate, private maintenance road surrounding Alternative C's proposed development, to connect The Old Road (a public road) to the preserved natural open space further southwest on the Project site. Due to site constraints and the need to minimize the development footprint to accommodate the reduced alternative footprint, no private maintenance road, and therefore, no publicly-accessible trailhead is included within Alternative C. Therefore, the approximately 205 acres of natural open space preserved on-site would not be open to the public for trail usage, and access to the natural open space would be prohibited with signage.

The 510 dwelling units would include 459 multi-family (apartment) rental units, and 51 very-low-income rental apartments. The dwelling units would be 4 stories and 56 feet tall. The same number of units as the Project (i.e. 510 units) developed in a smaller footprint (i.e. 28 acres) would result in a generally smaller square footage overall for the residential dwelling units. As all 510 units would be rental units, there would be no HOA management of the residential units and on-site uses; all units would be managed through an apartment leasing office. Alternative C infrastructure would include internal roadways, a new water tank, and LACFCD lots with debris and desilting basins, consistent with the Project. The same off-site improvements as the Project would also be necessary for Alternative C. These would include development of an 8-foot-wide sidewalk along The Old Road fronting the Project site to provide pedestrian access into the site and widening The Old Road along the Project site frontage to include a total of 80-foot right of way, including sidewalk, curb, and gutter. Between the proposed sidewalk and the portion of the Project site's eastern boundary (adjacent to The Old Road), Alternative C proposes a retaining wall of a maximum of 4 feet in height. In addition to improvements to The Old Road, Alternative C would include off-site fuel modification and off-site utility infrastructure components, including utility water line, and booster station, consistent with the Project.

The Project site has the following zoning designations: Heavy Agricultural (A-2-2 and A-2-1) and Unlimited Commercial-Development Program (General Commercial [C-3] and C-3-DP). The General Plan land use designation of Residential 2 (H2) encompasses the entire Project site. For the 28-acre development footprint, Alternative C would require a zone change to R-3, Limited Density Multiple Residential, which would allow apartment/multi-family units without condition, and a General Plan Amendment (GPA) to H18 (allow 9 to 18 units/acre). The remaining portion of the Project site would keep the existing zoning and land use of A-2-2 and H2, respectively.

As detailed in the following discussion, although Alternative C would partially satisfy the Project Objectives overall, it would not avoid the significant unavoidable VMT impact that would result from implementation of the Project.

Ability to Meet Project Objectives

1. Provide a diverse mix of housing units in various typologies that would assist the County in obtaining its RHNA goals, including very low-income housing and moderate/middle-income households.
    a. ***Alternative C would partially satisfy this Project Objective.*** Alternative C would provide one housing product (i.e., multi-family residential apartments), but 51 dwelling units would be very-low-income units. However, this alternative would not include housing for moderate/middle-income households.

2. Provide housing opportunities consistent with the Los Angeles County General Plan 2035 and the Santa Clarita Valley Area Plan, One Valley One Vision, a component of the General Plan and applicable to the unincorporated portions of the Santa Clarita Valley.
    a. ***Alternative C would partially satisfy this Project Objective.*** Alternative C would provide housing at the Project site. However, Alternative C would require legislative actions to make the uses consistent with the General Plan and the OVOV, since multi-family residential, non-townhomes, and non-single family residential uses are not contemplated by these plans.
3. Provide a mix of housing types proximate to convenient freeway access and existing roadway infrastructure.
    a. ***Alternative C would partially satisfy this Project Objective.*** Alternative C would provide for housing opportunities proximate to convenient freeway access and existing roadway infrastructure. However, it would not provide a mix of housing types.
4. Provide substantial homeownership opportunities for middle-income families in an area proximate to existing residential uses and infrastructure.
    a. ***Alternative C would not satisfy this Project Objective.*** Alternative C would not provide substantial homeownership opportunities for middle-income families, as all dwelling units in Alternative C would be rental units.
5. Provide a mix of housing types within a clustered development to limit the amount of the site subject to disturbance, limit the amount of urban wildland interface areas, preserve significant ridgelines, preserve biological resources, and provide a substantial amount of natural open space within the Project site.
    a. ***Alternative C would satisfy this Project Objective.*** Alternative C would provide housing opportunities within a clustered development and would be situated in the northeastern portion of the Project site, and therefore limiting the amount of the site subject to disturbance, limiting the amount of urban wildland interface areas, preserving significant ridgelines and biological resources, and maximizing natural open space within the Project site.
6. Provide a comprehensive trail network, including publicly accessible trailhead, that provides connections for the public to access existing open space areas and established trails.
    a. ***Alternative C would not satisfy this Project Objective.*** Due to site constraints and reduced footprint under Alternative C, Alternative C would not include a publicly accessible trailhead or provide a comprehensive on-site trail network; therefore, there would not be publicly accessible connections to off-site dedicated trails.

Comparison of the Effects of Alternative C to the Project

Aesthetics

The Project's construction and operational impacts regarding views from a regional trail, lighting/glare/shadow, applicable zoning, and compliance with other regulations governing scenic quality would be less than significant. Construction impacts regarding scenic vistas and the existing visual character or quality of public views would be less than significant with mitigation incorporated. Operational impacts regarding scenic vistas and the existing visual character or quality of public views would be less than significant. While development of the Project site as proposed would alter the character of existing hillside and valley terrain and would require the removal of on-site vegetation communities in development areas to accommodate future residential and associated uses, no corridor protection program has been developed or implemented for I-5, and thus, it has not been officially designated as scenic

by the State, and as such, the Project would result in less than significant impacts regarding substantial damage to scenic resources within a state scenic highway.

Alternative C would result in similar impacts to aesthetics as analyzed in Section 4.1, Aesthetics. All Project mitigation measures necessary to reduce construction impacts related to aesthetics to less than significant would also be required under Alternative B. For example, as construction would be required within a public viewshed, construction impacts under Alternative C, regarding scenic vistas and the existing visual character or quality of public views, would be less than significant with mitigation incorporated. However, operationally, the heights of the residential units would slightly increase overall when compared to the Project, which may result in slightly more visibility of the structures despite intervening topography and vegetation. As detailed in Table 6-2, multi-family buildings would be 56 feet tall. This would increase the height of on-site buildings by 11 feet when compared to the Project's maximum height for buildings (which would be 45 feet at one portion of the Project site—the senior housing apartment building). As such, from The Old Road and off-site dedicated trails, it is more likely that the structures would be visible under Alternative C, which would result in increased adverse effects on scenic vistas. Additionally, the multi-family residential complexes and height of proposed development would not be compatible with existing, off-site single-family (two-story) residences located directly north of the Project site. However, as the Project site footprint would be reduced under Alternative C, the views of development at the Project site would be reduced from the trails at Rivendale Open Space. Therefore, future development impacts under Alternative C relative to scenic vistas and views from regional riding, hiking, or multi-use trails would likely remain less than significant, consistent with the Project, and the magnitude of impacts would be similar to the Project.

No structures would be visible in the increased portion of the Project site that would be retained as open space under Alternative C. Future development of these components would be implemented in accordance with the existing zoning and land use designation regulations governing visual character and scenic quality, similar to the Project. Similar to the Project, there would be no impacts to scenic resources along a state scenic highway, although the development footprint would be smaller under Alternative C, and therefore be incrementally less impactful to the viewshed. The light, glare, and shade/shadow impacts would be comparable to the Project due to similar proposed uses with implementation of Alternative C. Overall, impacts related to aesthetics under Alternative C would be less than significant with mitigation and would be **similar to** those anticipated from the Project.

Agriculture/Forest Resources

The Project site is primarily zoned A-2, Heavy Agricultural but is not currently used for agriculture. The Project site does not contain timberland and is not zoned as forestland or timberland. The Project would result in no impact regarding conversion of Farmland to a non-agricultural use; conflicts with existing zoning for forest land, timberland, or timberland zoned Timberland Production, or the potential to cause the rezoning of forest land, timberland, or timberland zoned Timberland Production; and changes in the existing environment which could result in conversion of Farmland to non-agricultural. The Project would result in less than significant impacts regarding conflict with existing zoning for agricultural use, with a designated ARA or Williamson Act contract. With implementation of mitigation, the Project would result in less than significant impacts regarding loss of forest land or conversion of forest land to non-forest use and changes in the existing environment which could result in conversion of forest land to non-forest use.

Neither the Project nor Alternative C would result in impacts related to the conversion and/or loss of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; conflict with existing zoning for forest land, timberland, or timberland zoned Timberland protection; and changes in the existing environment which could result in conversion of Farmland to agriculture. For the 28-acre development footprint, Alternative C would require a zone

change to R-3, Limited Density Multiple Residential, which would allow apartment/multi-family units without condition, and a GPA to H18 (allow 9 to 18 units/acre). The remaining portion of the Project site would keep the existing zoning and land use of A-2-2 and H2, respectively. Thus, with approval of a zone change, Alternative C would result in a conversion of agricultural zoning to residential zoning and would therefore conflict with the zoning for the Project site. The Project site does not have land designated as an ARA or lands under Williamson Act contracts. The Project site supports scattered communities of native tree cover throughout at least 10% of the Project site. Therefore, as defined by PRC Section 12220(g), the Project site contains forest land. Both the Project and Alternative C's development footprint is within the Santa Susana/Simi Hills SEA; however, development of Alternative C would result in a reduced loss or conversion of forestland to non-forest use than the Project. All Project mitigation measures necessary to reduce potential forestry resource impacts to less than significant would also be required under Alternative B. The Project and Alternative C would be subject to the provisions of the SEA Ordinance and would result in a less than significant impact with mitigation. Overall, under Alternative C, while there would be a greater area of land subject to a zone change removing Agriculturally zoned land, there would be a smaller development footprint, and impacts related to Agriculture/Forest resources would be **similar to** the Project.

Air Quality

Construction and operation of the Project would result in a net increase of air pollutant emissions at the Project site. During the site preparation and grading phases of the Project, Project construction would exceed the SCAQMD's mass daily regional thresholds and localized significance thresholds, and therefore, mitigation (i.e., tiered construction equipment) to reduce pollutant emissions during construction is required. The Project would result in this potentially significant impact during the first year of construction activity, during which site preparation and grading activities would occur, but impacts would be reduced to less than significant upon implementation of mitigation. The Project's operational emissions would be under the SCAQMD's mass daily regional thresholds and LSTs without mitigation. As detailed in Section 4.3, Air Quality, the Project would result in a less than significant impact with mitigation regarding potential to conflict with the SCAQMD 2022 AQMP; cumulatively considerable increases of criteria air pollutants during construction and operation of the Project; and exposure of sensitive receptors to substantial pollutant concentrations. The Project would result in a less than significant impact regarding other emissions, including those leading to odors, during construction and operation of the Project.

Alternative C would result in the construction of the same number of units, although the units would likely be smaller because all would be multi-family (apartment) units. However, it is likely that the construction duration and effort would be reduced when compared to the Project, due to 67% less grading and site disturbance footprint under Alternative C. However, unlike the Project, grading would not be balanced on-site under Alternative C, and an increase of 17,000 one-way truck trips would be included over the grading phase, which would result in increased truck trips (and associated and fugitive dust emissions associated with grading activities). Under the Project, mitigation is required to reduce potentially significant impacts from construction equipment to less than significant. It is possible that offroad-equipment-specific mitigation would not be required for Alternative C due to the reduced footprint; however, the increased soil export off-site under Alternative C would increase truck-related emissions, which would result in higher construction-related emissions, which could require truck-related mitigation (of which the Project does not have) to reduce impacts to less than significant. Therefore, it is anticipated that Alternative C construction impacts would be greater than the Project.

Regarding long-term impacts, Alternative C would likely result in comparable magnitude of emissions to the Project from area, energy, mobile, and solid waste sources due to the unit count remaining the same under Alternative C. Therefore, similar to the Project, impacts to long-term air quality emissions under Alternative C would likely be less than significant. In general, a project would not conflict with or obstruct implementation of, the AQMP if the growth

in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook). Because Alternative C would result in the same number of dwelling units as the Project, impacts would be the same regarding consistency with the AQMP criterion. Even though a zone change and GPA is required and the AQMP did not anticipate multi-family development on the Project site, the assumed amount of criteria pollutants that would be generated by the operation of the Alternative C would not substantively differ from the Project, which was found to be consistent with the AQMP. Therefore, overall, air quality impacts under Alternative C would be **similar to** the Project.

Biological Resources

With the inclusion of mitigation measures, the Project would have a less than significant impact regarding substantial adverse effects, 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 CDFW or USFWS. The Project would have a less than significant impact with mitigation regarding substantial adverse effects on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or U.S. Fish and Wildlife Service (USFWS). With the inclusion of mitigation measures, the Project would have a less than significant impact regarding substantial adverse effects on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.

The Project would have a less than significant impact with mitigation to 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. With the inclusion of mitigation measures, the Project would have a less than significant impact on the conversion of oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or other unique native woodlands (juniper, Joshua, southern California black walnut, etc.). With the inclusion of mitigation measures, the Project would have a less than significant impact related to potential conflicts with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A. County Code, Title 22, Ch. 22.174), the SEAs (L.A. County Code, Title 22, Ch. 102), Specific Plans (L.A. County Code, Title 22, Ch. 22.46), Community Standards Districts (L.A. County Code, Title 22, Ch. 22.300 et seq.), and/or Coastal Resource Areas (L.A. County General Plan, Figure 9.3). The Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved state, regional, or local habitat conservation plan, and there would be no impact.

Under Alternative C, most development would be concentrated in the northeastern portion of the Project site. The water tank would be located west of the proposed development footprint to meet design requirements for hydraulic grade elevation. Most development would be concentrated in a portion of the site that would result in substantially reduced direct impacts to riparian habitat, non-riparian streams, and the development would be located outside of the 100 to 300-foot buffer for these resources. As a result of the reduced footprint, natural open space on-site would increase from approximately 150 acres of open space under the Project to approximately 205 acres under Alternative C. As the entirety of the Project site is within the SEA, Alternative C would still result in impacts to resources within a SEA, as discussed below.

Regarding special status plants, Alternative C would result in slightly fewer removals of rare plants than the Project. Specifically, fewer individuals of Slender mariposa lily (*Calochortus clavatus* var. *gracilis*) and Scarlet keckiella (*Keckiella ternata*) would be directly impacted under Alternative C. Therefore, mitigation would still be applicable to

Alternative C to reduce impacts to rare plants to less than significant. However, the specific restoration and replacement requirements would be proportionally reduced for direct impacts. Similar to the Project, construction impacts from Alternative C would result in temporary indirect impacts to special-status plants, and mitigation to reduce indirect impacts to special-status plants would be applicable to Alternative C. Even though Alternative C's disturbance footprint would be reduced, mitigation measures would be required under Alternative C to reduce impacts to less than significant. However, direct and indirect impacts to special-status plants under Alternative C would be less than the Project.

Twenty-three special status wildlife species occur or have the potential to occur on the Project site and could be impacted by Project and Alternative C implementation. However, as the development footprint for Alternative C is reduced by approximately 65% compared to the Project, it is expected that the magnitude of these direct and indirect impacts would also be reduced. However, as all species have the potential to occur throughout the Project site, including within the development footprint of Alternative C, all mitigation measures required to reduce direct and indirect impacts to less than significant to special-status wildlife would also be applicable to Alternative C. It is likely that the mitigation ratios and requirements would be reduced proportionally due to less overall impacted area under Alternative C. The required mitigation measures for direct impacts would still be required under Alternative C to reduce impacts to less than significant. As such, direct and indirect impacts to special-status wildlife under Alternative C would be less than the Project.

Alternative C's reduced footprint would reduce direct and indirect vegetation impacts to approximately 28 acres. Specifically, under Alternative C, there would no longer be direct impacts to the following vegetation: *Artemisia californica - Salvia leucophylla* Shrubland Alliance, *Eriodictyon crassifolium* Provisional Shrubland Alliance, *Eriogonum davisonii/Croton setiger* Grassland Alliance, *Juglans californica* Forest and Woodland Alliance, and *Salix Gooddingii - Salix laevigata* Forest & Woodland Alliance. Additionally, Alternative C would result in less direct impact acreage to the following vegetation: *Adenostoma fasciculatum* Shrubland Alliance, *Nassella [Stipa] spp. - Melica spp.* Herbaceous Alliance, *Baccharis salicifolia* Shrubland Alliance, and *Quercus agrifolia* Forest & Woodland Alliance. However, Alternative C would still result in impacts to vegetation within its development footprint, including impacts to *Adenostoma fasciculatum* Shrubland Alliance, *Ericameria palmeri* Provisional Shrubland Alliance, *Baccharis salicifolia* Shrubland Alliance, *Eriogonum fasciculatum* Shrubland Alliance, *Nassella [Stipa] spp. - Melica spp.* Herbaceous Alliance, and *Quercus agrifolia* Forest & Woodland Alliance. However, the avoidance of direct impacts to vegetation under Alternative C would reduce or eliminate specific mitigation restoration/establishment requirements, but mitigation would still be required. Impacts under Alternative C would be less than significant with mitigation. Under Alternative C, impacts to sensitive natural communities would be less than the Project.

No wetlands were identified in the Project site; however, the Project would impact up to 0.51-acre of U.S. Army Corps of Engineers (Corps) jurisdiction, which would require implementation mitigation to reduce impacts to non-wetland jurisdictional waters. As stated above, most Alternative C development would be concentrated in a portion of the site that would result in no direct impacts to riparian habitat, and the development would generally be located outside of the 100 to 300-foot buffer for these resources. Under Alternative C, a direct impact would occur to a CDFW-designated non-riparian stream and Corps Non-Wetland Waters of the U.S./Regional Water Quality Control Board (RWQCB) Non-Wetland Waters of the State, where the access road to the water tank would cross over the footprint of these features, as shown in Figure 6-3, Alternative C Site Plan of Development Footprint. As such, Alternative C would lessen impacts to waters of the U.S. and State, such that Corps and RWQCB, and CDFW jurisdiction (including all non-riparian streams and riparian habitat) impacts would be reduced. Therefore, Alternative C would require implementation of mitigation for preservation, restoration, and establishment of vegetation on-site and water preservation off-site, but the mitigation ratios would be reduced. Impacts under

Alternative C would be less than significant with mitigation. Under Alternative C, impacts to wetlands would be less than the Project.

As Alternative C would still result in development of the site, mitigation is still required to reduce impacts regarding substantial interference 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. However, Alternative C would increase the conservation easement land at the Project site, which would increase preservation of large tracts of conserved natural open space. Impacts to wildlife corridors would be less than the Project under Alternative C.

As with the Project, Alternative C would result in impacts to native forest and woodland vegetation communities—specifically, *Quercus agrifolia* Forest & Woodland Alliance (Category 3). However, the development footprint of Alternative C would result in a reduction of about half of the direct impacts to *Quercus agrifolia* Forest & Woodland Alliance that would occur under the Project. Alternative C would still comply with the 3:1 mitigation ratio recommended by the SEA guidelines, but the overall acreage of woodland preservation and establishment would be reduced under Alternative C. As such, impacts under Alternative C would be less than significant with mitigation, but impacts to oak woodlands would be less than the Project under Alternative C.

The Project would result in direct impacts to 424 protected non-heritage trees and 30 heritage trees and would be required to implement mitigation to reduce impacts to less than significant. The development footprint for Alternative C would substantially reduce direct impacts to trees and would avoid impacts to the following tree species altogether: Fremont Cottonwood, Red Willow, and Arroyo Willow. However, as Alternative C would still result in direct tree impacts to non-heritage and heritage trees, mitigation would still be required to reduce impacts to less than significant. However, the specific replacement and compensation requirements would be reduced under Alternative C, and therefore, impacts under Alternative C would be less than the Project.

Overall, as detailed above, Alternative C would reduce mitigation requirements and would reduce overall impacts to biological resources, although all significance findings of Alternative C would be consistent with the Project's significance findings. Regardless, impacts to biological resources under Alternative C would be **less than** the Project.

Cultural Resources

The Project would result in less than significant impacts with mitigation regarding the potential to cause a substantial adverse change in the significance of a historical resource or archaeological resource pursuant to CEQA Guidelines § 15064.5. In addition, the Project would result in a less than significant impact with mitigation regarding disturbance of any human remains, including those interred outside of dedicated ceremonies.

All Project mitigation measures necessary to reduce potential cultural resource impacts to less than significant would also be required under Alternative C. Similar to the Project, potential impacts to historical or archaeological resources could occur during construction of Alternative C. Even though the footprint of soil disturbance would be reduced under Alternative C, disturbance of the site would still occur, which could result in potential impacts to historical or archaeological resources, and human remains. Therefore, Project mitigation would still be required under Alternative C to reduce impacts regarding the potential to cause a substantial adverse change in the significance of a historical resources or archaeological resource pursuant to CEQA Guidelines § 15064.5.

As with the Project, Alternative C would comply with Section 7050.5 of the California Health and Safety Code, if human remains are found, and implementation of mitigation would be required to reduce impacts to human

remains to less than significant. As such, similar to the Project, impacts would be less than significant with mitigation. However, as the Project would reduce the footprint of the soil disturbance, impacts under Alternative C would be **less than** those anticipated from the Project.

Energy

Although the Project would increase energy use during construction and operation, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and Project impacts would be less than significant and no mitigation measures are required. The Project would be constructed in compliance with applicable regulations governing energy efficiency, energy impacts would be less than significant, and no mitigation measures are required to reduce energy impacts.

Because there would be less construction activity under Alternative C due to the reduction of development footprint, there would be reduced demands for the temporary use of electricity and petroleum during construction for these components; however, truck trips would result in an addition of 17,000 one-way truck trips to accommodate soil export under Alternative C. Therefore, energy consumption would increase during construction activities. However, it is likely that Alternative C would have less than significant impacts, because the inclusion of 17,000 one-way trips are necessary for construction of Alternative C and would not be wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, Alternative C would result in comparable short-term impacts related to energy, impacts under Alternative C would be less than significant and would be similar to those anticipated from the Project.

Similarly, operational energy consumption under Alternative C would be less than the Project due to reduced square footage overall for residential dwelling units. Both Alternative C and the Project buildings would be built in accordance with the current Building Energy Efficiency Standards (Title 24) at the time of construction, which include robust requirements for energy efficiency. Also, the provisions of the California Green Building Standards Code apply to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure. Therefore, similar to the Project, impacts to energy under Alternative C would be less than significant and no mitigation is required. Nonetheless, because Alternative C would generate reduced demands for energy resources, construction and operational impacts under this alternative would be less than significant and would be **less than** those anticipated from the Project.

Geology and Soils

The Project would result in less than significant impacts without mitigation for the following impacts: directly or indirectly causing potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides; substantial soil erosion or the loss of topsoil; potential for on- or off-site landslides, lateral spreading, subsidence, liquefaction, location on a geologic unit or soil that is unstable; expansive soils; and the potential to conflict with the HMA ordinance. The Project would result in no impact regarding 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. The Project would not directly or indirectly impact a unique geologic resource. With implementation of mitigation, the Project would result in less than significant impacts to the paleontological resources.

Although Alternative C would result in less site disturbance than the Project, soils would not be balanced on-site, and as such, 136,000 cubic yards of export would be required and would result in less impacts overall to geology

and soils. Consistent with the Project, Alternative C would be subject to the requirements of a geotechnical report which would be specific to Alternative C, and therefore, impacts to geology and soils would be less than significant for the Project and Alternative C. Impacts under Alternative C would be **less than** the Project.

Greenhouse Gas Emissions

Construction and operation of the Project would result in a net increase in GHG emissions. The Project would support achievement of SB 32 and EO S-3-05 goals through compliance with the GHG reducing plans and potential to conflict with the strategies identified in SCAG's 2020-2045 RTP/SCS to reduce per capita GHG emissions. As detailed in Section 4.8, Greenhouse Gas Emissions, the Project would result in a GHG emissions efficiency less than the significance threshold established by the County. This 2029 efficiency metric threshold reflects the trajectory planned for in the State's Scoping Plan and 2022 Scoping Plan Update (i.e., AB 32, SB 32, and AB 1279). Since the Project's efficiency, with mitigation, would be below the 2029 efficiency metric threshold, it would not interfere with attainment of the 2030, 2045, and 2050 statewide emission reduction targets, and therefore, would not interfere with the State's and the County's ability to achieve the mid-term and long-term GHG reduction targets. To reduce potentially significant GHG impacts, mitigation measures are identified to reduce Project-generated construction and operational GHG emissions from various Project emission sources, including construction, energy, water, solid waste, and landscaping. As such, the Project would result in less than significant impacts with mitigation regarding the potential to generate GHG emissions that may have a significant effect on the environment, and to conflict with an applicable plan, policy, or regulation adopted for reducing GHG emissions.

Alternative C would generate slightly less GHG emissions than the Project, because dwelling units would have reduced square footage when compared to the Project, and therefore, overall energy consumption would be less and mobile emissions would likely be less under the Project, due to the change in housing type from a mix of housing under the Project to all multi-family apartments under Alternative C. Multi-family apartments would result in less trips per unit when compared to other housing included in the Project, such as detached housing (ITE 2017). Further, the reduced development footprint under Alternative C would result in reduced grading and construction activities, although 17,000 additional one-way trips would be required for soil export under Alternative C. As GHG construction emissions are amortized over 30 years, the decrease in grading and on-site construction activities but increase in off-site truck trips associated with Alternative C would be marginal. Further, Alternative C would preserve more land as undisturbed open space when compared to the Project, which would result in some additional carbon sequestration when compared to the Project.

In total, it is likely that the operational GHG emissions under Alternative C would be slightly less than the Project. However, in order to reduce direct or indirect GHG emissions from Alternative C, it is likely that almost all mitigation measures required to reduce impacts to the Project would also be required to reduce impacts under Alternative C, given the similarity of uses on-site and magnitude of emissions for the Project. With mitigation, both the Project and Alternative C would not conflict with an applicable plan policy or regulation adopted for the purpose of reducing GHG emissions. Therefore, impacts under this alternative would be less than significant with mitigation, and **less than** the Project.

Hazards and Hazardous Materials

The Project would result in less than significant impacts with no mitigation required regarding the routine transport, use, or disposal of hazardous materials, and the Project would have no impacts regarding safety hazards or excessive noise for people residing or working in the Project area due to proximity within a public airport. However, mitigation measures are required to reduce hazards and hazardous material impacts with regard to accident

conditions involving the release of hazardous materials; hazardous emissions within one-quarter-mile of sensitive land uses; the Project site's location on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5; emergency response plan; significant risk of loss or death involving fires; and the Project's potential use as constituting a dangerous fire hazard.

As the development footprint of Alternative C would be reduced, it would no longer require the development of structures on or within 300 feet of the abandoned and plugged oil-well on-site. As such, Alternative C would not be required to implement mitigation related to well assessment and methane gas surveys and remediation on-site. Therefore, impacts from hazardous materials under Alternative C would be less than significant under Alternative C. Therefore, it is anticipated that Alternative B would result in less than significant impacts with no mitigation required regarding the routine transport, use, or disposal of hazardous materials, and would have no impacts regarding safety hazards or excessive noise for people residing or working in the Project area due to proximity within a public airport. Regarding potential fire hazards, the Project and Alternative C would be subject to the fire flow requirements of the Los Angeles County Fire Department (LACoFD), fuel modification plans, and mitigation measures as detailed in Section 4.20, Wildfire. Therefore, it is anticipated that Alternative B would result in less than significant impacts with no mitigation required regarding the routine transport, use, or disposal of hazardous materials, and would have no impacts regarding safety hazards or excessive noise for people residing or working in the Project area due to proximity within a public airport. Additionally, it is anticipated that Alternative B would require mitigation measures to reduce hazards and hazardous material impacts to less than significant with regard to accident conditions involving the release of hazardous materials; hazardous emissions within one-quarter-mile of sensitive land uses; the Project site's location on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5; emergency response plan; significant risk of loss or death involving fires; and the Project's potential use as constituting a dangerous fire hazard. However, as less mitigation would be required under Alternative C than the Project, Alternative C impacts would be **less than** the Project.

Hydrology and Water Quality

As discussed in Section 4.10 of this Draft EIR, the Project would result in less than significant impacts related to a violation of water quality standards, a substantial decrease in groundwater supplies, a substantial alteration of an existing drainage pattern, the placement of structures in a flood hazard zone, consistency with the County's Low Impact Development Ordinance, the risk of pollutant release due to inundation, and consistency with a water quality control plan. Under this alternative, the reduced footprint of development would mostly be outside of the FEMA Flood Zone A (100-year flood zone) and would result in less direct impacts to existing on-site drainage when compared to the Project. Further, the reduced development footprint under Alternative C would result in reduced amounts of impervious surfaces and a corresponding reduction in size of the low impact development design features. It is anticipated that the debris basins adjacent to the site perimeter would still be required to capture and divert off-site flows that would otherwise flow to the development footprint. Compliance with existing regulatory requirements and policies would reduce impacts from adverse effects related to hydrology and water quality to less than significant under Alternative C. Therefore, impacts to hydrology and water quality under Alternative C would be **less than** those anticipated under the Project.

Land Use and Planning

As discussed in Section 4.11, Land Use and Planning of this Draft EIR, while the Project includes a new development on an undisturbed site, it would not construct a linear feature, remove access on the Project site, or impair mobility within an existing community. Therefore, the Project would result in less than significant impacts regarding physical division of an established community. Regarding the potential to conflict with any County land use plan, policy, or

regulation adopted for the purposes of mitigation or avoiding an environmental effect, the Project would result in less than significant impacts with mitigation regarding potential to conflict with the General Plan, Santa Clarita Valley Area Plan, and the Zoning Code. Although Project construction and operation would result in development within an HMA and SEA, and therefore would have impacts to HMAs and SEAs, with applicable mitigation measures from Section 4.4, Biological Resources, the Project would result in less than significant impacts regarding the potential to conflict with the goals and policies of the General Plan related to HMAs or SEAs.

Alternative C would result in no impact associated with the physical division of established communities, consistent with the Project. For the 28-acre development footprint, Alternative C would require a zone change to R-3, Limited Density Multiple Residential, which would allow apartment/multi-family units without condition, and a GPA to H18 (allow 9 to 18 units/acre). The remaining portion of the Project site would keep the existing zoning and land use of A-2-2 and H2, respectively. Therefore, Alternative C would not be consistent with the land use/zoning of the site and when compared to the Project, would have increased land use impacts due to the requirement for a GPA. Regarding the potential of Alternative C to conflict with the goals and policies of the General Plan related to HMAs or SEAs, Alternative C would also be subject to the same mitigation measures as required to reduce impacts to less than significant for Biological Resources. However, the impacts to HMAs or SEAs would be less under Alternative C due to less site disturbance. Most mitigation measures applicable to land use and planning under the Project would also be applicable under Alternative C; however, due to the reduced development footprint, is likely that Alternative C would eliminate or reduce some mitigation measure requirements related to air quality, biological resources, GHG emissions, and noise. Therefore, regarding the question of whether Alternative C would 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, notwithstanding the GPA, Alternative C's impacts to land use and planning would be less than significant with mitigation and would be **less than** those anticipated under the Project.

Mineral Resources

As discussed in Section 4.12 of this Draft EIR, the Project would result in no impacts related to the loss of availability of a known regionally- and locally-important mineral resource, as there are no mineral resources located on-site. As Alternative C would be developed within the footprint of the Project's development, Alternative C would also not result in mineral resource impacts. As such, mineral resource impacts anticipated under Alternative C would be **the same as** the Project.

Noise

Regarding generation of substantial temporary increase in ambient noise levels in the vicinity of the Project, mitigation would be required to reduce Project impacts from construction activity to less than significant. Upon implementation of these mitigation measures, impacts regarding generation of substantial temporary increases in ambient noise levels in the vicinity of the Project in excess of standards established in the County's General Plan and noise ordinance would be less than significant. The Project would result in less than significant impacts regarding generation of excessive groundborne vibration or groundborne noise levels. The Project would result in no impacts regarding excessive noise levels due to proximity to a private airstrip, airport land use plan, public airport, or public use airport.

The development footprint of Alternative C would be reduced and located farther south than the Project, and therefore, farther away from existing sensitive receptors (i.e., residences) north of the Project site than proposed under the Project. During construction of Alternative C, it is anticipated that mitigation may still be required to reduce temporary construction noise impacts to less than significant. However, the specific mitigation requirements

may be reduced due to increased distance of the construction activity under Alternative C to existing off-site sensitive receptors. Therefore, under Alternative C, temporary increases in ambient noise levels in the vicinity of the Project site would be **less than** the Project.

Population and Housing

As discussed in Section 4.14, Population and Housing, of this Draft EIR, the Project would not result in substantial unplanned housing growth, thus, less than significant impacts would occur and no mitigation would be required. As Alternative C would result in the same number of dwelling units, Alternative C impacts to population would be the same as the Project. Because Alternative C would result in the same number of dwelling units as the Project, impacts would be the same regarding actual population growth, even though a zone change and GPA is required and the regional planning documents (e.g. OVOV, Connect SoCal RTP/SCS) did not anticipate multi-family development on the Project site, the population and employment that would be generated by the operation of the Alternative C would not substantively differ from the Project, which was found to be consistent with the Connect SoCal RTP/SCS. Therefore, Alternative C would result in less than significant impacts regarding the potential to induce direct or indirect substantial unplanned population growth in an area.

Alternative C would result in the same number of employees as the Project. Per Table 4.14-4 of Section 4.14, Population and Housing, 84,411 new employees are projected to be employed in the Santa Clarita Valley Planning Area by 2035. As such, Alternative C would result in a nominal contribution to the Project site vicinity's employment growth projections. Therefore, Alternative C, consistent with the Project would not result in substantial unplanned employment growth and less than significant impacts would occur. Employment impacts under Alternative C would be the **same as** the Project.

Public Services

For the Project, temporary Project construction impacts regarding capacity problems, service level problems, and/or the provision of a new or physically altered governmental facility related to fire protection, sheriff protection, schools; parks, and other facilities would be less than significant within implementation of mitigation. Operational Project impacts regarding capacity problems, service level problems, and/or the provision of a new or physically altered governmental facility related to fire protection, sheriff protection, schools, parks, and other facilities would be less than significant and no mitigation is required. The Project's construction and operational impacts regarding capacity problems, service level problems, and/or the provision of a new or physically altered governmental facility related to libraries would be less than significant, and no mitigation is required.

All Project mitigation measures necessary to reduce potential construction impacts related to public services would also be required under Alternative C. For example, similar to the Project, mitigation under Alternative C would require preparation of a Construction Traffic Management Plan, prepared in accordance with the County's Traffic Control Requirements, to provide temporary traffic controls and access within the County public rights-of-way when temporary disruption of traffic is anticipated. As the population would not increase under Alternative C, sheriff protection, school, and library impacts under Alternative C would be comparable to the Project.

Under Alternative C, the natural open space on-site would not be made available to the public. As such, only approximately 1-acre of the recreational center (and pocket parks throughout the development footprint) would be available for the residences to use on-site. This would increase the park pressure of facilities within Study Area #9 within the Santa Clarita Valley area. As a result, recreation service-level impacts under Alternative C would be less than significant, consistent with the Project, but would be **greater than** the Project.

Recreation

The Project would increase use of existing neighborhood and regional parks due to the introduction of approximately 1,785 residents to the site through proposed dwelling units; however, impacts would be less than significant because access to a multitude of existing neighborhood and regional parks or other recreational facilities in the local vicinity (as discussed above), as well as the substantial amount of open space and trails that would be provided on-site, together, would ensure that the 1,785 new residents would not result in, or accelerate, substantial physical deterioration of any given facility or facilities. Additionally, the construction of recreational facilities on-site would result in less than significant impacts.

Alternative C would introduce the same number residents as the Project (1,785 residents) due to the same dwelling unit count assumed under Alternative C. However, under Alternative C, the preserved natural open space on-site would not be made available to the public, and no publicly accessible trailhead would be provided on-site. As a result, Alternative C would not provide important missing linkages in the existing dedicated trail network within the Santa Clarita Valley or expand trail facilities consistent with the objectives of the Santa Susana Trails Master Plan. This would interfere with regional trail connectivity in the area and could result in a potentially significant impact. The lack of trail access/publicly accessible open space on-site under Alternative C would increase the park pressure of facilities within the Santa Clarita Valley area when compared to the Project. This would also increase potential impacts related to physical deterioration of recreational facilities nearby. Therefore, impacts to recreation under Alternative C would be **greater than** the Project.

Transportation

As discussed in Section 4.17, Transportation, of this Draft EIR, with preparation and implementation of a Construction Traffic Management Plan, the impacts of the Project's short-term construction activities related to a conflict with the County's TIA Guidelines would be less than significant. All Project mitigation measures necessary to reduce potential transportation impacts would also be required under Alternative C. Construction mitigation would be applicable to Alternative C, as the characteristics of construction activities would be comparable to the Project. The increased grading amounts would require increased off-site truck trips, which could result in increased mitigation requirements for Alternative C. The Project's and Alternative C's impacts related to SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, the County of Los Angeles General Plan, the County's TIA Guidelines, and the OVOV related to impacts to the circulation system, including transit, roadway, bicycle, and pedestrian facilities, would be less than significant with implementation mitigation measures. Furthermore, this alternative would not result in significant impacts related to the increase of design feature hazards nor would a significant impact occur relative to inadequate emergency access with implementation of mitigation, similar to the Project. However, due to the increased off-site truck trips needed under Alternative C, impacts under Alternative C would be greater than the Project.

As stated previously, the Project would result in a significant and unavoidable Project-level impact regarding VMT, even with implementation of mitigation, which requires TDM measures to reduce impacts. Prior to mitigation, the Project would result in 20.5 VMT. However, even with implementation of mitigation, which would result in a 7.45% reduction of VMT, the Project would result in 19.2 residential VMT per Capita with Mitigation, which would exceed the 10.6 residential VMT per Capita Threshold (Table 4.17-5 of Section 4.17, Transportation). In order to reduce impacts to less than significant, the Project would require a 48% reduction in VMT per Capita. Alternative C would not result in a substantial change to VMT when compared to the Project, because the overall dwelling unit count would not change and there would not be a substantive difference between the Project's single-family units when compared to Alternative C's multi-family units in terms of impacts related to VMT. The Project site's location in a

suburban context would generate longer trip distances than land uses in highly urban areas; therefore, the unit type is less relevant for VMT reductions. As such, under Alternative C, the baseline residential VMT per capita would be **similar to** the Project, and would **remain significant and unavoidable.**

Tribal Cultural Resources

The Project would result in a less than significant impact regarding the potential to cause a substantial adverse change in the significance of a TCR that is listed or eligible in the California Register of Historical resources, as no significant cultural resource has been identified within the Project site. The Project would result in less than significant impacts with mitigation regarding the potential to cause a substantial adverse change in the significance of a TCR that is a resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. No TCRs, as defined in Public Resources Code Section 21074 and pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, were identified as a result of the AB 52 tribal consultation conducted for this Project. However, as previously established, there is potential for unknown resources to be encountered during Project implementation that may meet the criteria of a TCR set forth in CEQA. To ensure unknown TCRs that are inadvertently encountered during Project implementation are assessed, evaluated (if necessary) and treated in accordance with CEQA, mitigation measures have been developed and will be required of the Project if approved. As such, the Project would result in less than significant impacts with implementation of mitigation regarding the potential to cause a substantial adverse change in the significance of a TCR pursuant to CEQA.

Similar to the Project, potential impacts to TCRs could occur during construction of Alternative C. Even though the footprint of soil disturbance would be reduced under Alternative C, disturbance of the site would still occur, which could result in potential impacts. Therefore, all Project mitigation measures necessary to reduce potential TCR impacts would still be required under Alternative C. As such, TCR impacts under Alternative C would be less than significant with mitigation. As with the Project, Alternative C would comply with Section 7050.5 of the California Health and Safety Code, if human remains are found. As such, similar to the Project, impacts would be less than significant with mitigation. However, as the Project would reduce the footprint of the soil disturbance, impacts under Alternative C would be **less than** those anticipated from the Project.

Utilities and Service Systems

As discussed in Section 4.19, Utilities and Service Systems, of this Draft EIR, the Project would result in less than significant impacts related to water and sewer infrastructure capacity, the availability of sufficient water supplies, the adequate capacity of wastewater treatment services, the generation of solid waste, and the compliance with management and reduction regulations of solid waste would be less than significant under the Project. The new development associated with Alternative C would result in new water service connections, sewer laterals, on-site stormwater infrastructure, and underground utility conduit systems for electricity and telecommunications, similar to the Project, and off-site improvements would also be required to facilitate utility and service systems. The residential unit count would be the same under Alternative C. Overall, utility connections and improvements would be required at the Project site, and as a result, impacts would be less than significant under Alternative C, consistent to the Project. However, as it is anticipated that all units would be multi-family residential, and thus smaller, it is possible that Alternative C impacts would be less than the Project. Thus, impacts under Alternative C would be **less than** the Project.

Wildfire

As presented in Figure 2-3, Special Management Areas of Chapter 2, Environmental Setting, of this Draft EIR, the Project site, including Alternative C, is located in an area designated by the LACoFD and CAL FIRE as a VHFHSZ. Alternative C's reduced development footprint would require revisions to mitigation as it is currently written, because the existing mitigation for the Project is applicable to residential uses that would be south and outside of the development footprint of Alternative C. Because the development footprint under Alternative C would be smaller and denser than the Project, all of the requirements of FMZs could be accommodated on-site.

Although Alternative C would reduce the development footprint to 28 acres within the Project site, it would maintain the same number of dwelling units and have similar infrastructure requirements at the Project site. As such, Alternative C would be required to implement mitigation. It is plausible that an apartment management company, as would be included with Alternative C, could likely ensure maintenance and monitoring of the FMZs necessary to reduce wildfire impacts to less than significant. Therefore, although Alternative C may require revisions to Project mitigation measures as currently written, no mitigation measures applicable to wildfire would be eliminated. Alternative C would require less fuel modification overall, and no off-site FMZs when compared to the Project. Impacts to wildfire under Alternative C would be **less than** the Project regarding exacerbation of fire risks, installation or maintenance of associated infrastructure, exposure of people or structures to significant risks, and exposure of people or structures to significant wildfire risk.

6.6 Summary of Alternatives to the Project

To summarize these Project alternatives, as suggested in CEQA Section 15126.6(d), a matrix was prepared to summarize and compare the impacts of each Project (see Table 6-3).

Table 6-3. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Project Findings	Alternative A – No Project/No Build Alternative	Alternative B – Mixed Use Project Alternative	Alternative C – Reduced Footprint Alternative
4.1. Aesthetics	LTS-MM	▼	▲	=
4.2. Agriculture/Forest	LTS-MM	▼	=	=
4.3. Air Quality	LTS-MM	▼	=	=
4.4. Biological Resources	LTS-MM	▼	=	▼
4.5. Cultural Resources	LTS-MM	▼	=	▼
4.6. Energy	LTS	▼	=	▼
4.7. Geology and Soils	LTS-MM	▼	=	▼
4.8. Greenhouse Gas Emissions	LTS-MM	▼	=	▼
4.9. Hazards and Hazardous Materials	LTS-MM	▼	=	▼
4.10. Hydrology and Water Quality	LTS	▼	=	▼

Table 6-3. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Project Findings	Alternative A – No Project/No Build Alternative	Alternative B – Mixed Use Project Alternative	Alternative C – Reduced Footprint Alternative
4.11. Land Use and Planning	LTS-MM	▼	=	▼
4.12. Mineral Resources	LTS	=	=	=
4.13. Noise	LTS-MM	▼	▲	▼
4.14. Population and Housing	LTS	▼	▼	=
4.15. Public Services	LTS-MM	▼	▼	▲
4.16. Recreation	LTS	=	=	▲
4.17. Transportation	SU	Eliminate	▼	=
4.18. Tribal Cultural Resources	LTS-MM	▼	=	▼
4.19. Utilities and Service Systems	LTS	▼	=	▼
4.20. Wildfire	LTS-MM	▼	=	▼

Notes:
= Alternative is likely to result in the same or similar impacts when compared to Project.
▼ Alternative is likely to result in reduced impacts when compared to Project.
▲ Alternative is likely to result in greater impacts when compared to Project.
LTS = less than significant impact; LTS-MM= less than significant impact with mitigation; SU= Significant and Unavoidable Impact

Table 6-4, Alternatives Comparison for Project Objectives, compares the alternatives in terms of whether they meet the Project objectives or not.

Table 6-4. Alternatives Comparison for Project Objectives

Objective	Would this meet the Project Objective?			
	Project	Alternative A – No Project/ Current Land Use Buildout	Alternative B –Elimination of Accessory Commercial Units (ACUs)	Alternative C – Housing Element Update/RHNA Only
1. Provide a diverse mix of housing units in various typologies that would assist the County in obtaining its regional housing needs allocation (RHNA) goals, including very low-income housing and moderate/middle-income households.	Yes	No	Partially	Partially

Table 6-4. Alternatives Comparison for Project Objectives

Objective	Would this meet the Project Objective?			
	Project	Alternative A – No Project/ Current Land Use Buildout	Alternative B –Elimination of Accessory Commercial Units (ACUs)	Alternative C – Housing Element Update/RHNA Only
2. Provide housing opportunities consistent with the Los Angeles County General Plan 2035 and the Santa Clarita Valley Area Plan, One Valley One Vision, a component of the General Plan and applicable to the unincorporated portions of the Santa Clarita Valley.	Yes	No	Yes	Partially
3. Provide a mix of housing types proximate to convenient freeway access and existing roadway infrastructure.	Yes	No	Yes	Partially
4. Provide substantial homeownership opportunities for middle-income families in an area proximate to existing residential uses and infrastructure.	Yes	No	No	No
5. Provide a mix of housing types within a clustered development to minimize grading, minimize urban wildland interface areas, preserve significant ridgelines, preserve biological resources, and maximize natural open space within the Project site.	Yes	No	Yes	Yes
6. Provide a comprehensive trail network, including publicly accessible trailhead, that provides connections for the public to access existing open space areas and established trails.	Yes	No	Yes	No

6.7 Environmental Superior Alternative

An EIR must identify an "environmentally superior" alternative; and, where the no project alternative is environmentally superior, the EIR is then required to identify an alternative from among the others evaluated as environmentally superior (14 CCR 15126.6[e][2]).

As shown in Table 6-3, Alternative A would result in reduced environmental impacts to more environmental topics as compared to Alternatives B and C. As shown in Table 6-3, Alternative A would result in reduced/no environmental impacts to all environmental topics in the short-term because construction activity would not occur. Similarly, Alternative A would result in reduced environmental impacts to all environmental topics in the long-term, including elimination of the significant unavoidable impact related to VMT, because no operational changes would occur from existing conditions, and because no development would occur under Alternative A. Under Alternative A, the Project site would remain in its existing condition and potential benefits of the Project related to providing residential units

to meet the County's RHNA goals and publicly accessible trails would not occur. Nevertheless, the elimination of all construction and operational impacts associated with the Project would result in a more environmentally superior alternative when compared to the Project, Alternative B, or Alternative C. As required under CEQA Guidelines Section 15126.6(e)(2), if the environmentally superior alternative is the "no project" alternative, the EIR must also identify an environmentally superior alternative among the other alternatives.

Alternative B would not eliminate any mitigation measures required under the Project. Additionally, Alternative B would have similar impacts to the Project in the following areas: agriculture/forest, 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, recreation, TCRs, utilities and service systems, and wildfire. Alternative B would reduce the magnitude of impacts related to baseline residential VMT per capita, but would not eliminate the significant and unavoidable impact.

Alternative C would reduce short-term construction-related impacts when compared to the Project for most environmental topics. Alternative C would eliminate the need for hazards mitigation (related to the on-site methane well) to reduce hazards and hazardous materials impacts to less than significant. It is possible that the air quality mitigation would change under Alternative C; Alternative C could reduce mitigation requirements for off-road equipment mitigation but add truck-related mitigation measures to reflect the increase of 17,000 one-way truck trips during construction under Alternative C. Although mitigation would likely still be required to reduce temporary construction noise impacts to less than significant, the specific mitigation requirements may be reduced due to increased distance of the construction activity under Alternative C to existing off-site sensitive receptors.

For long-term operational impacts, most environmental factors would have similar, albeit reduced, impacts under Alternative C compared to the Project due to the reduced area of development. Although mitigation measures would still be required for biological resources impacts, mitigation ratios and requirements may be reduced proportionally due to less overall impacted area under Alternative C. It is also likely that the operational GHG emissions under Alternative C would be slightly less than the Project, which may result in the reduction of some mitigation measures applicable to GHG emissions. However, long-term operational impacts to public services and recreation would increase under Alternative C. Alternative C would have similar impacts to the Project in the following areas: aesthetics, agriculture/forest, air quality, mineral resources, population and housing, and transportation. However, Alternative C would not eliminate the significant unavoidable impact related to baseline residential VMT per capita.

Because Alternative C would reduce some mitigation requirements related to air quality, biological resources, GHG emissions, hazards, and noise, and would reduce the footprint of development when compared to both the Project and Alternative B, Alternative C would be the environmentally superior alternative.

6.8 References

County of Los Angeles. 2009. "Notice of Determination for Project No. TR53653-(5)." State Clearinghouse No. 2003031086. Department of Regional Planning. August 2009. Accessed October 2022. https://case.planning.lacounty.gov/assets/upl/case/tr_53653_notice-of-determination.pdf.

County of Los Angeles. 2012. *Santa Clarita Valley Area Plan – One Valley One Vision*. Accessed May 12, 2022. https://planning.lacounty.gov/wp-content/uploads/2022/10/Santa-Clarita-Valley-Area-Plan.pdf.

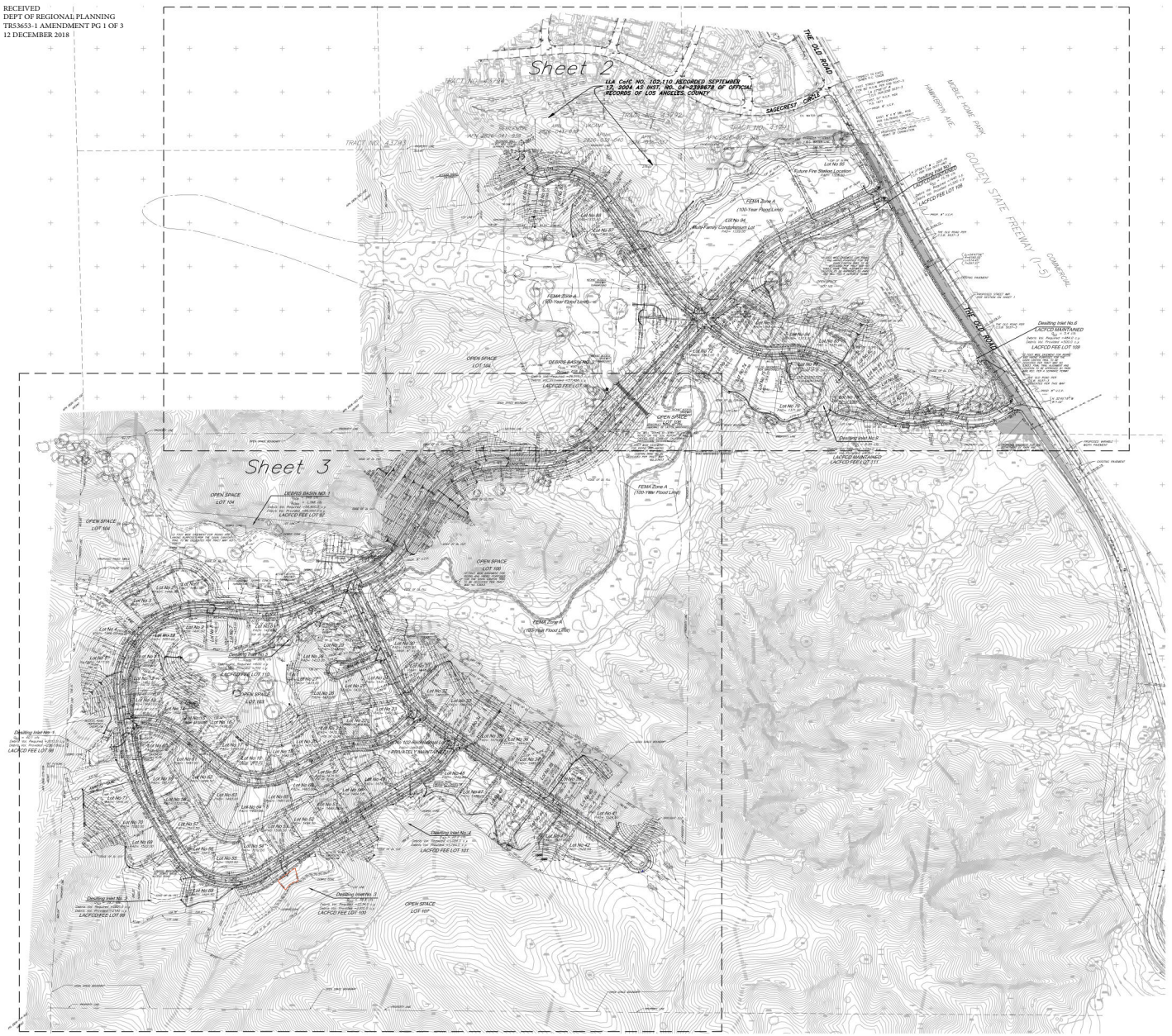
County of Los Angeles. 2022. "Revised Housing Element." Department of Regional Planning. Accessed May 2022. https://planning.lacounty.gov/wp-content/uploads/2022/11/housing-element-20220517.pdf.

ITE (Institute of Transportation Engineers). 2017. *Trip Generation, 10th Edition*.

Lin, D. 2023. "Lyons Canyon - Alternatives. Email correspondence between K. Starbird (Dudek) and D. Lin (Fehr and Peers). October 30, 2023.

Public Works (Los Angeles County of Public Works). 2020. *Transportation Impact Analysis Guidelines*. July 23, 2020. Accessed November 2023. https://dpw.lacounty.gov/traffic/docs/Transportation-Impact-Analysis-Guidelines-July-2020-v1.1.pdf.

SCAG (Southern California Association of Governments). 2001. “Tabel 4A.” In *Employment Density Study Summary Report*. Prepared by Natelson Company in association with Terry A. Hayes Associates. October 31, 2001. Accessed May 2022.



Source: Civil Design and Drafting Inc., 2018

FIGURE 6-1

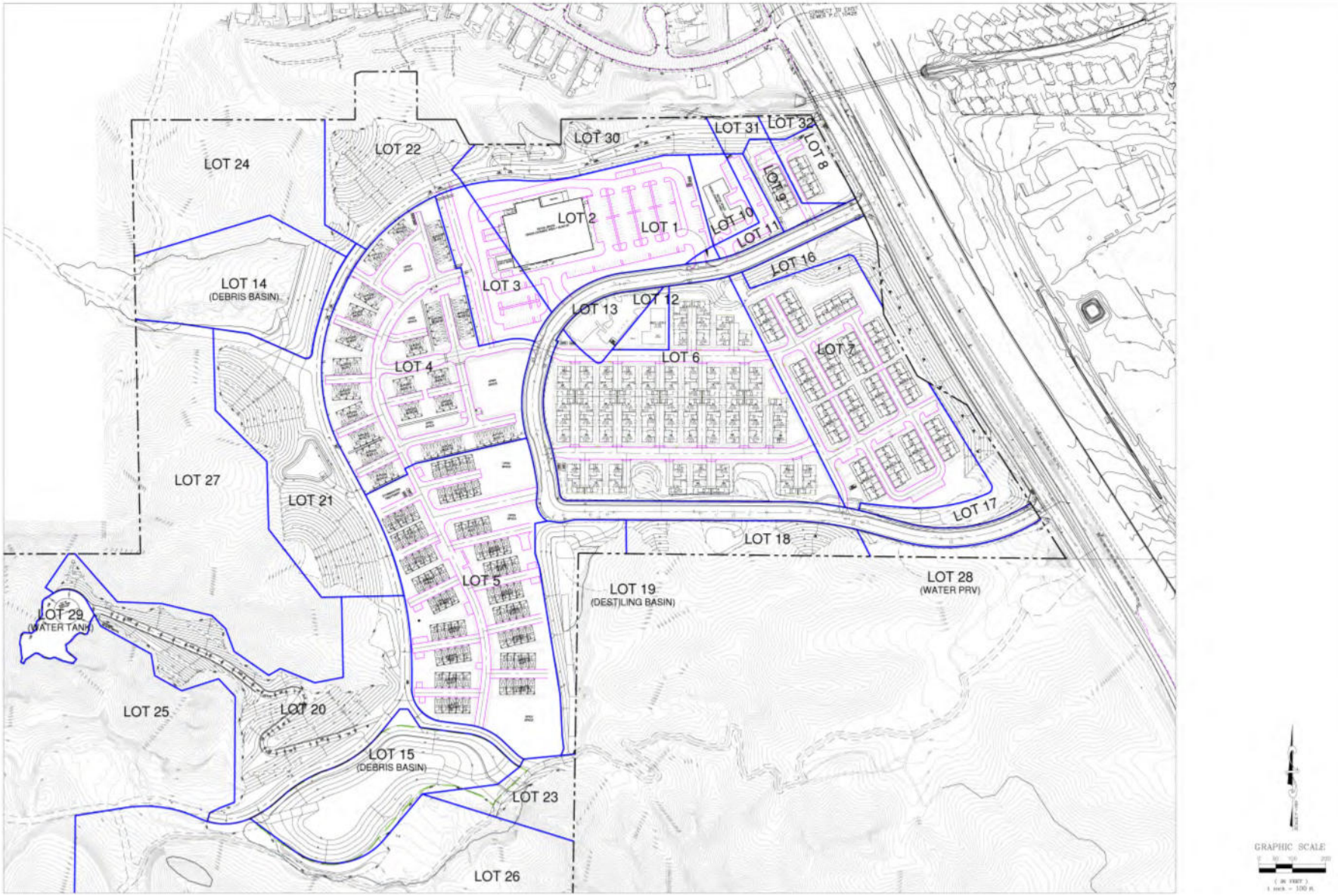
Previously Approved Project Site Plan

Trails at Lyons Canyon Project

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Source: United Civil Inc., 2023

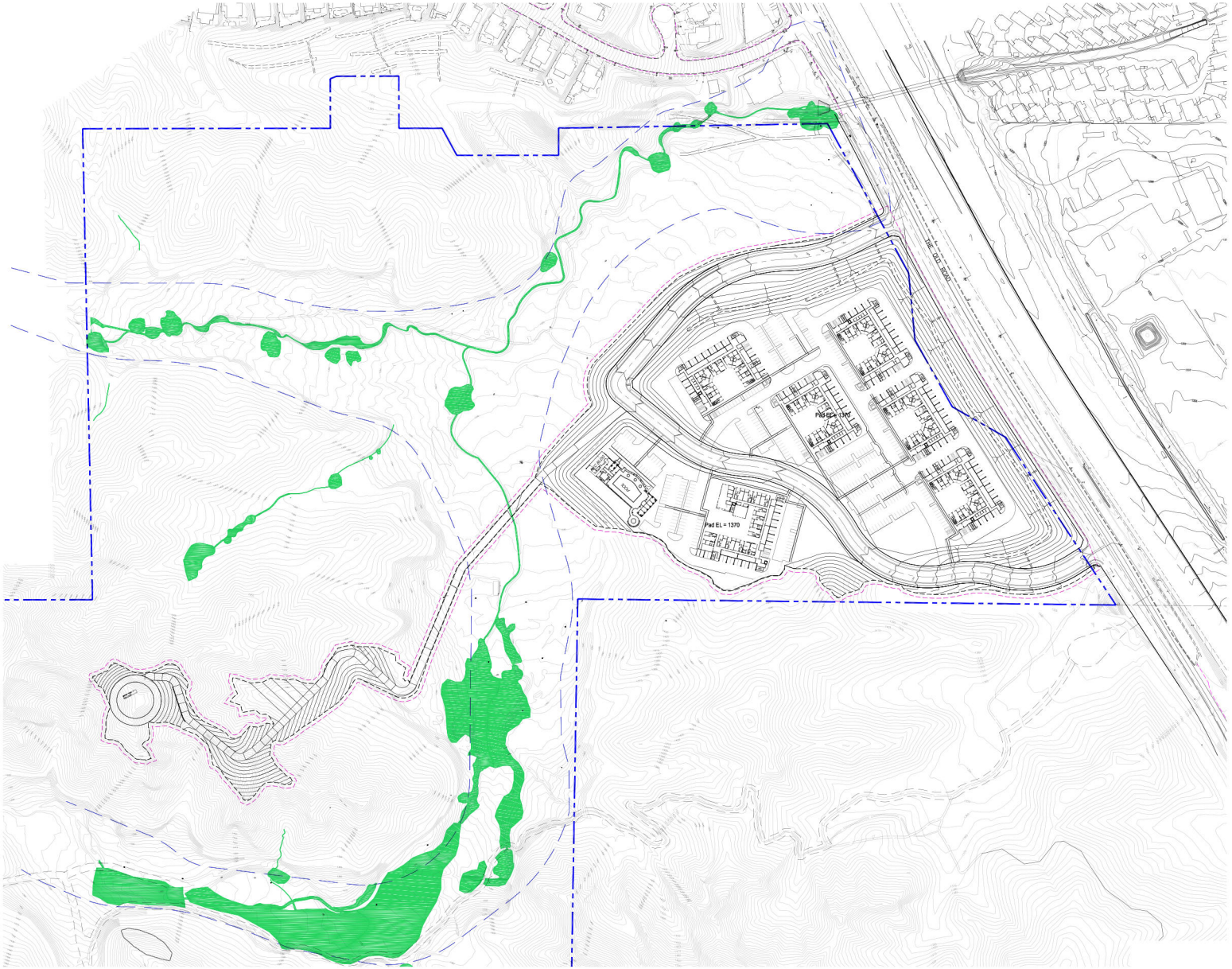
FIGURE 6-2

Alternative B Site Plan of Development Footprint

Trails at Lyons Canyon Project

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ALTERNATIVE SITE PLAN
LYONS CANYON

UNITED CIVIL INC
30141 Agoura Road, Suite 215
Agoura Hills, CA 91301
PH: (818) 707-8648

OWNER/APPLICANT:

NUWI LYONS CANYON, LLC
2001 WILSHIRE BOULEVARD, SUITE 401
SANTA MONICA, CA 90403
TEL: (310) 864-2427

THE TRAILS AT LYONS CANYON
MAJOR LAND DIVISION
VESTING TENTATIVE TRACT MAP NO. 83301
(FOR CONDOMINIUM PURPOSES)
~~LOCATED IN THE UNINCORPORATED TERRITORY OF~~
THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA
SITE PLAN ALTERNATIVE C

Source: United Civil Inc., 2022

FIGURE 6-3

Alternative C Site Plan of Development Footprint

Trails at Lyons Canyon Project

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