Scenic Route 68 Corridor Improvements Project

Monterey County, California
05-Mon-68-PM (4.8-13.7)
EA 05-1J790
Project ID 0518000061

State Clearinghouse Number 2019090448

Draft Environmental Impact Report/ Environmental Assessment and Section 4(f) Evaluation



Prepared by the
State of California, Department of Transportation

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 U.S. Code 327 and the Memorandum of Understanding dated May 27, 2022 and executed by the Federal Highway Administration and Caltrans.

November 2023

Caltrans

General Information About This Document

What's in this document:

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration, has prepared this Draft Environmental Impact Report/Environmental Assessment, which examines the potential environmental impacts of the alternatives being considered for the proposed project in Monterey County, California. Caltrans is the lead agency under the National Environmental Policy Act (NEPA). Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document explains why the project is being proposed, the alternatives being considered for the project, the existing environment that could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read the document. Printed copies of the document and the related technical studies are available for review at the Transportation Agency for Monterey County office at 55-B Plaza Circle, Salinas, California 93901; Monterey Public Library at 625 Pacific Street, Monterey, California 93940; Cesar Chavez Library at 615 Williams Road, Salinas, California 93905; El Gabilan Library at 1400 North Main Street, Salinas, California 93906, and Caltrans District 5 office at 50 Higuera Street, San Luis Obispo, California 93401. This document may be downloaded at the following website: https://dot.ca.gov/caltrans-near-me/district-5/district-5-current-projects/d5-scenic-route-68-improvements.
- Attend the Open Forum Hearings: 1) November 15, 2023 at the WeatherTech Raceway Laguna Seca Hospitality Pavilion, 1021 Monterey-Salinas Highway, Salinas, California 93908; 2) November 16, 2023 at The Armory Police Activities League, 100 Howard Street, Salinas, California 93901, and 3) December 6, 2023 at the Monterey Conference Center, 1 Portola Plaza, Monterey, California 93940.
- Submit comments via U.S. mail to: Matt Fowler, Senior Environmental Planner, District 5, California Department of Transportation, 50 Higuera Street, San Luis Obispo, California 93401.
- Submit comments via email to: SR-68@dot.ca.gov
- Submit comments by the deadline: January 8, 2024.

What happens next:

After comments are received from the public and reviewing agencies, Caltrans, as assigned by the Federal Highway Administration, may: 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

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For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Matt Fowler, Senior Environmental Planner, District 5, California Department of Transportation, 50 South Higuera Street, San Luis Obispo, California 93401; (805) 779-0793 (Voice), or use the California Relay Service 1-800-735-2929 (TTY), 1-800-735-2929 (Voice), or 711.

State Clearinghouse Number 2019090448
05-Mon-68-4.8/13.7
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Improve operations at nine intersections along State Route 68
from post miles 4.8 to 13.7 in Monterey County

DRAFT ENVIRONMENTAL IMPACT REPORT/
ENVIRONMENTAL ASSESSMENT
and Section 4(f) Evaluation

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 U.S. Code 4332(2)(C) and 49 U.S. Code 303

THE STATE OF CALIFORNIA
Department of Transportation

Cooperating Agencies: Transportation Agency of Monterey County
Responsible Agencies: California Transportation Commission

Scott Eades
District 5 Director
California Department of Transportation
NEPA and CEQA Lead Agency

11/07/2023
Date

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Summary

California participated in the "Surface Transportation Project Delivery Pilot Program" (Pilot Program) pursuant to 23 U.S. Code 327 for more than five years, beginning July 1, 2007 and ending September 30, 2012. MAP-21 (Public Law 112-141), signed by President Barack Obama on July 6, 2012 amended 23 U.S. Code 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, the California Department of Transportation (Caltrans) entered into a Memorandum of Understanding pursuant to 23 U.S. Code 327 (NEPA [National Environmental Policy Act] Assignment MOU) with the Federal Highway Administration. The NEPA Assignment MOU became effective October 1, 2012 and was renewed on May 27, 2022 for a term of 10 years. In summary, Caltrans continues to assume Federal Highway Administration responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, the Federal Highway Administration assigned, and Caltrans assumed, all the U.S. Department of Transportation (U.S. DOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off the State Highway System within the State of California, except for certain categorical exclusions that the Federal Highway Administration assigned to Caltrans under the 23 U.S. Code 326 Categorical Exclusion Assignment MOU, projects excluded by definition, and specific project exclusions.

Overview of Project Area

The project is in Monterey County on State Route 68 from just west of Josselyn Canyon Road and the Monterey County Regional Airport to just east of San Benancio Road. The project covers a distance of 8.9 miles from post mile 4.8 to post mile 13.7. Within the limits of the project, State Route 68 is a two-lane highway with multiple signal-controlled intersections that are configured with additional turning lanes and acceleration/deceleration lanes. State Route 68 is an undivided highway with 12-foot lanes and 4- to 8-foot-wide paved shoulders.

Purpose and Need

The purpose of the project is to:

- Improve intersection operations to reduce vehicle delay throughout the project corridor.
- Reduce the rate and severity of collisions on State Route 68 within the project area.
- Enhance wildlife connectivity and reduce the rate of collisions between vehicles and wildlife.
- Improve bicycle and pedestrian access within the project corridor.

The project is needed because of the following:

- **Intersection Operations:** Heavy congestion along the State Route 68 corridor leads to travel delays, occurring primarily at signalized intersections. According to the Intersection Control Evaluation Step 2 and Traffic Operations analysis Report Addendum (Caltrans District 5, Traffic Operations, August 2023) the State Route 68 corridor is currently experiencing 6,609 Daily Vehicle Hours of Delay. Daily travel delay is forecasted to rise to 18,457 Daily Vehicle Hours of Delay by the year 2045 based on the existing traffic intersection controls and lane configurations. Daily Vehicle Hours of Delay is the measurement of delay in travel time within a 24-hour period between any two locations within the highway corridor compared to the time it would take without interruption from stopped or slowed traffic due to congestion or impedance. An additional method of performance measure for a given day is Daily Person Hours of Delay. This metric factors in the number of people experiencing delay in vehicles while travelling on the highway corridor. The State Route 68 corridor is currently experiencing 11,565 Daily Person Hours of Delay and is forecast to have 32,300 Daily Person Hours of Delay in the year 2045. Traffic on the State Route 68 corridor is expected to experience increased vehicle delays from 259 and 747 Vehicle Hours of Delay in the current AM Peak Hour condition and PM Peak Hour condition, respectively, to a projected 377 Vehicle Hours of Delay and 884 Vehicle Hours of Delay in the year 2045, respectively. Traffic delay at the corridor intersections is caused, in part, by the inefficiency of the existing intersection controls due to limited green time for each direction of travel at the intersections and the lack of coordinated signal timing among the intersections. Queueing (lines of vehicles backed-up) at intersections occurs during peak hours of the morning and late afternoon/early evening when vehicles are unable to move through the intersection during the first green light period (also referred to as a signal phase) they encounter and must wait until the next green light period to move through the intersection. This queuing results in delays along the project corridor through stop-and-go traffic conditions at multiple intersections. Queuing also routinely blocks access to upstream side streets (cross-streets at State Route 68 behind an intersection) and driveways.
- **Vehicle Collisions:** Vehicle collision rates occurring from January 1, 2017 through December 31, 2019 on the State Route 68 segment from 0.1 mile west of Laureles Grade (post mile 11.1) to 0.4 mile east of San Benancio Road (post mile 13.7) exceeded the statewide average total collision rate for similar facilities. Rear-end collisions comprise the majority of the collision types occurring within the project area along State Route 68 and are typically associated with congestion or stop-and-go traffic conditions during peak periods. Current traffic signals generate a full-stop condition with queuing traffic needing to come to a complete stop during the red phase for each approach to the intersection.
- **Wildlife Connectivity and Wildlife-Vehicle Collisions:** State Route 68 intersects with a critical wildlife habitat area and acts as a barrier to the wildlife corridor, routinely resulting in roadkill, property damage, and vehicle safety

issues when various wildlife species attempt to cross the roadway. Data shows that roadkill locations were close to culverts and bridges and that improvements would allow more wildlife to use those facilities to safely cross State Route 68.

- **Multimodal Deficiencies:** Lack of bike and pedestrian refuge areas, sidewalks, and marked bike lanes, along with the high number of conflict points at intersections, lead to increased delay for both bicyclists and vehicles at intersections.

Proposed Action

Caltrans proposes to make improvements along State Route 68 within the cities of Monterey and Del Rey Oaks and the County of Monterey which would include modifying nine intersections and improving wildlife connectivity. Two build alternatives are under evaluation in this Draft Environmental Impact Report/ Environmental Assessment for potential environmental impacts: Alternative 1 would construct roundabouts in place of the existing signalized intersections, and Alternative 2 would include upgraded signalized intersections with enhanced lane configurations. Both build alternatives include the same wildlife crossing improvements which include replacement of existing underground culverts at five locations and providing guidance fencing along the highway to the culvert entrances.

Joint California Environmental Quality Act/National Environmental Policy Act Document

The proposed project is a joint project by Caltrans and the Federal Highway Administration and is subject to State and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Caltrans is the lead agency under NEPA as well as the lead agency under CEQA. In addition, the Federal Highway Administration's responsibility for environmental review, consultation, and any other actions required by applicable federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 U.S. Code Section 327 (23 USC 327) and the Memorandum of Understanding dated May 27, 2022, and executed by the Federal Highway Administration and Caltrans.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the project as a whole, often a "lower level" document is prepared for NEPA. One of the most common joint document types is an Environmental Impact Report/Environmental Assessment (EIR/EA). This document is a Draft Environmental Impact Report/Environmental Assessment.

After Caltrans receives comments from the public and reviewing agencies, a Final Environmental Impact Report/Environmental Assessment will be prepared. Caltrans may prepare additional environmental and/or engineering studies to

address comments. The Final Environmental Impact Report/Environmental Assessment will include responses to comments received on the Draft Environmental Impact Report/Environmental Assessment and will identify a preferred alternative. If the decision is made to approve the project, a Notice of Determination will be published for compliance with CEQA, and Caltrans will decide whether to issue a Finding of No Significant Impact (FONSI) or require an Environmental Impact Statement (EIS) for compliance with NEPA. A Notice of Availability (NOA) of the Finding of No Significant Impact will be sent to the affected units of federal, State, and local governments, and to the State Clearinghouse in compliance with Executive Order 12372.

Project Impacts

The following table lists potential impacts resulting from the project alternatives:

Summary of Potential Impacts from Alternatives

Potential Impact	Build Alternative 1	Build Alternative 2	No-Build Alternative
Land Use – Existing and Planned Uses, Patterns, Densities	Alternative 1 would propose changes to existing intersections along State Route 68 within the project limits and no additional access routes are proposed. No areas within the project limits or cumulative study area identified for future development would be made directly more accessible with implementation of Alternative 1. Alternative 1 is not anticipated to change current planned development patterns in either the adjacent cities or county planning areas, or change existing or future land uses and/or densities.	Same as for previous alternative.	Existing and planned land uses, patterns, and densities would remain unchanged.
Land Use – Consistency with Monterey County General Plan	Alternative 1 would be inconsistent with the Monterey County General Plan's Conservation and Open Space Element regarding visually sensitive areas and transit improvements/ access, and with the County's	Same as for previous alternative.	Inconsistent with General Plan Conservation and Open Space Element and Circulation Element regarding transit improvements/ access.

Potential Impact	Build Alternative 1	Build Alternative 2	No-Build Alternative
	Circulation Element regarding transit improvements/ access. The project would potentially be inconsistent with the County's Greater Monterey Peninsula Area Plan regarding development setbacks from wetlands. The project would also be inconsistent or potentially inconsistent with the County's Toro Area Plan regarding four-lane widening of State Route 68, transit improvements/access, and oak removal.		
Land Use – Consistency with City of Monterey General Plan	Alternative 1 would potentially be inconsistent with the City of Monterey General Plan's Urban Design Element regarding highway construction grading outside the roadway right-of-way.	Same as for previous alternative.	No impact
Land Use – Consistency with City of Del Rey Oaks General Plan	No Impact	No Impact	Land uses would remain unchanged.
Coastal Zone	No Impact	No Impact	No Impact
Wild and Scenic Rivers	No Impact	No Impact	No Impact
Parks and Recreational Facilities	Alternative 1 would result in up to 5.44 acres of permanent property acquisition affecting parks/ recreation facilities, and up to 0.22 acres of temporary construction easements. This alternative would require the relocation of a disc golf course basket or other modification of course features at Ryan Ranch Park because of permanent	Alternative 2 would result in up to 8.18 acres of permanent property acquisition affecting parks/ recreation facilities, and up to 0.10 acres of temporary construction easements. This alternative would not require relocation of a disc golf course basket or other	No Impact

Potential Impact	Build Alternative 1	Build Alternative 2	No-Build Alternative
	partial right of way acquisition.	modification of course features.	
Farmland and Timberland	The project limits do not contain any farmland or any land zoned as timberland, or timberland zoned Timber Production. However, the project limits contain "forest land" as defined in Public Resources Code (PRC) section 12220(g). Under Alternative 1, up to 4,000 trees may be impacted (removed or otherwise adversely affected), including approximately 1,100 to 1,200 coast live oaks and 300 to 400 Monterey pines. The balance would consist of other tree species.	The project limits do not contain any farmland or any land zoned as timberland, or timberland zoned Timber Production. However, the project limits contain "forest land" as defined in Public Resources Code (PRC) section 12220(g). Under Alternative 2, up to 5,500 trees may be impacted, including approximately 2,600 to 2,700 coast live oaks and 800 to 900 Monterey pines. The balance would consist of other tree species.	No Impact
Growth	No Impact	No Impact	No Impact
Community Character and Cohesion	No Impact	No Impact	No Impact
Relocations and Real Property Acquisition	Alternative 1 would require acquisition of 14.8 acres of partial permanent right of way and 4.0 acres of temporary construction easements across 56 parcels. There would be no housing or business displacements. Potential utility relocation impacts are described below under Utilities and Emergency Services. There would potentially be one full property acquisition, of the church property at 1375 Josselyn Canyon Rd.	Alternative 2 would require acquisition of 38.6 acres of partial permanent right of way and 1.6 acres of temporary construction easements across 99 parcels. There would be no housing or business displacements. Potential utility relocation impacts are described below under Utilities and Emergency Services. There would potentially be one full property acquisition, of the church	No Impact

Potential Impact	Build Alternative 1	Build Alternative 2	No-Build Alternative
		property at 1375 Josselyn Canyon Rd.	
Environmental Justice	No Impact	No Impact	No Impact
Utilities and Emergency Services	Alternative 1 would require permanent relocation of utilities including lines for water, sewer, natural gas, electrical, cable, and telecommunications. Effects on emergency services during construction would be minor because access for fire/paramedic and other emergency service vehicles through the project limits would be enabled through controlled work zones by the project's construction contractor. Alternative 1 is anticipated to improve long-term access for emergency services through the corridor. Roundabout design would provide sufficient lane width to allow for other vehicles to move aside for emergency vehicles passing through the intersection. Curbs in the roundabouts would be designed to be traversable by emergency vehicles.	Same as for previous alternative in regard to construction period effects on emergency vehicle access, except larger area of construction work compared to Alternative 1. Alternative 2 is anticipated to improve long-term access for emergency services through the corridor with expanded through and turn lanes at the intersections and priority access for emergency vehicles programmed into the signal systems.	No Impact
Traffic and Transportation – Intersection Operations	Alternative 1 (roundabouts) are anticipated to result in a Daily Vehicle Hours of Delay savings of 2,123, 2,812, and 4,587 hours in 2025, 2035, and 2045, respectively, compared to the No-Build condition. Alternative 1 would result in savings of 3,714, 4,920, and 8,027 Daily Person Hours of Delay in 2025, 2035, and 2045,	Alternative 2 (intersection improvements) are anticipated to result in higher Daily Vehicle Hours of Delay savings of 4,056, 8,057, and 13,188 in 2025, 2035, and 2045, respectively, over the No-Build condition.	Traffic delays at project intersections on State Route 68 would continue to increase.

Potential Impact	Build Alternative 1	Build Alternative 2	No-Build Alternative
	respectively. This translates to a reduction of 25% in Daily Person Hours of Delay in 2045 as compared to the No-Build condition.	Alternative 2 would result in savings of 7,097, 14,100, and 23,079 Daily Person Hours of Delay in 2025, 2035, and 2045, respectively. This translates to a reduction of 71% in Daily Person Hours of Delay in 2045 as compared to the No-Build condition.	
Traffic and Transportation – Pedestrian and Bicycle Facilities	Pedestrian and bicycle access would improve.	Same as for previous alternative.	Pedestrian and bicycle access on State Route 68 in the project area would be unchanged or continue to deteriorate.
Visual/Aesthetics	The project would increase urban character and reduce visual quality of a designated Scenic Highway corridor.	Same as for previous alternative, except larger area of potential impacts than Alternative 1 due to larger project footprint and additional retaining walls and cumulative wall mass.	No Impact
Cultural Resources	Alternative 1 would not impact any of the five previously recorded sites in the Archaeological Study Area. However, this alternative may have the potential to impact currently unknown buried cultural resources through deep ground disturbance (3+ feet deep) during construction. Areas within the project limits with elevated archaeological sensitivity would be tested as part of the project's Programmatic Agreement and Cultural Resources Management Plan.	Alternative 2 would not impact four of the five previously recorded sites in the Archaeological Study Area, but it may potentially impact an untested portion of site CA-MNT-3 that was previously determined eligible for listing on the National Register. This alternative may also have the potential to impact currently unknown buried cultural resources through deep ground disturbance (3+ feet deep) during	No Impact

Potential Impact	Build Alternative 1	Build Alternative 2	No-Build Alternative
		construction. Areas within the project limits with elevated archaeological sensitivity would be tested as part of the project's Programmatic Agreement and Cultural Resources Management Plan.	
Hydrology and Floodplain	Alternative 1 could result in minimal adverse effects to hydrology and floodplains.	Alternative 2 could result in adverse effects to hydrology and floodplains. These would be minimal and would be addressed through the use of design features and Standard Specifications. Under this alternative only, incursion into El Toro Creek regulatory floodway would be necessary for State Route 68 bridge widening. Bridge design would minimize the extent of the incursion.	No Impact
Water Quality and Storm Water Runoff	The project would result in up to 24.95 acres of disturbed soil area and 1.58 acres of net new impervious surface area within the project limits.	The project would result in up to 59.54 acres of disturbed soil area and 11.95 acres of net new impervious surface area within the project limits.	No Impact
Geology, Soils, Seismicity, and Topography	In general, geologic hazards on a project site can be avoided, reduced to an acceptable level, or accommodated. Both proposed build alternatives would require grading, trenching, and other earthwork operations for the construction of retaining	Same as for previous alternative, except larger area of potential impacts than Alternative 1 due to larger project footprint.	No Impact

Potential Impact	Build Alternative 1	Build Alternative 2	No-Build Alternative
	walls, concrete barriers, culvert improvements, and more. The project design would be based on the results of geotechnical studies conducted throughout the project area and would follow current State of California seismic engineering standards to ensure maximum strength and safety of all constructed features under both static and dynamic (earthquake-caused ground shaking) conditions, as well as associated hazards such as seismic-related ground failure (e.g., rupture, landslide, liquefaction). Slope compaction specifications would be applied to project designs for slopes and embankment areas in liquefaction and landslide-prone areas of the project limits so as not to cause potential instability of the soils on or offsite.		
Paleontology	The project has the potential for deep ground disturbance (3+ feet deep) during construction to disturb buried paleontological resources.	Same as for previous alternative, except larger area of potential impacts than Alternative 1 due to larger project footprint.	No Impact
Hazardous Waste and Materials	There is very little risk of impacts due to unanticipated hazardous waste or other contamination-related issues. However, Alternative 1 would require grading, trenching, and other earthwork operations for the construction of retaining walls, concrete barriers, culvert improvements, and more. Therefore, the potential exists for project	Same as for previous alternative, except larger area of potential impacts than Alternative 1 due to larger project footprint.	No Impact

Potential Impact	Build Alternative 1	Build Alternative 2	No-Build Alternative
	construction to encounter unanticipated hazardous chemicals in the soil, as well as to release hazardous chemicals from existing roadway materials.		
Air Quality	The proposed project alternatives would not increase the capacity of State Route 68 in the project area, and therefore they would not have the ability to degrade local air quality over the long term.	Same as for previous alternative.	No Impact
Noise and Vibration	Alternative 1, converting intersections to roundabouts, would not involve any substantial widening of State Route 68 or the addition of auxiliary lanes. Under this alternative, one- and two-lane roundabouts would be placed with minimal change from the original intersection configuration, leading to no extensive substantial change in distance between the sensitive receptors and noise sources. This alternative would result in minor, temporary increases in noise due to construction activities.	Alternative 2 would not increase roadway capacity or traffic volume. However, this alternative would add auxiliary lanes in some locations, shifting traffic noise closer to certain sensitive receptors. Exceedance of the Caltrans/ Federal Highway Administration Noise Abatement Criteria threshold of 67 decibels would only occur at one location, a basketball court/parking area located near Josselyn Canyon Road. This alternative would result in minor, temporary increases in noise due to construction activities.	No Impact
Energy	No Impact	No Impact	No Impact
Natural Communities	Alternative 1 has the potential to result in temporary and permanent, direct and indirect impacts, to natural communities. These include coast live	Alternative 2 has the potential to result in temporary and permanent, direct and indirect impacts, to natural	No Impact

Potential Impact	Build Alternative 1	Build Alternative 2	No-Build Alternative
	oak woodland (6.761 acres of temporary and 1.17 acres of permanent impacts), Monterey pine forest (1.885 acres of temporary and .0547 acres of permanent impacts), and red willow riparian woodland and forest (0.258 acres of temporary and 0.257 acres of permanent impacts).	communities. These include coast live oak woodland (15.393 acres of temporary and 3.027 acres of permanent impacts), Monterey pine forest (7.094 acres of temporary and 2.452 acres of permanent impacts), and red willow riparian woodland and forest (1.66 acres of temporary and 0.266 acres of permanent impacts).	
Wetlands and Other Waters	Alternative 1 has the potential to result in temporary and permanent, direct and indirect impacts, to jurisdictional wetlands and other waters due to construction activities. These potential impacts include 0.595 acres of temporary impacts and 0.295 acres of permanent impact to US Army Corps of Engineers-regulated wetlands, and 0.463 acres of temporary and 0.118 acres of permanent impacts to Other Waters of the United States.	Alternative 2 has the potential to result in temporary and permanent, direct and indirect impacts, to jurisdictional wetlands and other waters due to construction activities, including 1.038 acres of temporary impacts and 0.222 acres of permanent impact to US Army Corps of Engineers-regulated wetlands, and 1.138 acres of temporary and 0.432 acres of permanent impacts to Other Waters of the United States.	No Impact
Plant Species	The project has the potential to result in temporary and permanent, direct and indirect impacts, to special-status plant species other than those listed as Threatened or Endangered, or species proposed for listing as Threatened or Endangered (see “Threatened and Endangered Species”	Same as for previous alternative, except larger area of potential impacts than Alternative 1 due to larger project footprint.	No Impact

Potential Impact	Build Alternative 1	Build Alternative 2	No-Build Alternative
	below), due to construction activities. These plant species include Hooker's manzanita, Toro manzanita, sandmat manzanita, Pajaro manzanita, Congdon's tarplant, Lewis' clarkia, and Monterey pine.		
Animal Species	The project has the potential to result in temporary and permanent, direct and indirect impacts, to special-status animal species other than those listed as Threatened or Endangered, or species proposed for listing as Threatened or Endangered (see "Threatened and Endangered Species" below), due to construction activities. These animal species include special-status and other nesting birds, monarch butterfly, Crotch bumble bee, roosting bats such as pallid bat and western red bat, Monterey dusky-footed woodrat, American badger, Northern California legless lizard, Western pond turtle and two-striped garter snake.	Same as for previous alternative, except Alternative 2 would have a larger area of potential impact due to larger project footprint.	No Impact
Threatened and Endangered Species	Alternative 1 has the potential to result in temporary and permanent, direct and indirect impacts, to species listed as Threatened or Endangered, or species proposed for listing as Threatened or Endangered, due to construction activities. These species include the endangered Yadon's piperia plant, California red-legged frog, and California tiger salamander.	Alternative 2 has the potential to result in temporary and permanent, direct and indirect impacts, to species listed as Threatened or Endangered, or species proposed for listing as Threatened or Endangered, due to construction activities. This includes the endangered Yadon's piperia plant,	No Impact

Potential Impact	Build Alternative 1	Build Alternative 2	No-Build Alternative
		California red-legged frog, California tiger salamander, and south-central California coast steelhead. Only Alternative 2 has the potential to impact south-central California coast steelhead since it is the only alternative proposing work within El Toro Creek. All other impacts are the same as for the previous alternative, except that Alternative 2 has a larger area of potential impacts than Alternative 1 due to a larger project footprint.	
Invasive Species	Although there is a potential for invasive species to occur due to project activities, in compliance with the Executive Order on Invasive Species (EO 13112) and guidance from the Federal Highway Administration, the landscaping and erosion control included in the proposed project would not use plant species listed as invasive. None of the species on the California list of invasive species is used by the Department for erosion control or landscaping.	Same as for previous alternative, except larger area of potential impacts than Alternative 1 due to larger project footprint.	No Impact
Cumulative Impacts	(Visual/Aesthetics only) Within the context of 22 other current and reasonably foreseeable projects in the region, the proposed project would increase urban character	Same as for previous alternative.	No Impact

Potential Impact	Build Alternative 1	Build Alternative 2	No-Build Alternative
	and reduce visual quality of a designated Scenic Highway corridor.		
Wildfire	No Impact	No Impact	No Impact
Senate Bill 743 Induced Demand Analysis	No Impact	No Impact	No Impact
Climate Change	The project would result in temporary construction-related air pollutant emissions (including greenhouse gases) and fuel consumption that exceed current conditions. After project completion, it is expected that air pollutant emissions and fuel consumption would decrease overall due to reduced traffic congestion and associated reduction of idling and start-stop movements. The project would not increase roadway capacity and is not expected to result in an increase in climate change-related natural hazards such as wildfire, heat waves, drought, or flooding.	Same as for previous alternative.	No Impact

Coordination with Public and Other Agencies

Caltrans' cultural resources staff initiated consultation with the California State Historic Preservation Officer in accordance with the January 1, 2014 First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer and Caltrans regarding compliance with Section 106 of the National Historic Preservation Act and the January 2019 Memorandum of Understanding between Caltrans and State Historic Preservation Officer regarding compliance with Public Resources Code 5024 and as the proposed project pertains to cultural resources in the project Area of Potential Effect. Management Plan proposing a phased program approach for completion of testing of archaeological sites to determine the project's effects on potential sensitive archaeological resources and prescriptive treatment steps depending on

the findings of testing results. Consultation with the State Historic Preservation Officer is ongoing.

Caltrans has conducted coordination and consultation with Native American tribes, entities, and individuals knowledgeable about cultural resources in the project area, as summarized in Section 4.3 of this document. Coordination is ongoing and will be continued throughout the project development process.

Caltrans has coordinated with the U.S. Department of the Interior, Bureau of Land Management, the County of Monterey, City of Monterey, and City of Del Rey Oaks in regard to potential effects on the properties under the jurisdiction of those agencies. Coordination is ongoing and will continue through the remaining phases of the project development process as necessary.

Upon selection of a preferred alternative for the project, Caltrans will submit applications for permits from various federal, State, and local public agencies. The following permits and approvals will be required for the project:

- U.S. Army Corps of Engineers Alternative 1: potential 404 Nationwide Permit; Alternative 2, potential Individual 404 permit
- Regional Water Quality Control Board 401 Certification
- California Department of Fish and Wildlife 1602 Streambed Alteration Agreement
- U.S. Fish and Wildlife Service Biological Opinion and Take Permit for the California red-legged frog and California tiger salamander
- U.S. Fish and Wildlife Service Letter of Concurrence for the least Bell's vireo
- U.S. Department of the Interior – Permit to Encroach for construction within the Federal right-of-way
- U.S. Department of the Interior – Temporary Construction Easements.
- California Department of Fish and Wildlife 2081 Incidental Take Permit for the California tiger salamander
- California Department of Fish and Wildlife 2081 Incidental Take Permit for the tricolored blackbird
- California Department of Fish and Wildlife 2081 Incidental Take Permit for geotechnical subsurface drilling in jurisdictional waters
- California Department of Fish and Wildlife 2081 Incidental Take Permit for completion of archaeological field studies
- National Marine Fisheries Service – Biological Opinion and Take Permit for the South-Central California Coast Steelhead Distinct Population Segment
- State Historic Preservation Officer Programmatic Agreement and Cultural Resources Management Plan
- Monterey County Public Works - Temporary Construction Easements

- Monterey County Public Works - Permit to Encroach for construction within the County right-of-way
- City of Monterey Public Works – Permit to Encroach for construction within the City right-of-way
- City of Monterey Public Works – Temporary Construction Easements

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Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) proposes intersection and mainline improvements to State Route 68 from post mile 4.8, west of the Josselyn Canyon Road intersection, to post mile 13.7, east of the San Benancio Road intersection in Monterey County. This project is involved only with the portion of State Route 68 east of State Route 1 and does not include any portion of the State Route 68 segment west of State Route 1.

Caltrans, as assigned by the Federal Highway Administration, is the lead agency for the project under the National Environmental Policy Act (NEPA). Caltrans is also the lead agency under the California Environmental Quality Act (CEQA).

Two Build Alternatives and a No-Build Alternative have been considered for this project. Wildlife connectivity improvements are also proposed for each build alternative.

The 8.9-mile project spans multiple jurisdictions and is a joint project by Caltrans and the Transportation Agency for Monterey County (TAMC), with input from local partners, including the County of Monterey, the Association of Monterey Bay Area Governments (AMBAG), the Fort Ord Reuse Association (FORA), the City of Monterey, the City of Del Rey Oaks, the City of Salinas, and other cities located within the Monterey Peninsula.

The current estimated cost ranges from $209,910,000 for Alternative 1 to $260,520,000 for Alternative 2. The project is funded with 20.10.075.600 Regional Transportation Improvement Program (RTIP) funds in the 2024 State Transportation Improvement Program (STIP). The project is also identified for funding in the Transportation Agency for Monterey County's 2016 Transportation Safety and Investment Plan through the funding received from Measure X. The Transportation Safety and Investment Plan allocates $50 million to address safety and traffic flow along State Route 68. Figures 1.1 and 1.2 show the project vicinity and location maps.

1.1.1 Background

History

The State Route 68 corridor has long been an important route between the Monterey Peninsula and the Salinas Valley. From prehistoric times, indigenous peoples living in the area used the east-west corridor for travel between the coast and inland valleys and established temporary and permanent settlements near waterways in the corridor.

Figure 1.1 Project Vicinity Map

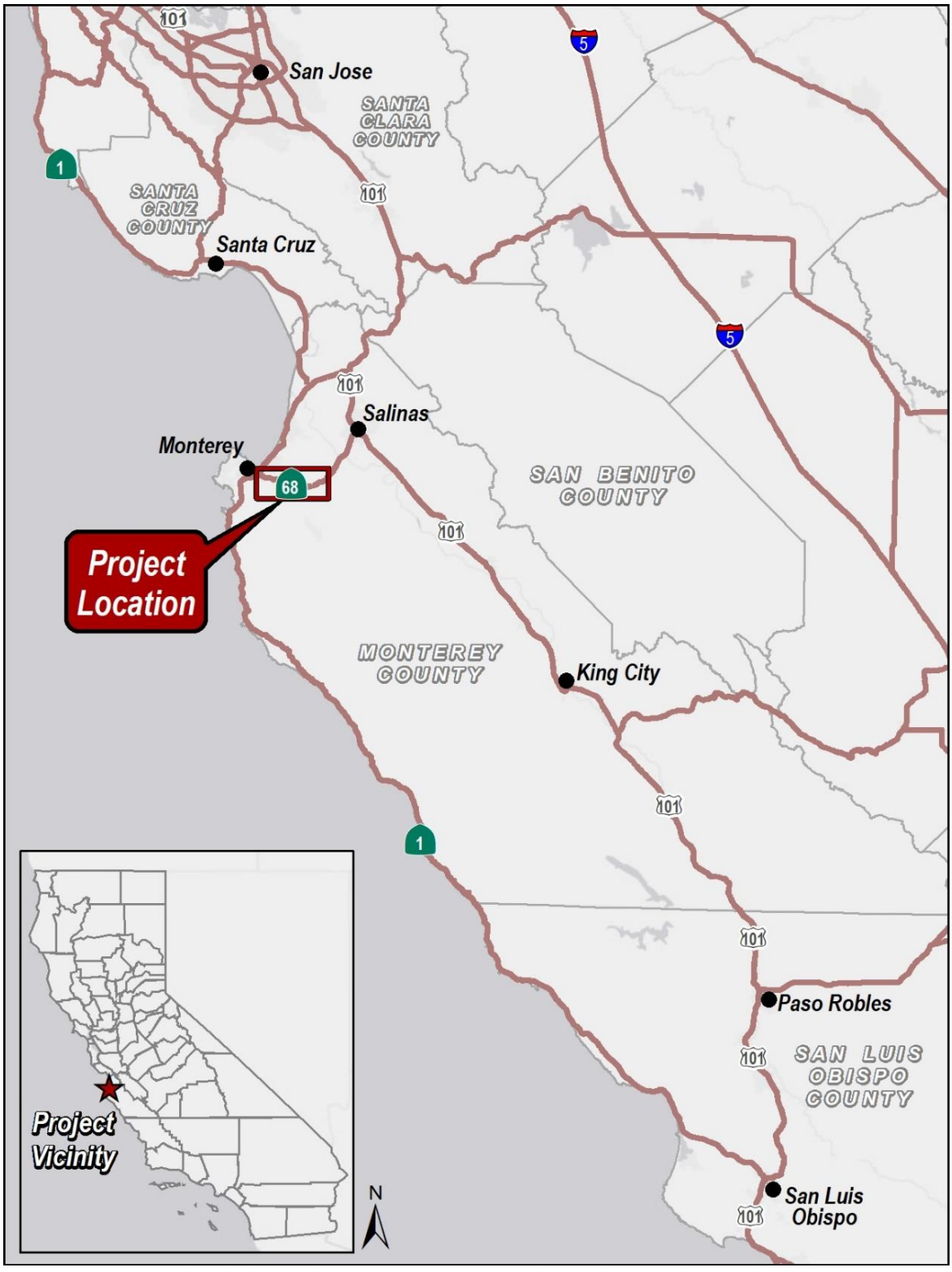
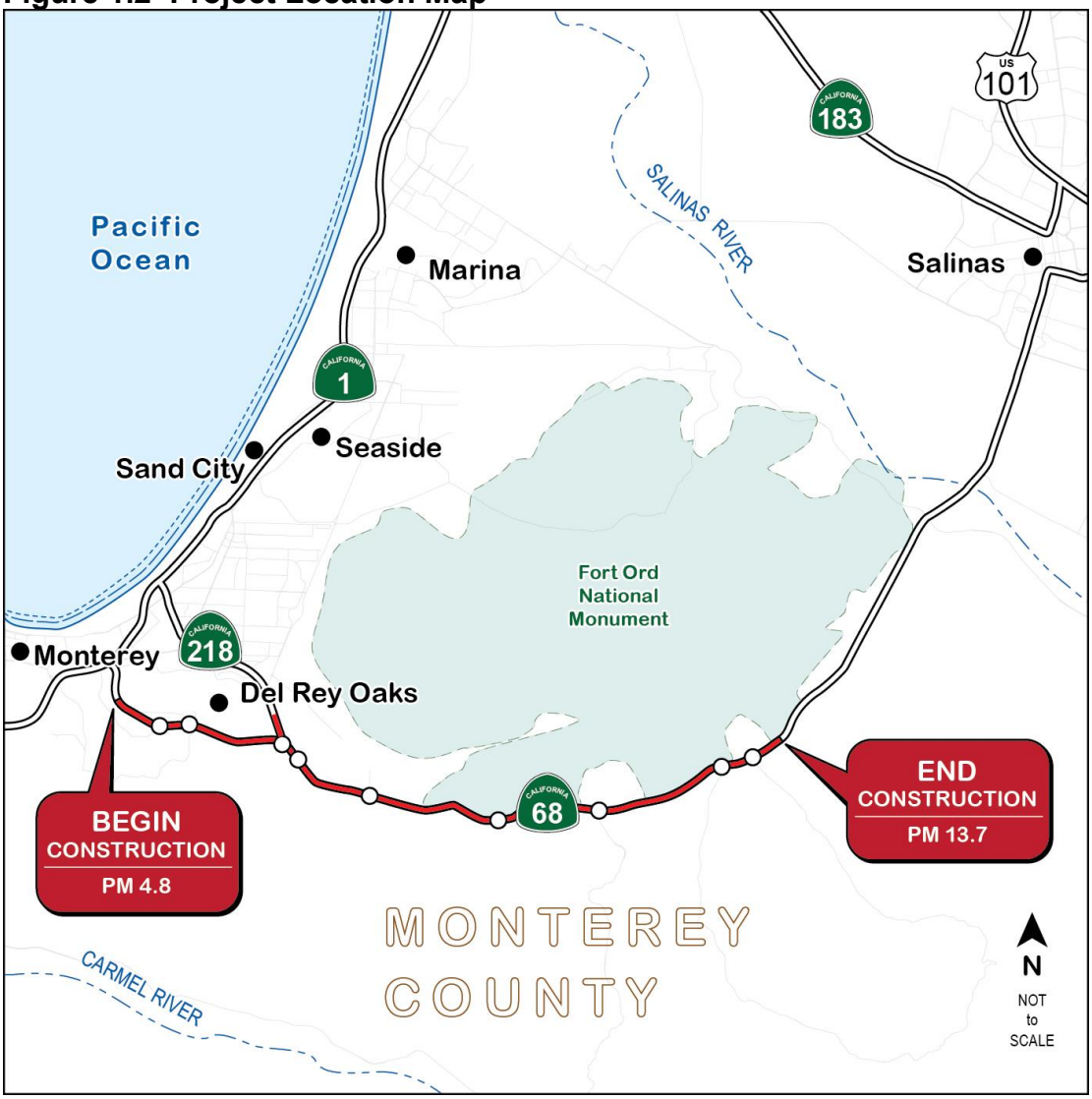


Figure 1.2 Project Location Map



The existing State Route 68 alignment generally follows the historic trail used by Spanish Lieutenant Colonel Juan Bautista de Anza's expedition in 1775 as the group travelled from the Salinas Valley to the Monterey Peninsula. By the mid-1800s, the route was a well-travelled stagecoach route used by the California Stage Company. With the increase in travel by automobile, the State Route 68 roadway was upgraded from a dirt wagon road to a paved two-lane road by the County of Monterey in 1937.

In the 1950s, studies were begun to upgrade then-Highway 68 to a freeway. Portions of the freeway route were adopted, but agreement could not be reached for some segments of the alignment; after 15 years, consensus still had not been reached between the City and County of Monterey. In 1973, the California Transportation Commission (then known as the California Highway Commission) nullified the freeway route adoption and halted studies.

During the late 1970s, the City and County of Monterey began to move forward with freeway alignment planning with the development of new official plan lines. In the 1970s and1980s, segments of State Route 68 between Toro Park Estates and Salinas were widened to a four-lane divided highway.

In 1989, voters in Monterey County approved Measure B, which would have allocated $30 million toward alleviating congestion on State Route 68, including possible construction of a bypass at Corral de Tierra, as shown in the County's official plan lines. However, in 1992, the U.S. 6th District Court of Appeals ruled Measure B to be unconstitutional as it did not receive at least two-thirds of the vote, and no alternative funding source was identified.

A full State Route 68 bypass was previously considered by Caltrans and the Transportation Agency for Monterey County in the 1990s with potential funding under Measure B. With the retirement of Fort Ord Military Reservation in 1991, Caltrans, local agencies and the Bureau of Land Management entered into discussions that identified potential alternate routes for State Route 68 along the southern portion of Fort Ord. In 1993, a Memorandum of Understanding was approved between Caltrans and Bureau of Land Management, and Fort Ord land was designated as a potential State Route 68 bypass corridor. A State Route 68 bypass would be an access-controlled freeway aligned north of the existing State Route 68 highway and extending east from the intersection of State Route 218/State Route 68 to the western side of the Toro Park community.

As recently as 2010, the bypass alignment was included in various planning documents, including the 2010 Monterey County Land Use Plan Fort Ord Master Plan (2010 Monterey County General Plan Figure# LU6a). However, creation of the Fort Ord National Monument by presidential proclamation in 2012 greatly reduced the feasibility of constructing a new State Route 68 alignment though the former Fort Ord, along with the substantial costs and environmental constraints that would occur. Subsequent studies evaluated current and future travel patterns between Salinas and Monterey. The studies concluded that a future bypass on the reserved transportation corridor alignment route is not the preferred long-term solution. This, in addition to a lack of funding priority led Caltrans in 2021 to notify the partner agencies that Caltrans would no longer pursue any bypass alternative and would allow the affiliated Memorandums of Understanding to expire.

Today, most of State Route 68 is an officially designated scenic highway connecting the Monterey Peninsula to U.S. Highway 101 at the City of Salinas. State Route 68 is a key route for commuter travel between the Monterey Peninsula and communities in the Salinas Valley, as well as for tourism and special event travel. State Route 68 also serves as a link to communities north of the City of Monterey, including Del Rey Oaks and Seaside via connection to State Route 218, and to communities to the south, including Carmel Valley and Carmel via connection to Laureles Grade.

Community resources accessed from State Route 68 corridor include the Monterey Regional Airport, Jacks Peak County Park, Stone Creek shopping center, Ryan Ranch businesses, golf courses, multiple private schools, Laguna Seca Raceway, and Toro Regional Park.

2017 State Route 68 Scenic Highway Plan

As a result of concerns expressed by residents living along the State Route 68 corridor and commuters using State Route 68 to travel between the Monterey Peninsula and Salinas, the Transportation Agency for Monterey County obtained a Caltrans Sustainable Communities Planning Grant to study the corridor conditions. The study, titled the State Route 68 Scenic Highway Plan, evaluated current and future travel patterns between Salinas Valley and the Monterey Peninsula and feasibility of mid-term solutions. The plan was finalized in August 2017. The plan found that congestion, safety, and reliability issues on State Route 68 from Josselyn Canyon Road to Blanco Road are ongoing concerns to motorists using State Route 68 to travel between the Monterey Peninsula and Salinas Valley on regular basis.

The stated goal of the plan was to identify a preferred State Route 68 corridor concept and associated infrastructure improvements that would best meet both local and regional goals, while providing the highest return on investment of limited regional transportation funding for the next 20 years.

Phase 1 of the plan was an evaluation of existing conditions and analysis of future conditions. Based on research evaluating traffic conditions, public input, and cost-benefit analysis, Phase 2 of the plan developed and evaluated corridor concepts to determine the most suitable option for affordable mid-term operational improvements. Three corridor concepts were evaluated, and a preferred concept was identified.

Table 1.1 lists the intersections that received intersection control evaluation Level 1 Analysis in the August 2017 State Route 68 Scenic Highway Plan prepared by the Transportation Agency of Monterey.

Table 1.1 Intersections Evaluated by the 2017 State Route 68 Scenic Highway Plan

Intersection Name	Post Mile	Intersection Number
State Route 68/Josselyn Canyon Road	5.20	1
State Route 68/Olmsted Road	5.56	2
State Route 68/State Route 218 Canyon del Rey Boulevard	6.85	3
State Route 68/Ragsdale	7.08	4
State Route 68/York Road	8.15	5
State Route 68/Pasadera Drive	9.90	6
State Route 68/Laureles Grade	11.22	7
State Route 68/Corral de Tierra Road	12.95	8
State Route 68/San Benancio Road	13.34	9
State Route 68/Torero Drive	14.68	10
State Route 68/Blanco Road	19.96	11

The larger project area is bordered by vast open space areas, which offer important wildlife habitat, including the approximately 14,000-acre Fort Ord National Monument north of State Route 68, and Sierra de Salinas south of State Route 68, which connects to the Ventana Wilderness and Santa Lucia Range in Los Padres National Forest. The location of State Route 68 between these open space areas splinters wildlife habitat and inhibits wildlife mobility. Regional and statewide conservation efforts have identified the State Route 68 Scenic Highway Plan study area as a critical link to maintain landscape connectivity for a variety of wildlife species (California Essential Habitat Connectivity Project (2010), Critical Linkages-Bay Area and Beyond (2013), Regional Wildlife Corridor and Habitat Connectivity Plan (2014)). To address this fragmentation, the plan also coordinated concurrent development of the State Route 68 Wildlife Connectivity Study to evaluate wildlife connectivity and propose solutions along the corridor. The Transportation Agency for Monterey County-sponsored study also identified animal-vehicle collision hot spots within the project limits that could be addressed, at least partially, through the measures proposed to improve wildlife connectivity.

The plan concluded with a concept recommendation for a project that supports both improved travel and wildlife connectivity along the State Route 68 corridor while also having a strong cost-benefit ratio.

Following completion of the concept recommendation, additional discussions by the Transportation Agency for Monterey County and the Caltrans Project Development Team were conducted, and it was determined that the concept

showed no improvement at Blanco Road and the improvements at Torero Drive were not needed at this time. As a result, the two intersections were removed from this project. The proposed project alternatives evaluated by this Draft Environmental Impact Report/Environmental Assessment aim to implement the needed mid-term operational improvements at the remaining intersections along State Route 68 identified by the plan.

1.2 Purpose and Need

The project's purpose and need were developed by Caltrans with input from the Transportation Agency of Monterey County. The project "purpose" is the set of objectives the project intends to address. The project "need" is the transportation deficiency that the project was initiated to address.

1.2.1 Purpose

The project proposes to:

- Improve intersection operations to reduce vehicle delay throughout the project corridor.
- Reduce the rate and severity of collisions on State Route 68 in the project area.
- Enhance wildlife connectivity and reduce the rate of collisions between vehicles and wildlife.
- Improve bicycle and pedestrian access within the project corridor.

1.2.2 Need

Intersection Operations

The State Route 68 corridor (project limits) currently experiences heavy congestion leading to travel delays, primarily occurring at signalized intersections. According to the Intersection Control Evaluation Step 2 and Traffic Operations Analysis Report Addendum (Caltrans District 5, Traffic Operations, August 2023), the State Route 68 corridor is currently experiencing 6,609 Daily Vehicle Hours of Delay. Daily travel delay is forecasted to rise to 18,457 Daily Vehicle Hours of Delay by the year 2045 based on the existing traffic intersection controls and lane configurations. Daily Vehicle Hours of Delay is the measurement of delay in travel time within a 24-hour period between any two locations within the highway corridor compared to the time it would take without interruption from stopped or slowed traffic due to congestion or impedance.

An additional method of performance measure for a given day is Daily Person Hours of Delay. This metric factors in the number of people experiencing

delay in vehicles while travelling on the highway corridor. The average number of persons per vehicle in California is 1.73, according to the 2017 Federal Highway Administration National Household Travel Survey, and 1.75 in the Salinas-Monterey Region. The State Route 68 corridor is currently experiencing 11,565 Daily Person Hours of Delay and is forecast to have 32,300 Daily Person Hours of Delay in the year 2045. Hourly performance metrics for traffic operations also show that traffic on the State Route 68 corridor is expected to experience increased vehicle delays from 259 and 747 Vehicle Hours of Delay in the current AM Peak Hour condition and PM Peak Hour condition, respectively, to a projected 377 Vehicle Hours of Delay and 884 Vehicle Hours of Delay in the year 2045, respectively.

Traffic delay at the corridor intersections is caused, in part, by the inefficiency of the existing intersection signal controls due to limited green time for each direction of travel at the intersections and the lack of coordinated signal timing among the intersections. Queueing (lines of vehicles backed-up) at intersections occurs during peak hours of the morning and late afternoon/early evening when vehicles are unable to move through the intersection during the first green light period (also referred to as a signal phase) they encounter and must wait until the next green light period to move through the intersection. This queuing results in delays along the project corridor through stop-and-go traffic conditions at multiple intersections. Queuing also routinely blocks access to upstream side streets (cross-streets at State Route 68 behind an intersection) and driveways.

Vehicle Collisions

Traffic collision rates within the segments of the State Route 68 corridor for the three-year period between January 1, 2017, and December 31, 2019, are provided in Table 1.2 below. The rate values are per million vehicle miles, or million vehicles divided by segment distance and traffic volume. These data are from the Traffic Accident Surveillance System (TASAS) for the most recent period. The data represent 288 documented collisions, three (3) of which were fatality collisions and one hundred thirty-two (132) were reported as injury collisions.

The 8.9-mile-long State Route 68 corridor has several segments with collision rates above the statewide average for similar facilities. These segments are shown in bold text in Table 1.2 and include above-average collision rates from post miles 4.82 to 6.68 (Fatal plus Injury, F+I) which includes the portion of the project corridor west of Josselyn Canyon Road to just east of State Routes 218, post miles 6.97 to 8.33 (Total) west of Ragsdale Drive to east of York Road, and post miles 11.1 to 11.21(F), west of and including the intersection of Laureles Grade Road and State Route 68.

Rear-end collisions comprise the majority of the collision types occurring within the project area along State Route 68 and are typically associated with congestion or stop-and-go traffic conditions during peak periods. During the

3-year period there were a total of 259 collisions along State Route 68 from post miles 4.82 to 13.7. Over 72 percent, or 187, of the 259 collisions that occurred during that time were rear-end-type collisions. Current traffic signals generate a full-stop condition with queuing traffic needing to come to a complete stop during the red phase for each approach to the intersection.

In the table below, F+I indicates Fatal plus Injury Collisions. Collision Rates indicate per million vehicle miles or million vehicles divided by segment distance and traffic volumes. Total Collision Rates are composed of a combination of Fatal, Fatal plus Injury (F+I), and Property Damage Only collisions.

Table 1.2 Collision Rates by Highway Segment for State Route 68 from January 1, 2017 to December 31, 2019

Segment Begin Post Mile	Segment End Post Mile	Segment Length (miles)	Actual Fatal Rate	Actual F+I Rate	Actual Total Rate	Statewide Average Fatal Rate	Statewide Average F+I Rate	Statewide Average Total Rate
4.80	4.82	0.02	0.00	0.00	0.00	0.007	0.27	0.66
4.82	6.68	1.86	0	**0.47**	0.63	0.013	0.40	0.82
6.68	6.71	0.04	0	0	0	0.007	0.27	0.67
6.72	6.81	0.10	0	0.04	0.04	0.003	0.14	0.32
6.81	6.97	0.16	0	0.04	0.04	0.005	0.26	0.67
6.97	8.33	1.36	0	0.32	**0.86**	0.013	0.40	0.82
8.33	11.10	2.77	0	0.37	0.87	0.02	0.49	1.20
11.10	11.21	0.11	**0.034**	0.27	0.51	0.023	0.39	0.94
11.21	15.18	3.97	0.017	0.49	1.13	0.02	0.49	1.19
Begin PM	End PM	Total	Average	Average	Average	Average	Average	Average
4.80	15.20	10.40	0.01	0.45	0.95	0.018	0.47	1.07

Source: Caltrans Traffic Accident Surveillance and Analysis System (TASAS).

The Traffic Accident Surveillance and Analysis System also includes data on collision rates at intersections within the State Route 68 corridor for the same three-year period of January 1, 2017 through December 31, 2019. Of the nine (9) study intersections, five (5) intersections (56 percent) exceeded the statewide average rate for similar facilities in the categories of Fatality plus Injury (F+I) rate and/or total collision rate. In addition, four (4) of the nine (9) intersections (44 percent) exceed the statewide average rate in both categories as shown in bold text in Table 1.3. In Table 1.3, Collision Rates indicate per million vehicle miles, or million vehicles, and F+I indicates Fatal plus Injury Collisions.

Table 1.3 Collision Rates by Intersection for State Route 68 from January 1, 2017 to December 31, 2019

Intersection ID	Post Mile	Intersection	Actual Fatal Rate	Actual F+I Rate	Actual Total Rate	Average Fatal Rate	Average F+I Rate	Average Total Rate
1	5.22	Josselyn Canyon Road	0	0.07	0.14	0.001	0.09	0.19
2	5.57	Olmsted Road	0	0.07	0.1	0.001	0.11	0.24
3	6.81	State Route 218/Canyon del Rey Boulevard	0.022	0.04	0.04	0.001	0.11	0.24
4	7.08	Ragsdale Drive	0	0.04	0.11	0.001	0.11	0.24
5	8.15	York Road	0	**0.11**	**0.29**	0.001	0.09	0.19
6	9.78	Pasadera Drive /Boots Road	0	**0.26**	**0.53**	0.002	0.16	0.43
7	11.22	Laureles Grade	0	**0.16**	**0.48**	0.001	0.11	0.28
8	12.95	Corral de Tierra Road	0	**0.17**	**0.6**	0.002	0.16	0.43
9	13.33	San Benancio Road	0	**0.17**	0.2	0.002	0.16	0.43

Source: Caltrans Traffic Accident Surveillance and Analysis System (TASAS)

The TASAS report for State Route 68 (January 2020) cites speeding as the top collision factor (over 67% of collisions) and shows that collision hot spots are clustered at or close to the York Road, Pasadera Drive, Laureles Grade, Corral De Tierra Road, and San Benancio Road intersections. The cluster of collision hot spots near the intersections is another indication that congestion, coupled with speeding between signalized intersections, is largely the cause of the rear-end collisions. Furthermore, the collisions are occurring mostly during the weekday afternoon peak period when delay at intersections from congestion is most prevalent.

Wildlife Connectivity and Wildlife-Vehicle Collisions

State Route 68 intersects a critical wildlife habitat area connecting the coast of Monterey to the Sierra Azul range. As such, State Route 68 is a barrier to the wildlife corridor, routinely resulting in roadkill and vehicular property damage when various wildlife species attempt to cross the roadway. In 2017, consultant Pathways for Wildlife prepared the Monterey-Salinas State Route 68 Plan: Wildlife Connectivity Analysis Study for the Transportation Agency for Monterey County. The study data indicated that there is high use of the majority of the culverts and bridges by traveling animals. For animals still crossing the highway, Pathways for Wildlife recorded a total of 60 animals hit by vehicles on State Route 68 during the one-year study period in 2016 (see Appendix A.3 of the 2017 State Route 68 Scenic Highway Plan for study details). The roadkill data was compared to the locations of existing culverts and bridges along State Route 68 and determined that most of the roadkill locations were close to culverts and bridges.

Multimodal Deficiencies

Lack of bike and pedestrian refuge areas, sidewalks, and marked bike lanes, along with the high number of conflict points at intersections, lead to increased delay for both bicyclists and vehicles at intersections.

1.2.3 Independent Utility and Logical Termini

Federal Highway Administration regulations (23 Code of Federal Regulations [CFR] 771.111[f]) require that the proposed transportation improvements under evaluation:

1. Connect logical termini and be of sufficient length to address environmental matters on a broad scope.

2. Have independent utility or independent significance (be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made).

3. Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

The term logical termini is defined by the Federal Highway Administration as rational end points for a transportation project, and rational end points for review of the environmental impacts.

The limits of the proposed operational improvements for this project on State Route 68 are based on The State Route 68 Scenic Highway Plan which found that congestion, safety, and reliability issues on State Route 68 from Josselyn Canyon Road to Blanco Road are ongoing concerns to motorists using State Route 68 to travel between the Monterey Peninsula and Salinas Valley on regular basis. The project proposes improvements at nine intersections between Josselyn Canyon Road and San Benancio Road to address these issues. It would not require new intersections, new ramps, lanes or connecting roadways outside of the existing highway corridor and intersections to be fully functional. Therefore, the proposed project maintains independent utility and logical termini.

1.3 Project Description

The project would make intersection operational improvements and wildlife connectivity improvements along State Route 68 in Monterey County from post mile 4.8, west of the Josselyn Canyon Road intersection, to post mile 13.7, east of the San Benancio Road intersection. The proposed intersection improvements are within this 8.9-mile stretch of State Route 68. Within most of the project limits, State Route 68 is a conventional two-lane, undivided highway with 12-foot travel lanes and 4- to 8-foot-wide shoulders. The

highway has a two-way left-turn median channelization between Corral de Tierra Road and San Benancio Road. East of the project limits, State Route 68 operates as a limited access freeway (between Portola Drive and Spreckels Boulevard interchanges) and as a four-lane expressway (between the Spreckels Boulevard interchange and Blanco Road). West of the project limits, State Route 68 is classified as a freeway as it converges onto State Route 1, continues south congruent with State Route 1, and then diverges west to the Monterey Peninsula.

As detailed in Section 1.2, the purpose of the project is to reduce travel delays, vehicle collisions, and collisions between wildlife and vehicles, as well as improve access for bicyclists and pedestrians within the project corridor. Under consideration are two project build alternatives that would either convert the nine existing signalized intersections identified within the corridor into one- or two-lane roundabouts (Build Alternative 1) or improve the nine existing intersections with modifications to lane configurations and lengths and upgrades to signal equipment (Build Alternative 2). The nine intersections included in both project build alternatives are as follows:

- Josselyn Canyon Road (post mile 5.22)
- Olmsted Airport Road (post mile 5.57)
- State Route 218 (Canyon Del Rey Boulevard)-Monterra Ranch Road (post mile 6.81)
- Ragsdale Drive (post mile 7.08)
- York Road (post mile 8.15)
- Pasadera Drive-Boots Road (post mile 9.78)
- Laureles Grade (post mile 11.22)
- Corral de Tierra Road-Cypress Church Drive (post mile 12.95)
- San Benancio Road (post mile 13.33)

A wildlife connectivity improvement component is also included in each alternative. This component proposes installation of new culverts at five locations along State Route 68 to facilitate large mammal crossing movement and/or installation of directional fencing to deter wildlife from entering onto State Route 68.

1.4 Project Alternatives

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts. Two build alternatives, Alternative 1 and Alternative 2, and the No-Build Alternative are evaluated in this environmental document.

A number of design concepts to address State Route 68 operational conditions were assessed in the August 2017 State Route 68 Scenic Highway Plan prepared by the Transportation Agency for Monterey County. Public input was a key component of the development and evaluation of the plan's alternatives.

Following completion of the plan, Caltrans worked with the Transportation Agency for Monterey County and other stakeholders to further refine the design concepts into the project alternatives. The project alternatives used for evaluation in this Draft Environmental Impact Report/Environmental Assessment were developed to meet the purpose and need of the project while also considering public input received during the public scoping period, operational conditions relative to current traffic demand at intersections, traffic efficiency and safety at intersections, wildlife habitat connectivity, specific environmental impacts, and project costs.

1.4.1 Build Alternatives

This Draft Environmental Impact Report/Environmental Assessment analyzes the potential effects on the project environment from two build alternatives: Alternative 1, construction of roundabouts in place of the existing signalized intersections, and Alternative 2, signalized intersections with enhanced lane configurations and traffic signal system improvements. Both build alternatives are considered to be feasible and would reasonably attain the purpose and need of the project as stated in Sections 1.2.1 and 1.2.2, to improve intersection operation and alleviate traffic congestion at the project intersections, enhance wildlife connectivity and reduce the rate of collisions between wildlife and vehicles, and improve bicycle and pedestrian access within the project corridor. Alternative 1 (roundabouts) would also reduce the rate and severity of collisions at the project intersections. The project intersections and wildlife crossing improvement locations are shown in Figure 1.3.

Figure 1.3 Project Intersections and Wildlife Crossing Locations



This Draft Environmental Impact Report/Environmental Assessment analyzes preliminary designs of the roundabouts and signalized intersection alternatives. Because these types of intersection designs have distinctly different physical shapes, their footprints over the existing intersections, and in part the adjacent environment, vary. Figure 1.4 shows the approximate footprints of each of the two build alternatives, as well as an Area of Potential Impacts for each of the project intersections. The Area of Potential Impacts is the area anticipated to contain the direct footprints of the components of the build alternatives, as well as areas of temporary construction work, to encompass the study areas of environmental effects of both of the proposed alternatives.

Appendix H contains the preliminary design plans for Alternatives 1 and 2 at each of the project intersections.

Common Design Features of the Build Alternatives

Wildlife Connectivity Improvements

Proposed wildlife connectivity improvements were developed from recommendations provided by the study titled 2017 Monterey-Salinas State Route 68 Plan: Wildlife Connectivity Analysis. Both project build alternatives propose wildlife crossing improvements at five locations within the project limits, each with existing box or pipe culverts. Installation of new larger culverts is proposed at all five locations. To facilitate wildlife use of the new culverts, gentle approach slopes at the openings of each of the new culverts have been designed to create openness and visual clearance. Increasing the size of each of the culverts and creating the approach slopes would require excavating into the landscape at both ends to develop necessary clearance to the existing topography.

Exclusionary fencing is also proposed at four of the crossings to guide animals to the crossing structures. Fencing was deemed to be appropriate at specific locations where it can be terminated into a natural landform so that wildlife is less likely to walk around the opposite end of the fencing.

Figure 1.3 above shows the locations of wildlife crossing improvements within the project limits. The proposed wildlife crossing improvements at each location are described in Table 1.4 and shown on the project design layout sheets for both build alternatives.

Figure 1.4 Project Areas of Potential Impact (Sheet 1 of 6)

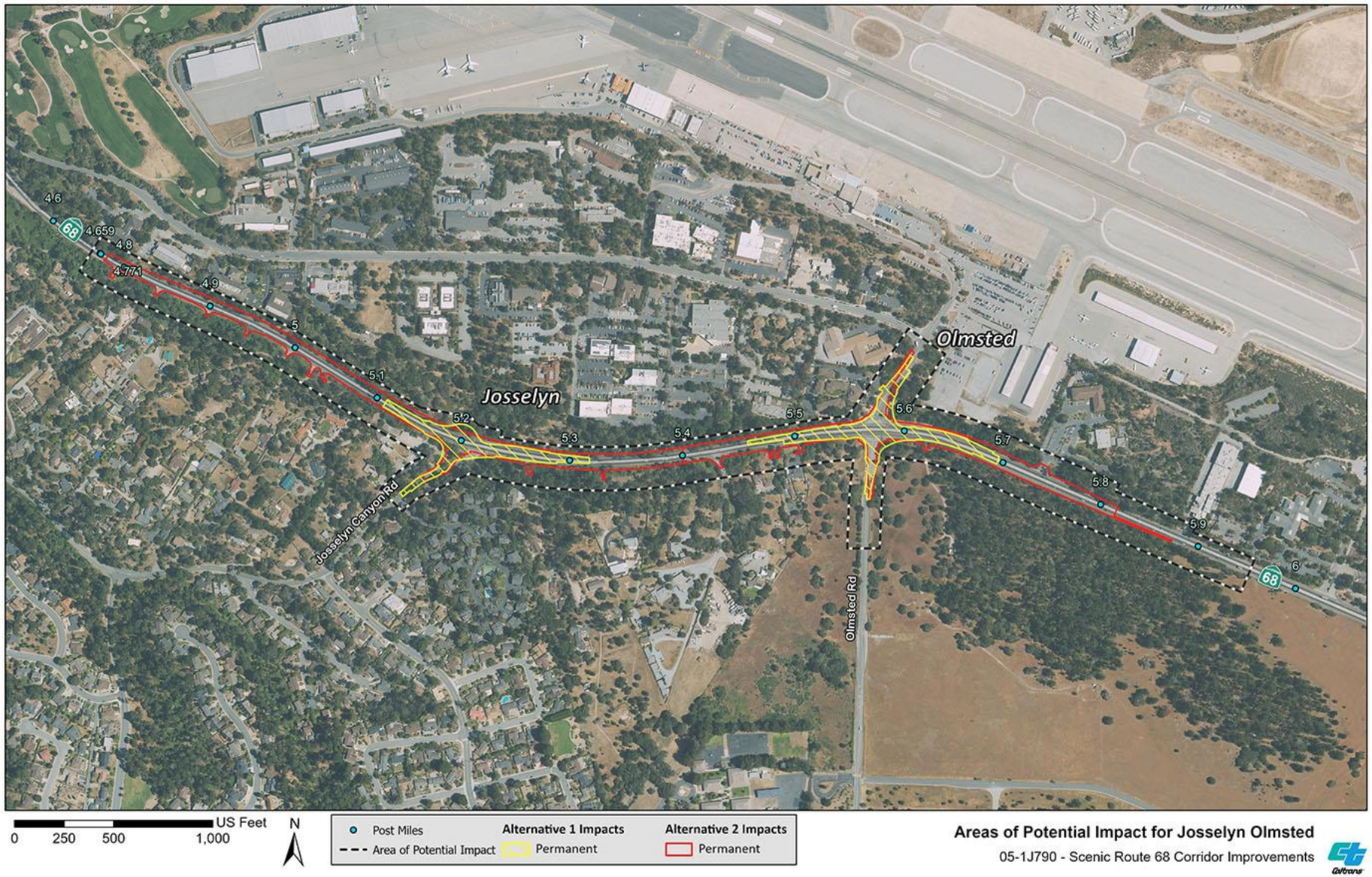


Figure 1.4 Project Areas of Potential Impact (Sheet 2 of 6)

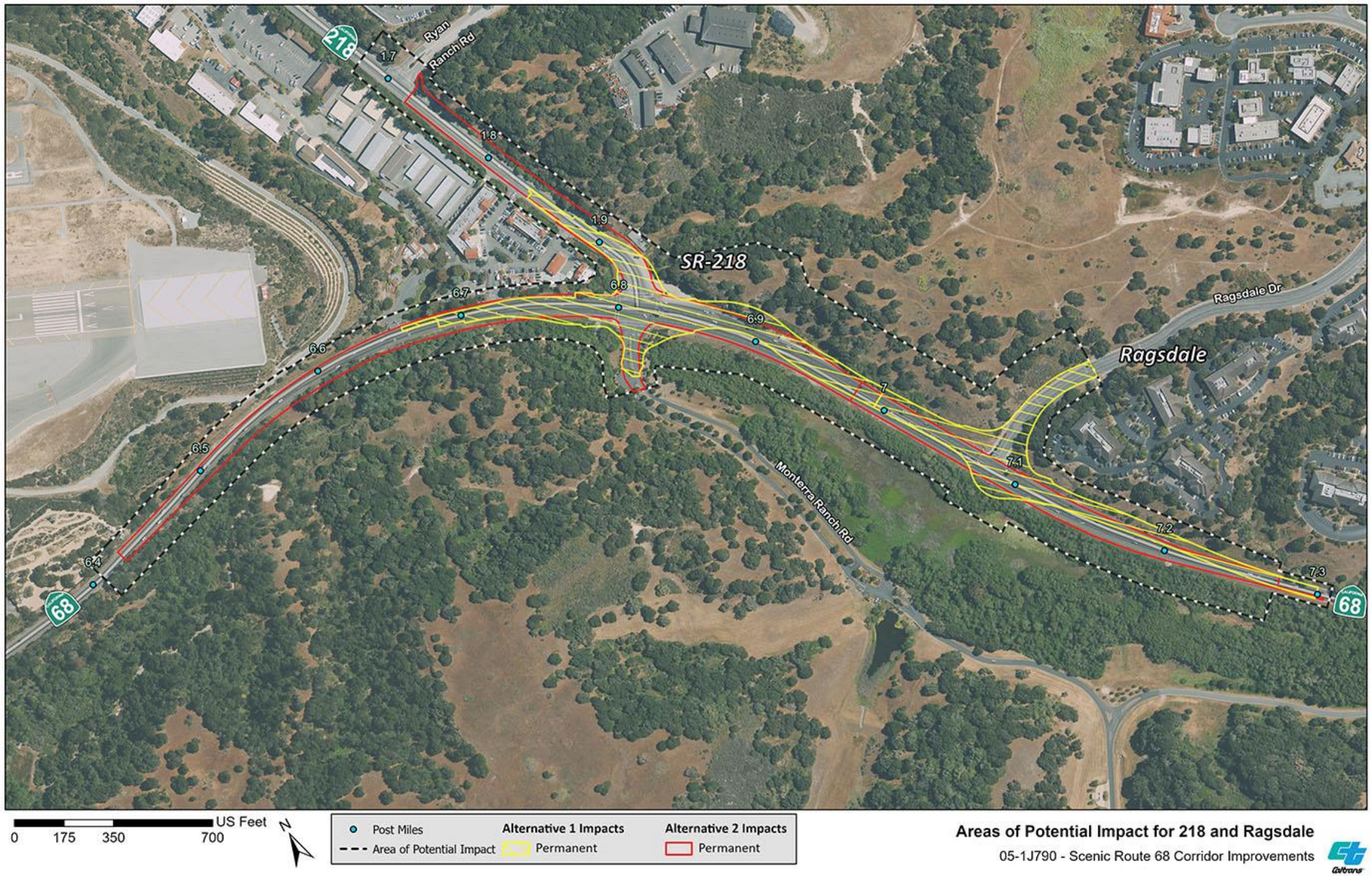


Figure 1.4 Project Areas of Potential Impact (Sheet 3 of 6)

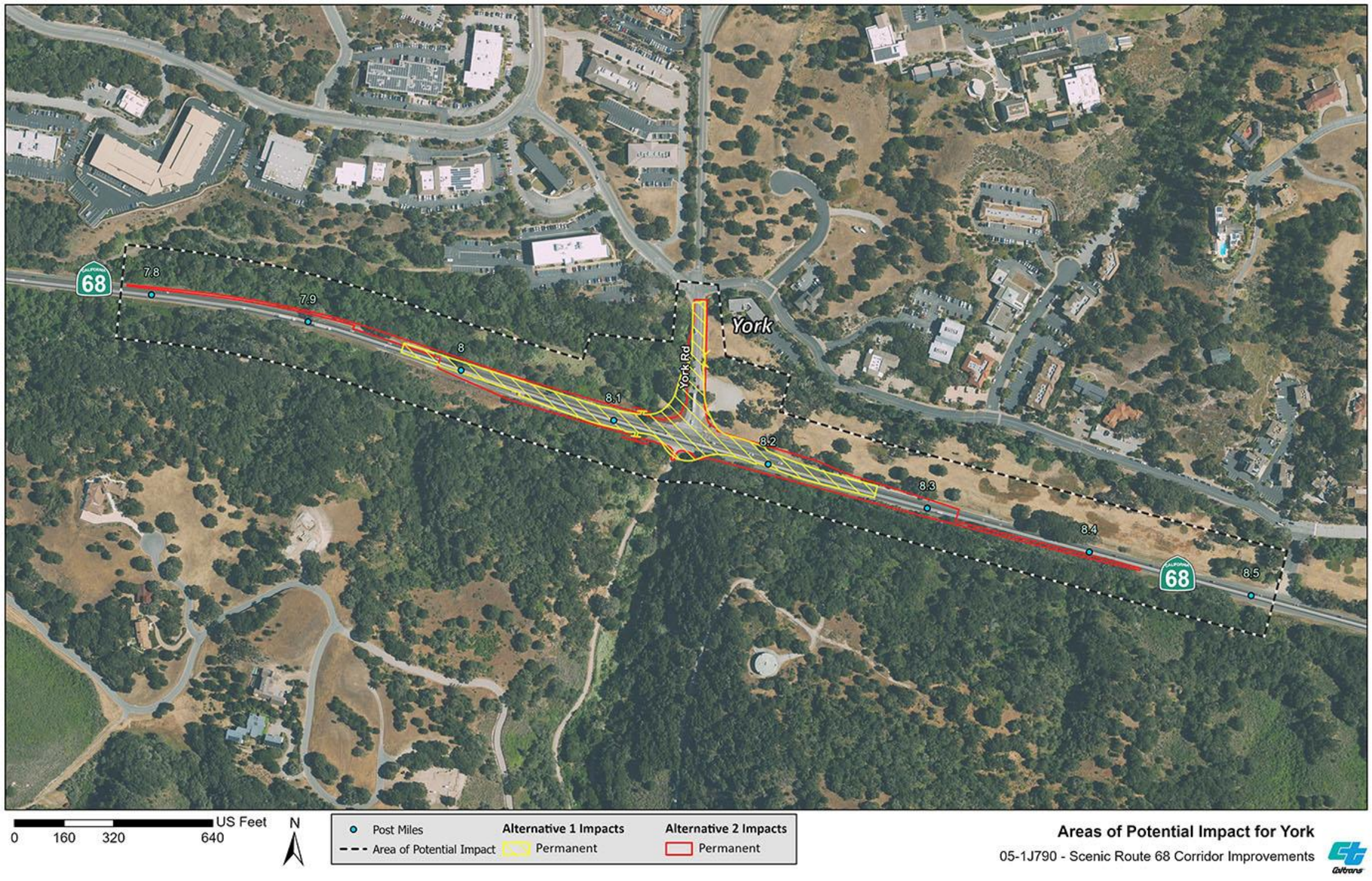


Figure 1.4 Project Areas of Potential Impact (Sheet 4 of 6)



Figure 1.4 Project Areas of Potential Impact (Sheet 5 of 6)

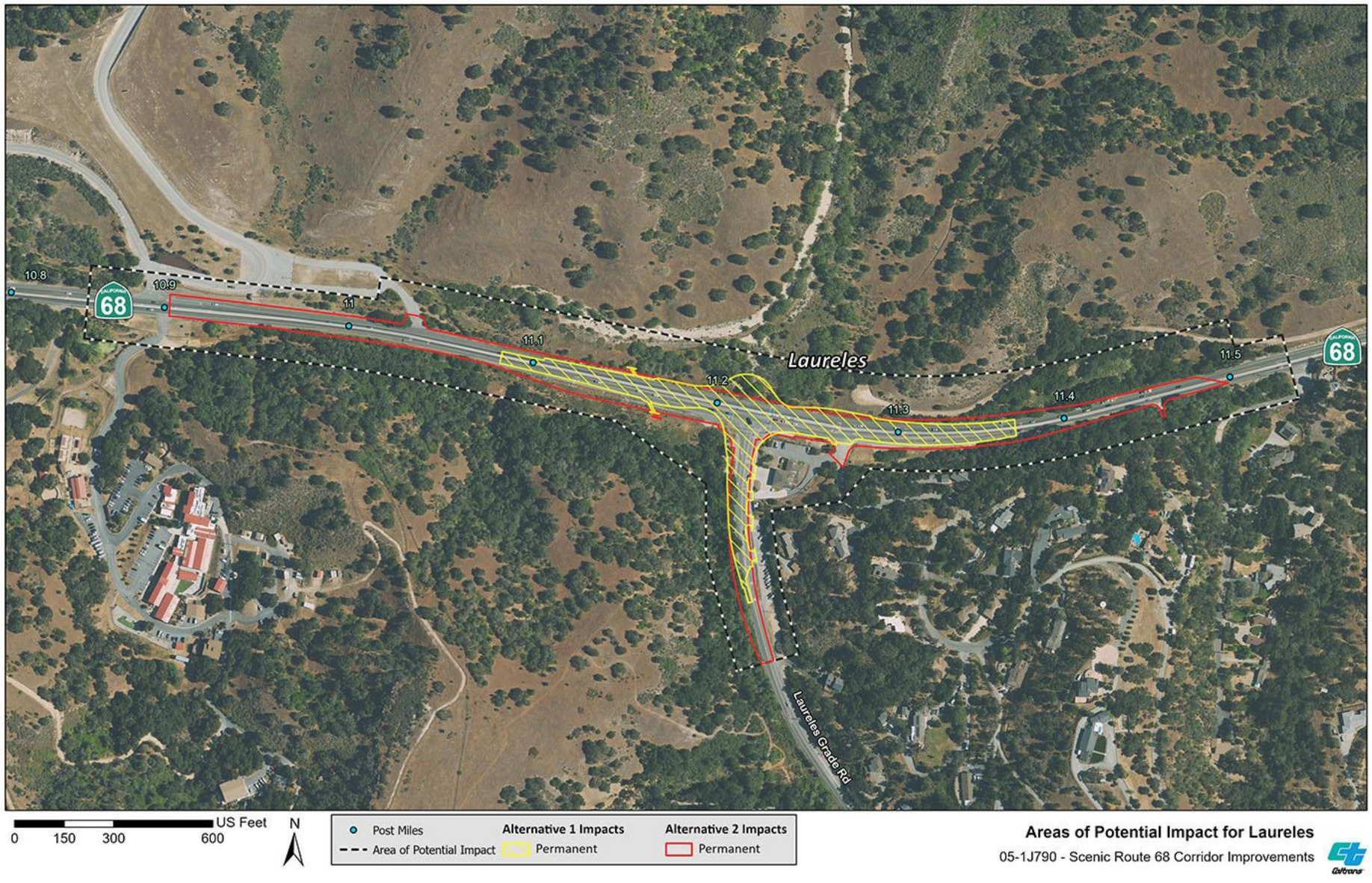


Figure 1.4 Project Areas of Potential Impact (Sheet 6 of 6)

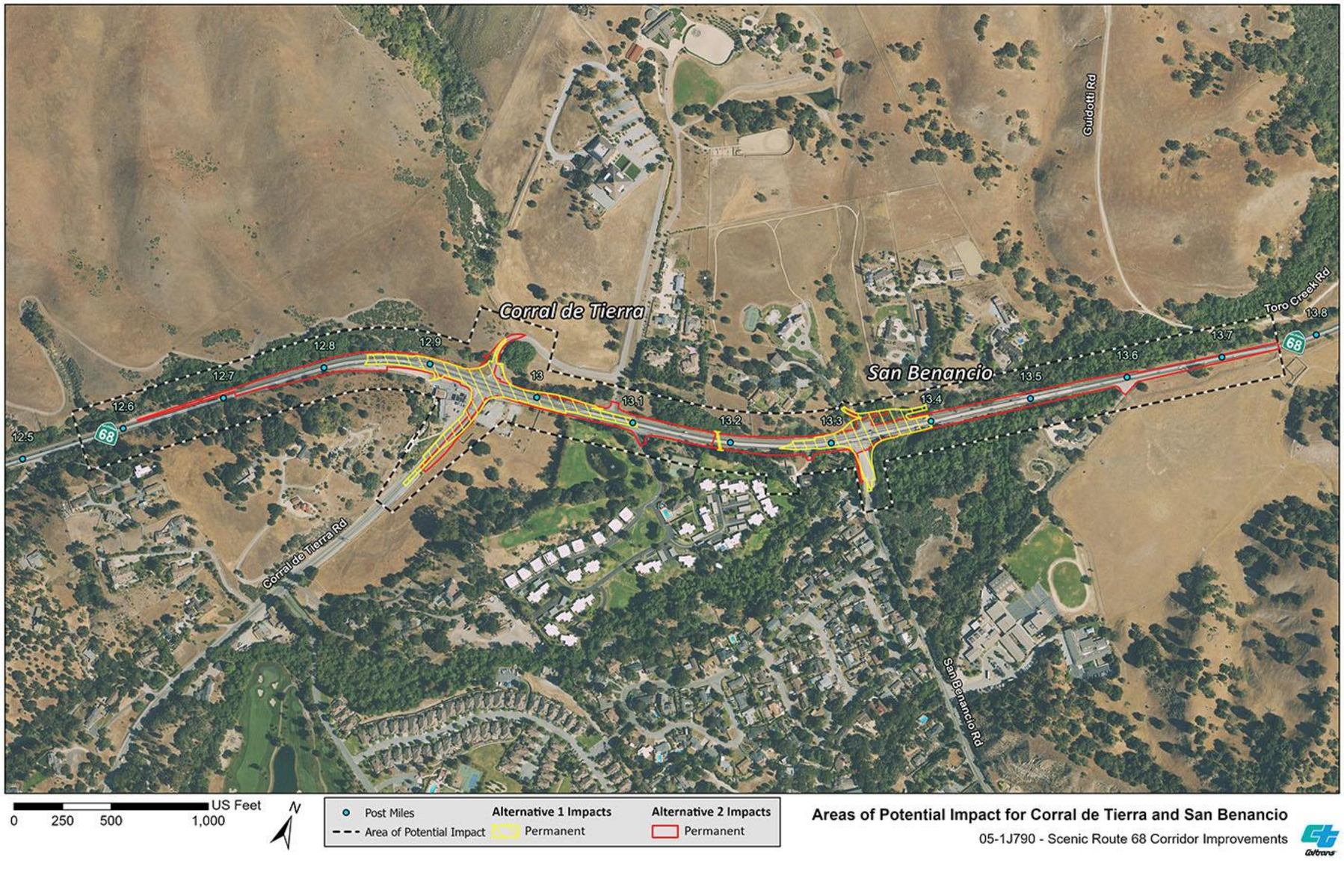


Table 1.4 Summary of Proposed Wildlife Connectivity Improvements

Location of Wildlife Crossing (State Route 68 Post Mile)	Existing Width/ Height/Type/ Length	Proposed Wildlife Crossing Improvement
Site 1-York Road Culvert (post mile 8.12)	6-foot by 4-foot reinforced concrete box culvert Length: 60 feet	A new 8-foot-wide by 8-foot-high by about 85-foot-long reinforced concrete box culvert would be installed under State Route 68, 18 feet west of the existing concrete box culvert, which would be abandoned in place. Excavation is required at approximately 90 to100 feet to the north and 75 to 85 feet south of the new culvert to conform to existing flow lines and improve visibility to facilitate large animal movement. Exclusionary fencing to be installed along both sides of State Route 68 to guide wildlife to the new culvert.
Site 2-Roadkill Hot Spot Location west of Pasadera Drive-Boots Road (post mile 9.41, eastbound near the Water District property across from the golf course)	3.5-foot-diameter corrugated steel pipe Length: 60 feet	A new 12-foot-wide by 11-foot-high by about 90-foot-long reinforced concrete box culvert would be installed under State Route 68 approximately 450 feet west of the evaluated roadkill hot spot at post mile 9.41. The existing culvert at the regulated floodway would not be altered. Excavation is required about 85 to 95 feet south of the new culvert to conform to existing flow lines and improve visibility to facilitate large animal movement. An outlet basin would be constructed to the north for proper drainage from the culvert during storms. The basin would be about 75 feet wide by 150 feet long. A smaller pond to the south would also be excavated to ensure drainage functionality of the crossing feature. Exclusionary fencing would be installed on both sides of State Route 68 from west of Pasadera Drive to the new culvert to guide wildlife to the crossing culvert.
Site 3-Boots Road Culvert (post mile 9.67)	4.5-foot-diameter reinforced concrete box culvert Length: 60 feet	A new 8-foot-tall by 8-foot-wide by 125-foot-long reinforced concrete box culvert would be installed under State Route 68 approximately 450 feet west of the evaluated roadkill hot spot at post mile 9.67, replacing a smaller-diameter corrugated steel pipe at the proposed location. The existing culvert at the regulated floodway at post mile 9.67 would not be altered. Excavation required is approximately 20 to 30 feet to the north and 60 to 70 feet south of the new culvert to conform to existing flow lines and improve visibility to facilitate large animal movement. Exclusionary fencing would be installed on both sides of State Route 68 to guide wildlife to the culvert.
Site 4-Laureles Grade Culvert (post mile11.15)	2- to 2.3-foot by 1.8-foot corrugated steel pipe Length: 60 feet	A new 8-foot-wide by 8-foot-tall by about 170-foot-long reinforced concrete box culvert would be installed under State Route 68 approximately 50 feet west of the existing corrugated steel pipe, which will be abandoned in place. Excavation of an 1,800-foot-long ditch would be required about 45 to 55 feet to the north and 60 to 70 feet south of the new culvert to conform to existing flow lines and improve visibility

Location of Wildlife Crossing (State Route 68 Post Mile)	Existing Width/ Height/Type/ Length	Proposed Wildlife Crossing Improvement
Site 5-Box Culvert west of San Benancio Road (post mile 13.19)	5-foot by 5-foot reinforced concrete box culvert Length 55 feet	A new 7-foot-wide by 7-foot-tall by 100-foot-long reinforced concrete box culvert would be installed under State Route 68 approximately 50 feet west of the existing corrugated steel pipe, which will be abandoned in place. Excavation is required approximately 15 to 25 feet to the north and 25 to 35 feet south of the new culvert to conform to existing flow lines and improve visibility. Exclusionary fencing will be installed on both sides of State Route 68 to guide wildlife to the culvert

Utilities Relocation

Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be relocated underground (subsurface) in accordance with Scenic Highway regulations. Existing underground lines, including natural gas, sewer, and water lines in conflict with project improvements, would also require relocation. Relocated underground lines would be installed as close to the state highway right-of-way as feasible. Potholing would be conducted as soon as feasible and would be done in the Plans, Specifications, and Estimates (project final Design) phase of the project to positively identify the specific locations of existing subsurface utilities to confirm relocation needs in conjunction with discussions with the utility owner(s).

Bicycle and Pedestrian Facilities Improvements

The build alternatives would provide various improvements to bicycle and pedestrian facilities at the project intersections as noted in the specific descriptions below. Alternative 1 would include 8-foot-wide shared bicycle and pedestrian pathways on all legs of the roundabout connecting to crosswalks across each leg, and 5-foot-wide bicycle path and ramps after the shared paths end at the crosswalks. Crosswalks would be provided on all legs of the roundabouts.

Alternative 2 would include road widenings via auxiliary through lanes and/or designated left-/right-turn lane extensions where feasible that may also include accommodation provisions for new and/or extended bicycle lanes in accordance with the specific layouts of each intersection. Existing crosswalks would be restriped where the road is widened at the intersections.

Zero Emission Vehicle Charging Station

Two Zero Emission Vehicle (ZEV) charging station systems would be installed at the existing Park and Ride lot operated by Monterey County on the east side of Laureles Grade Road south of State Route 68. The stations

would be Level 2, solar-powered charging systems, providing charging capability for two electric vehicles at the same time. Up to three of the existing parking stalls in the portion of the lot south of a residential driveway would be converted for the charging systems equipment. The existing parking spaces in that portion of the lot would be restriped for eight parking stalls based on current design standards. A total of 15 parking stalls would be available in the entirety of the lot for Park and Ride users, a reduction of 5 stalls from the existing lot capacity of 20 stalls.

The charging station equipment and lot modifications would be constructed and installed by Caltrans through an encroachment permit to be obtained from the County of Monterey. The cost for the station would be sponsored by the Transportation Agency for Monterey County, and the County would maintain the facilities. No right-of-way acquisitions would be required.

Standard Project Measures and Practices Intended to Reduce Environmental Impacts

The project contains standardized project measures that are used on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections of the/ topical analyses found in Chapter 2.

Table 1.5 provides a list of standard measures and best management practices relevant to the proposed project for either build alternative. The measure numbers reference those in the Caltrans Standard Specifications book (2018) for construction contracts. Additional regulatory requirements are also included as applicable.

Table 1.5 Standard Measures and Best Management Practices Included in Project Build Alternatives

Topic	Standard Measure/Best Management Practice
General	7-1.02A The contractor would comply with laws, regulations, orders and decrees applicable to the project
Air Quality	7-1.02C Emissions Reduction: The contractor would submit a certification acknowledging compliance with emissions reduction regulations managed by the California Air Resources Board.
Air Quality	14-9.02 Air Pollution Control: The project would comply with all air pollution control rules, regulations, ordinances, and statutes.
Air Quality	14-11.04 Dust Control: Excavation, transportation, and handling of material containing hazardous waste or contamination must result in no visible dust migration. When clearing, grubbing, and performing earthwork operations in areas containing hazardous waste or contamination, a water truck or tank would be provided on the job site.
Archaeological Resources	14-2.03 Archaeological Resources: If archaeological resources are discovered within or near the construction limits, the resources would not be further

Topic	Standard Measure/Best Management Practice
	disturbed, and all work near the discovery would stop immediately. The area would be secured, and the Resident Engineer would be notified.
Biological Resources	14-6.03 Species Protection: Instructions for the protection of regulated species and their associated habitat. If a protected species is discovered in a project work area, work would stop near the discovery and the Resident Engineer would be notified.
Construction Site	13-4 Job Site Management: Specifications for performing job site management work such as spill prevention and control, material management, waste management, non-stormwater management and dewatering activities.
Environmentally Sensitive Areas	14-1.02 Environmentally Sensitive Areas: Caltrans would mark areas that are environmentally sensitive. These areas cannot be entered unless authorized. If the environmentally sensitive area is breached, work would stop and the Resident Engineer would be notified.
Fire Protection	7-1.02M(2) Fire Protection: Development of a Fire Prevention Plan which would minimize the risk of starting a wildfire during construction.
Hazardous Waste	14-11.03 Hazardous Waste Management: Outlines procedures for handling, storage, transport, and disposal of hazardous waste, in compliance with 22 California Code of Regulations Division 4.5.
Hazardous Waste	14-11.04 Dust Control: Excavation, transportation, and handling of material containing hazardous waste or contamination must result in no visible dust migration. A water truck or tank would be provided on the construction site when conducting clearing, grubbing, and earthwork operations in areas containing hazardous waste or contamination.
Hazardous Waste	14-11.06 Contractor-Generated Hazardous Waste: Provides instructions to the contractor for the management of hazardous wastes that may be generated during construction, and management of contaminated soils from accidental leaks or spills.
Hazardous Waste	14-11.08 for Regulated Material Containing Aerially Deposited Lead.
Hazardous Waste	14-11.09 for Minimal Disturbance of Regulated Material Containing Aerially Deposited Lead.
Hazardous Waste	14-11.12 Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue: Includes specifications for removing, handling, and disposing of yellow thermoplastic and yellow-painted traffic stripe and pavement marking. The residue from removal of this material is generated hazardous waste (lead chromate), and removal exposes workers to health hazards that must be addressed in a lead compliance plan.
Hazardous Waste	14-11.13C Safety and Health Protection Measures: Applies to worker protective measures for potential lead exposure.
Hazardous Waste	Standard Special Provision 14-11.14 Treated Wood Waste: Required to assess handling and disposal of any potential wood waste generated during the project.
Hazardous Waste	84-9.03C Remove Traffic Stripes and Pavement Markings Containing Lead: Includes instructions for the removal of yellow traffic stripe if the stripe would be removed using a cold plane or grinding operation.
Hazardous Waste	Standard Special Provision 7-1.02K(6)(j)(iii): Earth Material Containing Lead.
Hazardous Waste	Standard Special Provision 36-4: For work involving residue from grinding and cold planing that contains lead from paint and thermoplastic.
Noise	14-8.02 Noise Control: Noise from construction work activities would be controlled and monitored so as not to exceed 86 decibels at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.
Paleontological Resources	14-7.03 Discovery of Unanticipated Paleontological Resources: If unanticipated paleontological resources are discovered, the resources would not be further disturbed, and all work near the discovery would stop

Topic	Standard Measure/Best Management Practice
	immediately. The area would be secured, and the resident engineer would be notified.
Solid Waste	14-10.02 Solid Waste Disposal and Recycling Report: he types and amounts of solid waste taken to or diverted from landfills or reused on the project would be tracked and reported each calendar year.
Traffic Management	Transportation Management Plan: A Transportation Management Plan would be prepared and included with the project plans, specifications, and estimates for management of traffic flow during construction. The plan would include specific measures for movement of vehicles, bicyclists, and pedestrians through the project intersections such as lane closures, reversible lanes, detour routes, and public information programs and procedures.
Utilities	Overhead utility lines in conflict with project improvements shall be undergrounded by the responsible utility entity in accordance with Public Utilities Code 320 as required by the California Public Utilities Commission.
Water Quality	13-2 Water Pollution Control Program: Includes specifications for the development implementation of a Water Pollution Control Program.
Water Quality	13-5 Temporary Soil Stabilization: Includes specifications for placing temporary soil stabilization materials on stockpiles or disturbed soil areas.
Water Quality	13-6 Temporary Sediment Control: Includes specifications for installing temporary sediment controls, such as check dams and drainage inlet protections.
Water Quality	13-9 Temporary Concrete Washouts: Includes specifications for installing temporary concrete washouts to receive and dispose of concrete waste.
Water Quality	13-10 Temporary Linear Sediment Barriers: Includes specifications for installing temporary linear barriers to control sediment, like high-visibility fencing, fiber rolls, and temporary large sediment barriers.

Unique Features of the Build Alternatives

While both build alternatives propose changes to the same nine intersections, the types of changes at each intersection differ by alternative as summarized below.

Alternative 1 State Route 68 Roundabouts

Alternative 1 proposes to convert 9 existing signalized intersections to roundabouts. The project locations on State Route 68 for Alternative 1 are numbered 1 through 7, with two locations combining two intersections due to their close proximity and the operational traffic characteristics of roundabouts:

- Location 1 (Alternative 1): Josselyn Canyon Road (post mile 5.22)
- Location 2 (Alternative 1): Olmsted Airport Road (post mile 5.57)
- Location 3 (Alternative 1): State Route 218 (Canyon Del Rey Boulevard) to Ragsdale Drive (post miles 6.65 to 7.23)
- Location 4 (Alternative 1): York Road (post mile 8.15)
- Location 5 (Alternative 1): Pasadera Drive-Boots Road (post mile 9.78)
- Location 6 (Alternative 1): Laureles Grade Road (post mile 11.22)

- Location 7 (Alternative 1): Corral de Tierra Road to San Benancio Road (post miles 12.81 to 13.47)

The roundabouts are designed to naturally reduce vehicle speeds to approximately 20 to 30 miles per hour as vehicles approach each of the roundabout intersections. The typical roadway section at each roundabout intersection would consist of a central island with apron, with 2 to 4 travel lanes (1 or 2 travel lanes in each direction), a landscape buffer, splitter island with landscaping, and a shared path for bicyclists and pedestrians. Construction of retaining walls and/or landform grading would be required at some locations. The roundabout center islands would be hardscaped to minimize maintenance and associated temporary travel lane closures, and to facilitate worker safety. Landscaping the center islands may be considered during the final design phase.

Each roundabout would include a pedestrian and bicycle shared-use path to the north and south of the through vehicle travel lanes and accessible shared-use crosswalks across each leg of the roundabout. Safety features include island refuge areas to allow staged pedestrian and bicyclist crossings. All roundabouts would include signage, illumination, and striping for pedestrian and bicycle crossings.

Since directional travel lanes entering and exiting the roundabout are separated by a splitter island, pedestrians and bicyclists would cross only one lane/direction of travel at a time to a refuge point in the splitter island. Crosswalks are set back from the roundabout entry to allow drivers to watch for crossing pedestrians and bicyclists before they begin to yield for any oncoming vehicles, and again before they have fully exited the roundabout. Bicycle lanes would lead up to the roundabout and, upon entering the roundabout, bicyclists would have the option of riding in the travel lane or using a ramp to the shared use path.

The main elements of each of the proposed roundabout designs under Alternative 1 at the project intersections are summarized in Table 1.6. For a complete list of design elements, see the scope of work descriptions in Appendix I.

Table 1.6 Alternative 1 Roundabout Intersection Design Summary

Post Mile on State Route 68	Intersection on State Route 68	Proposed Roundabout Elements
5.22	Josselyn Canyon Road	Single-lane roundabout at 3-legged intersection; Josselyn Canyon Road realigned to intersect near 90 degrees with State Route 68; 8-foot-wide shared path for bicycle and pedestrian use on all intersection legs, and 5-foot-wide bicycle path and ramps on all legs after shared path ends at crosswalks;

Post Mile on State Route 68	Intersection on State Route 68	Proposed Roundabout Elements
		Raised splitter island between through lanes on all legs; Retaining wall on north side of State Route 68 west of bicycle ramp (4 to 22 feet tall, 320 feet long), and retaining wall with concrete barrier adjacent to northbound Josselyn Canyon Road (4 to 18 feet tall, 192 feet long); both walls would have a concrete drainage ditch and landform grading; A concrete barrier would be placed on the north side of State Route 68 adjacent to the edge of pavement from the end of the bike ramp east of the roundabout and extending east 460 feet; Drainage infrastructure modifications to propagate runoff into ditches; Hammond Drive entrance onto State Route 68 east of the roundabout would have right turn in-and-out access due to raised splitter island on State Route 68; Permanent property acquisition from 7 Assessor's Parcels totaling up to 1.3 acres; Removal of several trees from widening of State Route 68; Relocation of overhead and underground utility lines and poles where in conflict.
5.57	Olmsted Airport Road	Single-lane roundabout at 4-legged intersection; Olmsted Road would have an opening in the raised splitter island to allow for left turn in-and-out access to the Comfort Inn; 8-foot-wide shared path for bicycle and pedestrian use on all intersection legs, and 5-foot-wide bicycle path and ramps on all legs after shared path ends at crosswalks; Raised splitter island between through lanes on all legs; Drainage infrastructure modifications to propagate runoff into ditches; Permanent property acquisition from 4 Assessor's Parcels totaling up to 1.94 acres; Relocation of overhead and underground utility lines and poles where in conflict.
6.81	State Route 218 (Canyon Del Rey Boulevard)-Monterra Ranch Road	2-lane roundabout except for northbound and southbound State Route 218 and westbound State Route 68 which would have two southbound lanes and one northbound lane; 4-legged intersection; 8-foot-wide shared path for bicycle and pedestrian use on all intersection legs, and 5-foot-wide bicycle path and ramps on all legs after shared path ends at crosswalks; Raised splitter island between through lanes on all legs; State Route 68 east of the roundabout would be realigned to accommodate chicanes; Removal of several trees from realignment of State Route 68 east of the roundabout; Landform grading cut slope of 74 feet at 2 to 1 horizontal to vertical ratio in northeast quadrant of the roundabout;

Post Mile on State Route 68	Intersection on State Route 68	Proposed Roundabout Elements
		Two retaining walls, one in the southwest quadrant (5 feet tall and 119 feet long) and one in the southeast quadrant (5 feet tall and 105 feet long) to limit impacts of cut slope for realignment of State Route 68; Drainage infrastructure modifications to propagate runoff into ditches; Permanent property acquisition from 5 Assessor's Parcels totaling up to 1.67 acres; Temporary Construction Easement of up to 0.80 acre from one parcel for construction access; permanent slope easements from 6 parcels for up to 2.15 acres; Relocation of overhead and underground utility lines and poles where in conflict. Avoidance of historical elements on Tarpy's Roadhouse property adjacent to State Route 68.
7.08	Ragsdale Drive	Single-lane roundabout with a dedicated bypass lane for eastbound through traffic on State Route 68; 3-legged intersection with crosswalks on all legs; Dedicated right-turn lane on southbound leg (Ragsdale); 8-foot-wide shared path for bicycle and pedestrian use on all intersection legs, and 5-foot-wide bicycle path and ramps on all legs after shared path ends at crosswalks; Raised splitter islands between lanes on all legs; Three retaining walls and one concrete barrier: one in the northwest quadrant (about 4 to 20 feet tall, 254 feet long) with a trapezoidal ditch in front of the wall and a concrete drainage ditch and landform grading at the top and back side of the wall; one wall in the northeast quadrant with a length of about 370 feet and height of 4 to 22 feet, with a concrete drainage ditch at the top and backside of the wall; a concrete barrier with a length of 100 feet on the north side of State Route 68 adjacent to the highway edge of pavement; A third wall on the north side of State Route 68 starting at the end of the concrete barrier and extending easterly (about 4 to 15 feet high and 400 feet long) with a concrete ditch at the top of the wall, back side; Drainage infrastructure modifications to propagate runoff into ditches to accommodate capacity with graded slopes to meet design requirements for clear recovery areas; Permanent property acquisition from 7 Assessor's Parcels totaling up to about 3.13 acres; Temporary Construction Easement of up to one-tenth of an acre required on one parcel; Relocation of overhead and underground utility lines and poles where in conflict.
8.15	York Road	Single-lane roundabout at a 3-legged intersection; Dedicated right-turn lane for southbound traffic (York Road); Crosswalks on all legs of the intersection; 8-foot-wide shared path for bicycle and pedestrian use on all intersection legs, and 5-foot-wide bicycle path and ramps on all legs after shared path ends at crosswalks;

Post Mile on State Route 68	Intersection on State Route 68	Proposed Roundabout Elements
		Raised splitter islands between lanes on all legs; Several trees to be removed for roundabout; Wildlife Crossing Number 1: realignment of existing drainage channel to the west using a larger reinforced concrete box (8 feet by 8 feet by 83 feet); construction of two temporary access roads: one on the north side of State Route 68, one on the south side of State Route 68. Drainage infrastructure modifications to propagate runoff into ditches; existing reinforced concrete box culvert for the regulated floodway north of State Route 68 and under York Road would be lengthened to accommodate the roundabout; Permanent property acquisition from 5 Assessor's Parcels totaling up to 1.14 acres; Temporary Construction Easement from four parcels of up to 1.24 acres; Relocation of overhead and underground utility lines and poles where in conflict.
9.78	Pasadera Drive-Boots Road	Single-lane roundabout at a 4-legged intersection; Crosswalks on all legs; 8-foot-wide shared path for bicycle and pedestrian use on all intersection legs, and 5-foot-wide bicycle path and ramps on all legs after shared path ends at crosswalks; Raised splitter islands between through lanes; Several trees to be removed for roundabout; Drainage infrastructure modifications to propagate runoff into ditches to convey runoff from the south side to the north side of the roundabout and into the regulated floodway; Construction of retaining wall (about 4 to 6 feet high and 88 feet long) in the southwest quadrant to limit impacts to the slope and drainage facility; Permanent right-of-way acquisition from 6 Assessor's Parcels with a combined total of up to about 1 acre; Temporary Construction Easements from 3 parcels of up to 0.11 acre; Permanent drainage easements of up to 1.42 acres would be necessary for long-term maintenance of the drainage facilities; Wildlife Crossing (Site 2) would be constructed approximately 1,900 feet west of the intersection; a reinforced concrete box culvert (12 feet by 11 feet by 88 feet) would be installed, along with wildlife fencing; Wildlife Crossing (Site 3) would be constructed about 450 feet west of the intersection by installing a reinforced concrete box culvert (8 feet by 8 feet by 125 feet) filled with native material; wildlife directional fencing leading up to the culvert; Relocation of overhead and underground utility lines and poles where in conflict.
11.22	Laureles Grade Road	Single-lane roundabout at a 3-legged intersection; Dedicated right-turn lane for northbound traffic (Laureles Grade Road);

Post Mile on State Route 68	Intersection on State Route 68	Proposed Roundabout Elements
		Crosswalks on all legs; 8-foot-wide shared path for bicycle and pedestrian use on all intersection legs, and 5-foot-wide bicycle path and ramps on all legs after shared path ends at crosswalks; Raised splitter islands between through and right-turn lanes; Several trees to be removed for roundabout; Drainage infrastructure modifications to propagate runoff into ditches to convey runoff; Driveway access to Seca Place east of Laureles Grade Road would be modified to a right-in only, and right and/or left out onto State Route 68; Retaining wall (4 to 8 feet high, 114 feet long) in the northeast quadrant extending east of the intersection to limit impacts to slope and private road; Permanent right-of-way acquisition from 4 Assessor's Parcels with a combination of up to 2.91 acres for intersection modifications; Temporary Construction Easements of up to 0.13 acre combined from 2 parcels; Two Zero Emissions Vehicle charging station systems proposed for installation on the existing Park and Ride lot on the east side of Laureles Grade Road; charging for up to two vehicles simultaneously; no right-of-way acquisition necessary; reduction of 5 parking stalls for a total of 15 stalls at the lot. Wildlife Crossing (Site 4): reinforced concrete box culvert measuring 8 feet by 8 feet by 167 feet would be installed approximately 250 feet west of the intersection; native soil material to line the bottom of the culvert; Relocation of overhead and underground utility lines and poles where in conflict.
12.95	Corral de Tierra Road	Single-lane roundabout at 4-legged intersection; Crosswalks on all legs; 8-foot-wide shared path for bicycle and pedestrian use on all intersection legs, and 5-foot-wide bicycle path and ramps on all legs after shared path ends at crosswalks; Raised splitter islands between through lanes; Drainage infrastructure modifications to propagate runoff into ditches to convey runoff; Retaining wall (10 feet high, 265 feet long) to be constructed in the northwest quadrant extending east from the proposed bike ramp to limit impacts to the adjacent slope and sensitive resources; Modification of driveway access from State Route 68 to the Corral Market & Deli property on the southwest side of the intersection would be modified due to the roundabout design to remove the easternmost driveway and to change the western driveway to right in/right out only; Full access to the southwest retail property would remain from Corral de Tierra Road; Access to the property in the southeast quadrant from Corral de Tierra Road from the southern driveway would

Post Mile on State Route 68	Intersection on State Route 68	Proposed Roundabout Elements
		remain; driveways on State Route 68 to the property would be removed upon future property development; Permanent right-of-way acquisition from 9 Assessor's Parcels with a combination of up to 1.41 acres; Temporary Construction Easements from 7 parcels for up to a combined 1.36 acres; Relocation of overhead and underground utility lines and poles where in conflict.
13.33	San Benancio Road	Single-lane roundabout on a 3-legged intersection; Crosswalks on all legs; 8-foot-wide shared path for bicycle and pedestrian use on all intersection legs, and 5-foot-wide bicycle path and ramps on all legs after shared path ends at crosswalks; Raised splitter islands between through lanes; Drainage infrastructure modifications to propagate runoff into ditches to convey runoff; Existing frontage road access at the north leg would be moved east about 200 feet, with left-turn access from State Route 68 onto San Benancio Road (east leg). Access from San Benancio Road onto State Route 68 would be changed to allow right-out-only movements; Frontage Road would be realigned due to the widened roundabout; Retaining wall (4 to 15 feet tall, 296 feet long) in the northwest quadrant would be constructed extending east from the proposed bike ramp; a concrete barrier would be on top of the wall between the highway and the frontage road; The Toro Creek Bridge (#44C0117) and northern approach slab would be widened to accommodate the roundabout and shared use path, and would include new wing wall-retaining walls to protect the slopes of the creek; sidewalk would also be added within the existing bridge width; Permanent right-of-way acquisition from 2 Assessor's Parcels with a combination of up to 0.20 acre; a Temporary Construction Easement from one parcel of up to 0.07 acre; Wildlife Crossing Number 5: A reinforced concrete box culvert (7 feet by 7 feet by 99 feet) with native soil material added in the bottom of the culvert would be installed approximately 650 feet west of the intersection (post mile 13.18); wildlife fencing would be installed to guide wildlife to the box culvert. Relocation of overhead and underground utility lines and poles where in conflict.

Alternative 2 State Route 68 Integrated Corridor Management and Adaptive Signal Control

Alternative 2 would make various types of operational improvements at the same nine intersections on State Route 68 as those included with Alternative 1, but through modifications and upgrades to the existing signal control systems and vehicle travel lanes, plus the addition of accommodations for bicycle travel ways and pedestrian facilities. The project locations on State Route 68 for Alternative 2 are numbered 1 through 6, with three locations including two intersections due to their close proximity and the operational traffic characteristics of signalized intersections:

- Location 1 (Alternative 2): Josselyn Canyon Road to Olmsted Road (post miles 4.8 to 5.9)
- Location 2 (Alternative 2): State Route 218 (Canyon Del Rey Boulevard) to Ragsdale Drive (post miles 6.45 to 7.3)
- Location 3 (Alternative 2): York Road (post miles 7.8 to 8.45)
- Location 4 (Alternative 2): Pasadera Drive-Boots Road (post miles 9.46 to 10.21)
- Location 5 (Alternative 2): Laureles Grade Road (post miles 10.94 to 11.50)
- Location 6 (Alternative 2): Corral de Tierra Road to San Benancio Road (post miles 12.55 to 13.7)

Traffic channelization (lane) improvements at the intersections and approach areas to the intersections would include widening of State Route 68 and/or the intersecting local street and restriping to provide additional through and/or dedicated left-turn or right-turn lanes, extending the storage length of the lanes, or provision for new auxiliary lanes (short sections of additional travel lane that would taper back to the existing highway width) where needed. Channelization improvements would require acquisition of new right-of-way beyond the existing road right-of-way at intersections, particularly where an additional approach through lane and departing lane would be required.

Traffic signal system equipment would be replaced with upgraded adaptive signal control technology that would adjust the timing of the red, yellow, and green light cycle times to accommodate variations in traffic patterns and improve movement through the intersection. All currently signalized intersections would be upgraded with traffic sensors/traffic detection, traffic signal controllers, and fiber optic or wireless communication systems at the intersections. These communication devices would allow each signalized intersection to be adaptive and allow them to react to changing traffic conditions, monitor traffic conditions at each intersection in real time, and continuously distribute green time equitably for all traffic movements.

Operational improvements proposed in Alternative 2 would incorporate the December 2020 Traffic Operations Analysis Report recommendations for

intersection lane configurations that considered the 2045 forecasted peak traffic volumes. Dedicated bicycle lanes would be provided adjacent to dedicated right-turn lanes and auxiliary lanes. Roadway shoulder areas would be widened where necessary to the standard 8-foot width where feasible, with 4-foot-wide shoulders adjacent to dedicated right-turn lanes. Curb ramps with Americans with Disabilities Act design compliance would be constructed adjacent to intersection crosswalk areas, and the upgraded signal systems would include pedestrian push button accessibility for crossing time. Existing crosswalks would be restriped on the intersection legs that would be widened.

Adjustments to the existing drainage facilities would be modified (relocated and/or realigned, with the required forward and back slopes) where necessary to accommodate the travel lane and road shoulder improvements. Retaining walls would be constructed where necessary to retain cut slopes and minimize impacts to environmental resources. Underground and overhead utility lines in conflict with proposed intersection improvements would be relocated. Private driveways, fences, and private mailboxes within the intersection improvement areas would be relocated or set back.

Table 1.7 summarizes the elements of the signalized intersections proposed under Alternative 2. For a complete list of design elements see the scope of work descriptions in Appendix I.

Table 1.7 Alternative 2 Signalized Intersections Design Summary

Post Miles on State Route 68	Intersection on State Route 68	Proposed Signalized Intersection Elements
5.22	Josselyn Canyon Road	Eastbound State Route 68 would be widened to the south to add a 12-foot-wide by 500-foot-long combination through/right-turn lane approaching Josselyn Canyon Road, preceded by a 250-foot-long taper; The through lane on eastbound State Route 68 would continue between Josselyn Canyon Road and Olmsted Road; Standard 8-foot-wide shoulders constructed throughout; Westbound State Route 68 widened to the north to add a 12-foot by 1,220-foot-long westbound auxiliary lane west of Josselyn Canyon Road, and a 720-foot-long taper back to existing State Route 68; Westbound State Route 68 approach to Josselyn left-turn lane extended by 300 feet; the 12-foot median to Olmsted would be extended and function as a two-way turn lane to facilitate southerly driveway access; Josselyn Canyon Road would be realigned to improve the angle of the intersection to be greater than 75 degrees to improve sight distance at the corners and view approaching traffic;

Post Miles on State Route 68	Intersection on State Route 68	Proposed Signalized Intersection Elements
		Northbound Josselyn Canyon Road would be widened to accommodate a 125-foot-long dedicated left-turn lane and right-turn lane; Retaining wall along northbound Josselyn 4- to 12-foot-high by 100-foot-long to minimize impacts to the adjacent cut slope with Monterey pine trees; Traffic signal equipment would be replaced with adaptive signal control technology to accommodate changing traffic patterns and improve movement through the intersection; ADA-compliant curb ramps at all crosswalk intersections, and all crosswalks would be restriped; Clear recovery requirement of 20 feet from edge of travelled way in the eastbound direction, and construction of a 4-to-1 ratio embankment slope; Existing drainage culverts would be extended to daylight to the reconstructed ditches as applicable.
5.57	Olmsted Airport Road	Eastbound State Route 68 would be widened on the south side to add a two-way left-turn lane (12 feet wide, 745 feet long) between the westbound State Route 68 Josselyn left-turn approach and eastbound State Route 68 Olmsted approach; a 12-foot wide continuous through lane would be added; Eastbound State Route 68 outside through lane approach to Olmsted would also serve as a right-turn lane onto southbound Olmsted; Existing eastbound State Route 68 left-turn lane and westbound State Route 68 left-turn lane would be extended by 275 and 230 feet, respectively; A westbound State Route 68 auxiliary through lane (990 feet long) would be added, preceded by a 250-foot-long lane taper; The westbound State Route 68 exclusive right-turn lane would be realigned and extended by 360 feet to accommodate a 6-foot-wide bike lane; a 4-foot-wide (minimum) outside shoulder would be constructed adjacent to the dedicated right-turn lane; Standard 8-foot-wide shoulders would be constructed on eastbound State Route 68 throughout the improvements with 4-foot-wide shoulders adjacent to dedicated right-turn lanes; The Olmsted Road south leg of the intersection would be modified to have a 295-foot-long dedicated left-turn lane and a combination through/right-turn lane in the northbound direction; The Olmsted Road north leg of the intersection would be modified to have a 330-foot-long dedicated left-turn lane and a combination through/right-turn lane in the southbound direction. The widening would require regrading of the Comfort Inn landscaped slope from State Route 68 up to Garden Road. Slope regrading areas would be about 12 feet wide by 140 feet long south and 22 feet wide by 168 feet long north of the

Post Miles on State Route 68	Intersection on State Route 68	Proposed Signalized Intersection Elements
		entrance driveway, causing removal of up to 12 mature trees; Acquisition of permanent right-of-way from 39 identified Assessor Parcels for up to 6.8 acres; 0.06 acre of slope easement, and 0.05 acre of Temporary Construction Easement would be required; Retaining wall (4 to 10 feet high and 1,013 feet long) and concrete barrier with foundation to retain cut slope; Retaining wall (Number 2 at this intersection) 6 to 24 feet high and 2,025 feet long; Intersection signal and lighting systems would be replaced, and electrical work may require utility easements if PG&E facilities are on private property; existing electric service enclosures would be used to the extent feasible; Additional electroliers (light fixtures) may be necessary at Olmsted Road due to proposed road widening; electroliers would have a maximum height of 40 feet and design review by the Monterey Regional Airport; ADA-compliant curb ramps at all crosswalk intersections, and all crosswalks would be restriped; Utility lines in conflict with the proposed highway intersection improvements would be relocated.
6.81	State Route 218 (Canyon Del Rey Boulevard) – Monterra Ranch Road	Design on the northwest quadrant of the intersection for Alternative 2 was adjusted to avoid sensitive historical resources on the Tarpy's Roadhouse property adjacent to the State Route 68 right-of-way; Rather than a symmetrical widening of the intersection, the proposed design realigns and widens State Route 68 to the south to protect these resources. West leg of the intersection: existing 230-foot auxiliary through lane would be extended to 1,310 feet long, and a taper to conform back to the State Route 68 roadbed; The 145-foot-long eastbound State Route 68 combination auxiliary/right-turn lane would be lengthened to 600 feet, preceded by a 250-foot-long widening taper; Retaining wall (12 feet high, 1,250 feet long) along the south side of State Route 68 west of the intersection would be constructed to minimize impacts to riparian woodland; The east leg of State Route 68/State Route 218 would maintain the two eastbound continuous through lanes and the two westbound continuous through lanes, would lengthen the existing 225-foot-long westbound State Route 68 dedicated left-turn lane to 425 feet, and lengthen the bike lane to 450 feet, lengthen the dedicated right-turn lane to 450 feet, and add a 450-foot-long right-turn lane. A 4-foot-wide trapezoidal

Post Miles on State Route 68	Intersection on State Route 68	Proposed Signalized Intersection Elements
		ditch would be required for the westbound widening improvements. Eastbound State Route 68 between State Route 218 and Ragsdale Drive would be resurfaced; Drainage ditches would be constructed to manage roadway runoff, and run-on from adjacent hillsides onto the highway; Road shoulders with non-standard widths would be widened to 8 feet throughout, with the following exceptions: where adjacent to right-turn lanes, shoulders would be 4 feet wide; adjacent to retaining walls in cut slope areas and in front of transit stops, shoulders would be 10 feet wide; Monterra Road (south leg) would be widened to the east to accommodate a 235-foot-long dedicated southbound right-turn lane, a 6-foot-wide by 235-foot-long bike lane, a southbound through lane, southbound dual left-turn lanes 400 feet long minimum, and two northbound through lanes of which the outside lane becomes a dedicated right-turn lane at Ryan Ranch Road. Widening State Route 218 to the east would minimize impacts to the regulated floodway on the westerly side of State Route 218, and would necessitate two retaining walls: one 4 to 30 feet high by 225 feet long, and the other 4 to 32 feet high and 353 feet long; Traffic signal equipment would be replaced with adaptive signal control technology to accommodate changing traffic patterns and improve movement through the intersection; ADA-compliant curb ramps at all crosswalk intersections, and all crosswalks would be restriped; Clear recovery requirement of 20 feet from edge of travelled way in the eastbound direction, and construction of a 4-to-1 ratio embankment slope; Existing drainage culverts would be extended to daylight to the reconstructed ditches as applicable, and vegetated strips would be placed to treat runoff.
7.08	Ragsdale Drive	The 400-foot-long auxiliary through lane on eastbound State Route 68 would be lengthened by 100 feet at the departure leg, followed by a 720-foot reduction taper; The 500-foot-long eastbound State Route 68 auxiliary through/right-turn lane would be resurfaced; standard shoulder backing and cut embankment slope constructed to provide clear recovery standard requirements; Standard 8-foot-wide shoulders would be constructed throughout, except where adjacent to retaining walls in cut conditions where the shoulders would be 10 feet wide. The westbound State Route 68 approach leg to Ragsdale Drive shoulder backing widening would

Post Miles on State Route 68	Intersection on State Route 68	Proposed Signalized Intersection Elements
		require a short retaining structure to retain 3 feet of cut slope; Right-of-way acquisition from 9 Assessor's Parcels for a combined 6.75 acres of permanent right-of-way, 0.65 acre for slope easement, and 0.07 acre of Temporary Construction Easement; Retaining wall 4 to 16 feet high and 250 feet long west of State Route 218 to minimize impacts to vegetated cut slope; West of Ragsdale Drive along westbound State Route 68, a 175-foot-long concrete barrier with foundation system is proposed to retain a 3-foot cut slope; Southerly drainage ditch parallel to State Route 68 to be realigned to the south with forward slopes of 4 to 1 (horizontal to vertical) and back slopes of 2 to 1; Utility lines in conflict with the proposed highway intersection improvements would be relocated. Intersection signal and lighting systems would be replaced, and electrical work may require utility easements if PG&E facilities are on private property; existing electric service enclosures would be used to the extent feasible; ADA-compliant curb ramps at all crosswalk intersections, and all crosswalks would be restriped; Additional electroliers (light fixtures) may be necessary with the widened intersection; electroliers would have a maximum height of 40 feet and design review by the Monterey Regional Airport.
8.15	York Road	he 415-foot-long eastbound State Route 68 left-turn lane would be extended by 125 feet; Eastbound side of State Route 68 would be widened to the south to add a 12-foot-wide by 540-foot-long auxiliary through lane at the eastbound approach to the intersection of State Route 68/York Road, preceded by a 250-foot-long lane taper; Eastbound State Route 68 auxiliary through lane would continue for approximately 740 feet past the State Route 68/York Road eastbound departure. A 720-foot-long lane reduction taper would follow; Standard 8-foot-wide outside shoulders would be constructed throughout the State Route 68 widening improvements, except near retaining walls in cut conditions where the outside shoulder would be 10 feet wide and 4 feet wide adjacent to exclusive right-turn lanes; Westbound State Route 68 on the departure side to York Road would be widened to the north to add a 12-foot-wide by 1,090-foot-long westbound auxiliary through lane just west of York Road and would taper in 720 feet to conform to existing westbound State Route 68; At the westbound State Route 68/York Road approach leg, a 12-foot-wide by 600-foot-long

Post Miles on State Route 68	Intersection on State Route 68	Proposed Signalized Intersection Elements
		auxiliary through lane would be constructed, preceded by a 250-foot-long widening lane taper; Northbound York Road would be widened to accommodate an 8-foot-wide sidewalk to Blue Larkspur Lane as requested by the Transportation Agency for Monterey County and Monterey City and County; Southbound York Road right-turn lane would be lengthened by 155 feet; Traffic signal equipment would be replaced with adaptive signal control technology to accommodate changing traffic patterns and improve movement through the intersection; ADA-compliant curb ramps at all crosswalk intersections, and all crosswalks would be restriped; Improvements would provide clear recovery requirement of 20 feet from edge of travelled way and construction of 4-to-1 embankment slope; Wildlife Crossing Number 1: An 8-foot-wide by 8-foot-high reinforced concrete box would be installed at post mile 8.13 on State Route 68 under the highway; wildlife exclusionary fencing would be installed along the edge of the highway to guide wildlife to the undercrossing culvert and deter them from crossing the State Route 68 travel lanes; The existing drainage facility under York Road would be extended to accommodate the longer southbound right-turn lane and to accommodate the 8-foot-wide northbound sidewalk; Utility lines in conflict with the proposed highway intersection improvements would be relocated; Intersection signal and lighting systems would be replaced, and electrical work may require utility easements if PG&E facilities are on private property; existing electric service enclosures would be used to the extent feasible.
9.79	Pasadera Drive—Boots Road	The existing 330-foot-long eastbound State Route 68 left-turn lane would be lengthened by 95 feet; The existing exclusive eastbound State Route 68 right-turn lane would be converted to a combination 500-foot-long auxiliary through lane/right-turn lane, which would be preceded by a 250-foot-long standard lane widening taper; The existing 590-foot-long eastbound State Route 68 auxiliary through lane would be extended by 330 feet followed by a 720-foot long (using 60 miles per hour design speed) lane reduction taper to conform to existing eastbound State Route 68; The westbound left-turn lane would be reduced from 450 feet to 425 feet; A 700-foot-long auxiliary through lane separated by a 6-foot-wide bike lane and a 425-foot-long dedicated

Post Miles on State Route 68	Intersection on State Route 68	Proposed Signalized Intersection Elements
		right-turn lane preceded by a 220-foot widening lane taper on the approach; The westbound auxiliary through lane on the departure (west) side of State Route 68 would be extended from 550 feet to 890 feet, followed by a 720-foot-long lane reduction taper; Standard 8-foot-wide outside shoulders would be constructed throughout the State Route 68 widening improvements, except for the outside shoulders, which would be 10 feet at retaining wall locations in cut condition and would be 4 feet wide adjacent to exclusive right-turn lanes; Wildlife crossing Number 2 is proposed at post mile 9.52 and would consist of a 12-foot-wide by 11-foot-high precast reinforced concrete box culvert filled with 1 foot of native soil material. A 150-foot-long by 75-foot-wide northerly drainage pond would be excavated approximately 18 feet below the existing ground elevation, and a smaller southerly drainage pond would be excavated for this wildlife crossing. Wildlife exclusionary fence would also be installed along the eastbound and westbound sides of State Route 68 up to Pasadera Drive; A westbound State Route 68 10-foot-high by 125-foot-long retaining wall in fill would be constructed just west of Pasadera Drive to minimize impacts to an adjacent wetland and riparian woodland; Wildlife crossing Number 3 is proposed at post mile 9.68 and would consist of an 8-foot-wide by 8-foot-high precast reinforced concrete box culvert. The northerly inlet of this reinforced concrete box culvert crossing would be approximately 20 feet below the original ground elevation and excavated out to allow for passage of the wildlife; Adaptive signal control technology would be the traffic signalization system constructed that adjusts the timing of the red, yellow and green light cycle times to accommodate changing traffic patterns and improve traffic movement through the intersection; ADA-compliant curb ramps at all crosswalk intersections, and all crosswalks would be restriped; The roadway improvements would address the clear recovery requirement of 20 feet from edge of travelled way and construction of a 4-to-1 ratio embankment slope; Acquisition of permanent and drainage right-of-way easements from 12 identified Assessor Parcels, for a combined total of up to 3.72 acres, and 1.22 acres of drainage easement area for Wildlife Crossing Number 2 drainage pond located on the Pasadera Golf and Country Club property; Utility lines in conflict with the proposed highway intersection improvements would be relocated.

Post Miles on State Route 68	Intersection on State Route 68	Proposed Signalized Intersection Elements
11.22	Laureles Grade Road	A 1,450-foot-long westbound auxiliary through lane would be added that would then convert to an exclusive right-turn lane onto “B” Road. Signage would direct through traffic to merge left into the westbound continuous through lane; The 20-foot-wide striped median would be reduced to 12 feet wide and taper down to no median within in 720 feet to the west of Laureles Grade Road; The State Route 68 west leg intersection lane configuration would have a 500-foot-long eastbound auxiliary through lane, a 6-foot-wide by 500-foot-long bike lane and a 500-foot-long dedicated right-turn lane; On the State Route 68 east leg, the eastbound auxiliary through lane would continue for 798 feet followed by a 720-foot-long lane reduction taper to conform to existing eastbound State Route 68; The westbound dual left-turn lanes would remain at 470 feet, and a 700-foot-long westbound auxiliary through lane would be added preceded by a 250-foot-long lane widening taper; Standard 8-foot-wide outside shoulders would be constructed throughout the State Route 68 widening improvements, except for where adjacent to exclusive right-turn lanes; in those locations, the outside shoulder would be 4 feet wide; Laureles Grade Road (south leg of the intersection) would be modified to extend the 175-foot-long southbound auxiliary through lane to 290 feet followed by a 540-foot-long lane reduction taper. To avoid or minimize impacts to the existing park and ride lot, a 425-foot-long left-turn lane, a 5-foot-wide bike lane, and an exclusive right-turn lane would be provided. Laureles Grade Road would be widened on the west side (southbound direction) to minimize impacts to the Monterey County Regional Fire District property and the park and ride lot; Two Zero Emission Vehicle charging station systems would be installed at the park and ride lot operated by the County of Monterey on the east side of Laureles Grade Road. The charging systems would be Level 2, solar-powered facilities and would provide charging capability for two vehicles to charge at the same time. No right-of-way acquisitions would be required. Reduction of 5 parking stalls for a total of 15 stalls at the lot. Wildlife crossing Number 4 is proposed at post mile 11.16 and would consist of an 8-foot-wide by 8-foot-high precast reinforced concrete box culvert filled with 2 feet of native soil material. Wildlife exclusionary fence would also be installed along the eastbound and westbound sides of State Route 68;

Post Miles on State Route 68	Intersection on State Route 68	Proposed Signalized Intersection Elements
		An 1,800-foot-long northerly ditch with forward slopes of a 4-to- ratio and back slopes of a 2-to- ratio and up to 12 feet deep would need to be constructed to contain the roadway runoff and to provide for functionality of the wildlife crossing; A retaining wall along westbound State Route 68 10 feet high by 125 feet long in fill material would be constructed just west of Pasadera Drive to reduce impacts to adjacent wetland and riparian woodland; Intersection signal and lighting system would be replaced with adaptive signal control technology to accommodate changing traffic patterns and improve traffic movement through the intersection; the proposed electrical work may require utility easements if PG&E facilities are located on privately owned property. ADA-compliant curb ramps at all crosswalk intersections, and all crosswalks would be restriped; Acquisition of permanent and drainage right-of-way easements from 12 Assessor Parcels for a combined total of up to 7.52 acres of permanent right-of-way; Utility lines in conflict with the proposed highway intersection improvements would be relocated.
12.95	Corral de Tierra Road—Cypress Church Drive	The following lane configurations are proposed to best accommodate the curved geometry at the intersection: a 1,070-foot-long westbound auxiliary through lane, followed by a 720-foot-long lane reduction taper, a 460-foot-long left-turn lane, and an 850-foot-long eastbound combination auxiliary through and right-turn lane. The existing right-turn lane from eastbound State Route 68 onto southbound Corral de Tierra Road would be eliminated to avoid impacting the adjacent commercial property at the southwest corner of the intersection; the two driveways immediately west of the intersection would be restricted to right-in/right-out movements. Standard 8-foot-wide outside shoulders would be constructed throughout the intersection except along retaining walls in cut slope conditions (10 feet wide); Due to the immediate north and south driveways located just east of Corral De Tierra and the need to provide a continuous left-turn lane, the westbound left-turn lane would be extended to 310 feet; Widening of the eastbound State Route 68 approach would require construction of a retaining wall (4 to 12 feet high and about 640 feet long) to the west of this intersection to limit the impacts to a 60 feet and higher cut slope; The westbound State Route 68 departure widening would require the construction of a retaining wall (12 feet high by about 700 feet long) in fill condition to limit the impacts to the northerly riparian woodland and the

Post Miles on State Route 68	Intersection on State Route 68	Proposed Signalized Intersection Elements
		streambed that runs parallel just west of Corral De Tierra Road; Corral De Tierra Road (south leg of the intersection) would be realigned to have a skew angle greater than the existing 65-degree angle connection to State Route 68. The lanes would include a 405-foot-long dedicated northbound left-turn lane and a northbound combination through/right-turn lane with one southbound continuous through lane; Cypress Church Drive (north leg of the intersection) would be realigned to match the Corral de Tierra Road vehicle travel lane configurations. The lanes on the north leg would be modified to include a southbound combination right/through lane, an exclusive 75-foot-long southbound left-turn lane, and a northbound continuous through lane; Wildlife Crossing Number 5: Proposed at post mile 13.18 and would include a 7-foot-high by 7-foot-wide precast reinforced concrete box filled with 1 foot of native soil material; Retaining Wall Number 3 (230 feet long and varying in height from 4 to16 feet) would be on the north side and just east of the wildlife crossing Number 5 to limit impacts to a 30-foot-high cut slope. Retaining Wall Number 4 in cut condition is proposed approximately 145 feet east of Wall Number 3 and would be about 255 feet long and from 4 to 16 feet tall to minimize impacts to the heavily vegetated hillside. Retaining Wall Number 5 (about 100 feet long by 14 feet high) is proposed in fill material on the southside and just west of San Benancio Road to limit impacts to riparian woodland and Toro Creek streambed. Adaptive signal control technology would be the traffic signalization system constructed that adjusts the timing of the red, yellow, and green light cycle times to accommodate changing traffic patterns and improve traffic movement through the intersection; ADA-compliant curb ramps at all crosswalk intersections, and all crosswalks would be restriped; The roadway improvements would address the clear recovery requirement of 20 feet from the edge of travelled way along the eastbound direction and construction of 4-to-1 ratio embankment slope to maximum extent possible; Existing drainage culverts would be extended to daylight to the reconstructed ditches as applicable, and vegetated strips would be designed to treat runoff as applicable.
13.33	San Benancio Road	The State Route 68 west leg of the intersection would include two continuous State Route 68 westbound through lanes, and a 425-foot-long left-turn lane. Two continuous State Route 68 eastbound through lanes would extend from Corral De Tierra Road to the San

Post Miles on State Route 68	Intersection on State Route 68	Proposed Signalized Intersection Elements
		Benancio Road eastbound approach, with a 6-foot-wide and 425-foot-long bike lane and dedicated right-turn lane; The State Route 68 east leg would have a 1,430-foot-long eastbound auxiliary through lane followed by a 720-foot-long lane reduction taper, a continuous eastbound through lane, a 535-foot-long westbound left-turn lane, a continuous westbound through lane, and a 1,155-foot-long westbound combination auxiliary through/right-turn lane preceded by a 250-foot-long lane taper. The auxiliary lane would be extended to widen the bridge for two lanes in each direction of travel; The lane configurations on the San Benancio Road south leg of the intersection are proposed to be restriped such that the 250-foot-long northbound combination left/through lane would become an exclusive left-turn lane, and the exclusive right-turn lane would become a northbound combination through/right-turn lane; Lane configurations on San Benancio Road (south leg of the intersection) are proposed to be restriped such that the 250-foot-long northbound combination left/through lane would become an exclusive left-turn lane, and the exclusive right-turn lane would become a northbound combination through/right-turn lane; Standard 8-foot-wide eastbound/westbound shoulders along State Route 68 would be constructed throughout the intersection improvements< except for 10-foot-wide shoulders adjacent to retaining walls in cut conditions; A retaining wall approximately 250 feet long and from 4 feet to 10 feet high is proposed immediately to the east of the intersection to limit impacts to the northerly vegetated cut slope that extends 20 feet and higher; The State Route 68 bridge over Toro Creek would be widened to accommodate two lanes of travel in each direction along with a tapered striped median that forms the westbound left-turn lane at the State Route 68 east leg; A retaining wall about 460 feet long and from 4 to 12 feet tall is proposed along eastbound State Route 68 just east of the intersection and would connect to the widened State Route 68 Toro Creek bridge. The retaining wall would minimize impacts to the riparian woodland and Toro Creek streambed. A second retaining wall (about 225 feet long and varying in height from 4 feet to 14 feet) at the southeasterly end of the bridge would limit impacts to adjacent riparian woodland; Acquisition of permanent right-of-way from 20 identified Assessor Parcels for a combined total of up

Post Miles on State Route 68	Intersection on State Route 68	Proposed Signalized Intersection Elements
		to 6.56 acres, and 0.24 acre of Temporary Construction Easement area. Drainage ditches between the Corral de Tierra/State Route 68 intersection to wildlife crossing Number 5 on the north side and south side are proposed to handle roadway runoff. The ditches would have forward and back slopes of a 4-to-1 ratio; Intersection signal and lighting system will be replaced, and new electrical services for the proposed electrical work may require utility easements if PG&E facilities are located on privately owned property; ADA-compliant curb ramps at all crosswalk intersections, and all crosswalks would be restriped; Utility lines in conflict with the proposed highway intersection improvements would be relocated.

Transportation System Management and Transportation Demand Management Alternatives

Transportation System Management strategies increase the efficiency of existing facilities; they are actions that increase the number of vehicle trips a facility can carry without increasing the number of through lanes. Examples of Transportation System Management strategies include ramp metering, auxiliary lanes, turning lanes, reversible lanes, and traffic signal coordination. Transportation System Management also promotes automobile, public, and private transit, ridesharing programs, and bicycle and pedestrian improvements as elements of a unified urban transportation system. Modal alternatives integrate multiple forms of transportation modes, such as pedestrian, bicycle, automobile, rail, and mass transit.

Transportation Design Management focuses on regional means of reducing the number of vehicle trips and vehicle miles travelled, as well as increasing vehicle occupancy. It facilitates higher vehicle occupancy or reduces traffic congestion by expanding the traveler's transportation options in terms of travel method, travel time, travel route, travel costs, and the quality and convenience of the travel experience. A typical activity would be providing funds to regional agencies that are actively promoting ridesharing, maintaining rideshare databases, and providing limited rideshare services to employers and individuals.

The project area contains mostly suburban to rural land use development in portions of the County of Monterey, and cities of Monterey and Del Rey Oaks, with a population less than 200,000 combined in the immediate project vicinity. Although Transportation System Management measures alone could not satisfy the purpose and need of the project, both project build alternatives incorporate bicycle and pedestrian facility improvements, as described in the

tables above. Alternative 2 would provide exclusive turn lanes and/or combination through/turn lanes, and auxiliary lanes, extension of lane lengths on intersection approach and departure legs, as well as upgrades to the signalization system.

Reversible Lanes

Assembly Bill 2542 amended California Streets and Highways code to require, effective January 1, 2017, that Caltrans or a regional transportation planning agency demonstrate that reversible lanes were considered when submitting a capacity-increasing project or a major street or highway lane realignment project to the California Transportation Commission for approval (California Streets and Highways Code, Section 100.015). Projects that meet these criteria must be evaluated by District Traffic Operations to determine the feasibility of including reversible lanes in the project scope.

The proposed project is not a capacity-increasing project because it would not increase the vehicular capacity of mainline State Route 68; it would not add travel lanes on the highway. Realignments of short sections of intersection legs and lanes are included in the preliminary designs of both build alternatives. As examples, the entrance legs to some of the Alternative 1 roundabouts are curved to slow traffic speeds entering and exiting the roundabout. With Alternative 2, through and turn lanes are extended and/or added at the intersections to improve traffic operations (flow) entering and exiting the intersection; at select locations, local cross-streets that intersect State Route 68 are proposed to be realigned according to current design standards for improvement of traffic operations.

Reversible lanes are within the concept of Managed Lanes (refer to discussion below in Section 1.7.3) in that vehicle directional travel on the highway mainline would be reversed during peak traffic periods of the day accordingly to accommodate the predominant directional travel demand. Reversing traffic direction on travel lanes or median lanes works well when the directional split of traffic is greater than 65/35 and there is minimal disruption from intersecting street traffic. During the project scoping phase, it was determined that lane management, including reversible lanes, on the Scenic Route 68 Corridor was not recommended for further consideration because the traffic on the highway corridor has a fairly even directional split and numerous intersecting streets.

Access to Navigable Rivers

California Streets and Highways Code Section 84.5 states that during the design hearing process related to state highway projects that include the construction by Caltrans of a new bridge across a navigable river, full consideration of, and a report on, the feasibility of providing a means of public access to the navigable river for public recreational purposes shall be conducted. The proposed project would not construct a new bridge over a

navigable river, and therefore, access to a navigable river for public recreational purposes would not be affected by the project and is not analyzed herein.

1.4.2 No-Build (No-Action) Alternative

The No-Build Alternative would not make any intersection improvements along State Route 68, though regular maintenance of the existing facilities would continue. The No-Build Alternative would not reduce intersection congestion or vehicle collisions along State Route 68. The No-Build Alternative would not improve existing wildlife crossing conditions and would not improve connectivity of the wildlife corridor intersected by State Route 68. The No-Build Alternative provides a baseline to compare the impacts of making no change to existing conditions with the impacts associated with the viable "build" alternatives.

1.5 Comparison of Alternatives

Caltrans and the Transportation Agency for Monterey County developed the range of alternatives based on project purpose and need, cost, and environmental considerations. Along with these factors, the team used the following list of guiding principles to direct the evaluation of alternatives:

- Minimization of right-of-way impacts
- Minimization of impacts to environmental resources
- Preservation of existing sense of community
- Facilitation of bicycle and pedestrian improvements
- Allowance of future State Route 68 widening projects

As noted in the background provided in Section 1.1, the Transportation Agency for Monterey County evaluated current and future travel patterns between the Salinas Valley and Monterey Peninsula and feasibility of mid-term solutions in the 2017 study, titled the State Route 68 Scenic Highway Plan. The stated goal of the plan was to identify a preferred State Route 68 corridor concept and associated infrastructure improvements that would best meet both local and regional goals, while providing the highest return on investment of limited regional transportation funding for the next 20 years.

Based on research evaluating traffic conditions, public input, and cost-benefit analysis, the plan developed and evaluated corridor concepts to determine the most suitable option for affordable mid-term operational improvements. Three corridor concepts were evaluated in the plan, including Concept 1: State Route 68 Roundabout Corridor that would convert 11 intersections to roundabouts, Concept 2: State Route 68 Widening with Roundabout Control,

which would widen four segments of State Route 68 and convert 9 intersections to roundabouts; and Concept 3: State Route 68 Integrated Corridor Management and Adaptive Signal Control, which would widen and channelize 6 intersections and add a communications system between signals along two sections of the highway, and widen the highway to four lanes for 1.15 miles from east of Toro Creek Road to the existing four-lane section between Toro Park Estates and Salinas. As a result of the intersection-specific benefit-cost analysis conducted in the Scenic Highway Plan that assessed factors including safety, travel time, air pollution emissions, habitat and other resource preservation, maintenance and capital costs, as well as a micro-simulation analysis, the study concluded that the concept of roundabouts throughout the State Route 68 corridor would be the preferred concept as it would significantly reduce travel delay and improve State Route 68 reliability.

Two of the concept alternatives were further refined and selected by the Project Development Team for evaluation in the environmental analysis phase. Alternatives 1 and 2 analyzed in this environmental document would modify the same 9 intersections along State Route 68 included in Tables 1.6 and 1.7 earlier; however, they vary in the types of modifications that would be made to the intersections and their physical footprints. The two build alternatives differ in the locations where widening would extend beyond the existing roadway footprint to accommodate each proposed intersection modification as well the ultimate configuration of each intersection. Both alternatives include the same proposed wildlife connectivity improvements at five locations.

1.6 Identification of a Preferred Alternative

While final identification of a preferred alternative typically occurs after public review of the draft environmental document and comment period, given the initial public comments received and differences between the two alternatives, the Project Development Team determined that identifying the locally preferred alternative in the draft environmental document would assist the public in the environmental review process. After comparison of the benefits and impacts of the alternatives, Alternative 1, intersection roundabouts, was preliminarily identified by the Transportation Agency of Monterey County (local project proponent) as the locally preferred alternative.

Alternative 1 currently:

- Meets the project's purpose and need to the greatest extent of the viable alternatives
- Has the smallest environmental footprint of the viable alternatives
- Is the most feasible and attainable solution of the viable alternatives

After the public circulation period, all comments will be considered, and Caltrans will select a preferred alternative and make the final determination of the project's effect on the environment. Under the California Environmental Quality Act (CEQA), Caltrans will certify that the project complies with CEQA, prepare findings for all significant impacts identified, and if necessary, prepare a Statement of Overriding Considerations for any impacts that would not be mitigated below a level of significance, and certify that the findings and Statement of Overriding Considerations have been considered prior to project approval.

Caltrans will then file a Notice of Determination with the State Clearinghouse that will identify whether the project will have significant impacts, if mitigation measures were included as conditions of project approval, that findings were made, and if a Statement of Overriding Considerations was adopted. Similarly, if Caltrans, as assigned by the Federal Highway Administration, determines the National Environmental Policy Act (NEPA) action does not significantly impact the environment, Caltrans will issue a Finding of No Significant Impact (FONSI). If it is determined that the project is likely to have a significant effect on the environment, an Environmental Impact Statement (EIS) will be prepared.

1.7 Alternatives Considered but Eliminated from Further Discussion

This section explains why certain alternatives in the early development process were not considered further. The project alternatives described below were considered but eliminated from further consideration. Additional information regarding alternative route corridors previously considered is in Section 1.1.1, Background.

1.7.1 Full Corridor Widening (Expressway)

While various state and regional planning documents have referenced the future widening of State Route 68 to four lanes, neither the Association of Monterey Bay Area Government's 2040 Metropolitan Transportation Plan (published June 2018) or the Transportation Agency for Monterey County's Regional Transportation Plan currently include widening of State Route 68 in their financially constrained project lists.

Based on the concept analysis completed as part of the 2017 State Route 68 Scenic Highway Plan, it is anticipated that, as compared to the two alternatives being considered for the State Route 68 Corridor Improvements project, environmental resources would be affected to a much greater magnitude under a full corridor widening scenario due to the larger scale

project footprint that would be required to expand the current highway alignment.

Also, this alternative was not advanced as an alternative because it does not closely align with the project purpose and need, has mixed public support, and was previously estimated to cost close to $200 million, a value that would be much higher today.

The full corridor widening alternative was not advanced for further consideration, but this decision does not preclude future widening along the corridor.

1.7.2 Corral de Tierra Bypass Alternative

Previous Monterey County Planning documents included a future alignment for a two-lane bypass in the area north of the present Corral de Tierra and San Benancio intersections on State Route 68, which are referred to as "Official Plan Lines" (OPL). Policy 39.1.1.1 (T) of the 1992 Amended Toro Area Plan proposed the two-lane bypass as an interim measure to alleviate congestion ahead of an eventual widening of State Route 68 to a four-lane highway. In the 2010 Toro Area Plan Policy 39.1.1.1(T) was replaced with Policy T-2.3, which no longer includes reference to a two-lane bypass in the area north of the present Corral de Tierra and San Benancio intersections on State Route 68 as an interim measure. While the Official Plan Lines for the Corral De Tierra bypass have not formally been rescinded yet, the Official Plan Lines do not obligate the County, Caltrans, or any other entity to act to facilitate or pursue construction of the Corral de Tierra bypass. Also, Monterey County has been working to rescind older Official Plan Lines and ordinances that are no longer pertinent.

The Corral de Tierra bypass alignment, as shown in Monterey County planning documents dating back to the late 1970s, would require acquisition of private property and use of a portion of Fort Ord National Monument. The project is subject to the requirements of Section 4(f), which prevents transportation projects on federal recreation areas when there is a feasible and prudent alternative project available.

This alternative was considered as a "concept" in the State Route 68 Scenic Highway Plan, but was not advanced for consideration. The Intersection Control Evaluation analysis conducted as part of the plan determined that the operational issues at the Corral de Tierra and San Benancio intersections can be remedied without constructing the bypass. In compliance with Section 4(f), this alternative was not pursued because other feasible and prudent alternatives are available.

The State Route 68 Scenic Highway Plan also noted that the bypass would require a "significant investment" of public funds, with a preliminary estimate of over $100 million, while only providing a "spot" remedy.

Both the four-lane widening of State Route 68 and the Bypass route alternative are not consistent with California's multiple Senate and Assembly bills and executive orders in place for reduction of vehicle miles traveled and greenhouse gases. The State of California accordingly has implemented goals and policies for reduction of greenhouse gas emissions and traffic-related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety. Specifically, Senate Bill 743 (September 2013) changed the metric for analysis of the effects of transportation projects on the environment to use methods focused on vehicle miles traveled.

1.7.3 Managed Lanes

A managed lanes alternative would add a lane in the median, which would be open to the westbound traffic in the morning peak period, closed during midday, and open to the eastbound traffic in the afternoon peak period. During the project scoping phase, it was determined that given the even directional split of traffic volumes and the high number of intersections on State Route 68, as well as high maintenance costs, this alternative does not merit further review.

1.8 Permits and Approvals Needed

Table 1.8 provides the permits, licenses, agreements, and certifications required for project construction:

Table 1.8 Permitting and Approving Agencies

Agency	Permits, Licenses, Agreements, and Certifications	Status
U.S. Army Corps of Engineers	Clean Water Act Section 404 Permit Alternative 1: Potential Nationwide Permit Alternative 2: Potential Individual Permit	Notification to be submitted during the Plans, Specifications, and Estimates phase
Regional Water Quality Control Board	401 Certification	Application to be submitted during the Plans, Specifications, and Estimates phase
California Department of Fish and Wildlife	1602 Streambed Alteration Agreement	Notification to be submitted during the Plans,

Agency	Permits, Licenses, Agreements, and Certifications	Status
		Specifications, and Estimates phase
U.S. Fish and Wildlife Service	Biological Opinion and Take Permit for the California red-legged frog and California tiger salamander	Application to be submitted during the Plans, Specifications, and Estimates phase
U.S. Fish and Wildlife Service	Letter of concurrence for the least Bell's vireo	Application to be submitted during the Plans, Specifications, and Estimates phase
California Department of Fish and Wildlife	2081 Incidental take permit for the California tiger salamander	Application to be submitted during the Plans, Specifications, and Estimates phase
California Department of Fish and Wildlife	2081 Incidental take permit for the tri-colored blackbird	Application to be submitted during the Plans, Specifications, and Estimates phase
California Department of Fish and Wildlife	2081 Incidental take permit for geotechnical subsurface drilling in jurisdictional waters	Application to be submitted during the Plans, Specifications, and Estimates phase
California Department of Fish and Wildlife	2081 Incidental take permit for completion of archaeological field studies	Application to be submitted during the Plans, Specifications, and Estimates phase
National Marine Fisheries Service	Biological Opinion and Take Permit for the South-Central California Coast steelhead Distinct Population Segment	Application to be submitted during the Plans, Specifications, and Estimates phase
State Historic Preservation Officer	Programmatic Agreement and Cultural Resources Management Plan approval	Draft in Progress; Final agreement prior to approval of Final environmental document
Monterey County Public Works	Permit to Encroach for construction within the County right-of-way	To be requested during the Plans, Specifications, and Estimates phase
Monterey County Public Works	Temporary Construction Easements	To be requested during the Plans, Specifications, and Estimates phase
City of Monterey Public Works	Permit to Encroach for construction within the City right-of-way	To be requested during the Plans, Specifications, and Estimates phase
City of Monterey Public Works	Temporary Construction Easements	To be requested during the Plans, Specifications, and Estimates phase

Agency	Permits, Licenses, Agreements, and Certifications	Status
U.S. Department of the Interior, Bureau of Land Management	Permit to Encroach for construction within the Federal right-of-way	To be requested during the Plans, Specifications, and Estimates phase
U.S. Department of the Interior, Bureau of Land Management	Temporary Construction Easements	To be requested during the Plans, Specifications, and Estimates phase

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Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

As part of the scoping and environmental analysis done for the project, the following environmental issues were considered, but no adverse impacts were identified. Therefore, there is no further discussion of these issues in this document.

- Coastal Zone—The project would not affect coastal resources because it not located within the coastal zone.
- Environmental Justice—A review of California Office of Environmental Health Hazard Assessment's (OEHHA) CalEnviroScreen tool was made to identify most environmentally burdened and vulnerable communities in the project area. CalEnviroScreen shows a low vulnerability score for the communities immediately adjacent to the project area. A review of U.S. Census Bureau data for other areas in Monterey County show higher percentages of minority populations and larger numbers of households below the poverty level; however, these communities are located outside of the immediate project area. No minority or low-income populations that would be adversely affected by the proposed project have been identified as determined above. Therefore, this project is not subject to the provisions of Executive Order 12898.
- Farmland—Although there is extensive farmland in Monterey County and close to the project area along eastern State Route 68 and in the Salinas Valley, the project would not affect farmlands. The project would occur entirely in a portion of the State Route 68 corridor where there is no land zoned for agricultural uses. There is no planned acquisition of farmland, and the project does not require easements on agricultural land.
- Timberlands—No Timber Production Zones exist within or near the project area; therefore, none will be affected. However, the project would include tree removal as discussed in Section 2.3.1.
- Wild and Scenic Rivers—There are no wild and scenic rivers located within or near the project area; therefore, none will be affected.

2.1 Human Environment

2.1.1 Existing and Future Land Use

Affected Environment

The project area includes more than 8 miles of existing State Route 68, beginning in the City of Monterey, passing through Del Rey Oaks, and ending in unincorporated Monterey County just west of the Toro Park community. State Route 68 is also close to the Monterey Peninsula Airport District, which is a special district and is not incorporated into a city or county. Land use in the project area includes residential, commercial, industrial, airport, conservation open space, and public lands. These land uses in the various communities are discussed below and shown in Figures 2.1 and 2.2.

City of Monterey

The City of Monterey is a coastal community approximately 5,382 acres in size, located adjacent to the Monterey Bay National Marine Sanctuary. Within the city, residential development encompasses most land, and significant commercial areas are concentrated in the downtown core as well as along the waterfront area of Cannery Row. Other significant land uses include the Presidio of Monterey, the Naval Post Graduate School and Monterey Peninsula College.

Open space and recreational areas include beaches along the city's waterfront as well as parks and golf courses in the city's upland areas, which are a huge draw to the city's tourism industry. Industrial land use in the city is clustered in its easternmost portion along the State Route 68 corridor, adjacent to the Monterey Peninsula Airport and within the Ryan Ranch. The public educational facilities, commercial businesses, and services, along with tourism trade, provide a range of jobs and economic opportunities.

The State Route 68 area within the City of Monterey is characterized by a densely wooded pine forest giving way to rolling meadows with oak woodlands and chaparral on the surrounding hillsides. These visual resources led to the designation of State Route 68 as a Scenic Highway. Figure 2.1 shows land use designations in the city.

City of Del Rey Oaks

The City of Del Rey Oaks is southeast of Seaside and has an area of approximately 319 acres. The southeast portion of Del Rey Oaks extends down State Route 218 and is bordered by State Route 68 at the State Route 218 intersection. Land use in Del Rey Oaks consists mostly of residential development with some park and open space uses and a small amount of commercial land use largely located in the southeast portion of the city closest to State Route 68. Figure 2.1 shows land use designations in the city.

Monterey County

Monterey County is home to over 400,000 people and encompasses approximately 3,280 square miles (source: US Census). The project area passes through portions of Monterey County known as the Greater Monterey Peninsula Planning Area and the Toro Planning Area and is adjacent to the Fort Ord Master Plan Area.

The Greater Monterey Peninsula Planning Area extends from the City of Monterey limits east to Laureles Grade and consists largely of rural residential and resource conservation land uses. The Greater Monterey Peninsula Planning Area is an area of exceptional scenic beauty and includes Scenic Highway corridors with surrounding areas designated as visually “sensitive’ and “highly sensitive.” “Highly sensitive” areas are intended to be preserved as open space, and potential development is restricted in “sensitive” areas.

The Fort Ord Master Plan area is generally within the former Fort Ord military base, which is adjacent to State Route 68 on the north from east of Laguna Seca Regional Park to the Toro Park Neighborhood. Fort Ord became a National Monument in 2012, and the lands closest to State Route 68 are continuously designated as “habitat management” and not intended for development. The Fort Ord Badger Hills National Monument Trailhead parking area is accessed from State Route 68 just west of the Toro Park neighborhood.

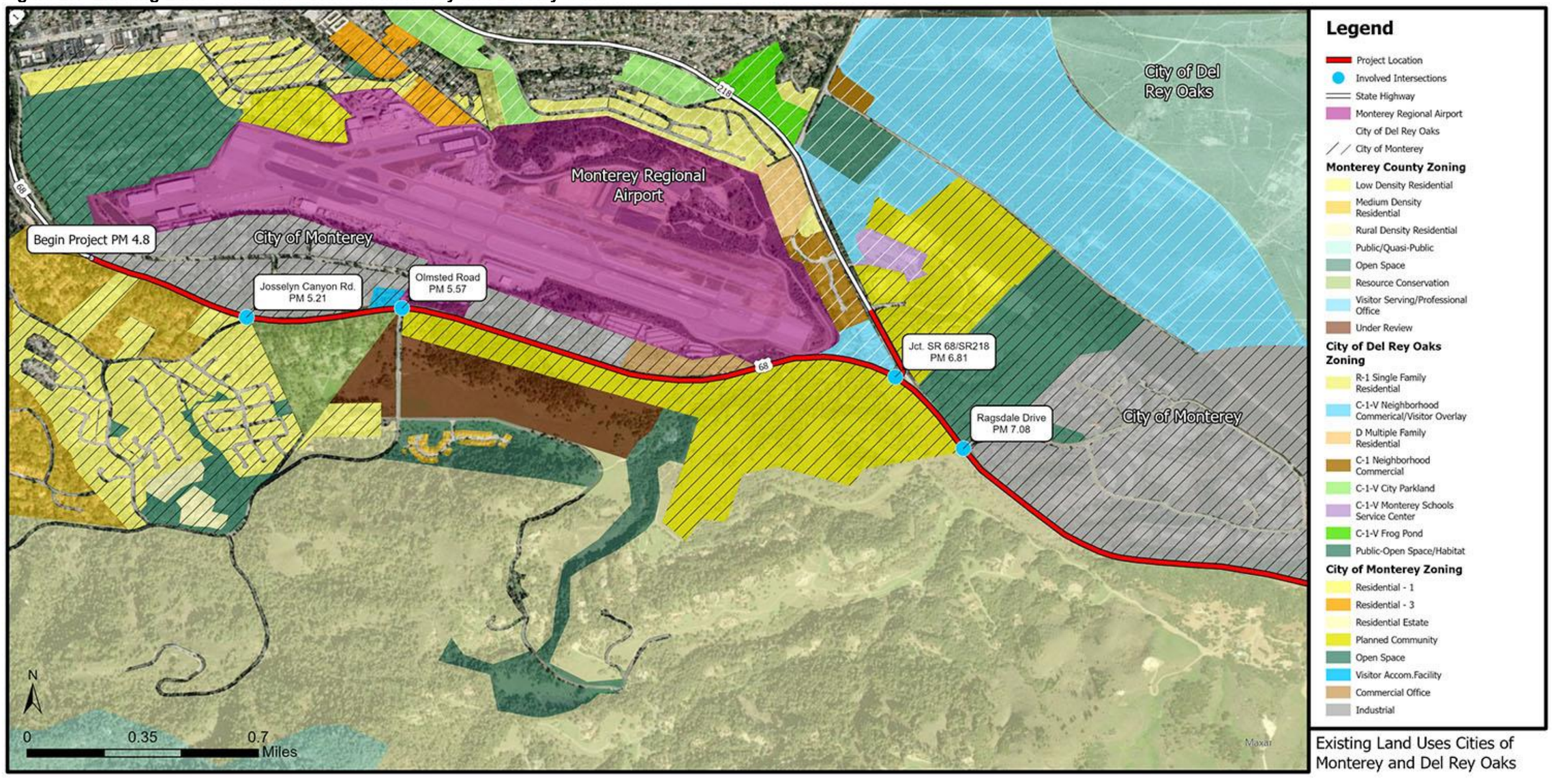
The Toro Planning Area is adjacent to State Route 68 to the south from Laureles Grade east to River Road. This area is largely composed of low-density residential and resource conservation land uses with some medium-density residential and a small amount of commercial land uses. Figure 2.2 shows land use designations in the Greater Monterey Peninsula Planning area, the Toro Planning Area, and the Fort Ord Master Plan Area.

Monterey Regional Airport District

Monterey Regional Airport is situated between the cities of Monterey and Del Rey Oaks and is accessed from State Route 68 at Olmsted Road, which becomes Fred Kane Drive at the airport terminal. Beginning in the 1920s, the present day airport site was used as a landing strip that was then deeded to the City of Monterey in the 1930s. In 1941, state legislation authorized the creation of the Monterey Peninsula Airport District. The airport district is a stand-alone public entity governed by a five-person elected Board of Directors. At the time of preparation of the October 2019 Airport Master Plan, the airport was in the process of completing a project to improve runway safety areas. Figure 2.1 shows the location of Monterey Regional Airport in relation to adjacent land uses.

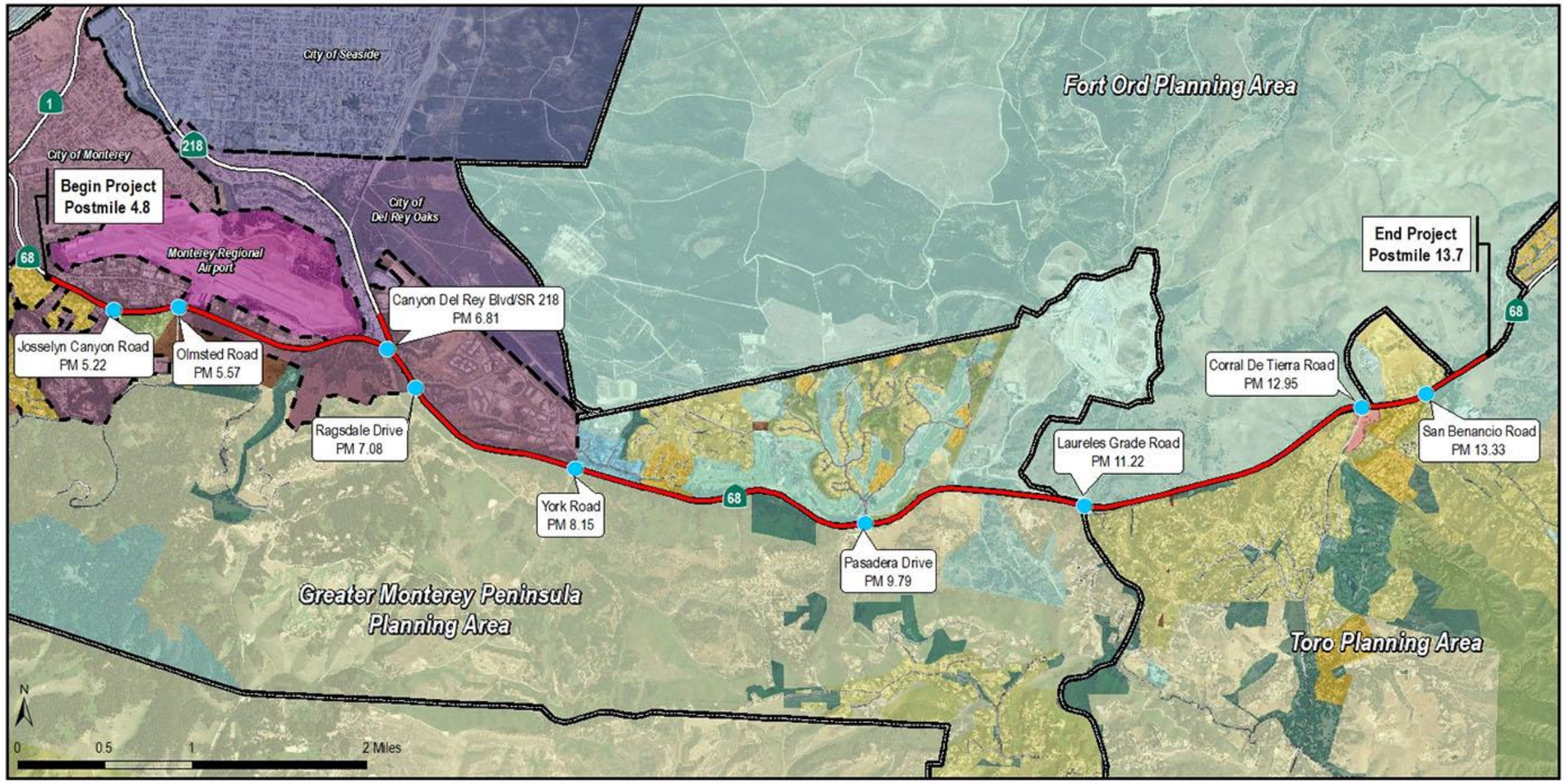
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Figure 2.1 Existing Land Uses in the Cities of Monterey and Del Rey Oaks



Existing Land Uses Cities of Monterey and Del Rey Oaks

Figure 2.2 Existing Land Uses in Monterey County Planning Areas



Existing Land Uses Monterey County

Future Land Uses

According to the Monterey County General Plan (2010) Land Use Element, future growth is encouraged within or near developed areas and employment centers, including incorporated cities and designated community areas where existing services are available, to preserve agricultural and open space lands. Top priority for development in unincorporated areas of the county is within specified community areas, rural centers, and affordable housing overlay districts, as defined by the General Plan (Policy LU-1.19). However, the County will work with the Association of Monterey Bay Area Governments (AMBAG) to direct most growth into cities with an emphasis on redevelopment and infill. The County encourages development of affordable housing projects in areas designated with an affordable housing overlay (LU-2.11). Two Affordable Housing Overlay Districts within and near the State Route 68 project area are: 1) 85 acres located in the Monterey Airport Vicinity south of State Route 68, off Olmsted Road (within project limits), and 2) 31 acres located at State Route 68 and Reservation Road (this site is approximately 3.7 miles east of the project limits).

According to the City of Monterey's General Plan (amended 2016), scenic gateways leading into the city should be protected and enhanced and where possible, human-made visual barriers should be removed or screened. A major consideration during review of development proposals within scenic corridors is their potential impact on views from scenic roadways. The city supports future growth in "mixed use neighborhoods" to allow for a mix of residential, commercial and jobs in close proximity. Within the Monterey city limits, much of the potential future development along the State Route 68 corridor is for industrial uses near Ryan Ranch industrial park or near the Monterey Regional Airport. The city recently annexed 125 acres from the former Fort Ord adjacent to Ryan Ranch. This area will allow for future industrial development (referred to as the FORA Business Park), but it may also be considered to allow for workforce housing in proximity to this major employment center. The city's Highway 68 Area Plan allows for some future development in the area across State Route 68 from the Monterey Regional Airport, commonly referred to as Tarpey Flats and Monterra. While a development application is not currently proposed for this area and is limited due to current water service restrictions, it is possible that portions of this area could be developed with a mix of residential and commercial uses in the future. Per the 2018 Monterey Airport Master Plan, a small portion of the Monterra Ranch property closest to the State Route 218 intersection and a small portion of Ryan Ranch are identified for acquisition for Monterey Airport's runway protection zone and would not be developed.

The City of Del Rey Oaks acquired 310 acres of former Fort Ord parcels zoned neighborhood commercial and intends to support development of the property. There is currently a proposal under review to develop the easterly

53 acres of the former Fort Ord property into a 210-pad recreational vehicle resort.

Tables 2.1.1.1 and 2.1.1.2 list the currently proposed projects and recently completed projects in the regional vicinity of the project area, including unincorporated portions of the County of Monterey, the cities of Monterey, Del Rey Oaks, Salinas, Sand City, Gonzalez, Seaside, and Marina, as well as Caltrans highway projects. Information regarding the project status and environmental document type prepared for the projects is provided. The projects listed are based on best available information at this time from the jurisdictions where the projects are located.

Projects that have been cancelled, rescinded, delayed or are otherwise not likely to be approved include the fully permitted Ferrini Ranch residential development in the Toro Area near Torero Road, Laguna Sea Office Park Project, New Merrill / Wayland Tierra Master Plan, Villas De Carmelo Project, FORA Business Park Project, Monterey Canning Company Building Project, Del Rincon Apartments Project, The Projects at Main Gate, The Collection and Monterey Bay Project, Shores at Marina Project, and the Filigera Apartments Project.

Environmental Consequences

Build Alternatives

Because both build alternatives propose changes to existing intersections along State Route 68 and no additional access routes are proposed as part of the intersection improvements, no areas within the project limits or cumulative study area identified for future development would be made directly more accessible with implementation of either project alternative. Therefore, changes to current planned development patterns in either the adjacent cities or county planning areas, or changes to existing or future land use and/or density, are not anticipated occur as a result of either project build alternative.

Table 2.1.1.1 Proposed Development in Regional Vicinity of Project Area

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
Corral De Tierra Retail Village (Omni Resources)	County of Monterey	State Route 68/Corral De Tierra Intersection, Salinas, CA 93908. Development of a retail center and Lot Line Adjustment to modify the lot line between two existing parcels (5.6 acres and 5.38 acres in area) to create Parcel A (1.12 acres) and Parcel B (9.86 acres). Development of 10 retail buildings, a one-story grocery store, and a two-story office building.	Final EIR complete Design
Harper Canyon Subdivision	County of Monterey	North of San Benancio Road, East of Highway 68, Salinas, CA 93908. This project proposes a subdivision of 344 acres into 17 residential lots ranging in size from 5.13 acres to 23.42 acres on 164 acres with one 180-acre remainder parcel.	Final EIR; project approval overturned; Supplemental EIR being prepared Planning
East Garrison Specific Plan	County of Monterey	East Garrison, Fort Ord off Reservation Road between Davis and Blanco Roads, Marina, CA 93933. Specific Plan that accommodates development of up to 1470 housing units, 75,000 square feet of commercial space, 100,000 square feet of studio space for community uses.	Final Subsequent EIR Construction
Monterey Peninsula Water Supply Project	County of Monterey	26530 Rancho San Carlos Road, Carmel-by-the-Sea CA 93923. The Combined Development Permit provides for the development of the Monterey Peninsula Water Supply Project includes a 9.6 million gallons per day desalination plant, terminal reservoir, and conveyance system.	Final EIR Certified Project Approved
Pebble Beach Company Project (Pebble Beach Company Development Proposal)	County of Monterey	Throughout Pebble Beach-The Lodge at Pebble Beach: 1700 17-Mile Drive -The Inn at Spanish Bay: 2700 17 Mile Dr -Spyglass Hill: 3206 Stevenson Dr -Pebble Beach Equestrian Center: 3300 Portola Rd. Renovation and expansion of visitor-serving uses, creation of 90 to 100 single-family residential lots, preservation of 635 acres as forested open space. New construction at The Lodge at Pebble Beach, The Inn at Spanish Bay, Spyglass Hill, and the Pebble Beach Equestrian Center.	Final EIR complete Design

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
Paraiso Hot Springs Resort	County of Monterey	Western Terminus of Pariso Springs Road, Seven miles west of Greenfield, California, Soledad CA 93960. Development of a resort that includes 103 hotel units, restaurants, meeting and conference rooms, associated support facilities.	Final EIR Complete Construction; delayed
River View at Las Palmas Assisted Living Senior Facility	County of Monterey	At the end of Woodridge Court, Las Palmas Ranch Subdivision, Salinas CA 93908. Construction and operation of a senior assisted living facility and associated site improvements. Development of 13 casitas that would provide 26 units, a two-story assisted living facility that measures 43,400 square feet with 40 units, and a 38,800 square-foot memory-care facility with 39 units.	Final Supplemental EIR complete Design assumed
Rancho San Juan Butterfly Village Project	County of Monterey	North of Salinas, CA. Construction of 1,147 homes that will replace the proposed golf course with 342 acres of public parks and open space.	Programmed Project approved; design assumed
Rancho Canada Village Subdivision	County of Monterey	Carmel Valley Drive and Carmel Valley Road, Carmel-by-the-Sea CA 93923. Increased unit, greater affordability project. Subdivision for a total of 145 housing units, 1.5-acre community park and 8.6 acres of common areas.	Second Final EIR July 2022 Design assumed
September Ranch Project	County of Monterey	Carmel Valley Road, Carmel-by-the-Sea, CA 93923. Subdivision of 891 acres into 94 market-rate residential lots, 15 lots or units for inclusionary housing; continuation of the existing equestrian facility open to the public on a 20.2-acre lot; and 783 acres of open space.	Final EIR completed Design assumed
Carmel Rio Road Subdivision	County of Monterey	26500 Val Verde Drive, Carmel-by-the-Sea, CA 93923. Subdivision of a 7.9-acre property to develop 31 units including 24 single family lots and one parcel with seven deed-restricted inclusionary units.	Final EIR complete Project appealed
Carmel Properties Company/ Foothill	County of Monterey	Rio Road and Carmel Center Place, Carmel-by-the-Sea, CA 93923.	Draft EIR complete

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
Properties (Rio Ranch Marketplace)		Commercial development of a 3.8-acre undeveloped infill site. The project would consist of a retail marketplace development, including four buildings and two farm sheds, totaling 42,310 sq. ft.	Programmed
Rio Vista Group LLC	County of Monterey	1, 53, 55 & 57 Susan Street, Royal Oaks, North County Area Plan. Construction of four 16,286 square foot apartment buildings totaling 60 units for agricultural workforce housing and 1 manager unit.	Mitigated Negative Declaration Awaiting permit approval
Miller Clinton F. Jr. & Karen V. Trust, Aka "Miller Trust Commercial Project"	County of Monterey	235 San Juan Road, Royal Oaks. Re-subdivide 6 existing parcels into 3 parcels and a remainder parcel consisting of Lot 1: 178,695 square foot commercial building, 20,000 square foot garden center and parking; Lot 2: well & tank lot with well and storage tank for irrigation and fire flow; Lot 3: San Juan Road right-of-way conveyance to the County of Monterey.	Final EIR Design assumed
Carmel Area Wastewater District – Carmel Meadows Lift Station and Sewer Replacement Project	County of Monterey	Sewer Line behind homes along Ribera Road between Calle La Cruz and Mariposa Court, Monterey, CA. A lift station and sewer replacement project consisting of a new below grade sewage lift station and accessary utility equipment, installation of four residential scale sewage grinder pumps, and rehabilitation/replacement of approximately 1,600 linear feet of sewer line.	Mitigated Negative Declaration Awaiting permit approval
Anthony Nicola Inc	County of Monterey	124 Gonda Street, Royal Oaks Demolition of an existing single family dwelling and septic system and construction of 36,200 square feet of housing in 2 three-story buildings to house up to 250 agricultural employees and provide three very low income level inclusionary housing units.	Mitigated Negative Declaration Design assumed
Davis Road Bridge Replacement and Road Widening Project	County of Monterey	Davis Road Bridge The County of Monterey proposes to replace the existing two-lane, low-level bridge the Salinas River with a longer bridge that meets current American Association of State Hwy and Transportation Officials requirements.	EIR Preconstruction

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
Gonzales River Road Bridge Rehabilitation Project	County of Monterey	0.2 mile east of River Road and 2 mi west of U.S. Route 10 Replacement of the superstructure of the existing two-lane Gonzales River Road Bridge over the Salinas River with a wider bridge deck that meets current American Association of State Highway and Transportation Officials (AASHTO) requirements.	Mitigated Negative Declaration Design
Toro Park Water System Improvement Project	County of Monterey	Monterey County Toro Regional Park, 501 Monterey-Salinas Highway, Salinas, CA 93908 Rehabilitation of an existing well; installation of approximately 1 mile of new irrigation pipeline; and upgrade of an existing booster station.	Mitigated Negative Declaration Awaiting approval
Carmel River Floodplain Restoration and Environmental Enhancement Project	County of Monterey	Downstream end of the Carmel River Watershed, approximately one-half a mile from the river mouth, immediately east and west of State Route 1 The Proposed Project consists of two interdependent Project components: Floodplain Restoration and Causeway. The U.S. Fish and Wildlife Service has granted partial funds for the Floodplain Restoration component and is the NEPA lead agency, with the California Department of Transportation acting as a cooperating agency on the review of the Causeway facilities.	Final EIR Permits received; Seeking funding
Rancho Canada Sewer Replacement Project	County of Monterey	Near Via Mallorca Road and Via Petra Road The Rancho Cañada Sewer Replacement Project would replace a Carmel Area Wastewater District (CAWD) sewer main. The purpose of the project is to upsize and regrade the existing pipeline to address capacity issues to handle current flows and address surcharging. The project would involve installation of a total of 4,240 linear feet of new gravity sewer mains	Mitigated Negative Declaration Design assumed
Carmel Valley Traffic Improvements Draft SEIR	County of Monterey	Monterey County The County of Monterey will prepare a Subsequent Environmental Impact Report (SEIR) for the Carmel Valley Master Plan. The proposed EIR will evaluate the traffic impacts of the Master Plan and refine the traffic analysis contained in the December	Subsequent EIR Design assumed

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
		1991 Carmel Valley Master Plan EIR. The EIR shall also integrate the environmental effects of the Master Plan circulation and land use elements, so the transportation impacts of growth can be presented in both descriptive and economic terms.	
Ocean View Plaza	City of Monterey	480 Cannery Row. Construct a combination of buildings to include 51 residential units, 87,362 square feet of commercial use 30,000 square feet of restaurant space, and 8,408 square feet of coastal/community use	Final EIR Design assumed
Strangio Apartments	City of Monterey	600 Irving Ave. Construction of five residential units.	No document available Planning permits approved; Water allocation pending
457 Wave Street	City of Monterey	457 Wave Street. Two three-story residential condominium buildings that total four dwelling units.	No document available Construction underway
Park Lane Addition	City of Monterey	200 Glenwood Circle. 40 independent living apartment units.	No document available Construction underway
2200 North Fremont Street Mixed Use Building	City of Monterey	2200 North Fremont Street. 40 residential units (including eight affordable units) and 6,000 square feet of commercial space.	No document available Building permit in review
300 Cannery Row	City of Monterey	300 Cannery Row. Conversion of existing building to 8 residential condominiums with 8,500 square feet of retail with offsite parking	No document available Planning permit approved; Awaiting Coastal Permit
449 Alvarado Street	City or Monterey	Demolish existing structure; Construct a four-story mixed-use building with 34 new apartment units and 2,376 square feet of retail space	EIR preparation in process

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
			Planning
704 Foam Street	City or Monterey	Demolish existing structure; Construct four new stand-alone residential units with detached garages	No document available Environmental review pending
2600 Garden Road	City of Monterey	Demolish existing structure; Construct five three-story multi-family buildings with 57 apartment units	No document available Permits under review
2101 North Fremont	City of Monterey	Demolish existing structures; Construct a three-story, 42 room hotel	EIR underway Planning
Laguna Grande Trail and Vegetation Maintenance Strategy	City of Monterey	Laguna Grande Regional Park The proposed project involves updates to the Laguna Grande Regional Park Trail Maintenance Strategy. The project will implement maintenance strategies to create a more accessible, safe, and vibrant park for the surrounding community and region.	MND Design assumed
North Fremont Street - Casanova to Canyon Del Rey Sidewalk Gap Closure	City of Monterey	North Fremont Street to Canyon Del Rey The purpose of the Project is to connect/complete the sidewalk and provide a safe pathway for pedestrian and cyclist connectivity along the north side of North Fremont Street with a Class I multi-use trail	MND Construction
Del Rey Oaks Monument RV Resort	City of Del Rey Oaks	Located on the eastern portion of Del Rey Oaks' parcels of former Fort Ord land. Closest to Laguna Seca. Develops 71 RV sites and a 7,670-sf lodge and a 2,025-sf operations building on 17 acres in the first development phase. Total build out is 210 RV sites and 13,595-sf of structures	Exempt from CEQA Design

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
Del Rey Oaks/Former Fort Ord Parcels	City of Del Rey Oaks	East of General Jim Moore Boulevard along South Boundary Road. Approximately 340-acre mixed-use project	No document available Looking for developer to move forward with project
Fort Ord Recreational Trail and Greenway	City of Del Rey Oaks	Del Rey Oaks, Marina, Monterey, Seaside. Multi-use trail includes approximately 28 miles of new paved trail, primarily on the inland side of State Route 1	Final EIR completed Design
Pavement Recycling Facility Project	City of Del Rey Oaks	South Boundary Road and General Jim Moore Boulevard. MPE is seeking to relocate their existing City of Marina-based concrete and base rock recycling facility to a parcel on the former Fort Ord in the City of Del Rey Oaks for a period of five (5) years.	Mitigated Negative Declaration Planning
American Tin Cannery Hotel and Commercial Project	City of Pacific Grove	Ocean View Boulevard and Eardley Avenue. The project would replace an existing 165,000 square feet of "factory outlet" uses with a new hotel and commercial uses. The hotel and commercial uses would provide 225 guest rooms in two primary guest wings with a restaurant and bars, meeting and gathering spaces, spa and fitness center and approximately 20,000 square feet of street retail uses.	Final EIR Design assumed
Hotel Durell Project	City of Pacific Grove	157 Grand Ave/Central Ave/Fountain Ave. The project would demolish an existing building and construct an approximately 76,200 square foot hotel. The hotel would include 116-rooms, 2,000 square foot meeting space and 3,815 square foot restaurant	Final EIR completed Permits Pending
East Laurel Pedestrian	City of Salinas	East Laurel Drive and Constitution Boulevard. New sidewalk, trail system & boardwalk for pedestrians & bicyclists, trail lighting, and street lighting on E. Laurel Dr to Constitution Blvd to N. Sanborn Rd; and on	Mitigated Negative Declaration completed

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
Improvements Project		Constitution Blvd to -375 feet south of Manchester Circle. Rehabilitation of a trail from the Monterey County East Laurel Facility Yards to the Natividad Creek Detention Basin.	Construction
Sanborn Road/U.S. Highway 101 Interchange and Elvee Drive Improvements	City of Salinas	Intersections of Sanborn Road /Elvee Drive and the Sanborn Road/Fairview Avenue and US 101 Northbound on-ramp. Construction of an approximately 890-foot extension of existing Elvee Drive that requires construction of a 49-foot-long bridge. Other improvements include signalization, construction of a U.S. Highway 101 ramp meter, modification of existing travel lane configuration, reconstruction of approximately 1,400 feet of Elvee Drive.	Mitigated Negative Declaration Construction
Gonzales Wastewater Treatment Plant Expansion	City of Gonzales	400 Short Road, Gonzales, CA. Construction of another pond and adding larger pumps to the facility	EIR Planning
Pending Expansion of City Boundary	City of Gonzales	Fanoe Ranch on East Side of HWY 101. Between Fanoe Road and Iverson Road. Development of 1700 housing units, an elementary school, shops, and open space on 400 acres	No Document Planning
Monterey Bay Shores coastal eco-resort	Sand City	West of Hwy 1. The project includes 184 hotel rooms, 184 condominium units and visitor facilities, including restaurants, spa, swimming pools, and a conference center on 39 acres.	FEIR approved Construction
South of Tioga development	Sand City	California and Tioga Avenues. Approximate 10-acre site intended for 216-room hotel and 356-unit residential development.	FEIR approved Construction
West End Storm Water Improvement	Sand City	Catalina Street and Contra Costa Street.	Exemption

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
Project - Catalina Street		Sand City is currently working with Proposition 1 grants to prepare plans and implement stormwater improvements on both Catalina Street and Contra Costa Street. Contra Costa Street is a primary entrance street into the West End District of the City	Under construction
Sand City West End Parking Plan	Sand City	Sand City West End District Analyzes parking supply and demand; identifies potential parking opportunities in public and private locations; proposes potential parking layouts; outlines financing, management programs, and strategies to create more efficient parking; suggests revisions to existing parking regulations to address common issues; and presents an action plan for implementation.	Mitigated Negative Declaration Planning
Sand City Sustainable Transportation Plan	Sand City	Sand City The Sustainable Transportation Plan proposes conceptual improvements within and adjacent to Sand City to improve circulation for pedestrians, bicyclists, and the mobility-challenged, and improve access to transit. The Sustainable Transportation Plan will guide future investments in non-motorized transportation facilities. No final improvement designs have been prepared at this time; the improvements depicted in the Sustainable Transportation Plan are conceptual.	Mitigated Negative Declaration Planning
Campus Town Specific Plan (Seaside Campus Town in Fort Ord)	City of Seaside	Between 1st and 7th Ave., Lightfighter Drive, Colonel Durham and Gigling Rd. 1485 housing units; 250 hotel rooms; 75 youth hostel beds; 150,000 square feet of retail space, dining, and entertainment uses; and 50,000 square feet of office, flex, makerspace, and light industrial uses; as well as park/recreational areas.	Final EIR completed Design assumed
Seaside Senior Living Project	City of Seaside	550 Monterey Road Seaside, CA. Two buildings that will house an Assisted Living facility, a Memory Care facility, and an Assisted Living Co-Housing facility on the 5.47-acre project site Includes 17,958 square feet of open space, 61,856 square feet of landscaping, and 92 parking spaces.	Mitigated Negative Declaration Completed Construction

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
The Ascent Project at Terrace and Broadway	City of Seaside	Corner of Broadway Avenue and Terrace Street. Ten building workforce rental housing project that consists of 105 units of mixed-use one-bedroom, two-bedroom, three-bedroom units and townhouses. Includes 14 affordable units and 4,000 square feet of retail space.	EIR Construction
Parker Flats Apartments Project	City of Seaside	Located at 4386 – 4387 Parker Flats Cut Off Rd. Conversion of an existing abandoned military nursing barracks on the former Fort Ord into residential apartments with 42 dwelling units, including two one-bedroom units, 29 two-bedroom units, and 11 three-bedroom units.	Exemption Pre-planning
The Seaside Resort (Seaside Golf Course Resort)	City of Seaside	General Jim Moore Blvd./McClure Way. Hotel project to develop 275 rooms, 175 timeshare units, and 125 custom residential units	EIR Construction
Freeman Stadium Facilities Renovation Project at CSU Monterey Bay	City of Seaside	2nd Avenue, Divarty Street, former Fort Ord The Monterey Bay Football Club is proposing to renovate, utilize, and maintain the existing Freeman Stadium and Field House at CSUMB as a shared campus-United Soccer League facility.	Mitigated Negative Declaration Pre-construction
New Fort Ord Courthouse	City of Seaside	South side of Divarty Street, between 1st and 2nd Avenues, Seaside. New 7 courtroom courthouse of about 83,000 square feet. Secured parking for judicial officers and about 280 surface parking spaces for jurors and the public. Solar power generation capability. Acquisition of 3.4 acres would be required.	EIR Planning

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
Veteran's Transition Center Supportive Housing (Lightfighter Village)	City of Marina	229-239 Hayes Circle Marina, CA. Demolition of the existing four on-site vacant duplex structures and construction of a 54,480 sf, three-story, 71-unit apartment complex organized into a main building and a family wing, connected via a covered walkway. Located on 2.4 acres, the project would have a residential density of 30 units per acre.	Mitigated Negative Declaration Under construction
Seacrest Apartments	City of Marina	3108 Seacrest Ave, Marina, CA. Construction of 3-story multi-family 10 unit apartment building.	Exemption Permits pending
Marina Downtown Vitalization Specific Plan	City of Marina	Expands the space for multiple use and permits 2,400 new units	Mitigated Negative Declaration May Design assumed
Marina Station Specific Plan	City of Marina	Del Monte Boulevard/ Marina Greens Drive, Marina, CA. Mixed-use development on 325 acres.	Final EIR Design assumed
05-1J880	Caltrans	On State Route 68 from post miles 0.2 to 15.7. Drainage Improvements including culvert replacements at 25 locations, replacement lighting near post mile 4.14, and installation of two traffic count stations.	Mitigated Negative Declaration Design
05-1N160	Caltrans	0.28 miles south of the South Marina Overhead to the State Route 1/156 Junction. Preserve 22.183 LM of Class 2 pavement, pave gore areas, replace drainage, replace TMS elements and upgrade guardrail to MASH standards.	Mitigated Negative Declaration Planning

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
05-1P63.0	Caltrans	On State route 68 at post mile 3.5, and 15.9. Replace culvert. Repair sinkhole. Repair soundwall. Restore pavement, traffic control.	Exemption Construction
05-1R300	Caltrans	On State Route 68 from post mile 10.8 to 22.02. Preserve 35.862 LM of Class II Pavement, Drainage Restoration, upgrade curb ramps, replace sign panels, upgrade guard rail.	No document available Scoping/Planning
05-1N850	Caltrans	On State Route 1 from San Luis Ave intersection to the Sloat Ave Undercrossing. Pavement preservation, sign rehab, guardrail, and median barrier upgrades.	No document available Planning
05-1J460	Caltrans	From 0.5 miles East of SFB Morse Dr. to Scenic Drive Overcrossing and from 0.2 miles East of Skyline Forest Drive to 0.1 miles West of the Community hospital entrance. Superelevation correction, shoulder widening and rumble strips.	CE/CE Construction
05-1H650	Caltrans	8 miles north-west from Salinas, 10 miles south-west from Watsonville Improve multimodal travel along State Route 183 through the community of Castroville in Monterey County from post mile R8.8 to 9.97.	Mitigated Negative Declaration Design
05-1H691	Caltrans	North of the Crazy Horse Canyon Road/Echo Valley Road overcrossing to the northernmost intersection with Dunbarton Rd. Improvement of 15 drainage system locations along US Route 101.	Mitigated Negative Declaration Design

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
05-31601	Caltrans	Intersection of Highway 156 and Castroville Blvd. Construction of three roundabouts as Phase I of the State Route 156 Interchange project to replace the existing Castroville Boulevard signalized intersection. These roundabouts will connect State Route 156 with Castroville Boulevard. The project will also provide a new Class 1 mixed-use bicycle and pedestrian path, driveways, and on and off ramps associated with the three new roundabout structures.	EIR Design
MST SURF! Busway and Bus Rapid Transit Project	Transportation Agency for Monterey County/ Caltrans Oversight	MST's Marina Transit Exchange at Reservation Road and De Forest Road, and Contra Costa Street and Orange Avenue in Sand City Implement of bus rapid transit between the cities of Monterey, Marina, Sand City, Seaside, and Salinas in Monterey County, California including a six-mile dedicated busway along a former rail right-of-way parallel to California Highway 1, and bicycle and pedestrian improvements.	Mitigated Negative Declaration Design

Table 2.1.1.2 Built-Out Development

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
Pebble Beach Company Inclusionary Housing	County of Monterey	Near the intersection of New Congress Road and SFB Morse Drive. Address: 31 Congress Court, Pebble Beach, CA 93953. The Combined Development Permit allows for construction of 24 affordable housing units, and a manager's building.	Final EIR complete Built-out
Spreckels Industrial Park LLC (Tanimura and Antle Agricultural Employee Housing Project)	County of Monterey	121 Spreckels Blvd, Salinas CA 93908. 100-unit agricultural employee housing complex that includes two-bedroom apartment units and related facilities. The project site encompasses approximately 4.5 acres.	Mitigated Negative Declaration Built-out
Monterey Motorsports Vehicle Storage	City of Monterey	2969 Monterey-Salinas Highway. 88-unit commercial condominium vehicle storage facility. Construction of four vehicle storage buildings.	Mitigated Negative Declaration Built Out
Del Monte Beach Re-Subdivision	City Monterey	Cross Streets: Beach Way, Roberts Avenue, Spray Avenue. Merge and re-subdivide 48 existing lots into a maximum of 12 single family residential lots and two open space lots; merge and re-subdivide 12 existing lots into a maximum of eight 8 residential townhouse lots, common area and Open Space.	Final EIR Built out
595 Munras	City of Monterey	595 Munras Ave. 5,600 square feet of commercial space and 10 residential units (including two affordable units).	Mitigated Negative Declaration Built out

Project	Jurisdiction	Address and Proposed Use	Environmental Document and Project Status
Montage Health Medical Building	City of Monterey	2 Upper Ragsdale Drive, Bldg. C. 21,500 square-foot medical office building over enclosed 40-stall parking garage. No Environmental Documentation.	No document available Built out
Catalina Loft Mixed-Use Development	Sand City	400 block fronting Catalina St. between Ortiz Ave. and Elder Ave. A mixed use (residential and commercial) project will include 8 residential units and 7 commercial units on a 15,000 square foot property	Construction Built out
Mosaic Apartments	City of Marina	225 Cypress Ave, Marina, CA. Construction of 4-story multi-family 12-unit apartment building.	Exemption Built out
Schulman Townhomes	City of Marina	3110 Seacrest Ave. Construction of 7 townhomes.	Exemption Built out
Sea Haven	City of Marina	California Avenue, Imjin Parkway, Reservation Road in Marina, CA. Redeveloping former Ford Ord Army Base, the Sea Haven project removed 828 abandoned housing units and will replace it with 1,050 new townhouse, cottage, and single-family residential housing units. The community will include 35 acres of parks, greenbelts, and open space.	Final EIR Built out
05-44800	Transportation Agency for Monterey County/ Caltrans	Just west of Community Hospital of the Monterey Peninsula entrance to State Route 1/68. A Transportation Agency for Monterey County widening & intersection improvements project. Caltrans oversight.	EIR Built out

No-Build Alternative

Under the No-Build Alternative, the existing conditions would remain and no impacts to existing or future land uses would occur. Traffic delay and safety issues at the signalized intersections along State Route 68 would not be alleviated, and wildlife connectivity would not be improved.

Avoidance, Minimization, and/or Mitigation Measures

No measures would be required.

2.1.2 Consistency with State, Regional and Local Plans and Programs

Affected Environment

The topic of future improvements to State Route 68 has long been included in various planning documents for the region. Caltrans' State Route 68 Transportation Concept Report (2013) documents heavy congestion on the route between post mile 5.2 and post mile 13.1 during peak hours. In 2017, the Transportation Agency for Monterey County prepared the State Route 68 Scenic Highway Plan to identify and evaluate potential mid-term solutions to improve operations at intersections along State Route 68. This document was supported by initiation of the State Route 68 Corridor Improvements Project.

A policy consistency analysis was completed by reviewing the applicable policies from the various agencies with jurisdiction within the region. The table in Appendix D includes a list of applicable State, regional, and local plans, and programs, the goals and policies of each plan, and whether the proposed Scenic Route 68 Corridor Improvements Project is consistent with each. Applicable State, regional, and local plans and programs are summarized according to the California Environmental Quality Act standards; any inconsistencies are discussed in the Environmental Consequences section below.

Monterey County General Plan (2010)

The Monterey County General Plan is the main planning document for the county. The 2010 General Plan contains eight elements (land use, circulation, conservation and open space, safety, public services, agriculture, economic development, and housing) and includes general plans and policies for the entire county. In addition, specific planning area/master plans have been developed and offer more defined policies and goals for each specific area and element. The 2010 General Plan and associated area/master plans represent the county's vision for preserving and improving quality of life and county resources for its residents and visitors. Different portions of State Route 68 are located within the Toro Planning Area, the Greater Monterey Peninsula Planning Area, and the Fort Ord Master Plan.

While the Land Use Element of the County's General Plan does not specifically discuss State Route 68, it does state that growth shall occur in

those areas with adequate transportation facilities. The Land Use Element also discusses lighting, states that all exterior lighting shall be unobtrusive, and requires a reduction in long-range visibility and reducing off-site glare.

The Circulation Element provides policy direction for the transportation systems that serve the unincorporated lands of Monterey County and describes how the County intends to serve transportation needs for the next 20 years as the County's population grows. The specific goals and policies that would apply to State Route 68 are listed in the table in Appendix D and generally include the following:

- The acceptable level of service for county roads and intersections is D.
- Goals to protect air quality, reduce noise, reduce consumption of fossil fuels, and minimize acquisition of land for roadway construction.
- Transportation alternatives such as bicycles, carpools, public transit shall be encouraged and accommodated within and outside the public ROW
- All new road and interior circulation systems shall be designed, developed, and maintained according to adopted County standards or allowed through specific agreements and plans
- Direction regarding cooperation with the regional transportation agencies and Caltrans to maintain roadways, intersections bikeways, and pedestrian facilities.
- Guidelines for Scenic Highway Corridors that promote undergrounding utilities, architecture and landscape controls, and use of native plants for landscaping.
- Special scenic treatment and design of officially designated State Scenic Highways applying to highway directional signs, guardrails and fences, lighting and illumination, provision of scenic outlooks, road lanes, frontage roads, vegetation, grading, and highway structures.
- Construction or expansion of roadways within major transportation corridors shall consider improved bike routes.

The proposed project would support most goals and policies outlined in the Circulation Element of the General Plan, with the exception of certain goals surrounding the expansion of public transit, which is not part of the proposed project (see Appendix D).

The Conservation and Open Space Element of the General Plan does not replace existing State and federal laws and regulations, rather it ensures cooperation in protecting scenic resources, mineral resources, soils, marine and river resources, biological resources, archaeological resources, paleontological resources, tribal cultural sites (including sacred places and burial sites), energy resources, and air quality. The specific goals outlined in the Conservation and Open Space Element are congruent with the California

Environmental Quality Act requirements that are evaluated in this Draft Environmental Impact Report/Environmental Assessment. As required by the General Plan, Caltrans will coordinate and comply with the requirements of other public agencies, such as the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, State Historic Preservation Officer, Regional Air and Water Quality Control Boards, and any other appropriate regulating agencies as determined by Caltrans.

Apart from Policy OS-1.2, the proposed project is consistent with the goals and policies of the Conservation and Open Space Element of Monterey County's General Plan, with the proposed Avoidance, Minimization, and Mitigation Measures incorporated. Policy OS-1.2 of the Conservation Element of the Monterey County General Plan is discussed in the Environmental Consequences section below.

Monterey County – Greater Monterey Peninsula Area Plan (2010)

The Greater Monterey Peninsula Area Plan is to be used in conjunction with Monterey County's 2010 General Plan and offers more specific guidelines relevant to the portion of State Route 68 that is within the Greater Monterey Peninsula planning area.

The Land Use Element of the Greater Monterey Peninsula Area Plan designates State Route 68 as a Scenic Highway Corridor, and also designates locations within the planning area, north and south of State Route 68, as visually "sensitive" and/or "highly sensitive" to regulate development within the scenic corridor. Most of the proposed intersection improvements are within areas designated visually "sensitive" or "highly sensitive" areas. The Conservation and Open Space Element provides requirements to reduce potential impacts within visually sensitive areas and includes the following directives that apply to State Route 68:

- Development of roads shall be sited in a manner that minimizes visible effects to the greatest extent possible
- New direct access to State Route 68 from single-family residences is prohibited
- Landscape screening and other techniques shall be utilized to achieve maximum protection of the visual resource, using locally native plant and tree species consistent with surrounding native vegetation
- New development shall maintain the visual character of the area utilizing appropriate siting, design, materials, and landscaping
- Any earth movement shall be mitigated in such a manner that permanent scarring is not created
- Tree removal shall be minimized; if removed, replacement shall occur

- Architectural review of projects is required to ensure visual compatibility with surrounding area
- Removal of native oak, Monterey pine, and redwood trees minimized
- 100-foot setback from all wetlands shall apply
- Critical habitat areas preserved as open space
- Measures to protect wetlands shall be employed

Avoidance, minimization, and/or mitigation measures will be implemented for visual/aesthetics, biological resources, and natural communities as outlined in the corresponding sections of this document to ensure consistency with these requirements. Where feasible, a 100-foot setback will be implemented around wetlands. Where alterations in wetland setbacks are necessary, a wetland restoration and enhancement plan will be developed to address temporary and permanent impacts to wetlands. Therefore, both build alternatives of the proposed project would include measures that will ensure consistency with the protections afforded by the Greater Monterey Peninsula Area Plan.

The Circulation Element states that improvement of State Route 68 intersections, construction of alternate passing lanes, public transit roadway improvements, and improved bicycle safety measures shall be given priority for funding. The proposed State Route 68 Corridor Improvements Project meets the goals of this plan by improving State Route 68 intersections and improving efficiency throughout the corridor. Both project build alternatives include some proposed pedestrian and bike lane improvements at the intersection locations.

Monterey County – Toro Area Plan (2010)

The Toro Area Plan is part of the Monterey County 2010 General Plan and encompasses the area on the south side of State Route 68 to the east of Laureles Grade. A goal of the plan's Circulation Element is to alleviate traffic congestion while maintaining the scenic beauty of State Route 68. The Toro Area Plan also has goals to coordinate with Caltrans and the Transportation Agency for Monterey County to construct a four-lane facility between the Toro interchange and State Route 218, and to construct bus stops, pull-outs, and shelters where needed. The plan includes recommendations to pursue State Route 68 intersection improvements, alternate passing lane construction, public transit roadway improvements, and improved bicycle safety measures as soon as funding becomes available. The plan also prohibits creation of new direct access points from single-family residences onto State Route 68.

The Toro Area Plan includes goals for conservation and open space, with stipulations for areas designated as visually sensitive so that development in those areas will be conducted in a manner that will enhance the scenic value of the area. Land use, architectural, and landscaping controls shall be applied to preserve Toro's visually sensitive areas, specifically at the Laureles Grade

scenic vista. Undergrounding of utilities is encouraged in these areas, and lighting should preserve the quality of darkness and shall be unobtrusive and consistent in intensity throughout the Toro area.

The proposed project is consistent with conservation and open space goals of the Toro Area Plan because: 1) utilities will be undergrounded at the intersections; 2) bus stops, pull-outs, and shelter facilities will be improved; 3) new lighting will be designed to be focused downward to maintain the dark sky appearance, while also providing enough light to enhance safety; and 4) landscaping and visual treatments will be designed to maintain the natural character of the scenic highway.

The proposed project alternatives do not meet the goal of creating a four-lane facility throughout the State Route 68 corridor, as discussed below under Environmental Consequences. However, both alternatives are consistent with all other goals and policies of the Toro Area Plan, as shown in Appendix D.

Monterey County – Fort Ord Master Plan (2010)

The Fort Ord Master Plan incorporates objectives, programs, and policies to be consistent with the Fort Ord Reuse Plan and is also a part of the Greater Monterey Peninsula Area Plan and the Monterey County General Plan.

The Circulation Element of the Fort Ord Master Plan includes objectives to manage congestion and de-emphasize the need for vehicle travel to and within the former Fort Ord, and to develop transportation systems that support the planned use of development patterns. State Route 68 provides access to Fort Ord recreational areas at the Badger Hills Trailhead, which is at the southern portion of the Fort Ord National Monument. The proposed intersection improvements will help to achieve the plan's objective of managing congestion, thereby improving safe access to Fort Ord from State Route 68.

Of the nine proposed intersection improvement locations, only two of the project locations are directly adjacent to Fort Ord property: the State Route 68/Corral de Tierra Road intersection and the State Route 68/San Benancio Road intersection. At the Corral de Tierra Road intersection, some acquisition from the Fort Ord National Monument is anticipated for both Alternatives 1 and 2. At the San Benancio Road intersection, some acquisition from the Fort Ord National Monument is anticipated for Alternative 2 only.

Policies and objectives outlined in the Conservation Element of the Fort Ord Master Plan generally outline policies for erosion control, preserving wildlife habitat, special-status species protection, measures for stormwater pollution prevention, preservation of oak woodlands, protection of wetlands and riparian areas, and identification and protection of cultural resources.

Specifically, the Conservation Element states that the County shall coordinate with Caltrans in the design of State Route 68 to assess the feasibility of avoiding the riparian forest within the alignment. The Recreation and Open Space Element specifies that if riparian forest removal is unavoidable, Caltrans shall compensate at a 2-to-1 ratio of newly created habitat to lost habitat or at a 4-to-1 acreage ratio of enhanced habitat to lost habitat; restoration could occur in other areas of El Toro Creek. Of the two project locations adjacent to Fort Ord, both locations have the potential of impacting riparian areas. If riparian impacts occur, impacts would be offset by onsite restoration at a ratio of at least 2-to-1 to ensure consistency with this policy.

The Recreation and Open Space Element includes policies addressing street lighting, stating that lighting of outdoor areas shall be minimized and carefully controlled to maintain habitat quality for wildlife in undeveloped natural lands. In addition, street lighting shall be as unobtrusive as practicable and shall be consistent in intensity throughout development areas adjacent to undeveloped natural lands. With the proposed avoidance, minimization and/or mitigation measures identified in this document, both build alternatives would be designed to ensure consistency with these policies.

Fort Ord Reuse Plan (1997)

The Fort Ord Reuse Plan was developed by the Fort Ord Reuse Authority. The plan was adopted in 1997 for the purposes of designating land uses, objectives, programs, and policies because of the base closure of Fort Ord. Most of the applicable policies and programs contained in the Fort Ord Reuse Plan were also adopted into Monterey County's 2010 Fort Ord Master Plan. The Reuse Plan also included a Habitat Management Plan for the protection and conservation of natural resources.

The Fort Ord Reuse Plan emphasized the importance of State Route 68 as a major transportation route for the community and a major travel corridor between the Monterey Peninsula and Salinas. The Fort Ord Reuse Plan Circulation Concept noted that State Route 68 experienced congestion and that Caltrans was considering improvements to the existing highway or a potential new alignment north of the existing alignment referred to as the Fort Ord bypass. The 2018 Monterey County Regional Transportation Plan notes that due to cost and environmental constraints, the Fort Ord bypass alignment is not being pursued.

City of Monterey General Plan (Amended 2016)

Five of the nine proposed State Route 68 intersection improvement locations in the project are within the City of Monterey and subject to the City of Monterey General Plan. These five intersections are Josselyn Canyon Road, Olmsted Road, State Route 218 (Canyon Del Rey Boulevard), Ragsdale Drive, and York Road. The City of Monterey General Plan notes that State Route 68 is a congested highway and currently exceeds capacity. The City of

Monterey has a policy to coordinate with Caltrans and the Transportation Agency for Monterey County to identify improvements and funding for improvements to State Route 68 to meet the City's level of service standards.

The overarching goal of the City's Circulation Element is to create a multimodal-oriented city where alternative forms of transportation are encouraged. Programs include providing Americans with Disabilities Act (ADA) access, bikeways, paths, and pedestrian infrastructure. The City of Monterey is proposing bicycle lanes for portions of Josselyn Canyon Road, Olmsted Road, and York Road, including where these roads intersect with State Route 68. The proposed intersection improvements for both build alternatives provide bicycle access through the intersections and would be consistent with these policies.

The City's Urban Design Element emphasizes the importance of preserving the visual character of the scenic highway and states that the following measures should be implemented along State Route 68:

- Protect and enhance scenic entrances
- Scenic corridors should be preserved and enhanced to the maximum extent possible in the design and construction of scenic entrances
- Highway construction grading should not take place outside the roadway right-of-way
- Roadway lighting and signing should be minimized, of low-profile design, and designed to enhance the scenic character of the corridor
- Reverse the visual degradation of scenic forests
- Avoid further illumination along Ryan Ranch and Garden Road Business Park area
- Screen buildings close to the highway with native vegetation, such as coast live oak
- Maintain the scenic corridor
- Preserve the visual character of wooded canyons, and protect existing cypress, Monterey pine, and coast live oak trees in urban and historic contexts, replant when removal is necessary, and retain the health of the stands

The City of Monterey General Plan states that efforts to widen State Route 68 to four lanes or a new bypass alignment through Fort Ord are planned. As previously stated, the 2018 Monterey County Regional Transportation Plan notes that due to cost and environmental constraints, the Fort Ord bypass has not been pursued. The proposed State Route 68 Corridor Improvements Project does not meet the goal of constructing a new bypass alignment nor does it propose the full widening of State Route 68 to a four-lane highway. The four-lane highway concept appears to be carried over from earlier

planning documents, and more recent plans from the Transportation Agency for Monterey County, such as the State Route 68 Scenic Highway Plan and the Monterey County Regional Transportation Plan, state that these alternatives are no longer being considered due to financial and environmental constraints. It is important to note, however, that the proposed Corridor Improvements Project would also not preclude these alternatives in the future. [City of Monterey Highway 68 Area Plan (Amended 2016)]

City of Del Rey Oaks General Plan (1997)

The Circulation Element of the City of Del Rey Oaks General Plan states that the City will coordinate and assist the Transportation Authority of Monterey County and Association of Monterey Bay Area Governments in providing funding for an efficient regional transportation network. The City further states that it has shared jurisdiction with Caltrans for the State Route 68/State Route 218 (Canyon Del Rey Boulevard) intersection in monitoring whether installation of signals or addition of turn lanes is warranted. The plan states that at this intersection, commercially zoned areas shall include standards for: visual appearances, landscaping, screening of storage and trash, building bulk, height, exterior treatment, in relationship to State Route 68 and Canyon Del Rey Boulevard. The plan also states that this intersection is part of the adopted Monterey County Congestion Management Program network, and the level of service standard for this intersection is level of service E. The plan makes particular reference to the Stonehouse Historic Building at the Canyon Del Rey intersection and notes that this historic resource should be protected and that any improvements to operations or alignments of State Route 68 should not impact this historic resource. Goals and Policies of the Open Space/Conservation Element state that the natural, cultural, visual, and historic resources, and wildlife habitat should be protected.

State Route 68 Scenic Highway Plan

The goal of the State Route 68 Scenic Highway Plan is to identify a preferred State Route 68 corridor concept and associated infrastructure improvements that would best meet both the local and regional goals, while providing the highest return on investment of limited regional transportation funding for the next 20 years. Analyses were conducted on the status of the current operational conditions of State Route 68, and it was determined that State Route 68 suffers from unreliable travel times, congestion, collisions, extensive wildlife movement across the corridor, and that there is strong public support for improving State Route 68 while preserving the scenic nature of the corridor. An extensive public outreach effort for this plan included public workshops, community and stakeholder meetings, online engagement, and media. The State Route 68 Scenic Highway Plan considered three concepts for improving conditions along State Route 68. The plan determined that the preferred concept was to convert 11 intersections to roundabouts, construct wildlife connectivity improvements at six locations, install additional signs and lighting elements, and restrict left turns out of side streets and driveways.

It is important to note that the State Route 68 Scenic Highway Plan specifically does not recommend constructing the previously planned Fort Ord bypass. This is because the establishment of the Fort Ord National Monument in 2012 greatly reduces the feasibility of constructing a new State Route 68 alignment through that area. In addition, the State Route 68 Scenic Highway Plan mentions that some planning documents reference the future widening of State Route 68 to a four-lane facility from the City of Monterey to the City of Salinas. However, this concept is not considered to be a viable option in various other planning documents, such as the Association of Monterey Bay Area Governments' Metropolitan Transportation Plan and the Transportation Agency for Monterey County's Regional Transportation Plan, which states that the full widening of State Route 68 is financially constrained. As a result, the full widening concept was not advanced further by the plan. However, the proposed State Route 68 Corridor Improvements Project would not preclude a full widening of State Route 68 in the future.

Monterey Regional Airport Master Plan (2018)

The Monterey Regional Airport Master Plan provides short-term, intermediate, and long-term development goals of the airport over a 20-year planning horizon. The plan includes a section titled "Access to the Airport," noting that terminal access is located on Olmsted Road, which is accessed from State Route 68. The Monterey Regional Airport Master Plan supports the need for improvements along the State Route 68 corridor and specifically identifies concern for improved operations at the State Route 68/Olmsted Road intersection. The Monterey Regional Airport Master Plan references the 2014 Monterey County Regional Transportation Plan and states that the proposed improvements to the State Route 68 corridor will improve access to the airport.

Monterey County Regional Transportation Plan (2018)

The Monterey County Regional Transportation Plan (RTP) is prepared every four years and provides a basis for allocation of funding to transportation projects. The plan is prepared by the Transportation Agency for Monterey County in coordination with the Metropolitan Transportation Plan prepared by the Association of Monterey Bay Area Governments (AMBAG), which is the federal Metropolitan Planning Organization for the three-county Monterey Bay region. Both the Regional Transportation Plan and the Metropolitan Transportation Plan outline the agencies' priorities for meeting transportation needs within the constraints of the anticipated funding forecast of the 22-year planning horizon of the document.

The 2018 Regional Transportation Plan discusses consideration and implementation of roundabouts at intersections as an important strategy for achieving the goals of the 2018 Monterey County Regional Transportation Plan for the following reasons: 1) roundabouts allow for free movement of vehicles and reduce vehicle emissions; 2) roundabout intersections are

proven to be safer; and 3) roundabouts incorporate pedestrian- and bicycle-friendly accommodations that make these types of intersections safer and easier to navigate for all users. An intersection control evaluation was recommended for State Route 68 to determine whether roundabouts are a cost-effective strategy.

Both the 2014 and 2018 Regional Transportation Plans include a specific discussion on the Salinas-Monterey corridor, which includes two commute routes from Salinas to the Monterey Peninsula, one being State Route 68. The 2018 Regional Transportation Plan discussion identifies State Route 68 as a regionally significant roadway and includes two separate projects, which include: 1) widen existing roadway to four lanes between existing four-lane segment at Toro Park and Corral de Tierra Road; and 2) construct safety, congestion relief, and wildlife connectivity projects along State Route 68 from Blanco Road to State Route 1. The 2018 Regional Transportation Plan also notes that due to funding and environmental constraints, a Fort Ord bypass or full corridor widening is not currently being considered.

The project is consistent with the 2018 Monterey County Regional Transportation Plan, which includes the State Route 68 Corridor Improvements Project in Appendix C, the 2018 Monterey County Regional Transportation Plan Projects List, as project number MON-CTXX-CT.

Monterey Bay 2040: Metropolitan Transportation Plan/Sustainable Communities Strategy (AMBAG, 2018)

The Monterey Bay 2040: Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) plans how the Monterey Bay area (including Monterey, Santa Cruz, and San Benito counties) will meet its transportation needs for the 25-year period from 2015 to 2040. The Metropolitan Transportation Plan/Sustainable Communities Strategy defines goals and policy objectives that guide the planning effort and outlines the transportation investments balancing the entire region's transportation needs. The region cannot afford to fund all needed highway improvements, but State Route 68 is identified as a regionally significant highway project included in the 2040 Metropolitan Transportation Plan.

Active Transportation Plan for Monterey County (2018)

The Active Transportation Plan for Monterey County includes policies for maximizing the transportation system to promote walking and bicycle travel, including development of bicycle and pedestrian facilities, improved access and safety provisions, and improved linkages to bikeways and recreational trails. The plan proposes a Class 2 bike route along the length of State Route 68. A Class 2 facility consists of a bike lane that has a painted strip to the right of mixed-vehicle flow lanes. Both build alternatives of the proposed State Route 68 Corridor Improvements Project propose active transportation improvements at the intersections, including bike lanes and pedestrian

facilities that would support the goal of eventually creating a Class 2 facility along the entire length of State Route 68.

Environmental Consequences

Build Alternatives

Both build alternatives for the proposed State Route 68 Corridor Improvements Project are consistent with most of the state, regional, and local plans and programs discussed above and shown in the consistency analysis table in Appendix D. This section discusses the environmental consequences from the project where it was determined that it would not be consistent with state, regional, and local plans and programs.

Both build alternatives would maintain the existing transit stops within the project limits on State Route 68; however, neither project build alternative would add or expand public transit service or facilities. Thus, the project would be inconsistent with Monterey County General Plan Circulation Element Goal C-3, Policy C-3.5 as well as other policies in the County General Plan Conservation Element, the County's Toro Area Plan, and the City of Monterey General Plan Traffic and Transportation Element (see Appendix D). Currently, Monterey-Salinas Transit does not run many buses on State Route 68 due to reduced demand and unpredictability in service delays. It is expected that once the State Route 68 improvements are completed, service times will be more reliable and Monterey-Salinas Transit would consider increasing transit service for that route, pending demand.

Neither project build alternative would construct a four-lane facility, as identified by the City of Monterey General Plan and the Monterey County Regional Transportation Plan. Because various other planning documents do not recommend the four-lane facility at this time, this inconsistency is not considered to be major since the goals and policies of local and regional plans differ with respect to the four-lane concept. In addition, the project would not preclude the pursuance of a four-lane facility in the future.

Although the project does not propose a four-lane facility, it is consistent with the other aspects of the aforementioned planning documents since it would improve the flow of traffic on State Route 68 and improve pedestrian/bike facilities at the intersections where improvements are proposed. In addition, under Alternative 2 auxiliary lanes and widening are proposed in some portions of the corridor to accommodate the intersection improvements extending turning lanes. The proposed project does meet the goal of improving congestion since the intersection improvements would improve the flow of traffic as evaluated in the Traffic Operations Analysis Report, prepared by Caltrans, dated September 2020 (for more information see Section 2.1.8, Traffic and Transportation/Pedestrian and Bicycle Facilities).

Neither of the build alternatives would be consistent with Policy OS-1.2 of the Open Space Element of Monterey County's General Plan, which states that

"development in designated visually sensitive areas shall be subordinate to the natural features of the area." The proposed retaining walls may be extensive and tall in some areas, which may lead to an adverse visual impact. Potential visual impacts from the proposed alternatives are evaluated in the Visual/Aesthetics section of this document (see Section 2.1.9), which includes a discussion on the proposed avoidance, minimization, and/or mitigation measures.

Both build alternatives of the project would be inconsistent with the City of Monterey General Plan's Urban Design Element, Policy h.2, which states that highway construction grading should not take place outside the roadway right-of-way. Acquisition of right-of-way would be required for both build alternatives to construct the project. While the project may not be consistent with Policy h.2, it would not result in a major impact for the following reasons: 1) any acquisition of right-of-way will follow the Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs; 2) the minimum possible amount of right-of-way would be acquired to construct the proposed project; and 3) once any additional right-of-way is acquired, it would no longer be outside the roadway right-of-way.

Monterey County's Greater Monterey Peninsula Area Plan, Supplemental Policy GMP-3.6 requires a 100-foot setback from wetlands for any development. If a 100-foot setback is not possible at all work locations, a restoration and enhancement plan would be prepared. Also, the project would implement standard measures, best management practices, and Avoidance, Minimization, and Mitigation Measures to protect wetland features (see Section 2.3.2). Compensatory mitigation for impacts to wetland, stream, streambank, and riparian aquatic resources would be implemented onsite at a 1-to-1 ratio (acreage) for temporary impacts and a 3-to-1 ratio (acreage) for permanent impacts. If sufficient area is not available onsite, additional mitigation for permanent impacts would be completed offsite at an existing mitigation bank or in coordination with a local land conservancy or restoration group.

No-Build Alternative

The No-Build Alternative would be inconsistent with the Monterey County Regional Transportation Plan, the Monterey Bay 2040 Metropolitan Transportation Plan, and the Monterey County Toro Area Plan, which call for improvements along State Route 68 to address safety, congestion relief, and wildlife connectivity.

Avoidance, Minimization, and/or Mitigation Measures

For both build alternatives, conflicts with state, regional, and local plans and programs are anticipated for visual resources. Avoidance, minimization, and/or mitigation measures would be required for visual resources (see

Section 2.1.10), and for biological resources (see Sections 2.3.1 and 2.3.3) and wetlands (see Section 2.3.2).

2.1.3 Parks and Recreational Facilities

Regulatory Setting

The Park Preservation Act (California Public Resources Code Sections 5400-5409) prohibits local and state agencies from acquiring any property that is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land.

Affected Environment

The information and analysis in this section are largely based on the Section 4(f) De Minimis and No Use Determinations contained in Appendix A. Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 United States Code (USC) 303, declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites." In accordance with the Federal Highway Administration's Section 4(f) Policy Paper (July 12, 2012, pp 23-24), a park, recreational area, or wildlife or waterfowl refuge is defined for purposes of Section 4(f) analysis as when the land has been officially designated as such by a federal, state, or local agency and officials with jurisdiction over the land determine that its primary purpose is a park, recreational area, or wildlife or waterfowl refuge. A property's primary purpose is its primary function and how it is intended to be managed. The Section 4(f) statute states that a property must be a significant public park, recreational area, or wildlife or waterfowl refuge to be considered in Section 4(f) evaluations; significance means that the property serves an important role in meeting the objectives for parks, recreational areas, and/or refuges of the public agency or community authority with jurisdiction over the property.

Public parks and recreational facilities within the State Route 68 Corridor Improvements Project area and the greater Monterey Peninsula area include neighborhood and community parks, regional parks, state parks, open spaces, trails, and national monument lands. Parks and recreational areas in the project vicinity are listed in Table 2.1.3.1 and shown in Figure 2.3.

There are a number of parks and recreational facilities nearby, but outside of the project area. These include Garland Ranch Regional Park managed by Monterey Peninsula Regional Parks District at the southerly side of Laureles Grade at Carmel Valley Road. This park offers hiking, biking, and horseback riding trails. The Badger Hills Trailhead, outside of the project area immediately to the east, provides recreational access to the southern portion of the Fort Ord National Monument, which is managed by the Bureau of Land

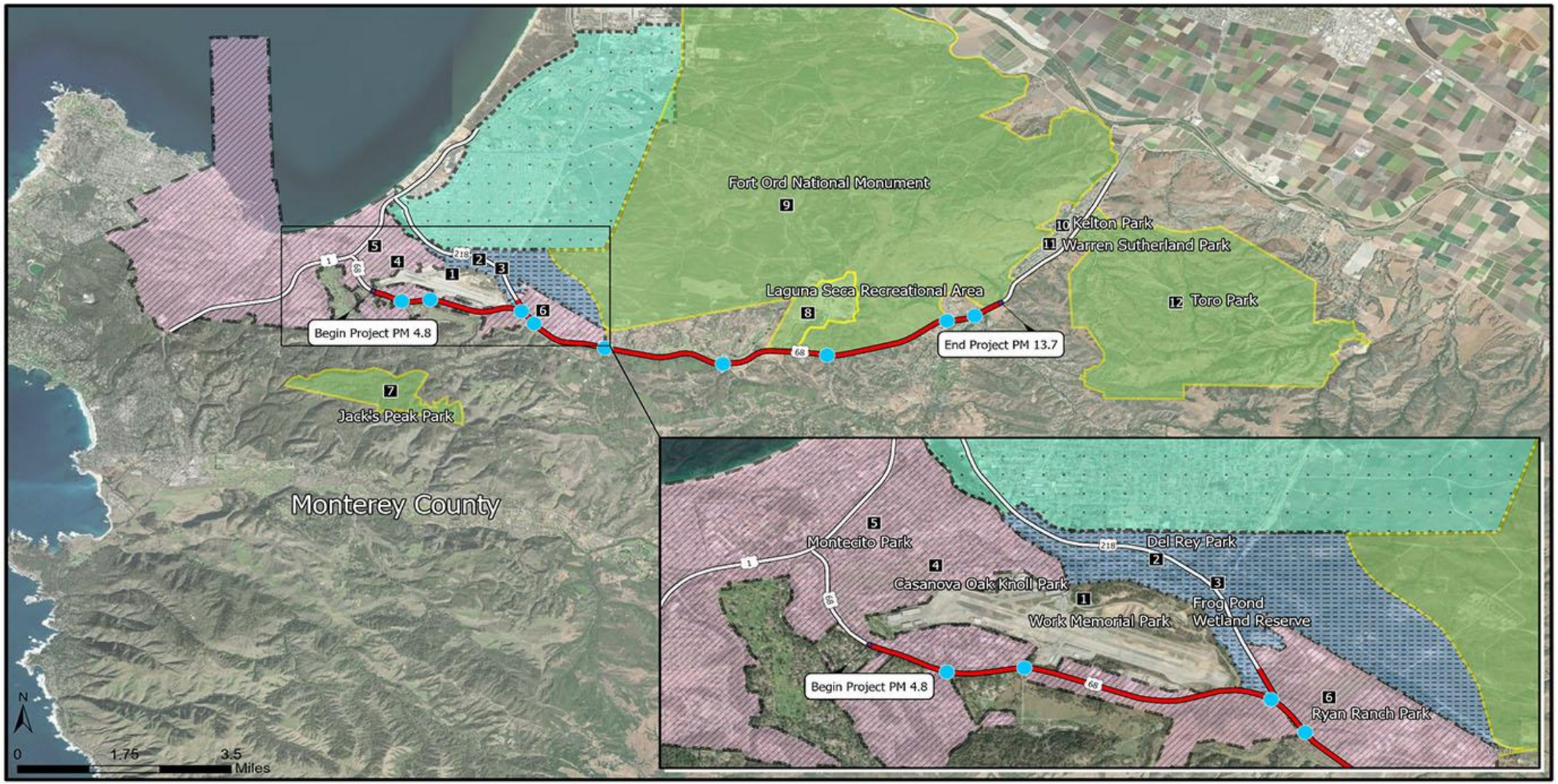
Management. Toro County Park, farther east of the project area, offers picnic areas, playgrounds, hiking and horseback riding trails, ball fields and volleyball courts.

Table 2.1.3.1 Public Parks and Recreational Facilities in Project Vicinity

Map Reference Number on Figure 2.3	Park/Recreational Facility Name	Location	Responsible Jurisdiction
1	Work Memorial Park	Canyon Del Rey Boulevard, Del Rey Oaks	City of Del Rey Oaks
2	Del Rey Park	Canyon Del Rey Boulevard, Del Rey Oaks	City of Del Rey Oaks
3	Frog Pond Wetland Reserve	Canyon Del Rey Boulevard, Del Rey Oaks	Monterey Peninsula Regional Parks District
4	Casanova Oak Knoll Park	735 Ramona Avenue, Monterey	City of Monterey
5	Montecito Park	220 Montecito Avenue, Monterey	City of Monterey
6	Ryan Ranch Park and Disc Golf Course	10 Park Road, Monterey, Parcel Number 259-031-003	City of Monterey
7	Jacks Peak Park	25020 Jacks Peak Park Road, Monterey	Monterey County Public Works, Facilities and Parks
8	Laguna Seca Recreation Area	1025 Monterey-Salinas Highway 68	Monterey County, Public Works, Facilities and Parks
9	Fort Ord National Monument – Badger Hills Trailhead	692-696 Monterey Salinas Highway 68, Salinas	Bureau of Land Management
10	Kelton Park	Portola Drive, Salinas	Monterey County
11	Warren Sutherland Park	Portola Drive, Salinas	Monterey County
12	Toro County Park	501 Monterey-Salinas Highway 68, Salinas	Monterey County, Public Works, Facilities and Parks

North and west of the immediate project area are four city parks; two in the City of Del Rey Oaks: Work Memorial Park and Del Rey Park; and two in the City Monterey: Casanova Knoll Park and Montecito Park. Also nearby but outside the project area is Frog Pond Wetland Preserve, managed by the Monterey Peninsula Regional Parks District, which provides a refuge for wildlife, as well as open space with walking trails. Outside of the immediate project area, on the Monterey Peninsula and within the jurisdictions along the coast, are many other city parks, local and state parks, and public beaches. These recreational resources outside of the immediate project impact area would not be part of the affected environment under Section 4(f).

Figure 2.3 Parks and Recreation Areas in the Project Vicinity



Public Parks and Recreation Facilities in Project Vicinity

There are no officially designated wildlife or waterfowl refuges within the project study area, according to the Section 4(f) De Minimis and No Use Determinations in Appendix A.

The recreational properties considered to be public recreational lands protected under Section 4(f) that would be affected by the proposed project build alternatives include:

- Ryan Ranch Park in the City of Monterey, north of and adjacent to State Route 68 between the intersections of State Route 218 and Ragsdale Drive (Assessor's Parcel Number 259-031-003)
- Fort Ord National Monument, north of and adjacent to State Route 68 at Corral de Tierra Road (Assessor's Parcel Number 031-011-014)
- Laguna Seca Recreation Area, north of and adjacent to State Route 68 at Laureles Grade Road (Assessor's Parcel Number 173-011-025)
- County of Monterey Assessor's Parcel Number 031-1331-002 (recreational-habitat management property), north of State Route 68 and Laureles Grade Road.

The Ryan Ranch Park in the City of Monterey sits on a 75-acre parcel (Assessor's Parcel Map 259-031-003) along the north side of State Route 68 between the intersections of State Route 218/State Route 68 and Ragsdale Drive/State Route 68. The park contains an active recreational use Ryan Ranch Disc Golf Course, which has 31 holes over most of the parcel. Course facilities include disc golf "tees" on permanent tee pads (dirt, grass, or rubber mats), and baskets (disc targets). Fairways and baskets can be rearranged to create various course layouts.

The Fort Ord National Monument property occupies most of the former Fort Ord Army facility along the north side of State Route 68 between Reservation Road near the city of Salinas and General Jim Moore Boulevard near the city of Seaside. The National Monument was established in April 2012 through *Proclamation 8803 – Establishment of the Fort Ord National Monument*, which identifies the land's values for large contiguous open space (habitat types of oak woodland, chaparral, streamside corridors, grasslands, and seasonal pools), recreational uses (trail system for hiking, biking, and equestrian riding), scientific research, outdoor education, and historical and cultural significance.

About one-half of the 14,651-acre National Monument property is managed by the Department of the Interior, Bureau of Land Management (7,205 acres), and the remaining half (7,446 acres) by the Department of the Army. The portion managed by the Army is closed to public use and has munitions hazards from unexploded ordnance from the land's former military use. The portion managed by the Bureau of Land Management borders the north side of State Route 68 for about 5 miles from east of the Laureles Grade

Road/State Route 68 intersection and east to Reservation Road, including the project intersections at Corral de Tierra Road and San Benancio Road. The Bureau of Land Management-managed area consists of large contiguous open space.

The Laguna Seca Recreation Area in unincorporated Monterey County along State Route 68 within the project area is a large regional park managed by the County of Monterey Public Works, Facilities and Parks department, offering camping and picnicking facilities. It is home to the WeatherTech Laguna Seca Raceway. County parcel 173-011-025 is part of the recreational area property and is immediately adjacent to State Route 68, west of Laurels Grade Road.

The County of Monterey parcel number 031-131-002 is adjacent to and west of the Fort Ord National Monument property, and part of the lands included in the county's Fort Ord Master Plan (Chapter 9.E of the 2010 Monterey County General Plan). The county property covers over 247 acres and is designated habitat management land use, which is intended for environmental education activities, ecological restoration, and passive recreational uses such as hiking, horse riding, and picnicking. The Fort Ord Base Reuse Plan designates this property as open space/recreation.

Environmental Consequences

Build Alternatives

Real property would be required for right-of-way to construct either of the build alternative designs at the intersections of State Route 218/State Route 68, State Route 68/Ragsdale Drive, State Route 68/Laureles Grade Road, and State Route 68/Corral de Tierra Road. Table 2.1.3.2 summarizes the anticipated amounts of permanent partial property acquisitions that would be required from park and recreational lands at the four intersections.

Table 2.1.3.2 Park and Recreation Lands Property Acquisition

Park or Recreation Land	Location	Permanent Acquisition (Acres)	Temporary Use Area (Acres)	Project Alternative
Ryan Ranch Park and Disc Golf Course (Parcel 259-031-003)	State Route 218 to Ragsdale/State Route 68, north side	3.09 (1.48 acres for roundabout features and 1.61 acres for landform grading)	None	Alternative 1
Ryan Ranch Park and Disc Golf Course (Parcel 259-031-003)	State Route 218 to Ragsdale/State Route 68, north side	1.94 acres (1.39 acres for intersection improvements and 0.55 acre for landform grading)	None	Alternative 2

Park or Recreation Land	Location	Permanent Acquisition (Acres)	Temporary Use Area (Acres)	Project Alternative
Laguna Seca Recreation Area (Parcel 173-011-025)	Laureles Grade/State Route 68, north side	None	None	Alternative 1
Laguna Seca Recreation Area (Parcel 173-011-025)	Laureles Grade/State Route 68, north side	0.96	None	Alternative 2
County Recreation (Parcel 031-131-002)	Laureles Grade/State Route 68, north side	1.92	None	Alternative 1
County Recreation (Parcel 031-131-002)	Laureles Grade/State Route 68, north side	3.31	None	Alternative 2
Fort Ord National Monument (Parcel 031-011-014)	Corral de Tierra/State Route 68, north side	0.43	0.22	Alternative 1
Fort Ord National Monument (Parcel 031-011-014)	Corral de Tierra/State Route 68, north side	1.97	Less than 0.10	Alternative 2

Ryan Ranch Park and Disc Golf Course

Alternative 1, Roundabouts. The proposed roundabouts at the intersections of State Route 218/State Route 68 and Ragsdale Drive/State Route 68 would have a combined permanent impact of about three (3) acres that would be required for acquisition on the Ryan Ranch Park property and portions of the active use disc golf course, as shown in Table 2.1.3.2. The additional right-of-way would be needed for construction of the roundabout features, and realignment of State Route 68 at the eastern leg of the intersection with State Route 218 to enter the roundabout which would bow toward the park property. The right of way expansion would also be necessary for construction of drainage infrastructure, retaining wall elements, and several landform grading areas for engineered slopes. One of the landform grading areas closest to State Route 218 would be constructed instead of a tall (over 40-feet-high) retaining wall that would otherwise be required. That proposed landform grading area would impact the disc golf basket at fairway number 13 and a small portion of the course in that area, based on the "Bottom Course Layout" shown on the park's course website (https://udisc.com/courses/ryan-ranch-tsYS/map). The roundabout design includes two other landform grading areas on the north side of State Route 68 between State Route 218 and Ragsdale Drive; these three landform grading areas would impact the steeper slope areas of the park property.

The disc golf course fairways, including the baskets, are movable by design as noted previously (Professional Disc Golf Association Course Design information: https://pdga.com/course-development/). Disc golf tee pads are generally more fixed features of a course and, therefore, usually not relocated for course changes. Therefore, to minimize impacts to course facilities, the

proposed roundabout at Ragsdale Drive/State Route 68 includes a retaining wall at the northwest quadrant of the intersection, which would avoid impacting the 12th tee pad on the course. No other course facilities, tee pads or other permanent fixtures of the course would be affected by the roundabout designs for the intersections at State Route 218 and Ragsdale Drive. The acquisition of parkland and the need to relocate the disc basket would result in a "use" under Section 4(f). Minimization Measure PR-1 would require the relocation of the disc basket to be performed in a manner that would not disrupt active play on the course. Implementation of this measure, in combination with the avoidance design component of the retaining wall in the northwest corner of Ragsdale Drive included in the proposed roundabout at that intersection, is anticipated to not adversely affect the activities, features, or attributes of the park property, under Alternative 1.

Alternative 2, Signalized Intersections. The design for Alternative 2 at State Route 218/State Route 68 would also include a landform grading area northeast of the intersection in lieu of a retaining wall along the north side of State Route 68 and east side of State Route 218. The landform grading footprint would be slightly smaller than the landform grading area for the Alternative 1 roundabout design at the same location and is not anticipated to require relocation of the disc golf basket at fairway number 13. The total permanent right-of-way acquisition at the park property for Alternative 2 for these two intersections would be just less than 2 acres in comparison to 3 acres for the Alternative 1 roundabout. In addition, the design for the roundabout would realign the State Route 68 east leg of the State Route 218/State Route 68 intersection to bow toward the northeast to slow traffic entering the roundabout, which would shift the landform grading area onto more of the park property. Alternative 2 would not require the other landform grading areas in the steeper slope areas of the park property adjacent to the north side of State Route 68 or along the west side of Ragsdale Drive that the roundabout designs would require. The tee pad for fairway number 12 would not be impacted. Therefore, the Alternative 2 signalized intersections at State Route 218 and Ragsdale Drive intersections would not adversely affect the activities, features, or attributes of the park.

Neither build alternative would require temporary construction easements on the park property.

The permanent uses of the Ryan Ranch Park property for both build alternatives would be considered de minimis, under Section 4(f).

Fort Ord National Monument

Alternative 1, Roundabouts. The project build alternatives would require linear permanent use areas through right-of-way acquisition adjacent to the north side of State Route 68 and along the western edge of Cypress Church Drive (the north leg of Corral de Tierra Road) for the proposed intersection improvements. Alternative 1 (Roundabout) would require an amount of

permanent property use of less than one-half acre on the property for a proposed retaining wall to minimize impacts to the adjacent slope and sensitive resources. About one quarter of an acre of temporary construction easement area is anticipated for the property based on preliminary design for the roundabout.

Alternative 2, Signalized Intersections. Alternative 2, the Signals and Lane Channelization design, would require a total of just under 2 acres of the monument property for permanent use, primarily due to the proposed lengthy westbound auxiliary through travel lane and reduction taper, and widening of the west leg (State Route 68 west of Corral de Tierra Road) to accommodate the lane configurations and standard shoulder widths. Widening of the west leg would require an approximately 720-foot-long retaining wall along the north side of State Route 68 to minimize the impacts to a riparian woodland/streambed that runs parallel to State Route 68. These design elements would necessitate some additional encroachment along the perimeter of the National Monument property compared to the roundabout design.

There are no active trails or other recreational uses in the peripheral areas of the National Monument property that would be used for permanent highway and cross-street improvements at the intersection of State Route 68/Corral de Tierra Road-Cypress Church Drive. The permanent acquisition areas would be on the edge of the property adjacent to State Route 68 highway and Cypress Church Drive roadways, and their use would not impair the activities, features, or attributes of the recreational value of the National Monument property that is protected under Section 4(f). Alternative 2 is anticipated to require less than one-tenth of an acre of temporary construction easement on the Fort Ord National Monument property.

The permanent and temporary uses of the Fort Ord National Monument property are therefore considered de minimis, under Section 4(f).

Laguna Seca Recreation Area Parcel 173-011-025

Alternative 1, Roundabouts. Alternative 1 would require no permanent use of this county parcel and therefore would have no use under Section 4(f). No temporary construction easements are anticipated for this property for the roundabout design.

Alternative 2, Signalized Intersections. Alternative 2 is estimated to require just under 1 acre of the southern periphery of the parcel along the north side of State Route 68. The permanent use of this parcel with Alternative 2 would be along the southern edge of the property adjacent to State Route 68 for the proposed intersection improvements, including an added westbound auxiliary lane on State Route 68 that would connect to a right-turn lane onto B Road, which provides access to the Laguna Seca recreational facilities. An existing drainage ditch on the north side of State Route 68 would be reconstructed to

hydraulic design standards to contain highway runoff and enable functionality of the proposed wildlife crossing culvert at post mile 11.16 west of Laureles Grade Road.

Portions of the existing alignments of B Road and A Road at the south end of this property adjacent to State Route 68 would potentially be impacted by the highway widening for Alternative 2 at the Laureles Grade Road/State Route 68 intersection and segments of the highway on either side. B Road and A Road are on the Laguna Seca Recreation Area and provide access from State Route 68 to the recreational area facilities; therefore, they are features of the Section 4(f) resource. Affected portions of these access roads may require realignment or reconfiguration to restore connectivity to the recreational area facilities. During road realignment/reconstruction, a temporary detour would be implemented to maintain access to the recreational area facilities. A Transportation Management Plan would be implemented for the project that would prescribe specific traffic management procedures at the project locations to enable continued access to properties during the project construction phases. Therefore, the use of this parcel would not adversely affect the qualities, attributes, or features of the Laguna Seca Recreation Area that provide protection under Section 4(f) as a public recreational resource.

County Recreational Parcel 031-131-002

Alternative 1, Roundabouts. Alternative 1, the roundabout at Laureles Grade Road/State Route 68 would require 1.92 acres of permanent right-of-way from this county parcel for proposed drainage and retaining wall improvements. No temporary construction easements are anticipated to be required on this property.

Alternative 2, Signalized Intersections. Alternative 2 at Laureles Grade Road/State Route 68 would require 3.3 acres of permanent use of this county property for intersection improvements, including the addition of an auxiliary lane and shoulder widening, and construction of a drainage ditch with forward and back slopes to contain runoff and enable the proposed wildlife crossing culvert to function. As with the roundabout alternative, no temporary construction easements are anticipated on this property.

The portions of this parcel adjacent to State Route 68 that would have permanent use for the proposed intersection improvements from both build alternatives are along the perimeter of the property and do not contain any recreational features, attributes or activities that would be adversely affected; therefore, it is anticipated that the project would not adversely affect the qualities, attributes, or features of the National Monument that provide protection under Section 4(f) as a public recreational resource.

Compensation will be provided to the public agencies that manage the recreational resources affected permanently or temporarily by either of the

build alternatives. Caltrans Division of Right of Way and Land Surveys will coordinate with the County of Monterey County, management of the Laguna Seca Recreation Area, and the Bureau of Land Management to provide compensation as required under the Park Preservation Act.

No-Build Alternative

Under the No-Build Alternative, no intersection improvements would be made, and no acquisition of park or recreational facility property would be required.

Avoidance, Minimization, and/or Mitigation Measures

The following minimization measure would be implemented for Alternative 1 to minimize impacts to activities to the Ryan Ranch Park and Disc Golf Course during construction.

PR-1. Ryan Ranch Park and Disc Golf Course Activities During Construction. Relocation of a disc basket or modification of other course features during construction as a result of permanent partial right-of-way acquisition for the project would be performed in a manner that does not disrupt active play of disc golf, and the fairway course will remain open to players. Coordination efforts will continue with park officials throughout project development phases.

2.1.4 Growth

Regulatory Setting

The Council on Environmental Quality (CEQ) regulations, which established the steps necessary to comply with the National Environmental Policy Act (NEPA) of 1969, require evaluation of the potential environmental effects of all proposed federal activities and programs. This provision includes a requirement to examine indirect effects, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The Council on Environmental Quality regulations (40 Code of Federal Regulations [CFR] 1508.8) refer to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (CEQA) also requires the analysis of a project's potential to induce growth. The CEQA guidelines (Section 15126.2[d]) require that environmental documents "...discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment...."

Affected Environment

The information in this section is based on the Community Impact Assessment prepared for the project (dated October 2023) and follows the

First Cut Screening guidelines provided in the Caltrans' Guidance for Preparers of Growth-related, Indirect Impact Analysis (February 2012).

Project Study Area Population Growth Rates

Based on information from the Association of Monterey Bay Area Governments' 2022 Metropolitan Transportation Plan, in 2015, there were approximately 760,000 people within their jurisdiction, which includes the counties of Monterey, San Benito, and Santa Cruz. The population in this region is expected to reach around 870,000 people by 2045 and is forecast to grow by approximately 110,000 people between 2015 and 2045. Project area growth estimates, based on the 2022 Metropolitan Transportation Plan, are listed in Table 2.1.4.1.

Table 2.1.4.1 Project Area Growth

Region	2015 Population	2045 Population (Estimated)	Estimated Growth (Percent Increase)	Compound Annual Growth Rate
Monterey County	430,000	490,000	60,000 (13.95)	0.43 percent
City of Monterey	28,000	29,600	1,600 (5.71)	0.20 percent
City of Del Rey Oaks	1,600	2,600	1,000 (62.5)	1.88 percent
City of Salinas	158,000	177,000	19,000 (12.03)	0.35 percent

The Total Population Growth Over Planning Horizon presented in the Transportation Agency for Monterey County's 2022 Regional Transportation Plan reflects the data presented in 2022 Metropolitan Transportation Plan (Association of Monterey Bay Area Governments) and its population growth forecast.

Based on the Caltrans 2022 Long-Term Socio-Economic Forecast for Monterey County, the population is expected to grow slowly due to the aging population and declining birth rate. In 2022, the population of Monterey County was estimated at around 440,000 and is forecast to surpass 450,000 by 2027, at an annual average growth rate of approximately 0.5 percent per year from 2022 to 2027. Between 2022 and 2027, the number of households, and job growth in Monterey County are anticipated to rise as a result of population growth.

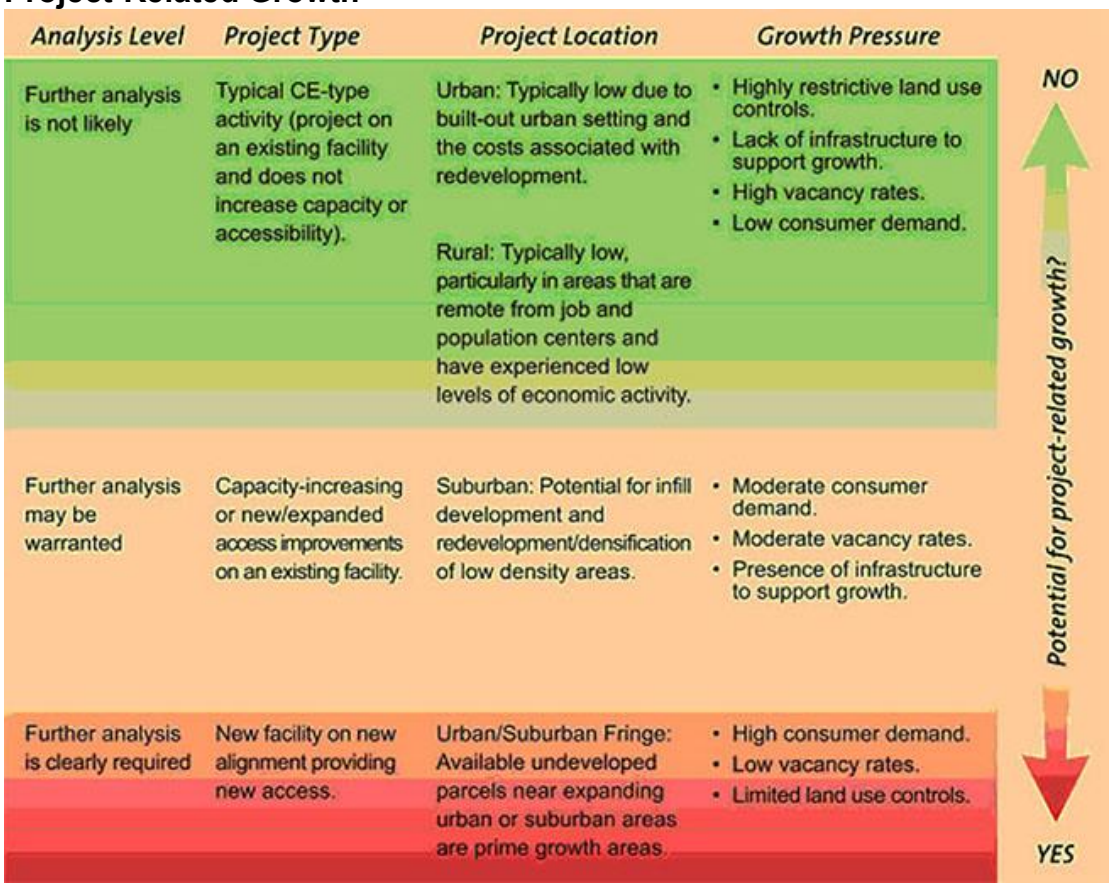
First-Cut Screening Methodology

According to Caltrans' guidance document titled Guidance for Preparers of Growth-related Indirect Impact Analysis (May 2006), the first step in determining whether a project could potentially influence growth and development is to perform a "first-cut screening." This process evaluates the potential for growth-related effects and whether further analysis is required by addressing the following questions:

- How, if at all, does the project potentially change accessibility?
- How, if at all, does the project type, location, and growth pressure potentially influence growth?
- Is project-related growth reasonably foreseeable as defined by NEPA (under NEPA, indirect impacts need only be evaluated if they are reasonably foreseeable as opposed to remote and speculative)?
- If there is project-related growth, if at all, will that affect resources of concern?

Figure 2.1.4.1, Analysis Considerations Related to Determining Potential for Project-Related Growth, shows the relationship between project type, location, and growth pressure and the potential for project-related growth in the study area.

Figure 2.1.4.1 Analysis Considerations of Determining Potential for Project-Related Growth



Source: California Department of Transportation, Guidance for Preparers of Growth-Related, Indirect Impact Analyses (May 2006), pages 5-8, Figure 5-2.

Environmental Consequences

The potential growth-related impacts of the project are discussed in this section. Project impacts have been considered within the context of the first-cut screening approach to assessing the potential growth-influencing effects of the project and whether any further analysis is necessary.

Build Alternatives

How, if at All, Does the Project Potentially Change Accessibility?

The project has been developed to accommodate existing traffic conditions and future traffic growth already planned in accordance with regional and local plans and policies. Both Build Alternatives of the proposed project would involve improving existing intersections on State Route 68 and would not add or remove intersections, travel routes, or access in the region. In addition, the project would not add or remove capacity on the State Route 68 corridor or on any other travel routes. The project would not open up previously inaccessible areas for future development or close currently accessible areas to prevent planned development. Although the project would improve multimodal access at the intersections, it would not address all multimodal deficiencies along the corridor. Therefore, the project is not anticipated to alter existing accessibility in the region.

How, if at All, Does the Project Type, Project Location, and Growth Pressure Potentially Influence Growth?

The project type is primarily traffic improvements on an existing corridor. The proposed intersection improvements under the two Build Alternatives are intended to reduce traffic delays and congestion along the State Route 68 corridor while also enhancing existing conditions for the traveling public. The project is on State Route 68, which is an interregional route that connects the coastal regions and interior regions of Monterey County. The project is located between the City of Monterey to the west and the City of Salinas to the east. The project site is in a valley, and the State Route 68 corridor closely follows the valley floor. Based on the local Metropolitan Transportation Plan and Regional Transportation Plan for the project area, it is anticipated that the projected growth in the region would occur regardless of the project. In addition, it is anticipated that most of the projected growth in the region would be concentrated around city centers, with little-to-no projected growth along the State Route 68 corridor within the project limits. Based on the above discussed forecast growth around nearby city centers, the growth pressure within the study area is considered low to moderate.

Is Project-Related Growth Reasonably Foreseeable As Defined by the National Environmental Policy Act?

It is anticipated that a low-to-moderate growth within the study area would occur regardless of the project. The purpose of the project is to improve intersection operations, multi-modal accessibility improvements along the

State Route 68 corridor, reduce existing traffic delay during peak traffic periods in the project corridor, and reduce the rate and severity of collisions between vehicles, and between vehicles and wildlife. Also, the proposed improvements would accommodate future traffic conditions that are anticipated to be the result of future growth in the region. The project would not add lanes or capacity through the corridor, and therefore is not anticipated to result in foreseeable project-related growth.

If There Is Project-Related Growth, How, if at All, Will That Affect Resources of Concern?

The project is not anticipated to result in project-related growth or contribute to the existing predicted growth in the region because the proposed improvements would not add capacity over the corridor limits. No further analysis related to growth is required for the project.

No-Build Alternative

The No-Build Alternative would not make any changes to the project area. Traffic congestion would likely continue to increase over time as planned growth occurred, which would result in the decreased operational efficiency of the corridor.

Cumulative Impacts Related to Growth

The Build Alternatives would not result in growth-inducing impacts, so the project would not contribute to a cumulative effect resulting in induced growth in the region.

Avoidance, Minimization, and/or Mitigation Measures

Since the project would not result in growth-related impacts, no measures would be required.

2.1.5 Community Character and Cohesion

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 U.S. Code 4331[b][2]). The Federal Highway Administration in its implementation of NEPA (23 U.S. Code 109[h]) directs that final decisions on projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under the California Environmental Quality Act (CEQA), an economic or social change by itself is not to be considered a significant effect on the

environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

Affected Environment

Information for this section comes from the project's Community Impact Assessment (September 2023).

Community character encompasses many attributes, including social and economic characteristics, and assets that make a community unique and that establish a sense of place for its residents. Community cohesion is the degree to which residents have a sense of belonging to their neighborhood, a level of commitment to the community, or a strong attachment to neighbors, groups, and institutions, usually due to continued association over time.

Dominant land uses along the project corridor are residential, open space, recreational, and commercial. Properties along the eastern 4-mile segment of the project, between State Route 1 and York Road, are within incorporated areas that are designated as urban, according to the 2020 U.S. Census. Lands along the remaining 9-mile segment of the State Route 68 project corridor are in unincorporated areas and considered rural.

The project's study area pertinent to community character and cohesion is within a suburban area of northern Monterey County covered by the postal zip codes 93908, 93940, and 93955. As shown in Figure 2.1.5.1, the study area includes all or part of the following 2020 U.S. Census tracts: 107.02, 132, 133, 134, 141.09, and 141.10. The demographic indicators discussed below tend to correlate with a higher degree of community cohesion and are used to determine the degree of community cohesion in the study area and census tracts.

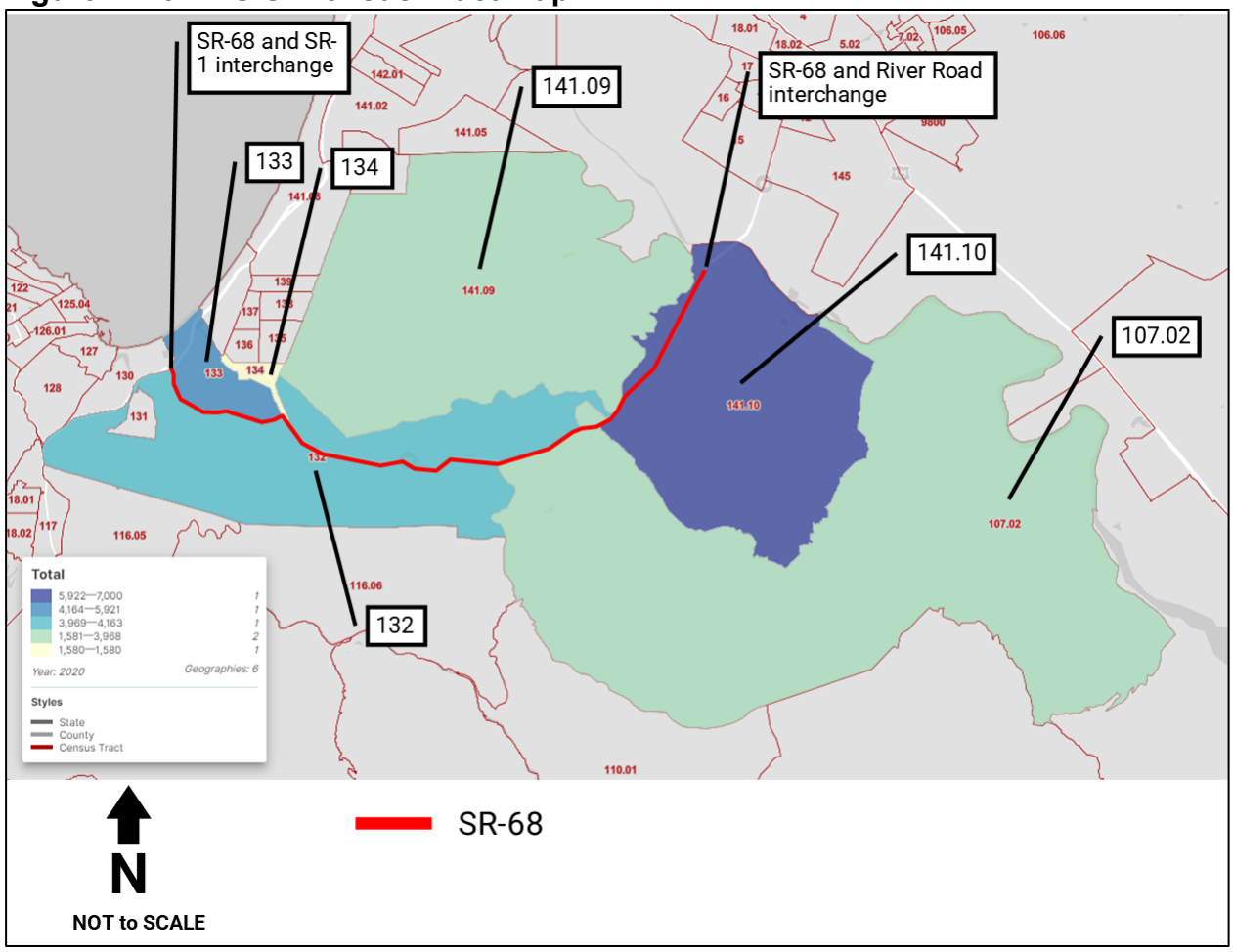
Neighborhoods and Residential Communities

Identified neighborhood and communities along the project corridor include Ambler Park, Baronet Estates, Casanova Oak Knoll, Creekside, Corral de Tierra, Deer Flats, Fisherman Flats, Laguna Seca, Pasadera, Ryan Ranch, San Benancio, Sierra Village, Toro Park Estates, and Villa Del Monte.

Neighborhoods and communities within the unincorporated study area are roughly based on housing developments, or on roads that provide access. The housing developments are mostly single-family homes and with high owner occupancy. Often, the residents of these housing developments are part of a homeowner association or neighborhood association, with some being gated communities with limited public access and accessible only by private roads. There are other locally perceived communities and

neighborhoods spread out in the study area, most of them located in more rural areas with limited access routes. These communities are situated in a more rural environment, with most of the area filled with detached single-family residential housing and plenty of open space and recreational areas.

Figure 2.1.5.1 - U.S. Census Tract Map



The hilly geography found within the study area creates natural breaks in community cohesion and, in some areas, creates pockets of isolated communities and neighborhoods. However, there is a shared notion of community cohesion for those who live in and around the State Route 68 corridor stemming from a sense of unique isolation.

Within the incorporated areas, there are very few businesses or shops in the surrounding area that offer basic necessities and are located along the project corridor. Two commercial shopping centers serve area residents. One is at the intersection of State Route 68 and State Route 218 on the western end; the other is at the intersection of State Route 68 and Corral de Tierra Road on the eastern end. Most residents have to travel to one of the nearby cities of Monterey or Salinas for more extensive shopping, business, and service

needs. The unincorporated communities within the study area rely on State Route 68 as the main corridor to provide access to and from their neighborhood due to the lack of alternative routes.

The urban portions of the study area within and near the incorporated cities of Monterey and Del Rey Oaks enjoy access to a greater mix of services, shops, and restaurants. Also, the urban environment provides a variety of routes and multiple access points to local and regional sites of interest. Therefore, these urban communities and their neighborhoods are less reliant on State Route 68 for access.

Demographic Information

In general, homogeneity of the population contributes to higher levels of community cohesion. Communities that are ethnically homogeneous often speak the same language, hold similar beliefs, and share a common culture and, therefore, are more likely to engage in social interaction on a routine basis. As presented in Table 2.1.5.1, the demographics of the study area indicate that it is predominantly a white and affluent population with low poverty rates. Table 2.1.5.2 provides demographic data for Monterey County, and the Cities of Del Rey Oaks, Monterey, and Salinas. The Hispanic population is the second largest in the study area but is relatively low when compared to the overall Hispanic population of the county. There is a relatively low presence of non-white, ethnic, or mixed-race populations within the study area when compared with that of the county. The expectation is that community cohesion within the project study area is moderate to strong. The data in the demographic categories presented in both tables 2.1.5.1 and 2.1.5.2 represent individual portions of the populations in each table, and also provides information in addition to race and ethnicity. Therefore, the data in each column of the tables is not intended to combine to a total of 100 percent. Also, the demographic of Hispanic or Latino is categorized by the U.S. Census Bureau as an ethnicity rather than a race.

Table 2.1.5.1 Project Study Area Census Tract Demographics

Demographic	Census Tract 107.02	Census Tract 132	Census Tract 133	Census Tract 134	Census Tract 141.09	Census Tract 141.10
Total Population	3,338	4,062	6,375	1,616	3,609	6,605
White (percent)	86.1	82.7	59.8	79.6	50.1	78.5
African American (percent)	0	0.9	3.2	1.4	5.7	0.2
American Indian and Alaskan Native (percent)	0	1.5	2,4	2.5	0.3	0
Asian (percent)	6.3	7.2	6.6	7.3	7.4	10.1

Demographic	Census Tract 107.02	Census Tract 132	Census Tract 133	Census Tract 134	Census Tract 141.09	Census Tract 141.10
Native Hawaiian and Other Pacific Islander (percent)	0	0	0	0.2	5.7	0
Two or More Races (percent)	5.1	6.0	7.2	7.0	18.8	8.2
Hispanic or Latino Ethnicity (percent)	9.1	9.6	29.0	11.7	35.4	16.1

Table 2.1.5.2 City and County Census Demographics

Demographic	County of Monterey	City of Del Rey Oaks	City of Monterey	City of Salinas
Total Population	438,953	1,616	30,014	163,004
White (percent)	43.3	79.6	71.9	27.7
African American (percent)	2.5	1.4	3.7	1.4
American Indian and Alaskan Native (percent)	0.7	2.5	0.9	0.9
Asian (percent)	5.8	7.3	7.3	5.8
Native Hawaiian and Other Pacific Islander (percent)	0.5	0.2	0.3	0.0
Two or More Races (percent)	8.8	7.0	7.9	8.5
Hispanic or Latino Ethnicity (percent)	59.7	11.7	19.0	79.8
Median Household Income ($)	66,676	90,795	77,562	58,598

Housing

Communities with a high percentage of owner-occupied residences are typically more cohesive because their populations tend to be less mobile. Because they have a financial stake in their community, homeowners often take a greater interest in what is happening in their community than renters do. This means they often have a stronger sense of belonging to their community.

The median housing price and owner-occupied homes found within the study area are greater than the median prices found in the county overall and the surrounding cities. There are fewer households with renters in the study area than in the County of Monterey and surrounding cities.

Within the study area, most housing units are owner-occupied, typically single-family detached homes on dedicated property lots. Most of the housing units are part of a larger housing development, or rural density subdivisions, and a few of these housing units are renter-occupied. The average median price of owner-occupied housing units within the study area is approximately $858,700. Most of the rental properties within the study area are within the urban environments found in the City of Monterey and the City of Del Rey Oaks. Most rental properties are found around the Monterey Regional Airport and along the northern sides of Fort Ord National Monument. Physical space is available within the study area for additional housing developments; however, there are existing local policies and regulations that seek to preserve as much open space as possible for conservation and recreational use.

According to U.S. Census Bureau's 2018 5-year American Communities Survey, the following characteristics are predominant along the State Route 68 corridor project area:

- An average of 69 percent of dwellings are single-family residences
- An average of 70 percent of dwellings are owner-occupied
- An average of 50 percent of residents have lived in their owner-occupied residences for 20 years or more
- An average of 50 percent of households include one or more persons over the age of 60

The characteristics listed above for the State Route 68 corridor project area further support the expectation that cohesion within most of the individual communities along State Route 68 is moderate to strong.

Community Facilities and Services

Accessibility of community facilities and services enhances the quality of life in the community and contributes to the sense of community cohesion. Community facilities and services identified within the project study area are listed below.

Churches

- Monterey Assembly of God, 317 Virgin Avenue, Monterey, CA 93940
- Saint John's Chapel, 1490 Mark Thomas Drive, Monterey, CA 93940
- Church of Oaks Congregational, 841 Rosita Road, Del Rey Oaks, CA 93940

- Living Hope Church of the Nazarene, 1375 Josselyn Canyon Road, Monterey, CA 93940
- Believers Church International, 2400 Garden Road, Monterey, CA 93940
- Shoreline Church, 2500 Garden Road, Monterey, CA 93940
- Calvary Monterey, 3001 Monterey-Salinas Highway, Monterey, CA 93940
- Stone Harbor Church, 203 Calle Del Oaks, Del Rey Oaks, CA 93940
- York Chapel, 9501 York Road, Monterey, CA 93940
- Cypress Community Church, 681 Monterey-Salinas Highway, Salinas, CA 93908

Schools

- Monterey Peninsula College, 980 Fremont Street, Monterey, CA 93940
- Naval Postgraduate School, 1 University Circle, Monterey, CA 93940
- Santa Catalina School, 1500 Mark Thomas Drive, Monterey, CA 93940
- La Mesa Elementary School, 1 La Mesa Way, Monterey, CA 93940
- Bay View Academy – Lower Campus, 222 Casa Verde Way, Monterey, CA 93940
- Monterey Bay Charter School K-2 – Foothill Campus, 1700 Via Casoli, Monterey, CA 93940
- Del Rey Woods Elementary School, 1281 Plumas Ave, Seaside, CA 93955
- Peninsula Adventist School, 1025 Mescal Street, Seaside, CA 93955
- York School, 9501 York Road, Monterey, CA 93940
- San Benancio Middle School, 43 San Benancio Road, Salinas, CA 93908
- Toro Park School, 22500 Portola Drive, Salinas, CA 93908
- Shoreline Preschool, 22732 Portola Drive, Salinas, CA 93908

Community Facilities

- La Mesa Village Community Center, 1200 Fechteler Drive, Monterey, CA 93940
- Festa do Divino Espirito Santo Portuguese Hall of Monterey, 950 Casanova Avenue, Monterey, CA 93940
- Monterey County Fairgrounds, 2004 Fairground Road, Monterey, CA 93940
- Monterey Regional Airport, 200 Fred Kane Drive, Monterey, CA 93940

Medical Facilities

- Stanford Medicine Children's Health Pediatrics – Monterey, 1900 Garden Road, Suite 110, Monterey, CA 93940

- Montage Medical Group – Cardiology, 30 Garden Court, Suite B, Monterey, CA 93940
- Montage Medical Group – Ryan Ranch, 2 Upper Ragsdale Drive, Building A, Monterey, CA 93940
- Monterey Bay Eye Center, 21 Upper Ragsdale Drive, Suite 200, Monterey, CA 93940
- AriaMed Quick Clinic, 10 Harris Court, Suite A2, Monterey, CA 93940
- Athena Occupational Medicine, 10 Harris Court, Suite A, Monterey, CA, 93940
- Apria Healthcare, 1 Lower Ragsdale Drive, Monterey, CA 93940
- Salinas Valley Health Clinic Primecare – Monterey, 5 Lower Ragsdale Drive, Suite 100, Monterey, CA 93940

Government Facilities

- U.S. Postal Service, 151 North Street, Monterey, CA 93940
- California Department of Forestry and Fire Protection, San Benito-Monterey Unit, 2221 Garden Road, Monterey, CA 93940
- California State Parks Monterey District Headquarters, 2211 Garden Road, Monterey, CA 93940
- Federal Aviation Administration – Monterey, 2475 Henderson Way, Monterey, CA 93940
- Del Rey Oaks City Hall, 650 Canyon Del Rey Boulevard, Del Rey Oaks, CA 93940
- Monterey-Salinas Transit Administration Office, 19 Upper Ragsdale Drive, Suite 200, Monterey, CA 93940
- City of Monterey – Street and Utilities, 27 Ryan Ranch Road, Monterey, CA 93940
- City of Monterey – Trees and Urban Forestry, 23 Ryan Ranch Road, Monterey, CA 93940
- Association of Monterey Bay Area Governments (AMBAG), 24580 Silver Cloud Court, Monterey CA, 93940
- Monterey Bay Air Resource District, 24580 Silver Cloud Court, Monterey, CA 93940

Fire Department

- California Department of Forestry and Fire Protection, San Benito-Monterey Unit, 2221 Garden Road, Monterey, CA 93940
- Monterey Fire Department, City of Monterey, 401 Dela Vina Avenue, Monterey, CA 93940

- Monterey County Regional Fire District, Toro Station, 19900 Portola Drive, Salinas, CA 93908
- Laureles Station, 31 Laureles Grade, Salinas, CA 93908

Law Enforcement

- Monterey County Sheriff's Department – City of Monterey, 1200 Aguajito Road, Monterey, CA 93940
- Del Rey Oaks Police Department, 650 Canyon Del Rey Boulevard, Del Rey Oaks, CA 93940
- Monterey Regional Airport Police, 300 Fred Kane Drive #200, Monterey, CA 93940

Paramedic

- American Medical Response, 2511 Garden Road, Suite 104, Monterey, CA 93940

Utilities

- Central Coast Community Energy, 70 Garden Court #300, Monterey, CA 93940
- Monterey City Disposal Service, 10 Ryan Ranch Road, Monterey, CA 93940
- Monterey Peninsula Water Management District, 5 Harris Court, Building G, Monterey, CA 93940
- Monterey One Water, 5 Harris Court, Monterey, CA 93940
- California American Water, 25219 Casiano Drive, Salinas, CA 93908
- California American Water, 92 Paseo De Vaqueros, Salinas, CA 93908

For the region, electrical and gas services are provided by Pacific Gas and Electric Company. Wired and wireless communication and television services are provided by a variety of local and national providers.

The large number of community facilities and services that are available within the project study area indicates moderate to strong community character and cohesion.

Access, Public Transit, and Public Parking

State Route 68 serves as the main access for the study area and as the only access for multiple homes and businesses. Communities in the study area depend on the project corridor as their main route to and from the area. It serves as one of only two ways to enter and exit the Monterey Peninsula, with the other being State Route 1 that follows the coast. Bicycle and pedestrian access is not prohibited on the highway, but there is little infrastructure to support bicycle and pedestrian use. Most bicycle and pedestrian access is limited to the highway shoulders. There are no sidewalks along the route

within the project limits. There are at-grade pedestrian crossings at several intersections along the highway.

Circulation patterns on State Route 68 consist of interregional and local traffic. Based on traffic studies conducted for the project, interregional traffic accounted for approximately 40 percent and local traffic accounted for approximately 60 percent of total trips on the highway. Interregional traffic uses the project corridor as an access route between the interior and coastal regions of California. Interregional traffic is a mix of regional commuters, commercial transport and visiting tourists. The westbound interregional traffic originates from U.S. Route 101 and/or the City of Salinas; the eastbound interregional traffic originates from State Route 1 and/or the City of Monterey.

The project corridor provides the main thoroughfare for travelers between the coastal cities and the interior cities in Monterey County. On a daily basis, State Route 68 is well used by travelers due to its relatively direct access between the City of Monterey and the City of Salinas. Local traffic uses and depends on State Route 68 to access homes, shops, and work. Communities and businesses along the corridor are relatively isolated, so many of the residents and commuters depend on the project corridor to provide the most direct access into and out of the region. This limits larger community cohesion, but the sense of isolation contributes to greater cohesion within the individual neighborhoods.

Commuter Patterns

An analysis of commuter patterns within the study area was conducted in the project's Community Impact Assessment using the 2020 U.S. Census OnTheMap web tool. The U.S. Census OnTheMap is a web-based mapping and reporting application that shows where workers are employed and where they live and is able to generate summary reports for selected locations.

The summary report for the project area indicates that there is a higher number of people who enter the study area for work when compared to the number of people who leave the study area for work. There are a relatively small number of people who live and work entirely within the study area. An estimated 14,400 people are employed within the study area, and approximately 92.5 percent live outside of the study area. An estimated 7,707 people live in the study area, and approximately 86 percent are employed outside of the study area. An estimated 1,082 people are living and employed within the study area and make up the remaining 7.5 percent.

The summary report indicates that most of the people who work in the study area originate from either the Salinas area or the Monterey area. Approximately 16 percent of the estimated 14,400 people who work in the study area live in or around Salinas. Approximately 16 percent of the estimated 14,400 people who work in the study area live in or around Monterey.

The summary report also indicates that most of the people who leave the study area for work end up in either the Monterey area or the Salinas area. An estimated 7,746 people who live in the study area work outside of the study area. Approximately 16.8 percent of the people living in the study area work around Salinas. Approximately 20.6 percent of the people living in the study area work around Monterey.

Since the project is a corridor project, the Community Impact Assessment investigated the commuter patterns between the City of Salinas and the City of Monterey, as these two cities are the largest urban centers located at either end of the corridor. Based on the analysis conducted for the City of Salinas, an estimated 58,629 people in the city are employed. Approximately 41.1 percent are employed in the city, and 4.1 percent are employed in Monterey city. Therefore, the data suggest that those who live in Salinas primarily work in Salinas. Based on the analysis conducted for the City of Monterey, an estimated 9,908 people in the city are employed. Approximately 26.9 percent are employed in the city, and 9.5 percent are employed in Salinas city. Data suggest that most of the people who live in Monterey work elsewhere.

Based on the Monterey-Salinas Transit Map, there are no public transit routes that use the entire State Route 68 corridor. The only bus route that runs along the project corridor is a connection line between the Monterey Transit Plaza and the Ryan Ranch Business Park, which includes a stop at the Monterey Regional Airport. This bus route is regularly serviced every hour on weekdays and weekends.

There are no parking facilities along the highway; all existing parking facilities along the project corridor lie off the highway. There is a Park and Ride lot at the east side of Laureles Grade Road, south of State Route 68 and operated by Monterey County. The existing Park and Ride lot has a capacity for 20 vehicles.

Economic Conditions

The most prominent economic industries within the study area are professional, management, education, and health. The presence of these industries is relatively high when compared with those in the county. The economic industries with the least presence within the study area are agriculture and wholesale when compared with those found in the county. The remaining economic industries within the study area are relatively comparable with those of the county.

The economic industry of the study area is predominantly associated with professional positions that would typically require a high degree of education and expertise. Another economic industry that is abundant in the study area is the recreational industry, as there are several recreational venues within the State Route 68 corridor. The economy of the study area lacks industries that require large-scale production or storage, such as agriculture, construction,

manufacturing, and wholesale. This is partially due to the topography of the corridor but also to the presence of conservation and recreational open spaces along the corridor.

The income levels and earnings within the study area are relatively higher when compared to values for the county. In addition, the population that is below the poverty level within the study area is also relatively low, less than 10 percent in all but one census tract. Within the study area, a high number of the labor force is employed, and most of those who are employed are also commuting.

Within the study area, there is a high number of employed workers who are also high income earners. When comparing incomes, levels within the study area are considerably higher than those in the county. The high employment level and high income are likely associated with the presence of strong economic industries within the study area that are able to support numerous staff with higher pay.

Based on information from the California Department of Tax and Fee Administration, the sales and use tax in Monterey County is 7.75 percent, while the sales and use tax for cities in Monterey County ranges from 8.75 percent to 9.25 percent. Sales and use tax for Monterey County is approximately average for the state, but cities in Monterey County have some of the highest tax rates in the state.

Information on real estate taxes is based on data available from the U.S. Census Bureau's 2021 American Communities Survey 5-Year Estimates Detail Tables.

Median real estate taxes paid:

- Census tract 107.02 - $8,256
- Census tract 132 - $9,180
- Census tract 133 - $4,311
- Census tract 134 - $4,568
- Census tract 141.09 – greater than $10,000 (Fort Ord)
- Census tract 141.10 - $6,676

Based on the Monterey County Auditor-Controller Office's Property Tax Highlights for fiscal year 2022-2023, revenues from property taxes have grown by 8.3 percent since the 2021-2022 fiscal year, with a total assessed value of approximately $84 billion in the 2022-2023 fiscal year.

Environmental Consequences

Build Alternatives

The Build Alternatives are not anticipated to drastically affect the character of the surrounding neighborhoods or communities. The Build Alternatives would not change or influence existing social connections or community cohesions because the project would not divide or connect existing neighborhoods or communities as a result of intersection improvements. Some improvements at the intersections have the potential to increase the presence of urban features in the predominantly rural environment found along the State Route 68 corridor. However, the Build Alternatives would incorporate visual and landscaping designs that would reduce the noticeability of newly built urban features and best fit the existing character of the corridor. Therefore, the Build Alternatives are not anticipated to affect the character and cohesion of the neighborhoods and residential communities within the project study area.

Ethnicity

The proposed improvements to the intersections on State Route 68 associated with both Build Alternatives would not alter the ethnicity of the neighborhoods and communities within the project study area. The Build Alternatives would involve improvements to the corridor that are anticipated to benefit all residents and travelers on the State Route 68 corridor.

Housing

The proposed improvements to the intersections on State Route 68 associated with both Build Alternatives would not add capacity to the travel lanes that could otherwise contribute to facilitation of economic development and population growth in the study area that would in turn influence housing development. Any change in housing trends, housing prices, or housing developments in the region would more likely be influenced by local policies and shifting trends in the larger economic environment. Therefore, implementation of the Build Alternatives is not anticipated to alter housing trends in the region.

Community Facilities and Services

Based on preliminary project design information, it is anticipated that the project would have adverse effects on one of the community facilities identified within the study area. Although the project would require additional right-of-way or easements from parcels adjacent to State Route 68, no other community facilities are anticipated to be adversely affected by the proposed project. More detailed information about real property acquisition is provided in Section 2.1.6.

At the intersection of State Route 68 and Josselyn Canyon Road, the southwestern corner is occupied by the Living Hope Church of the Nazarene, at 1375 Josselyn Canyon Road. The church property is approximately 2 acres, with hills along the western and southern edges: Josselyn Canyon

Road rising to the hills on the eastern edge, and State Route 68 along its northern edge. It is anticipated implementation of the Build Alternatives at the intersection of State Route 68 and Josselyn Canyon Road would result in temporary and permanent impacts on the church property.

Temporary impacts would result from construction activities. Noise and dust generated by construction work would have the potential to disrupt church operations, events, and/or activities. In addition, temporary traffic control implemented during construction could delay access to the church property. However, the Build Alternatives would include measures to minimize disturbances associated with construction work. Noise-related impacts are discussed in Section 2.2.7, Noise.

As detailed in Section 2.1.10, Visual/Aesthetics, prescriptive clearing and grubbing techniques would be used to preserve as much existing vegetation and trees as possible during construction, and all areas disturbed by project construction would be revegetated with native plant species. Section 2.2.5, Hazardous Waste and Materials, discusses how soils with aerially deposited lead would be handled and disposed in accordance with the 2016 Aerially Deposited Lead Agreement between Caltrans and the Department of Toxic Substances Control. Also, the Construction Contractor would be required to develop and implement a Lead Compliance Plan during construction to ensure the health and safety of workers and the environment. Standard Special Provisions for removal of nonhazardous pavement markings would be determined during the project design phase to ensure proper removal, handling, and disposal of any generated traffic striping waste at a permitted disposal facility.

The construction contract for the project would include a Standard Special Provision requiring the proper management and disposal of treated wood waste. California Department of Toxic Substances Control guidance for the Management of Treated Wood Waste would be included as part of the Plans, Specifications, and Estimates package to ensure compliance with current Department of Toxic Substances Control regulations. Standard construction dust and emissions minimization practices and procedures would be implemented during project construction, as noted in Section 2.2.6, Air Quality. Also, a Stormwater Pollution Prevention Plan would help protect air quality by requiring water pollution control measures that cross-correlate with dust emission minimization, such as covering soil stockpiles, watering haul roads, and watering excavation and grading areas.

A public outreach plan and Transportation Management plan would be developed during the Plans, Specifications, and Estimates (project final Design) phase of the project to minimize construction traffic impacts (see Section 2.1.9, Traffic and Transportation/Pedestrian and Bicycle Facilities).

Permanent impacts would result from property acquisition. Construction of either of the two Build Alternatives would require partial acquisition of the church property. Partial acquisition would occur on the edges of the parcel, adjacent to State Route 68 and Josselyn Canyon Road. The partial property acquisition would be required to accommodate the new intersection design, which includes alignment adjustments, wider shoulders, and bike and pedestrian facilities. Additional discussion on the property acquisition on the church property is presented in Section 2.1.6, Relocation and Real Property Acquisitions. Any property acquisition required for the project would be processed in accordance the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, which is detailed in Appendix C, Summary of Relocation Benefits.

Build Alternative 1 would require 0.41 acre of new permanent right-of-way from the church property. Build Alternative 2 is expected to require 0.82 acre of new permanent right-of-way.

For both Build Alternatives, the partial property acquisition is anticipated to reduce the number of existing parking spaces on the property. Currently, the church can accommodate approximately 86 parking spaces. Alternative 1 has the potential to remove 27 to 31 parking spaces on the northeastern corner of the property. Alternative 2 has the potential to remove 39 to 50 parking spaces on the northeastern corner and on the northern side of the property. For both Build Alternatives, none of the existing buildings or structures on the property are anticipated to be directly impacted as a result of the partial property acquisition based on preliminary project designs. There are no other properties or spaces available within walking distance from the church that could be used by the church to offset the loss of parking spaces on the property.

Both build alternatives have the potential to adversely affect church activities and operations, particularly during peak activity periods as a result of the reduction in parking area, with Alternative 2 having a more substantial effect (estimated 56 percent with Alternative 2, and 36 percent loss of existing parking area with Alternative 1). The reduction in parking area would reduce vehicle capacity on the property, which in turn may hinder and discourage church visitation. There are no proposed plans to relocate the church, but it would be at the church property owner or operator’s discretion to request the project sponsors to relocate the church to a more suitable location.

Access, Public Transit, and Public Parking

Both Build Alternatives would improve intersections along State Route 68 and result in beneficial impacts to access along the project corridor. The Build Alternatives would not alter existing public transit operations. There is the potential for the existing public transit operations within the corridor to improve after intersection improvements are completed as a result of reduced traffic congestion. However, this project is not anticipated to have

considerable effects on existing public transit plans or operations along the corridor.

The Build Alternatives would install two electric vehicle charging stations in the existing Park and Ride lot on Laureles Grade Road. The stations would be solar-powered Level 2 chargers and provide charging capability for two electric vehicles simultaneously. Up to three of the existing parking spaces in the southern portions of the Park and Ride lot would be converted for the charging stations. The existing space at the Park and Ride lot would also be restriped to accommodate 15 parking spaces, with two spaces available for electric vehicle charging. Construction of the charging stations and modifications to the Park and Ride lot would be conducted by Caltrans, and an encroachment permit would be obtained from Monterey County. No additional right-of-way would be required for this work. Construction of the new charging stations would require temporary closures of the Park and Ride lot. It is anticipated that these new electric vehicle charging stations would encourage the use of electric vehicles by the community, commuters, and visitors. Although considered adverse, construction impacts would be limited in scope and temporary. After construction, both Build Alternatives are not anticipated to have adverse effects on existing public transit plans or operations along the corridor.

Commuter Patterns

As previously noted, commuter traffic on State Route 68 between the cities of Salinas and Monterey is composed of about 4 percent originating from Salinas and almost 10 percent originating from Monterey. The amount of commuter traffic is likely higher if additional employment destinations served by State Route 68 were accounted for, such as Carmel, Seaside, and Pacific Grove. Implementation of the Build Alternatives is not anticipated to alter existing commuter patterns in the corridor or in the region. The destinations for commuters are not anticipated to change as a result of the project. The proposed intersection improvements have the potential to reduce traffic delay along the State Route 68 corridor but are not anticipated to alter current or future commuter patterns because the project would have little or no influence on existing destinations for commuters or influence where people live or work in the region. Although there is the potential that project construction could temporarily influence commuter route decisions, it is anticipated that after the project is completed, commuter patterns are not likely to change if conditions surrounding the corridor remain relatively the same. Therefore, the Build Alternatives are not anticipated to alter long-term commuter patterns in the region.

Economic Conditions

Both Build Alternatives would improve intersection operations and would not alter existing corridor capacity or alter access to and from the corridor. The project is not anticipated to influence existing or future economic conditions in

the region. The proposed improvements would not alter existing trends in the region's economic, employment, business, or fiscal conditions. Therefore, the Build Alternatives would not affect the economic conditions of the region.

No-Build Alternative

Under the No-Build Alternative, intersection improvements would not be made and retaining walls and other structures associated with the Build Alternatives would not be constructed. No changes to the visual nature of the intersections would occur. Intersection queues would not be reduced, and delays to residents and community members would persist and worsen over time. The ability of residents to move between communities and to access commercial services along the State Route 68 corridor would be further impeded in the future.

Avoidance, Minimization, and/or Mitigation Measures

Because implementation of the Build Alternatives would not have adverse long-term effects on community character and cohesion, no avoidance or minimization measures are proposed.

2.1.6 Relocations and Real Property Acquisition

Regulatory Setting

The Caltrans Relocation Assistance Program is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act), and Title 49 Code of Federal Regulations Part 24. The purpose of the Relocation Assistance Program is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. See Appendix C for a summary of the Relocation Assistance Program.

All relocation services and benefits are administered without regard to race, color, national origin, persons with disabilities, religion, age, or sex. See Appendix B for a copy of the Caltrans Title VI Policy Statement.

Affected Environment

The information in this section is based on the Community Impact Assessment report (September 2023) and estimated property right-of-way requirements for the preliminary designs of the Build Alternatives. The Build Alternatives would require additional right-of-way (property acquisition) from multiple properties adjacent to State Route 68 around the nine project intersections, based on preliminary designs. The number of properties and their land use types anticipated to be affected by one or the other of the two Build Alternatives at the project intersections are listed in Table 2.1.6.1. Most properties potentially affected are residential or of miscellaneous land use designation. Properties identified as the Miscellaneous land use type are

according to Assessor's Parcel Map data for specific properties and may be either vacant or a use that is undefined, or not within the use categories used in the Assessor's tax rolls.

Table 2.1.6.1 Properties Potentially Affected by Build Alternatives

Intersection at State Route 68 and Property Land Use Type	Alternatives 1 and/or 2: Number of Properties with Partial Acquisition
Josselyn Canyon Road: Residential	15
Josselyn Canyon Road: Commercial	5
Josselyn Canyon Road: Industrial	1
Josselyn Canyon Road: Miscellaneous	4
Josselyn Canyon Road: Total Number of Properties	25
Olmsted Road: Residential	5
Olmsted Road: Commercial	1
Olmsted Road: Industrial	3
Olmsted Road: Miscellaneous	5
Olmsted Road: Total Number of Properties	14
State Route 218: Residential	0
State Route 218: Commercial	0
State Route 218: Industrial	0
State Route 218: Miscellaneous	5
State Route 218: Total Number of Properties	5
Ragsdale Drive: Residential	0
Ragsdale Drive: Commercial	0
Ragsdale Drive: Industrial	0
Ragsdale Drive:	5
Ragsdale Drive: Total Number of Properties	5
York Road: Residential	1
York Road: Commercial	0
York Road: Industrial	0
York Road: Miscellaneous	5
York Road: Total Number of Properties	6
Pasadera Drive-Boots Road: Residential	8
Pasadera Drive-Boots Road: Commercial	0
Pasadera Drive-Boots Road: Industrial	0
Pasadera Drive-Boots Road: Miscellaneous or Vacant	2
Pasadera Drive-Boots Road: Total Number of Properties	10
Laureles Grade Road: Residential	7
Laureles Grade Road: Commercial	1
Laureles Grade Road: Industrial	0
Laureles Grade Road: Miscellaneous	4
Laureles Grade Road: Total Number of Properties	12
Corral de Tierra Road-Cypress Church Drive: Residential	10
Corral de Tierra Road-Cypress Church Drive: Commercial	3
Corral de Tierra Road-Cypress Church Drive: Industrial	0
Corral de Tierra Road-Cypress Church Drive: Miscellaneous	1
Corral de Tierra Road-Cypress Church Drive: Total Number of Properties	14

Intersection at State Route 68 and Property Land Use Type	Alternatives 1 and/or 2: Number of Properties with Partial Acquisition
San Benancio Road: Residential	3
San Benancio Road: Commercial	0
San Benancio Road: Industrial	0
San Benancio Road: Miscellaneous	4
San Benancio Road: Total Number of Properties	7

The project area does not have neighborhoods, public facilities or demographic elements that would require special relocation considerations.

Environmental Consequences

Build Alternatives

Partial acquisitions of some of the adjacent properties around each of the nine project intersections would be required for permanent use by both Build Alternatives to construct the intersection improvement components as proposed and described in Chapter 1. The circular configuration of roundabouts typically occupies more space than a signalized intersection, requiring a larger amount right-of-way from corner properties at the intersection. This right-of-way requirement at the intersection is offset by the much-reduced need for additional right-of-way along the roadway links between intersections. This holds true for the project where Alternative 1 (roundabouts) would require additional right-of-way immediately at the intersection, and Alternative 2 (intersection modifications) would require some additional right-of-way from properties at the intersections but would also require right-of-way from properties along the highway segments farther from intersection nodes to accommodate expansions of turning lanes and auxiliary lanes.

In addition to right-of-way requirements from some adjacent properties for the design features of either roundabouts or lane expansions and shared pathways, landform grading areas are included in the preliminary designs of both Build Alternatives at selected locations as an alternative to constructing only retaining walls for slope stabilization. The landform grading areas would be landscaped after construction and would require long-term maintenance by Caltrans, which necessitates a slope easement for those areas on the affected parcels, which is considered a permanent right of way element.

Where feasible, adjustments to the preliminary designs were made around the project intersections to further reduce property impacts on surrounding properties. As a result, most of the partial acquisitions for both Build Alternatives are not anticipated to affect continued use of the subject properties impacted and there are no structures located within the partial acquisition areas. However, the project would have potentially major impacts to the uses and functions at one property near the intersection of Josselyn Canyon Road/State Route 68; this property is the site of the Living Hope of

the Nazarene Church. Further discussion of this property impact is addressed below for that intersection location.

Property acquisition would be identified and processed with affected property owners as part of the Right of Way phase of the project, which follows the selection of the preferred alternative and the Plans, Specifications, and Estimates phase finalizes the design details for the selected Build Alternative. Any right-of-way required from adjacent properties outside of the existing state highway right-of-way would be in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Caltrans Right of Way agents will coordinate with affected property owners to address concerns, property loss, and compensation as result of the project. Compensation will be provided for any property acquisitions, including relocation assistance as required by law.

The following discussion describes, for each of the two Build Alternatives, the numbers and types of properties that would be affected with acquisition of land slivers along State Route 68 and/or the intersecting local cross-street. Permanent slope easements would also be required at certain locations to support landform grading in place of, or in addition to, retaining wall structures.

A full list of each property that would be affected by partial right-of-way acquisitions, slope easements, and/or temporary construction easements for both Build Alternatives is included in Appendix J. The quantities of property acquisition provided herein are approximate based on preliminary design plans and will be further refined during the Plans, Specifications, and Estimates phase of the proposed project.

Josselyn Canyon Road/State Route 68

Alternative 1. Table 2.1.6.2 shows the anticipated permanent partial property acquisitions associated with Alternative 1, Roundabout, at the Josselyn Canyon Road/State Route 68 intersection. The preliminary design of the Alternative 1 roundabout at this intersection is anticipated to need partial permanent acquisitions from six parcels, for a combined total of about 1.4 acres. The properties include four residential, one commercial, one industrial and one miscellaneous use (church) property. One residential parcel would have a requirement for acquisition for less than two-tenths of an acre for a permanent slope easement.

None of the parcels adjacent to the Josselyn Canyon Road intersection are anticipated to be needed for temporary construction easements, according to the preliminary design.

Most of the partial acquisitions are not anticipated to affect continued use, function access, or existing conditions of the properties, and no structures are located within acquisition areas. However, both Build Alternatives would

impact the Living Hope Church of the Nazarene property (APN 013-271-002) at 1375 Josselyn Canyon Road on the southwest corner of the intersection at Josselyn Canyon Road. Josselyn Canyon Road is proposed to be realigned to the west under both Build Alternatives to correct the angle at which the road intersects State Route 68. The realignment of the road, adjustments to eastbound State Route 68, and reconstruction of an existing drainage ditch along the south side of State Route 68 would necessitate acquisition of portions of the church property, and specifically impact the existing parking areas requiring removal of parking spaces. The existing church parking areas have capacity for about 86 parking spaces. Alternative 1 (roundabout) would remove about three-tenths (0.31) of an acre of the church property, which totals 2.12 acres. The acquisition area would potentially affect up to about 31 parking spaces, out of existing capacity for about 86 existing spaces, or 36 percent of the existing parking areas. The potential acquisition area would not affect any of the existing buildings or structures on the property.

Table 2.1.6.2 Alternative 1 Property Acquisition at Josselyn Canyon Road

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Parcel Size (Acres)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	013-271-002	Miscellaneous	2.12	0.31	19.3	Living Hope Church
2	013-312-004	Industrial	7.23	0.42	5.8	Office
3	013-312-006	Commercial	6.92	0.28	4.0	Office
4	101-231-013	Residential	1.05	0.11	10.4	No Notes
5	101-231-016	Residential	12	0.06	0.6	No Notes
6	101-241-051	Residential	9.4	0.20	2.1	0.18 acre of the total for landform grading/slope easement
Total	Not applicable	Not applicable	Not applicable	**1.38**	Not applicable	No Notes

Alternative 2. Table 2.1.6.3 provides the anticipated permanent partial property acquisitions associated with Alternative 2 at the Josselyn Canyon Road/State Route 68 intersection. Alternative 2 is anticipated to require partial acquisitions from 25 separate parcels adjacent to State Route 68 and Josselyn Canyon Road, totaling about 4 acres of permanent acquisition area. Fifteen of these parcels are residential, five are commercial, four are miscellaneous category use properties (including the Living Hope Church of the Nazarene), and one is industrial use property. Most of the properties

affected by partial acquisitions are not anticipated to affect continued use of the properties, and no structures are located within acquisition areas.

Alternative 2 is anticipated to remove about 0.82 acre of the Living Hope Church of the Nazarene property, affecting the existing parking areas similarly to Alternative 1. The right-of-way acquisition amount would be larger with Alternative 2 than Alternative 1, mainly because of the widening required for the travel lane configuration proposed on eastbound State Route 68. Based on preliminary plans for the proposed project and estimated parking areas on the church property, this alternative would affect up to about 50 of the existing parking spaces (out of 86 spaces), or about 58 percent of the currently available parking area.

Table 2.1.6.3 Alternative 2 Property Acquisition at Josselyn Canyon Road

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Parcel Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	013-271-002	Misc.	2.12	0.82	38.6	Church
2	013-312-004	Industrial	7.23	0.37	5.1	Office
3	013-312-006	Commercial	6.92	0.36	5.2	Office
4	013-312-007	Commercial	0.6	0.05	8.3	Office
5	013-312-008	Misc.	1.79	0.16	8.9	Recreational
6	013-312-009	Commercial	1.5	0.13	8.6	Office
7	013-312-010	Commercial	1.66	0.11	6.6	Office
8	013-312-015	Commercial	5.74	0.28	4.8	Offices
9	013-351-004	Misc.	1.6	0.28	17.5	Undeveloped
10	101-201-004	Residential	1.34	0.02	1.4	No Notes
11	101-201-017	Residential	1.0	0.04	4	No Notes
12	101-201-030	Residential	1.27	0.05	3.9	No Notes
13	101-201-032	Residential	1.24	0.04	3.2	No Notes
14	101-211-009	Residential	1.13	0.03	2.6	No Notes
15	101-211-017	Residential	1.11	0.02	1.8	No Notes
16	101-211-018	Residential	1.07	0.01	0.9	No Notes
17	101-211-033	Residential	0.8	0.02	2.5	No Notes
18	101-211-034	Residential	1.02	0.05	4.9	No Notes
19	101-221-001	Residential	1.21	0.11	9.0	No Notes
20	101-221-011	Misc.	0.4	0.004	1.0	Undeveloped

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Parcel Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
21	101-221-014	Residential	1.79	0.05	2.7	No Notes
22	101-231-001	Residential	4.32	0.48	11.1	No Notes
23	101-231-013	Residential	1.05	0.16	15.2	No Notes
24	101-231-016	Residential	12	0.19	1.5	No Notes
25	101-241-051	Residential	9.4	0.14	1.5	0.06 acre of the total for landform grading/slope easement
Total	Not applicable	Not applicable	Not applicable	3.97	Not applicable	No Notes

The Living Hope Church of the Nazarene shares the property with several other religious organizations, and services are held on Saturdays, Sundays and some holidays, with Sundays having the most activity. Educational activities are also held on weekdays. The property is overlain by a 100-foot setback and concurrent easement, which was established when State Route 68 was designated as a Scenic Highway, according to communications between the Transportation Agency for Monterey County and church representatives. Therefore, the parking area within the setback/easement is considered existing and non-conforming.

Both of the Build Alternatives have the potential to adversely affect church activities and operations, particularly during peak activity periods as a result of partial acquisition of the estimated reduction in parking area, with Alternative 2 having a more substantial effect (estimated 56 percent with Alternative 2, and 36 percent loss of existing parking area with Alternative 1). The reduction in parking area would reduce vehicle capacity on the property, which in turn may hinder and discourage church visitation. There are no proposed plans to relocate the church; however, it would be at the church property owner or operator's discretion to request the project sponsors to relocate the church to a more suitable location.

In summary, the Build Alternatives would require partial acquisition of the church property, with Alternative 1 requiring an estimated three-tenths of an acre, and Alternative 2 acquiring eight-tenths of an acre, both considerably reducing the amount of parking area. After selection of the preferred alternative for the project, the intersection design would be refined during the Plans, Specifications, and Estimates phase and any new proposed right-of-way affecting the church property would be assessed with the objective of minimizing or avoiding, to the extent feasible, any major impacts to the functionality of the uses and operations of the property.

Olmsted Road

Alternative 1 at Olmsted Road would need to make partial acquisitions from five separate parcels, totaling 1.95 acres. One commercial, two industrial, and two miscellaneous use parcels are affected. All partial acquisitions are not anticipated to affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses. No parcels would be temporarily impacted during construction. Table 2.1.6.4 provides the anticipated permanent partial property acquisitions associated with Alternative 1 at Olmsted Road.

Table 2.1.6.4 Alternative 1 Property Acquisition at Olmsted Road

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	013-221-020	Misc.	477.33	1.09	0.2	Monterey Regional Airport
2	013-322-007	Commercial	2.5	0.22	8.8	Hotel
3	101-231-005	Misc.	1.73	0.21	12.1	Vacant
4	259-011-027	Industrial	28	0.32	1.1	Undeveloped
5	259-011-064	Industrial	14.65	0.11	0.7	Undeveloped
Total	Not applicable	Not applicable	Not applicable	1.95	Not applicable	No Notes

Alternative 2 at Olmsted Road is anticipated to require partial acquisitions from 13 parcels totaling about 4.9 acres. Five of these properties are residential, one is commercial, five are miscellaneous uses (airport, church, vacant uses), and one is industrial property. Small portions of two properties (about 0.05 acre total)—one industrial designation and one commercial property—northwest of Olmsted Road would be temporarily impacted during construction (not shown on the table). All partial acquisitions are not anticipated to affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses. Table 2.1.6.5 provides the anticipated permanent partial property acquisitions associated with Alternative 2 at Olmsted Road.

In summary, no partial acquisitions of properties with either Build Alternative would affect continued use of the properties around the Olmsted Road intersection, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses.

Table 2.1.6.5 Alternative 2 Property Acquisition at Olmsted Road

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	013-221-015	Misc.	4.35	0.25	5.7	Vacant
2	013-221-020	Misc.	477.33	1.13	0.2	Monterey Regional Airport
3	013-322-007	Commercial	2.5	0.23	9.2	Hotel
4	013-222-008	Residential	5.64	0.34	6.0	No Notes
5	014-322-004	Misc.	6.29	0.16	2.5	Church
6	101-231-002	Residential	3.79	0.27	7.1	No Notes
7	101-231-003	Misc.	1.16	0.22	18.9	Detached Building
8	101-231-004	Residential	0.52	0.13	25.0	No Notes
9	101-231-005	Misc.	1.73	0.38	21.9	Vacant
10	101-231-006	Residential	0.78	0.03	3.8	No Notes
11	101-231-007	Residential	1.97	0.02	1.0	No Notes
12	259-011-027	Industrial	28.0	1.67	6.0	Undeveloped
13	259-011-064	Industrial	14.65	0.06	0.4	Undeveloped
Total	Not applicable	Not applicable	Not applicable	4.90	Not applicable	No Notes

State Route 218 (Canyon Del Rey Boulevard) and Ragsdale Drive Intersections

Due to the close proximity of the intersections of State Route 218 (Canyon Del Rey Boulevard) and Ragsdale Drive on State Route 68, the analysis of right-of-way acquisition is discussed for these two intersections together; acquisition data for the two intersections is presented separately in Tables 2.1.6.6 through 2.1.6.9.

Alternative 1 at the State Route 218 intersection with State Route 68 would necessitate partial acquisitions from five separate parcels for a total of about 3.30 acres of acquisition (see Table 2.1.6.6). The affected parcels include two airport-commercial uses, a City of Monterey public park (Ryan Ranch Park), an office-commercial property, and one miscellaneous-vacant land parcel. The latter vacant parcel would also have a temporary construction easement of 0.80 acre.

Table 2.1.6.6 Alternative 1 Property Acquisition at State Route 218

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	012-601-033	Misc.	0.78	0.03	3.8	Retail
2	012-601-034	Misc.	0.7	0.05	7.1	Retail
3	259-011-082	Misc.	47	0.06	0.1	Public Works
4	259-031-003	Public Recreation (Ryan Ranch Park)	74.45	2.19	2.93	Total acquisition includes 1.61 acres for landform grading/ slope easement
5	259-091-010	Misc.	83.95	0.96	1.1	Vacant
Total	Not applicable	Not applicable	Not applicable	3.29	Not applicable	No Notes

The preliminary design for the roundabout at State Route 218 and State Route 68 includes several landform grading areas along the north side of State Route 68 between State Route 218 and Ragsdale Drive. The largest of the proposed landform grading areas at this intersection would be in the northeast corner of the intersection at State Route 218 and State Route 68. This landform grading would require a permanent slope easement for maintenance of the slope, potentially impacting a portion of the Ryan Ranch Park and the disc golf course facility. The property impact for these uses is not anticipated to severely impair the activities, functions, or attributes of the recreational use of the park, as addressed in Section 2.1.3, Parks and Recreation, and in the Section 4(f) evaluation contained in Appendix A. All partial acquisitions are not anticipated to affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses.

As shown in Table 2.1.6.7, Alternative 2 at State Route 218 would necessitate estimated partial acquisitions from four parcels totaling about 3 acres. These parcels include two residential properties, the Ryan Ranch Park, and another city of Monterey parcel designated miscellaneous use. The partial acquisitions are not anticipated to affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses. Refer to further discussion below regarding the Ryan Ranch Park.

At the intersection of State Route 218/State Route 68, the preliminary design for the expanded intersection lanes under Alternative 2 (signals and lane

channelization design) was modified to shift the alignment of State Route 68 slightly south so that sensitive cultural resource elements on the adjacent Tarpy's Roadhouse property near the highway could be avoided. See Section 2.1.11, Cultural Resources, and the Section 4(f) evaluation in Appendix A for more discussion.

Table 2.1.6.7 Alternative 2 Property Acquisition at State Route 218

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	259-011-082	Residential	47	0.69	1.4	No Notes
2	259-031-003	Public Recreation (Ryan Ranch Park)	74.54	1.94	2.6	Total includes 0.55 acre for landform grading/ slope easement
3	259-071-008	City Misc.	0.82	0.20	24.0	City of Monterey
4	259-031-082	Residential	18.98	0.10	0.05	No Notes
Total	Not applicable	Not applicable	Not applicable	2.93	Not applicable	No Notes

Alternative 1 at the Ragsdale Drive intersection would require permanent acquisition from five properties for a total of 3.31 acres of acquisition as shown in Table 2.1.6.8; land uses of these parcels include the Ryan Ranch Park, office park, and vacant properties. The partial acquisitions would not displace any residents or businesses.

Table 2.1.6.8 Alternative 1 Property Acquisition at Ragsdale Drive

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	259-031-003	Public Recreation (Ryan Ranch Park)	74.54	0.90	1.2	No Notes
2	259-031-082	Misc.	18.98	0.52	2.7	Office Park
3	259-071-008	Misc.	0.82	0.66	80.4	Vacant
4	259-091-010	Misc.	83.95	0.73	0.8	Vacant
5	259-092-073	Misc.	17.99	0.50	2.7	Vacant
Total	Not applicable	Not applicable	Not applicable	3.31	Not applicable	No Notes

Alternative 2 at Ragsdale Drive intersection with State Route 68 is anticipated to require permanent property acquisition from four vacant parcels, one of which is designated industrial land use, and the remainder are miscellaneous designations. The permanent acquisitions from the parcels are estimated to total just over 4.5 acres. See Table 2.1.6.9.

Table 2.1.6.9 Alternative 2 Property Acquisition at Ragsdale Drive

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	259-011-027	Industrial	28.0	0.03	0.11	Vacant
2	259-011-071	Misc.	8.0	0.94	11.7	Vacant
3	259-091-010	Misc.	83.95	3.13	3.73	Vacant
4	259-092-073	Misc.	17.99	0.58	3.2	Vacant
Total	Not applicable	Not applicable	Not applicable	4.68	Not applicable	No Notes

The City of Monterey Ryan Ranch Park property (Assessor's Parcel Number 259-031-003) is just under 75 acres on the north side of State Route 68 between State Route 218 and Ragsdale Drive. Permanent acquisition from the park property would be necessary for roundabout features, including a curved realignment of the east leg of State Route 68 toward the park property on the north, construction of landform grading to function in place of a retaining wall in the northeast quadrant of the intersection (State Route 218/State Route 68), and two additional landform grading/slope easements along State Route 68 between State Route 218 and Ragsdale Drive. As noted at the beginning of this section, the landform grading areas would require permanent slope easements for Caltrans to maintain.

The amount of acquired property from the park parcel for these design features varies between the two Build Alternatives. For the two intersections of State Route 218 and Ragsdale Drive at State Route 68, Alternative 1 would require 3.09 acres from the park property, 1.48 acres for roundabout roadway design features, and 1.61 acres for slope easement (a combination of the data for Parcel 259-031-003 in Tables 2.1.6.6 and 2.1.6.8). Alternative 2 would require a total of 1.94 acres of permanent right-of-way from the park property, 1.39 acres for intersection features and just over one-half an acre (0.55) for slope easements area. The permanent acquisition areas estimated for either of the Build Alternatives would not severely impair the activities, functions, or attributes of the recreational use of the park, as further addressed in Section 2.1.3, Parks and Recreation, and in the Section 4(f) evaluation contained in Appendix A.

York Road

The Alternative 1 roundabout at York Road is estimated to need partial acquisitions from five parcels, totaling about 1.13 acres (see Table 2.1.6.10). The parcels include one multi-family residential, one City of Monterey industrial, and three County of Monterey parcels designated miscellaneous and zoned Resource Conservation. All partial acquisitions are not anticipated to affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses. Four of the five parcels would be temporarily impacted during construction on a combined total of about 1.24 acres.

Table 2.1.6.10 Alternative 1 Property Acquisition at York Road

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	173-071-042	Misc.	8.32	0.44	5.2	Vacant
2	259-031-062	Misc.	8.25	0.07	0.8	Vacant
3	259-181-008	Misc.	6.01	0.35	5.8	Offices
4	259-211-014	Misc.	1.98	0.13	6.5	Vacant
5	259-231-027	Misc.	2.08	0.14	6.7	Vacant
Total	Not applicable	Not applicable	Not applicable	1.13	Not applicable	No Notes

Alternative 2 at York Road would require partial acquisitions from six separate parcels totaling 4.75 acres, as shown in Table 2.1.6.11. Two of the parcels are residential, one is City of Monterey Industrial, and three are County of Monterey properties designated miscellaneous use and zoned Resource Conservation. All partial acquisitions are not anticipated to affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses. Five of the parcels would be temporarily impacted during construction, for a total of just under 1.2 acres of disturbance.

Table 2.1.6.11 Alternative 2 Property Acquisition at York Road

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	173-071-042	Misc.	8.32	1.42	16.8	Vacant
2	173-122-005	Residential	0.57	0.04	7.0	Office Park

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
3	259-031-062	Misc.	8.25	0.70	8.4	Vacant
4	259-181-008	Misc.	6.01	0.90	14.9	Medical Offices
5	259-211-014	Miscellaneous	1.98	0.80	40.4	Vacant
6	259-231-027	Miscellaneous	2.08	0.89	42.8	Vacant
Total	Not applicable	Not applicable	Not applicable	4.75	Not applicable	No Notes

In summary, Alternative 2 would require an estimated larger amount of permanent property from several adjacent parcels than Alternative 1 at York Road intersection, but neither alternative is anticipated to affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses.

Pasadera Drive-Boots Road

The Alternative 1 roundabout at Pasadera Drive/Boots Road is anticipated to require partial acquisitions from five separate parcels for a combined total of just over 1 acre (see Table 2.1.6.12). Three of these parcels are residential, one is undeveloped (vacant), and one is recreational (golf course). Three properties would potentially be affected by temporary construction activities, for a combined total of 0.11 acre. Areas for permanent drainage easements would be necessary from six properties, for a total of 1.42 acres. Some of the properties would be affected by more than one type of acquisition: partial permanent, temporary construction, and/or permanent drainage easement. None of the partial acquisitions are anticipated to affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses.

Table 2.1.6.12 Alternative 1 Property Acquisition at Pasadera Drive-Boots Road

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	173-062-004	Residential	8.0	0.24	3.0	No Notes
2	173-062-005	Residential	1.04	0.02	1.9	No Notes
3	173-062-006	Residential	0.91	0.06	6.5	No Notes

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
4	173-071-056	Vacant	25.62	0.30	1.1	Laguna Seca Golf Ranch
5	173-072-041	Misc.- Recreation	59.19	0.38	0.6	The Club at Pasadera
Total	Not applicable	Not applicable	Not applicable	1.01	Not applicable	No Notes

Alternative 2 at the Pasadera Drive/Boots Road intersection would require partial acquisitions from 10 parcels totaling about 3.71 acres. Four of these properties are residential, three are residential vacant, four are miscellaneous (vacant), and one is recreational (golf club). All partial acquisitions are not anticipated to affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses. Permanent drainage easement areas would be necessary from six of the parcels, for a combined total easement area of 1.22 acres. No temporary construction easements would be required at Pasadera Drive for this alternative. See Table 2.1.6.13.

Table 2.1.6.13 Alternative 2 Property Acquisition at Pasadera Drive-Boots Road

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	173-062-002	Residential	4.71	0.18	3.8	No Notes
2	173-062-003	Residential	4.9	0.21	4.2	No Notes
3	173-062-004	Residential	8.0	0.04	0.5	No Notes
4	173-062-005	Residential	1.04	0.04	3.8	No Notes
5	173-062-006	Residential	0.91	0.41	45.0	Easement
6	173-062-007	Residential	4.73	0.01	0.2	No Notes
7	173-062-010	Residential	10.3	0.04	0.3	No Notes
8	173-071-056	Vacant	25.62	1.17	4.5	Laguna Seca Golf Ranch
9	173-072-041	Misc.	59.19	1.53	2.5	The Club at Pasadera
10	416-193-013	Residential	14.11	0.10	0.7	No Notes

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
Total	Not applicable	Not applicable	Not applicable	3.71	Not applicable	No Notes

In summary, at the Pasadera Drive-Boots Road intersection at State Route 68, Alternative 2 is estimated to require a larger amount of permanent property from several adjacent parcels than Alternative 1, but neither alternative is anticipated to affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses.

Laureles Grade Road

The Alternative 1 roundabout at the Laureles Grade Road intersection is anticipated to require partial acquisitions from four parcels, totaling 3 acres. The parcels include two single-family residential properties, one vacant residential property, and a county parcel designated for Habitat Management and recreational uses. Section 2.1.3 Parks and Recreational Facilities discusses the project's effects on that property and other Section 4(f) properties within the project's area of potential impacts.

A minor amount (about 2 percent) of the County Fire District property at the southeast corner of Laureles Grade Road at State Route 68 would be required for the roundabout alternative intersection improvements. A temporary construction easement of 0.06 acre would also be necessary at this parcel for the roundabout alternative.

All partial permanent acquisitions at Laureles Grade Road under Alternative 1 are not anticipated to affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses. Small portions of two parcels would be required for temporary construction easements, for a total of 0.13 acre between the two properties. See Table 2.1.6.14.

Table 2.1.6.14 Alternative 1 Property Acquisition at Laureles Grade Road

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	031-131-002	Misc.	247.0	1.92	0.7	Fort Ord National Monument
2	173-011-022	Residential	18.27	0.09	0.4	No Notes
3	173-031-016	Misc.	1.20	0.03	2.5	County Fire Station
4	173-031-018	Residential	1.57	0.15	9.5	No Notes
Total	Not applicable	Not applicable	Not applicable	3.00	Not applicable	No Notes

Alternative 2 would require partial acquisitions from 13 separate parcels totaling 7.52 acres. About half of these properties are designated residential properties, several of which are vacant; one property is designated commercial – medical (county animal shelter), and two are County of Monterey properties: one containing the access roads to the Laguna Seca Recreation Area and the other containing natural resource land on the former Fort Ord military base. All partial acquisitions are not anticipated to affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses. A small (0.18 acre) temporary construction easement is anticipated on the County Fire District parcel. No permanent drainage easements would be required under Alternative 2 at this intersection. See Table 2.1.6.15.

Table 2.1.6.15 Alternative 2 Property Acquisition at Laureles Grade Road

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	031-131-002	Misc.	247.0	3.31	1.3	Fort Ord National Monument
2	173-011-003	Residential	5.56	0.09	1..6	Animal Shelter
3	173-011-005	Residential	6.0	0.04	0.6	No Notes
4	173-011-022	Residential	18.27	2.2	12.0	No Notes
5	173-011-025	Misc.	27.41	0.96	3.5	Laguna Seca Recreation Area
6	173-011-027	Commercial	26.62	0.29	1.0	Animal Shelter

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
7	173-021-013	Residential	1.65	0.01	0.6	No Notes
8	173-021-015	Residential	1.38	0.02	1.2	No Notes
9	173-021-016	Misc.	1.46	0.02	1.3	Residential
10	173-021-018	Misc.	0.84	0.34	25.2	Vacant
11	173-031-016	Misc.	1.2	0.03	2.5	County Fire Station
12	173-031-018	Residential	1.57	0.23	14.6	No Noes
13	173.031-019	Residential	1.02	0.01	0.9	No Notes
Total	Not applicable	Not applicable	Not applicable	7.52	Not applicable	No Notes

In summary, at the Laureles Grade Road intersection at State Route 68, Alternative 2 is estimated to require over two times the amount of permanent property from several adjacent parcels compared to Alternative 1. However, neither alternative is anticipated to affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses.

Corral De Tierra Road-Cypress Church Drive

Alternative 1 (roundabouts) would require partial acquisitions at the Corral de Tierra Road-Cypress Church Drive intersection from eight parcels for a combined total of about 1.25 acres. In the northwest quadrant of the intersection is the Fort Ord National Monument property managed by the U.S. Department of the Interior, Bureau of Land Management. Two parcels in the southwest quadrant are active commercial use properties, including an active service station and a flowers and deli business, the Cypress Community Church, plus three residential properties in the northeast quadrant, and two vacant commercial in the southeast quadrant.

All partial acquisitions with Alternative 1 preliminary design are not anticipated to affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses. The permanent right-of-way acquisition estimated to impact the Fort Ord National Monument parcel would be along the perimeter of the parcel and roadways, and would not substantially affect the recreational activities, objects and values for which the monument is managed, as discussed in Section 2.1.3, Parks and Recreational Facilities, and in Appendix A, Section 4(f) De Minimis Determination.

Seven parcels would be temporarily impacted during construction at the Corral de Tierra Road intersection under Alternative 1, for a combined total of about 1.54 acres. Three of these seven properties would also be among the parcels with minor amounts of partial acquisitions discussed above. See Table 2.1.6.16.

Table 2.1.6.16 Alternative 1 Property Acquisition at Corral de Tierra Road

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	031-011-014	Misc.	724.5	0.43	0.05	Fort Ord National Monument
2	161-251-011	Misc.	5.32	0.24	4.5	Cypress Community Church
3	161-251-018	Residential	2.85	0.08	2.8	No Notes
4	161-251-019	Residential	2.01	0.04	2.0	No Notes
5	161-251-024	Residential	17.89	0.15	0.9	No Notes
6	161-571-002	Commercial	0.68	0.16	23.5	Undeveloped
7	161-571-003	Commercial	5.42	0.12	0.02	Undeveloped
8	161-641-019	Commercial	0.04	0.01	14.4	Service Station
Total	Not applicable	Not applicable	Not applicable	1.23	Not applicable	No Notes

Alternative 2 at the Corral de Tierra Road intersection at State Route 68 would require partial acquisitions from 13 parcels for a combined total of about 4 acres. Nine of these properties are residential, two are commercial (service station and Cypress Community Church), and one is the U.S. government-managed Fort Ord National Monument. Alternative 2 would have 1.97 acres of permanent property acquisition along the periphery of the monument property, compared with less than one-half acre of permanent right of way acquisition with Alternative 1, the roundabout. Although the property impact with the expanded signals design would be larger, the functions of the monument property would not be substantively affected by the acquisition areas, as discussed in Sections 2.1.1, Land Use, and 2.1.3, Parks and Recreational Facilities, and the Section 4(f) analysis in Appendix A.

All partial acquisitions are not anticipated to affect continued use of the properties2, and no structures are located within acquisition areas. The partial

acquisitions would not displace any residents or businesses. Three parcels would be temporarily impacted during construction. See Table 2.1.6.17.

Table 2.1.6.17 Alternative 2 Property Acquisition at Corral de Tierra Road

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	031-011-014	Misc.	724.5	1.97	0.2	Fort Ord National Monument
2	161-251-002	Residential	47.42	0.05	0.1	No Notes
3	161-251-011	Misc.	5.32	0.36	6.7	Cypress Community Church
4	161-251-015	Residential	1.7	0.15	8.8	No Notes
5	161-251-016	Residential	1.65	0.15	9.0	No Notes
6	161-251-018	Residential	2.85	0.41	14.3	No Notes
7	161-251-019	Residential	2.01	0.21	10.4	No Notes
8	161-571-001	Residential	15.56	0.22	1.4	No Notes
9	161-571-002	Commercial	0.68	0.07	10.2	Vacant
10	161-571-003	Commercial	5.42	0.38	7.0	Undeveloped
11	161-641-014	Residential	10.94	0.02	0.1	No Notes
12	161-641-019	Commercial	0.04	0.002	5.0	Service Station
13	161-641-025	Residential	5.05	0.02	0.4	No Notes
Total	Not applicable	Not applicable	Not applicable	4.01	Not applicable	No Notes

The design of Alternative 2 was modified during the preliminary design to avoid impacts to the existing service station at the southwest corner of the intersection. The Alternative 2 design at the Corral de Tierra Road intersection initially intended for the eastbound direction on the west leg of the intersection to include a left-turn pocket lane, two through lanes and a right-turn pocket lane, the latter to turn south onto Corral de Tierra Road. This wider intersection leg with these lanes and two westbound through lanes and other design elements would have required encroachment onto the commercial gas station services property immediately adjacent to the southwest corner of the intersection (2 Corral de Tierra Road, Unit A, Assessor's Parcel Number 161-641-019). That encroachment would have

impacted the existing gas station pumps and other facilities of the service station, and therefore would have required a full acquisition of the gas station parcel and required relocation of the business. The design for Alternative 2 was revised to change the second eastbound through lane to a combination through/right-turn lane, which enabled the project to shift the lanes and the sidewalk away from the gas station property. As a result, Alternative 2 would require acquisition of a small sliver of the gas station property (about 92 square feet) at the corner of the intersection.

The Alternative 1 roundabout design is estimated to require a very small amount of acquisition of the gas station property as well, about 0.01 acre, or 250 square feet as shown in Table 2.1.6.16. No acquisition is anticipated for the commercial parcel adjacent to the gas station (161-641-018) for either Build Alternative. The two existing driveways on the south side of State Route 68 at the two commercial properties would be retained, with controlled access of right-turn in/right-turn out movements.

The vacant commercial properties at the southeast corner of Corral de Tierra Road (Assessor's Parcel Numbers 161-571-002 and 161-571-003) would have access prohibited from State Route 68, and access would be from the east side of Corral de Tierra. Alternative 1 would require about 0.28 acre of the two vacant commercial properties combined, and Alternative 2 would require about 0.45 acre for drainage improvements (trapezoidal ditch design criteria) between the proposed sidewalk and catch line. This right-of-way need for either alternative design can inform potential land development and site planning of the parcels.

In summary, at the Corral de Tierra Road-Cypress Church Drive intersection at State Route 68 Alternative 2 is estimated to require about 4 acres of permanent right-of-way compared to 1.25 acres for Alternative 1. However, neither alternative is anticipated to substantively affect continued use of the properties, and no structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses.

San Benancio Road

Two properties immediately adjacent to the San Benancio Road at State Route 68 intersection are anticipated to require partial acquisition for Alternative 1, for a combined total of just over one-quarter of an acre, as shown in Table 2.6.1.18. Both parcels are undeveloped, one with a residential designation, the other miscellaneous. No structures are located within acquisition areas. The partial acquisitions would not displace any residents or businesses.

Table 2.6.1.18 Alternative1 Property Acquisition at San Benancio Road

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	161-011-084	Residential	284.0	0.25	0.09	Undeveloped
2	161-061-015	Misc.	0.14	0.02	14.3	Undeveloped
Total	Not applicable	Not applicable	Not applicable	0.27	Not applicable	No Notes

Alternative 2 at the San Benancio Road intersection with State Route 68 is anticipated to require partial property acquisition from seven parcels, for a combined total of 2.74 acres. Most of the potentially affected properties are largely undeveloped, and some have homes in the rear of the parcel, away from the highway. See Table 2.1.6.19.

Table 2.1.6.19 Alternative 2 Property Acquisition at San Benancio Road

Parcel Count	Assessor's Parcel Number	Land Use Type	Existing Size (Acre)	Anticipated Acquisition (Acre)	Percentage of Acquisition	Notes
1	161-011-084	Residential	284.0	1.74	0.6	Undeveloped
2	161-061-003	Residential	1.07	0.29	27.1	Single Family
3	161-061-015	Misc.	0.14	0.06	42.8	Undeveloped
4	161-251-008	Residential	1.77	0.02	1.1	Single Family
5	161-541-001	Misc.	5.01	0.43	8.5	One residence in rear of property, rest undeveloped
6	161-541-002	Misc.	0.18	0.08	44.4	One residence in rear of property, rest undeveloped
7	161-541-003	Misc.	4.85	0.12	2.4	One residence in rear of property, rest undeveloped
Total	Not applicable	Not applicable	Not applicable	2.74	Not applicable	No Notes

As with Alternative 1 at this intersection, no structures are located within acquisition areas and the partial acquisitions would not displace any residents or businesses.

No-Build Alternative

Under the No-Build Alternative, intersection improvements would not be made as proposed, and no associated partial, full, or temporary property acquisitions would be required.

Avoidance, Minimization, and/or Mitigation Measures

RRPA-1. Right of Way Acquisitions and Relocations. The preliminary designs of both Build Alternatives have been sited to minimize impacts to the extent feasible to private and public properties at each intersection. Upon selection of the preferred alternative, final design of that alternative would further refine the right-of-way needs for the intersection improvements, and any partial property acquisitions. For those properties where acquisition cannot be avoided, all property acquisition activities would be conducted in accordance with the regulatory requirements of the Real Property Acquisition Policies Act of 1970, as amended. The parcel owners would be fully informed of their rights, and objective and fair property appraisals would be conducted. Offers would be prepared based on appraised fair market values. Should any property owners request that their property be purchased in its entirety to relocate their business or property occupancy, Caltrans Right of Way agents would coordinate with the property owner(s) in accordance with Caltrans' Relocation Assistance Program. Appendix C explains the program and provides a summary of relocation benefits, as this procedure is a regulatory requirement.

All driveways that would be affected by the project would be reconstructed to conform to the new roadway profile, and all mailboxes that would require temporary removal for construction would be replaced upon completion of construction activities in those locations. The proposed edge of pavement would conform to all asphalt concrete driveways.

2.1.7 Equity

Affected Environment

Information and analysis in this section is based on the Community Impact Assessment report (October 2023). The California Office of Environmental Health and Hazard Assessment's CalEnviroScreen is an online modeling tool that is used to help identify environmental justice communities that are most affected by many sources of pollution and where people are often vulnerable to pollution's effects. Based on the review of the study area using the CalEnviroScreen 4.0 online modeling tool, census tracts 107.2, 132, 134, and 141.10 each had a low score of less than 10; census tract 133 had a low score of 20; and census tract 141.09 had a medium score of 51. Information from the CalEnviroScreen modeling tool indicates that there is relatively low potential for disadvantaged communities to be present within the study area.

The California Environmental Protection Agency's Senate Bill 535 Disadvantaged Communities online map is a tool that is used to help identify communities disproportionately burdened by multiple sources of pollution and with population characteristics that make them more sensitive to pollution. Based on a review of the California Environmental Protection Agency's Senate Bill 535 Disadvantaged Communities (2022 update) online map, the data did not identify any disadvantaged communities within the study area or within the following census tracts: 107.02, 132, 133, 134, 141.09, and 141.10.

The EJScreen is an environmental justice mapping and screening tool created by the U.S. Environmental Protection Agency that is used to help identify areas with people of color and/or low population, potential environmental quality issues, and a combination of environmental and demographic indicators that can identify environmental justice issues. Based on a review of available environmental justice indexes presented in the Environmental Protection Agency EJScreen online tool, there is little to no indication of underserved populations within the study area. There is a low potential for underserved population issues within census tract 141.09, but no underserved population issues were identified within the following census tracts: 107.02, 132, 133, 134, and 141.10. The EJScreen online tool is also able to generate an EJScreen Community Report that summarizes environmental justice issues identified within a selected area. The study area was selected for the EJScreen Community Report, and the resulting report found no underserved populations present within the study area.

Environmental Consequences

Build Alternatives

Since there is no indication that underserved populations are present within the study area, the Build Alternatives would not adversely affect any underserved populations. Also, if approved, the proposed Build Alternatives would include improvements to bike and pedestrian facilities at intersections, and it is anticipated that these facility improvements would encourage multimodal travel and future development along the corridor. Multimodal improvements would improve access for members of any underserved populations potentially using the project corridor Therefore, the project is not anticipated to adversely affect underserved populations in the region.

No-Build Alternative

Under the No-Build Alternative, intersection improvements would not be made and retaining walls and other structures associated with the Build Alternatives would not be constructed. No changes to the visual nature of the intersections would occur. Intersection queues would not be reduced, and delays to residents and community members would persist and worsen over time. The ability of residents to move between communities and to access commercial services along the State Route 68 corridor would be further impeded in the future. Since there is no indication that underserved populations are present

within the study area, the No-Build Alternative would not adversely affect any underserved populations.

Avoidance, Minimization, and Mitigation Measures

Since implementation of the project would not have adverse effects on underserved populations, no avoidance or minimization measures are proposed.

2.1.8 Utilities and Emergency Services

Affected Environment

Several utilities are located along the project corridor and within the project's impact areas and may be in conflict with the proposed project improvements. Power and natural gas services in the project are provided by Pacific Gas and Electric. Other utility services in the project area include AT&T telecommunication lines and Comcast cable television lines. Most of the power, telecommunication, and cable television lines within the project site are located overhead and are suspended from poles. However, some of these utilities have been relocated underground in compliance Scenic Highway regulations. The gas lines within the project site are also underground.

Domestic water service in the project study area is provided by California American Water, Alco Water Service, California Water Service, and by private well in some unincorporated areas of Monterey County. Wastewater collection and treatment services are provided by Monterey One Water, Salinas Industrial wastewater, and through septic systems in some unincorporated areas of Monterey County. Flood control and maintenance are provided by the Monterey County Water Resources Agency. Refer to Sections 2.2.1 and 2.2.2 for discussions on floodplain and storm water.

Police and traffic law enforcement in the study area are provided by the Cities of Monterey and Del Rey Oaks, the Monterey County Sheriff's Department, and the California Highway Patrol. No law enforcement facilities are located immediately adjacent to the project area. The Monterey County Sheriff Department facility nearest to the project site is the Coastal Station at 1200 Aguajito Road in the City of Monterey, 1 mile from the eastern project limits. The City of Del Rey Police Department headquarters are 1 mile north of the project site at 650 Canyon Del Rey Boulevard in the City of Del Rey. The City of Monterey Police Department is at 580 Pacific Street in the City of Monterey, 2 miles west of the project site. The California Highway Patrol station nearest to the project site is 7 miles to the northeast, at 960 East Blanco Road in the City of Salinas.

Fire protection in the project area is provided by the Monterey County Regional Fire District, the City of Monterey Fire Department, and the City of

Del Rey Oaks Fire Department. A Monterey County Regional Fire District station sits within the project area at the intersection of State Route 68 and Laureles Grade. The CalFire San Benito-Monterey Unit Headquarters is at 2221 Garden Road, 3,000 feet northwest of the intersection of State Route 68 and Olmsted Road. Commercial emergency transportation and ambulance services for the project area are provided by American Medical Response, Central Coast Ambulance, Freedom Medical Transportation, and River of Life Transportation.

Environmental Consequences

Build Alternatives

Both Build Alternatives would require permanent relocation of utilities that would be in conflict with the proposed project, including water, natural gas, electrical, cable, and telecommunications. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be relocated underground (subsurface) in accordance with Scenic Highway regulations. Existing underground lines, including natural gas, sewer, and water lines in conflict with project improvements, would also require relocation. Relocated underground lines would be installed as close to the state highway right-of-way as feasible.

Potholing would be conducted as soon as feasible and would be done in the Plans, Specifications, and Estimates (project final Design) phase of the project to positively identify the specific locations of existing subsurface utilities to confirm relocation needs in conjunction with discussions with the utility owner(s). Estimates of utilities potentially in conflict with the Build Alternative are presented in Table 2.1.8.1. Based on preliminary estimates, implementation of Build Alternative 2 would require more linear feet of utility relocation than the implementation of Build Alternative 1.

Table 2.1.8.1 Utilities in Conflict with Build Alternatives

Utility Facility Relocation	Alternative 1	Alternative 2
Overhead power lines	12,372 linear feet	26,104 linear feet
Overhead poles	65	132
Overhead telecommunication lines	6,369 linear feet	12,546 linear feet
Overhead cable television lines	5,305 linear feet	5,185 linear feet
Underground power lines	1,188 linear feet	2,004 linear feet
Underground telecommunication lines	4,566 linear feet	11,257 linear feet
Underground cable television lines	1,355 linear feet	6,968 linear feet
Underground gas lines	18,495 linear feet	33,638 linear feet
Underground water lines	4,285 linear feet	4,645 linear feet
Underground sewer lines	1,554 linear feet	3,175 linear feet

Caltrans would coordinate with utility operators to ensure that all utilities within the roadway right-of-way would be relocated before and during construction. Caltrans has included funds, where necessary, to provide for the state share of utility relocation and would work closely with the utility providers to facilitate relocation. No permanent or long-term effects to utilities would occur.

Construction of the Build Alternatives would generate a minimal amount of wastewater. The main source of wastewater would be associated with sanitary waste generated by construction workers. Portable waste facilities would be provided for use by all workers, and sanitary waste generated from the use of these facilities would be disposed of by an approved contractor at an approved disposal site. No long-term generation of wastewater would occur since the proposed improvements are for roadway infrastructure.

Any water required for construction work would be brought to the project site as needed by the project's construction contractor. The installation of landscaping would require watering until it is fully established. This would be done through either water trucks or a utility agreement with the local water provider.

Temporary construction impacts on emergency services are expected to be minor because emergency services would still be allowed to access the project area during construction. The Resident Engineer for the project would notify and coordinate with regional emergency service providers regarding construction-related activities to ensure that project activities would not restrict or prevent access within the project area. Access for fire/paramedic and other emergency service vehicles through the project limits would be enabled through controlled work zones by the project's construction contractor.

The construction contractor would also ensure that emergency service access to all interconnecting roadways and routes in the project area would not be blocked by construction activities. The project would include Caltrans Standard Specifications and Standard Special Provisions pertaining to actions and strategies that would help maintain a safe environment for construction workers and the traveling public. Emergency access to all interconnecting roadways and routes within the project area would be maintained during construction. Specifically, the Caltrans Construction Manual requires, whether permanent or temporary, restoration of access as soon as possible without waiting for the work to be completed past all the nearby access points. Per the Caltrans Construction Manual (2019, Section 3-702A), the project's construction contractor would provide for the convenience of the public and public traffic. Caltrans Standard Specifications Section 7-1.03, "Public Convenience," requires that operations present the least possible obstruction and inconvenience to the public. The "least possible obstruction and inconvenience" would always depend on a judgment. Ultimately, the

construction contractor for the project would use good construction industry practice, comply with specifications, and not materially diminish the degree of convenience and free passage through the area that existed before construction.

As a result of reductions to current intersection delays and improved travel time reliability through the corridor, improved access for emergency services is anticipated to occur under both Build Alternatives. Alternative 1 would include a roundabout design that provides sufficient lane width to allow for other vehicles to move aside for emergency vehicles passing through the intersection. Curbs in the roundabouts would be designed to be traversable by emergency vehicles. Alternative 2 would include signal prioritization features that would alter the signal to provide priority access for emergency vehicles through signalized intersections. During the Plans, Specifications, and Estimates (project final Design) phase of the project, design of the intersections would be further refined to best accommodate emergency vehicles. The Build Alternatives would not permanently alter planned routes for emergency responses or evacuations. Therefore, no long-term impacts to emergency services are expected from the project.

No-Build Alternative

Under the No-Build Alternative, intersection improvements would not be made and no changes to utilities would be required. Intersection queues would not be reduced, and delays at the signalized intersections would continue. Therefore, movement of emergency services would not be improved.

Avoidance, Minimization, and/or Mitigation Measures

Since implementation of the project would not have adverse effects on utilities and emergency services, no avoidance or minimization measures are proposed.

2.1.9 Traffic and Transportation/Pedestrian and Bicycle Facilities

Regulatory Setting

Caltrans, as assigned by the Federal Highway Administration, directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 Code of Federal Regulations [CFR] 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

In July 1999, the U.S. Department of Transportation issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation

system. Accessibility in federally assisted programs is governed by the U.S. Department of Transportation regulations (49 Code of Federal Regulations 27) implementing Section 504 of the Rehabilitation Act (29 United States Code [USC] 794). The Federal Highway Administration has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the Americans with Disabilities Act requirements to federal-aid projects, including Transportation Enhancement Activities.

Affected Environment

This section is based on the following technical reports and planning documents:

- Final Traffic Operations Analysis Report completed in September 2020, prepared by Caltrans
- Intersection Control Evaluation Step 2 and Traffic Operations Analysis Report Addendum, completed in November 2022, prepared by Caltrans
- State Route 68 Corridor Improvements Project – Estimation of Induced Traffic Demand, completed September 2020, prepared by Caltrans
- Final State Route 68 Scenic Highway Plan completed in August 2017, prepared by the Transportation Agency for Monterey County

Supplemental information was obtained from the following documents:

- 2018 Monterey County Regional Transportation Plan, prepared by Transportation Agency for Monterey County
- Caltrans' Roundabouts: California State Highway System Roundabout Inventory Report completed in May 2017
- Caltrans' Transportation Concept Report for State Route 68 completed in October 2013
- Caltrans' District System Management Plan completed in August 2015

Study Area

The study area for the project includes the portion of State Route 68 just west of Josselyn Canyon Road (post mile 4.8) to east of San Benancio Road (post mile 13.7). State Route 68 is the main route between the Monterey Peninsula and the Salinas Valley and is an important corridor for commercial activity and residential access. The affected environment includes nearby communities within and immediately adjacent to the project limits.

State Route 68 operates as both a conventional highway and a freeway. From State Route 1 in the City of Monterey and heading east for 11.12 miles

(near Toro Park), State Route 68 is a two-lane conventional highway, with 12-foot lanes and 8-foot outside shoulders. State Route 68 then operates as a four-lane freeway for 2.92 miles, with 12-foot lanes and 8-foot to 10-foot outside shoulders. From the end of the freeway to Blanco Road in the City of Salinas (post mile 19.97), State Route 68 is a four-lane conventional highway with 12-foot lanes and 8-foot shoulders.

Terrain through the State Route 68 corridor varies from flat to rolling. The speed limit is 55 miles per hour from State Route 1 (post mile 3.95) and changes to a speed limit of 65 miles per hour between west of Portola Road (post mile 15.14) and Reservation Road (post mile 17.2).

Nine intersections were evaluated as part of the Traffic Operations Analysis Report and Traffic Operations Analysis Report Addendum traffic studies:

- Josselyn Canyon Road
- Olmsted Road
- State Route 218 (Canyon Del Rey Boulevard)
- Ragsdale Drive
- York Road
- Pasadera Drive
- Laureles Grade Road
- Corral de Tierra Road
- San Benancio Road

Existing Travel Patterns

The 2017 State Route 68 Scenic Highway Plan conducted a study of regional travel pattern characteristics throughout the project area using sensors and blue tooth technology to evaluate trip patterns. The study found that 60 percent of traffic observed on State Route 68 represents local trips, with at least one origin or destination located within the State Route 68 corridor.

Trips that pass through the entire corridor without stopping make up about 20 to 40 percent of total trips. For eastbound travel, State Route 68 throughput ranges between 20 and 40 percent depending on its specific origin, with the highest amount of through traffic originating from central Monterey or the State Route 1 corridor. Traffic originating from the eastern part of Monterey is more likely to use State Route 68 and less likely to use an alternate route. For westbound travel, the State Route 68 throughput ranges between 20 and 33 percent depending on its specific origin, with the highest amount of through traffic originating from Salinas along the State Route 68 corridor.

Analysis Thresholds: Level of Service and Vehicle Miles Traveled under Senate Bill 743

Prior to the implementation of Senate Bill 743, evaluation of transportation impacts under CEQA relied on Level of Service (LOS) to determine how a project might increase or reduce traffic delays in the project area. Level of Service is a description of the quality of a transportation facility's operation, ranging from Level of Service A (best operating conditions, indicating free-flow traffic conditions with little or no delay) to Level of Service F (worst operating conditions, representing over-saturated conditions where traffic flows exceed design capacity, resulting in long queues and delays).

Senate Bill 743, passed in 2013, amended CEQA to allow the Governor's Office of Planning and Research to develop new guidelines under CEQA establishing alternative metrics to Levels of Service for the analysis of transportation impacts. On December 28, 2018, the Office of Administrative Law approved the amendments to the CEQA Guidelines including changes related to Senate Bill 743. The amended CEQA Guidelines add a new section on determining the significance of transportation impacts, and generally specify Vehicle Miles Traveled (VMT) as the most appropriate measure of transportation impacts. Caltrans' implementation guideline memorandum dated April 13, 2020 and updated September 20, 2020 provides an implementation timeline for Senate Bill 743. The timeline states that projects initiated after December 28, 2018, that began environmental review before September 15, 2020, would be evaluated on a case-by-case basis to determine if the use of a vehicle miles traveled-based transportation impact significance determination in the draft environmental document is warranted.

Caltrans initiated environmental review for the State Route 68 Corridor Improvements Project on July 29, 2019, and therefore the project was evaluated for vehicle miles traveled applicability. The evaluation determined that the State Route 68 Corridor Improvements Project was exempt from the vehicle miles traveled-based analysis requirement for the following reasons: 1) the project is not a new alignment project; 2) the project is not a capacity-increasing project; and 3) the Transportation Agency for Monterey County conducted extensive public outreach during preparation of the 2017 State Route 68 Scenic Highway Plan that showed strong public support for the project.

Based on guidance included in the Office of Planning and Research 2018 VMT Technical Advisory, the project is not likely to lead to measurable or substantial increases in vehicle travel.

While the project is not a capacity-increasing project that will improve travel time through the corridor and provide additional facilities for bicycle and pedestrian users, Caltrans conducted an induced travel demand analysis that assessed the potential vehicle miles traveled induced by both Alternatives 1

and 2 (State Route 68 Corridor Improvements Project – Estimation of Induced Traffic Demand, Caltrans September 25, 2020). Alternative 2 adds short lane segments to State Route 68 for specific modifications to improve traffic flow and reduce queuing. These additional short lane sections at the nine intersections, a combined total of 2.2 lane miles, were determined not to cause an increase in vehicle miles traveled that would be significant or substantial in relation to the current regional daily vehicle miles traveled in accordance with the induced travel demand analysis conducted by Caltrans. Alternative 1 would not add any additional lane miles to the State Route 68 corridor. Therefore, Caltrans determined that neither Build Alternative would likely lead to a measurable or substantial increase in vehicle travel.

With the adoption of the Climate Action Plan for Transportation Infrastructure (CAPTI) and the 2020–2024 Caltrans Strategic Plan, prioritization of Mobility Investments is now based on the traffic operations metric of Daily Vehicle Hours of Delay (DVHD). The Traffic Operations Analysis Report dated September 30, 2020, used the legacy traffic operations metric of Level of Service (LOS) as defined by the Highway Capacity Manual. The legacy Level of Service metrics for the existing condition are presented here, as the 2020 Traffic Operations Analysis Report analysis of existing conditions was used to determine the need for operational improvements. However, the traffic operations performance metrics for the future Build and No-Build Alternatives for the project were converted into the current policy responsive metric of Daily Vehicle Hours of Delay (DVHD) in the 2023 Traffic Operations Analysis Report Addendum. These Daily Vehicle Hours of Delay analyses are based on a corridor-level traffic model (VISSIM) that enables assessment of operations (traffic flow and delays) on a highway corridor such as State Route 68 as a single integrated network, modeling queuing (vehicles waiting in line) and traffic behavior between and among intersections rather than an assessment of individual intersection operations.

Six levels are used to denote the various levels of service from “A” through “F.” Table 2.1.9.1 provides a summary of Levels of Service for intersections with traffic signals.

Table 2.1.9.1 Level of Service Criteria for Signalized Intersections

Level of Service	Average Control Delay (Seconds per Vehicle)	Flow Type/Operational Condition
A	Less than or equal to 10	Stable flow/Free flow or low delay values
B	Between 10-20	Stable flow/Slight delays
C	Between 20-35	Stable flow/Acceptable delays
D	Between 35-55	Approaching unstable flow/Tolerable delay, occasionally wait through more than one signal cycle before proceeding

Level of Service	Average Control Delay (Seconds per Vehicle)	Flow Type/Operational Condition
E	Between 55-80	Unstable flow/Intolerable delay
F	Greater than 80	Forced flow/Congested and queues fail to clear

Source: Highway Capacity Manual (HCM 7th edition), Transportation Research Board, 2023

Level of Service criteria for unsignalized intersections are also applied to roundabouts. Table 2.1.9.2 provides a summary of Levels of Service for unsignalized intersections, which includes roundabouts.

Table 2.1.9.2 Level of Service Criteria for Unsignalized Intersections, Including Roundabouts

Level of Service	Average Control Delay (Seconds per Vehicle)	Flow Type/Operational Condition
A	Less than or equal to 10	Stable flow/Free flow or low delay values
B	Between 10-15	Stable flow/Slight delays
C	Between 15-25	Stable flow/Acceptable delays
D	Between 25-35	Approaching unstable flow/Tolerable delay, occasionally wait through more than one signal cycle before proceeding
E	Between 35-50	Unstable flow/Intolerable delay
F	Greater than 50	Forced flow/Congested and queues fail to clear

Source: Highway Capacity Manual (HCM 7th edition), Transportation Research Board, 2023

Existing Intersection Operational Conditions

According to the 2020 Traffic Operations Analysis Report, the target level of service for all intersections is Level of Service C during weekday peak hour (morning and evening) operations. All nine intersections evaluated in the 2020 Traffic Operations Analysis Report are either three-legged or four-legged intersections. The Traffic Operations Analysis Report evaluated the Level of Service for each leg of each intersection separately. An average Level of Service was then determined for each of the nine intersections by averaging the Levels of Service of all legs for each intersection. Existing conditions analysis shows that almost all of the intersections have at least one leg below Level of Service C. A summary of existing intersection Levels of Service is shown in Table 2.1.9.3.

Table 2.1.9.3 Existing Intersection Level of Service

Existing Intersection Location	Existing Morning Peak Level of Service	Existing Evening Peak Level of Service
Josselyn Canyon Road – Northbound	D	C
State Route 68 – Eastbound	C	A
State Route 68 – Westbound	B	A

Existing Intersection Location	Existing Morning Peak Level of Service	Existing Evening Peak Level of Service
Josselyn Canyon Road – Intersection Average	**C**	**A**
Olmsted Road – Northbound	D	C
Olmsted Road – Southbound	C	D
State Route 68 – Eastbound	C	C
State Route 68 – Westbound	C	D
Olmsted Road – Intersection Average	**C**	**C**
State Route 218 (Monterra Road) – Northbound	C	D
State Route 218 (Canyon del Rey Boulevard) – Southbound	C	C
State Route 68 – Eastbound	B	C
State Route 68 – Westbound	C	C
State Route 218 (Canyon del Rey Blvd) – Intersection Average	**C**	**C**
Ragsdale Drive – Northbound	B	B
Ragsdale Drive – Southbound	C	B
State Route 68 – Westbound	A	C
Ragsdale Drive – Intersection Average	**B**	**B**
York Road – Southbound	C	D
York Road – Eastbound	B	B
State Route 68 – Westbound	B	D
York Road – Intersection Average	**B**	**C**
Boots Road – Northbound	D	C
Pasadera Drive – Southbound	D	C
State Route 68 – Eastbound	B	B
State Route 68 – Westbound	C	B
Pasadera Drive – Intersection Average	**C**	**B**
Laureles Grade – Northbound	C	D
State Route 68 – Eastbound	C	D
State Route 68 – Westbound	B	C
Laureles Grade – Intersection Average	**C**	**C**
Corral de Tierra – Northbound	D	D
Corral de Tierra – Southbound	D	C
State Route 68 – Eastbound	C	D
State Route 68 – Westbound	C	B
Corral de Tierra – Intersection Average	**C**	**C**
San Benancio Road – Northbound	E	C
San Benancio Road – Northbound	E	C
State Route 68 – Eastbound	B	D
State Route 68 – Westbound	C	C
San Benancio Road – Intersection Average	**C**	**C**

Source: Traffic Operations Analysis Report, September 2020, Table 7.

Corridor Collision History

Caltrans' Traffic Accident Surveillance and Analysis System, referred to as "TASAS," maintains an accident database recording all collisions on or associated with state highway facilities. The database can identify locations with high accident concentrations. Traffic Accident Surveillance and Analysis System collision history data for State Route 68 from January 1, 2017 to December 31, 2019 presented in the 2020 Traffic Operations Analysis Report

shows that a total of 288 collisions occurred during that period, categorized as follows:

- 3 of the 288 collisions, or 1 percent, resulted in fatalities, with a total of three persons killed
- 132 of the 288 collisions, or 45.8 percent, resulted in injuries, with a total of 220 persons injured
- 239 of the 288 collisions, or 83 percent, involved multiple vehicles
- 21 of the 288 collisions, or 7.2 percent, occurred in wet conditions
- 50 of the 288 collisions occurred, or 17.4%, in dark conditions

In general, most of the collisions took place in the eastern two-thirds of the project corridor (east of York Road).

Table 2.1.9.4 summarizes the number of fatal, injury or property damage-only collisions for the three-year period from January 1, 2017 to December 31, 2019 for each highway segment in the project limits.

Table 2.1.9.4 Number of Collisions by Segment (January 1, 2017 to December 31, 2019)

Segment Begin Post Mile	Segment End Post Mile	Segment Length in Miles	Number of Fatal Collisions	Number of Injury Collisions	Number of Property Damage Only Collisions	Total Collisions
4.80	4.82	0.02	0	0	0	0
4.82	6.68	1.86	0	25	8	33
6.68	6.71	0.04	0	0	0	0
6.72	6.81	0.10	0	1	0	1
6.81	6.97	0.16	0	1	0	1
6.97	8.33	1.36	0	12	20	32
8.33	11.10	2.77	0	31	42	73
11.10	11.21	0.11	1	7	7	15
11.21	15.18	3.97	2	55	76	133
Total Corridor	Blank Space	**10.38**	**3**	**132**	**153**	**288**

Source: Traffic Operations Analysis Report, September 2020

Table 2.1.9.5 summarizes the number of individual deaths and individual injuries resulting from collisions for the three-year period from January 1, 2017 to December 31, 2019 for each highway segment in the project limits.

Table 2.1.9.5 Number of Deaths and Injuries Resulting from Collisions by Segment (January 1, 2017 to December 31, 2019)

Segment Begin Post Mile	Segment End Post Mile	Segment Length in Miles	Total Number of Deaths	Total Number of Persons Injured
4.80	4.82	0.02	0	0
4.82	6.68	1.86	0	42
6.68	6.71	0.04	0	0
6.72	6.81	0.10	0	4
6.81	6.97	0.16	0	1
6.97	8.33	1.36	0	21
8.33	11.10	2.77	0	48
11.10	11.21	0.11	1	13
11.21	15.18	3.97	2	91
Total Segment Miles	Blank Space	**10.38**	**3**	**220**

Source: Traffic Operations Analysis Report, September 2020

Table 2.1.9.6 summarizes collision data by Day of Week by Time Period for the three-year period from January 1, 2017 to December 31, 2019 for each highway segment in the project limits. Analyzing the three-year collision data for State Route 68 from January 1, 2017 to December 31, 2019 by day of week in three-hour increments shows the following:

- 235 or 82 percent of the 288 collisions occurred during weekdays
- 243 or 84 percent of the 288 collisions occurred during daytime hours between 6:00 a.m. and 6:00 p.m.
- The greatest number of collisions in a single time period occurred between 3:00 p.m. and 6:00 p.m., with a total of 98 or 34 percent of the 288 collisions

Table 2.1.9.6 Number of Collisions by Day of Week and Time of Day (January 1, 2017 to December 31, 2019)

Time of Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
00:00-03:00	0	0	2	0	2	0	1	5
03:00-06:00	0	0	2	0	2	1	0	5
06:00-09:00	3	4	10	8	8	9	1	43
09:00-12:00	4	7	9	6	2	5	5	38
12:00-15:00	7	3	9	11	14	10	10	64

Time of Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
15:00-18:00	6	14	19	13	12	25	9	98
18:00-21:00	3	1	6	3	4	3	2	22
21:00-24:00	1	1	1	3	1	5	1	13
Total	**24**	**30**	**58**	**44**	**45**	**58**	**29**	**288**

Source: Traffic Operations Analysis Report, September 2020

Analysis of the three-year collision data for State Route 68 from January 1, 2017, to December 31, 2019, by collision type shows the following:

- 72.2 percent of the 288 collisions were rear-end collisions
- 10 percent of the 288 collisions were hit object or animal collisions
- 6.6 percent of the 288 collisions were broadside collisions
- The remaining 11.2 percent of the 288 collisions were head-on, sideswipe, overturn or auto-pedestrian collisions and other types

Analysis of the three-year collision data for State Route 68 from January 1, 2017, to December 31, 2019, by primary collision factor shows the following:

- 67.2 percent of the 288 collisions were a result of speeding
- 15.8 percent of the 288 collisions were a result of improper turns or failure to yield
- 5.4 percent of the 288 collisions were a result of driving under the influence
- 11.6 percent of the 288 collisions were a result of other factors

The Traffic Accident Surveillance and Analysis System data for this same three-year period indicates that three highway segments between the project limits experienced three-year average collision rates above the statewide average. Table 2.1.9.7 lists those segments with collision rates above the statewide average in comparison to the statewide average for similar facilities for the three-year period from January 1, 2017, to December 31, 2019.

Table 2.1.9.7 State Route 68 Segments with Three-Year Collision Rates Above the Statewide Average (January 1, 2017 to December 31, 2019)

Segment Post Miles	Segment Location	Collision Rate Type	Actual Collision Rate Exceeding Average	Statewide Average Collision Rate
4.82-6.68	West of Josselyn Canyon Road to west of State Route 218	Fatal and Injury Collisions Only	0.47 per million vehicle miles	0.40 per million vehicle miles
6.97-8.33	East of State Route 218 to east of York Road	Total Collisions	0.86 per million vehicle miles	0.80 per million vehicle miles
11.10-11.21	East of Laureles Grade to Laureles Grade	Fatal Collisions Only	0.034 per million vehicles	0.023 per million vehicles

Source: Traffic Operations Analysis Report, September 2020

According to the Traffic Operations Analysis Report traffic collision data for January 1, 2017, to December 31, 2019, the highest concentration of rear-end collisions during that period occurred at or very close to the following intersections:

- York Road
- Pasadera Drive
- Laureles Grade
- Corral de Tierra Road
- San Benancio Road

Research shows that stop-and-go traffic conditions contribute to or are the cause of rear-end collisions. Analysis of collision characteristics included in the August 2017 Final State Route 68 Scenic Highway Plan (page 74) concluded that most of the collisions along segments of State Route 68 relate to the extensive queuing condition at intersections within the project limits, specifically, high incidences of rear-end collisions and excessive speed.

Table 2.1.9.8 provides summary data for collision rates on State Route 68 compared with the statewide average for the more recent period of October 1, 2019, to September 30, 2022.

Table 2.1.9.8 State Route 68 Segments with Three Year Collision Rates in Relation to Statewide Average October 2019 through September 2022

Begin Post Mile	End Post Mile	Length (mile)	State Route 68 Actual (Fatal + Injury)	Statewide Average (Fatal + Injury)
4.80	4.82	0.02	0.00	0.54
4.82	6.68	1.86	0.44	0.61
6.68	6.71	0.03	0.00	0.54
6.72	6.81	0.09	0.08	0.31

Begin Post Mile	End Post Mile	Length (mile)	State Route 68 Actual (Fatal + Injury)	Statewide Average (Fatal + Injury)
6.81	6.97	0.16	0.11	0.79
6.97	8.33	1.36	**0.81**	0.61
8.33	11.10	2.77	0.69	1.20
11.10	11.21	0.11	0.35	0.65
11.21	13.70	2.49	0.81	1.16

The collision data for this more recent timeframe on State Route 68 indicates that the segment of State Route 68 between post mile 6.97 to post mile 8.33, which is from just west of Ragsdale Drive to east of York Road, had collision rates higher than the statewide average. The other segments showed collision rates less than the statewide average. The Traffic Operations Analysis Report and Traffic Operations Analysis Report Addendum studies used the 2017 to 2019 collision data as representative of more typical travel demand conditions. The collision data for the period of October 2019 through September 2022 covers the period of the COVID-19 health pandemic, during which time traffic volumes on roadways were generally lower due to stay-at-home health orders and telework practices. Therefore, the data does not reflect the typical traffic operation conditions on State Route 68; however, it is presented as additional information about the affected environment of the project study area.

Vehicle-Wildlife Collisions

In addition to being a key corridor for the traveling public between the Monterey Peninsula and the Salinas Valley, State Route 68 is bordered by important wildlife habitat, including the 14,650-acre Fort Ord National Monument and the Sierra de Salinas range just east of the Santa Lucia coastal range. These areas connect to the Ventana Wilderness in Los Padres National Forest farther south of the State Route 68 corridor. State Route 68 can be a barrier to wildlife attempting to cross between habitats on each side of the highway, putting both travelers and animals at risk of collision.

As part of the Transportation Agency for Monterey County's 2017 State Route 68 Scenic Highway Plan, a study of wildlife roadkill (Wildlife Connectivity Analysis, 2016 prepared by Pathways for Wildlife) was done for the State Route 68 corridor. The purpose of the study was to provide a detailed wildlife connectivity analysis, including GIS (geographic information system) mapping of habitats, existing crossings, connectors (culverts, drainpipes, and bridges) and roadkill data. Wildlife cameras installed at 11 locations (existing culverts and bridges, and wildlife hotspot trail) along the State Route 68 corridor from York Road to Portola Road during 2016 detected 2,709 instances of wildlife crossing the State Route 68 corridor. During the 2016 study period, biweekly roadkill surveys were conducted, and 60 animals were recorded hit on State Route 68. The highest percentages of animal species hit were badgers at 33 percent, followed by deer at 25 percent. The study found that most roadkill incidents occurred near existing culverts and bridges, which have high use by

animals. The intersection areas with the higher numbers of roadkill, based on physical evidence, included York Road, Pasadera Drive-Boots Road, Laureles Grade Road, Corral de Tierra Road and San Benancio Road. Further discussion is provided in the Natural Environment Study prepared for the project (Caltrans October 2023).

Existing Bicycle and Pedestrian Routes

The 2017 State Route 68 Scenic Highway Plan included a multimodal Level of Service analysis, which showed that while the State Route 68 corridor serves mostly vehicular traffic, bicycle and pedestrian activity occurs at many of the project intersections. The analysis followed the Highway Capacity Manual's 2010 Multimodal Level of Service (MMLOS) methodology. Per the methodology procedure, Level of Service is evaluated as a function of the infrastructure characteristics rather than on volume of bicycle and pedestrian users. The 2017 State Route 68 Scenic Highway Plan studied multimodal Level of Service for pedestrians and bicyclists at each of nine the project intersections.

Along State Route 68 the main inputs in evaluating bicycle Level of Service at the signalized intersections are: intersection crossing distance; width of the travel lane, bike lane, and shoulder; and number of vehicles per lane. For most intersections, the bicycle Level of Service score was "D" or better with the exception of three intersection legs that scored a level "E" during the morning and/or evening peak hour. All intersections with legs receiving the level "E" score also have legs with higher scores. The three legs scoring a bicycle Level of Service "E" were at the following intersections:

- Olmsted Road
- Pasadera Drive-Boots Road
- San Benancio Road

The main inputs in evaluating pedestrian Level of Service at the signalized intersections along State Route 68 are: number of lanes being crossed; right-turn-on-red vehicles; vehicle volumes and speed; and delay at the intersection.

All signalized intersections that include pedestrian phases and marked crossings recorded a Level of Service of D or better.

Environmental Consequences

Alternative 1: State Route 68 Roundabouts – Long-Term Operation

Alternative 1 proposes to reconfigure the nine existing signalized intersections along the State Route 68 corridor within the project limits into modern roundabouts. Modern roundabouts have improved geometric characteristics, including channelized approaches and engineered splitter islands that result

in lower vehicle speeds and fewer conflict points. Unlike other types of traffic circles, modern roundabouts include the following characteristics:

- Counterclockwise flow – traffic travels counterclockwise around a center island
- Entry yield control – vehicles entering the roundabout yield to traffic already circulating
- Low speed – the specific geometric curvature results in lower vehicle speeds through the roundabout; for the State Route 68 project, single-lane roundabout design speed would be 25 miles per hour and multilane roundabout design speed would be 30 miles per hour
- Pedestrian access – provided only across legs of the roundabout, behind the yield line
- Truck apron – a reinforced concrete apron around the perimeter of the center island to accommodate use of the roundabout by large trucks, buses, and fire engines

  Roundabouts typically require varying lane widths; narrower lanes help control speed leading up to the roundabout and wider lanes enable trucks to navigate the circle successfully. Approaching lane widths typically vary from 12 to 20 feet, and road shoulders are eliminated next to the approach lanes and in the circle itself to discourage drivers from passing bicyclists that may be riding through.

  Alternative 1 proposes varying diameters of the roundabout circles for each intersection. The State Route 68 intersections at Josselyn Canyon Road, Olmsted Road, Ragsdale Drive, York Road, Pasadera Drive-Boots Road, and Laureles Grade Road are proposed to have circle diameters of 150 feet, with 170 feet at the State Route 68/State Route 218 intersection, and 145 feet at State Route 68/San Benancio Road intersection. The intersection at State Route 68/Corral de Tierra Road is proposed to be elliptical in shape, ranging from 140 to 150 feet. The circulatory roadway at all of the project intersections is proposed to be 20 feet wide. Mountable aprons, 15 feet wide, would line the edge of the roundabouts' central islands to allow larger vehicles and their trailers to safely maneuver through the roundabout and for maintenance access to the island. Raised splitter islands would be placed along the approaches to the roundabouts which function to separate traffic and reduce vehicle speeds.

Alternative 2: State Route 68 Integrated Corridor Management and Adaptive Signal Control – Long-Term Operation

Alternative 2 proposes making operational improvements at nine existing signalized intersections (separated into six locations). This alternative proposes to replace the traffic signal at six intersections and modify traffic signals at three locations. Alternative 2 would establish two Integrated

Corridor Management segments along SR 68: between Josselyn Canyon Road and York Road and between Laureles Grade Road to San Benancio Road. All currently signalized intersections would be upgraded with traffic sensors/traffic detection, traffic signal controllers, and fiber optic or wireless communication systems at the intersections. These communication devices would allow each signalized intersection to be adaptive and allow them to react to changing traffic conditions, monitor traffic conditions at each intersection in real time, and continuously distribute green time equitably for all traffic movements. The proposed State Route 68 improvements would also reduce queuing and the possible rate of vehicle collisions, enhance wildlife habitat connectivity, and improve bicycle and pedestrian access throughout the project corridor. Operational improvements proposed in Alternative 2 would incorporate the December 2020 Traffic Operation Analysis Report (TOAR) recommendations for intersection lane configurations that considered the 2045 forecasted peak traffic volumes as well as recent lane configuration reevaluations (removal of right turn lane) at the Corral de Tierra Road intersection.

Daily Vehicle Hours of Delay

For Alternative 1, a reduction in Daily Vehicle Hours of Delay (DVHD) for both existing traffic conditions (2025) and future traffic conditions (2035 and 2045) is identified in the 2023 Traffic Operations Analysis Report Addendum. These results were compiled based on the operation of the entire corridor for each of the studied alternatives. Table 2.1.9.9 shows projected Daily Vehicle Hours of Delay as well as the DVHD savings for Alternative 1 and Alternative 2 compared with the No-Build condition. A positive DVHD savings denotes an improvement over the No-Build while a negative DVHD savings indicates worse performance than the No-Build. According to the analysis, the proposed roundabouts (Alternative 1) would result in a DVHD savings of 2,123, 2,812, and 4,587 hours in 2025, 2035, and 2045, respectively. The Alternative 2 intersection improvements are anticipated to result in higher DVHD savings of 4,056, 8,057, and 13,188 in 2025, 2035, and 2045, respectively, over the No-Build conditions.

Table 2.1.9.9 Daily Vehicle Hours of Delay Comparison of Alternatives

Alternative	2025 Daily Vehicle Hours of Delay	2025 Savings of Delay	2035 Daily Vehicle Hours of Delay	2035 Savings of Delay	2045 Daily Vehicle Hours of Delay	2045 Savings of Delay
No-Build Alternative	6,609	Not Applicable	11,583	Not Applicable	18,457	Not Applicable
Alternative 1: 8 single-lane and 1 two-lane (at State Route	4,486	2,123	8,771	2,812	13,890	4,587

Alternative	2025 Daily Vehicle Hours of Delay	2025 Savings of Delay	2035 Daily Vehicle Hours of Delay	2035 Savings of Delay	2045 Daily Vehicle Hours of Delay	2045 Savings of Delay
218/State Route 68) Roundabouts						
Alternative 2: Expanded Signalized Intersections	2,553	4,056	3,526	8,057	5,269	13,188

Source: Traffic Operations Analysis Report Addendum, Table 1 (Caltrans, August 2023).

Daily Person Hours of Delay

The 2023 Traffic Operations Analysis Report Addendum also provides the traffic operations metric of Daily Person Hours of Delay (DPHD), which is related to DVHD based on the typical vehicle occupancy rate. The No-Build Alternative provides the baseline, and a positive DPHD savings denotes an improvement over the No-Build condition. According to the 2023 Traffic Operations Analysis Report Addendum, the proposed roundabouts (Alternative 1) would result in a 25 percent savings in DPHD in the 2045 horizon year over the No-Build condition. Likewise, Alternative 2 would result in the savings of 7,097, 14,100, and 23,079 DPHD in 2025, 2035, and 2045, respectively. This translates to a reduction in DPHD of 71 percent in 2045. Table 2.1.9.10 shows 2045 projected Daily Person Hours of Delay for horizon years 2025, 2035 and 2045 for Alternatives 1 and 2, and the No-Build condition, as well as the DPHD savings of the build alternatives over the No-Build condition.

Table 2.1.9.10 Daily Person Hours of Delay Comparison of Alternatives

Alternative	2025 Daily Person Hours of Delay	2025 Savings of Delay	2035 Daily Person Hours of Delay	2035 Savings of Delay	2045 Daily Person Hours of Delay	2045 Savings of Delay
No Build	11,565	Not Applicable	20,270	Not Applicable	32,300	Not Applicable
Alternative 1: 8 single-lane and 1 two-lane (at State Route 218/State Route 68) Roundabouts	7,851	3,714	15,350	4,920	24,273	8,027
Alternative 2: Expanded Signalized Intersections	4,468	7,097	6,170	14,100	9,221	23,079

Source: Traffic Operations Analysis Report Addendum, Table 2 (Caltrans, August 2023).

Alternative 1 State Route 68 Roundabout Overall Corridor Operations: Traffic Flow and Efficiency

Eliminating bottlenecks at the existing signalized intersections along the State Route 68 corridor is anticipated to improve the overall average travel speed through the corridor during peak hours of operation. The following tables provide the peak period Vehicle Hours of Delay (VHD) comparison for the project alternatives. Unlike DVHD, the VHD metric accounts only for network level delays experienced during each of the individual peak hours (morning and evening). Under the No-Build Alternative, vehicle delay would be greater and delays would become increasingly higher in subsequent future years compared to existing delay conditions. The No-Build Alternative provides the baseline, and a positive Vehicle Hours of Delay savings denotes an improvement over the No-Build condition; a negative VHD savings indicates worse performance than the No-Build condition.

As shown in Table 2.1.9.11, the morning peak hour Vehicle Hours of Delay performance of proposed Alternative 1 is marginally better than the No-Build condition, with a small VHD savings over the No-Build condition. Alternative 2 would have the greatest amount of delay savings.

Table 2.1.9.12 shows the evening peak hour performance of each alternative. The evening peak hour performance of Alternative 1 offers a significant Vehicle Hours of Delay savings over the No-Build condition. Alternative 2 offers the best delay savings overall.

Table 2.1.9.11 Morning Peak Hour Vehicle Hours of Delay Comparison by Alternative and Horizon Year

Alternative Morning Peak	2025 Vehicle Hours of Delay	2025 Vehicle Hours of Delay Savings	2035 Vehicle Hours of Delay	2035 Vehicle Hours of Delay Savings	2045 Vehicle Hours of Delay	2045 Vehicle Hours of Delay Savings
No-Build (Baseline)	259	Not Applicable	455	Not Applicable	747	Not Applicable
Alternative 1 Roundabouts	244	15	454	1	672	75
Alternative 2 Expanded Signalized Intersection	116	143	130	325	162	585

Alternative 2 would provide short sections of expanded lanes and additional lane channelization at the intersection legs as well as enhanced signal systems. The additional number of lanes close to the intersection would have additional potential traffic conflict points at the intersections compared to either the No-Build (existing condition) or the roundabout designs under

Alternative 1. Refer to the discussion regarding intersection traffic safety below.

Table 2.1.9.12 Evening Peak Hour Vehicle Hours of Delay Comparison by Alternative and Horizon Year

Alternative Evening Peak	2025 Vehicle Hours of Delay	2025 Vehicle Hours of Delay Savings	2035 Vehicle Hours of Delay	2035 Vehicle Hours of Delay Savings	2045 Vehicle Hours of Delay	2045 Vehicle Hours of Delay Savings
No-Build (Baseline)	377	Not Applicable	627	Not Applicable	884	Not Applicable
Alternative 1 Roundabouts	197	180	383	244	623	261
Alternative 2 Expanded Signalized Intersection	140	237	228	399	375	509

Alternative 2 State Route 68 Integrated Corridor Management and Adaptive Signal Control - Overall Corridor Operations: Traffic Flow and Efficiency

Eliminating bottlenecks at the existing signalized intersections along the State Route 68 corridor to reduce queues would improve the overall average travel flow through the corridor during peak hours of operation. Under the No-Build Alternative, vehicle delay will be highest and delays will become increasingly higher than existing delay conditions with subsequent future years. The Alternative 2 intersection improvements are projected to reduce delays by about 69 percent in 2035 and by about 71 percent in 2045.

While Alternative 2 signalized intersection modifications would improve peak hour corridor delays more than the No-Build Alternative for both existing and future conditions, Alternative 2 is not expected to offer improved safety benefits. The Expanded Signal Alternative adds additional conflict points to each of the nine study intersections compared to the No-Build condition, which translates to more opportunities for vehicle and pedestrian collisions to occur as discussed in the above Safety Analysis.

Traffic Safety Analysis

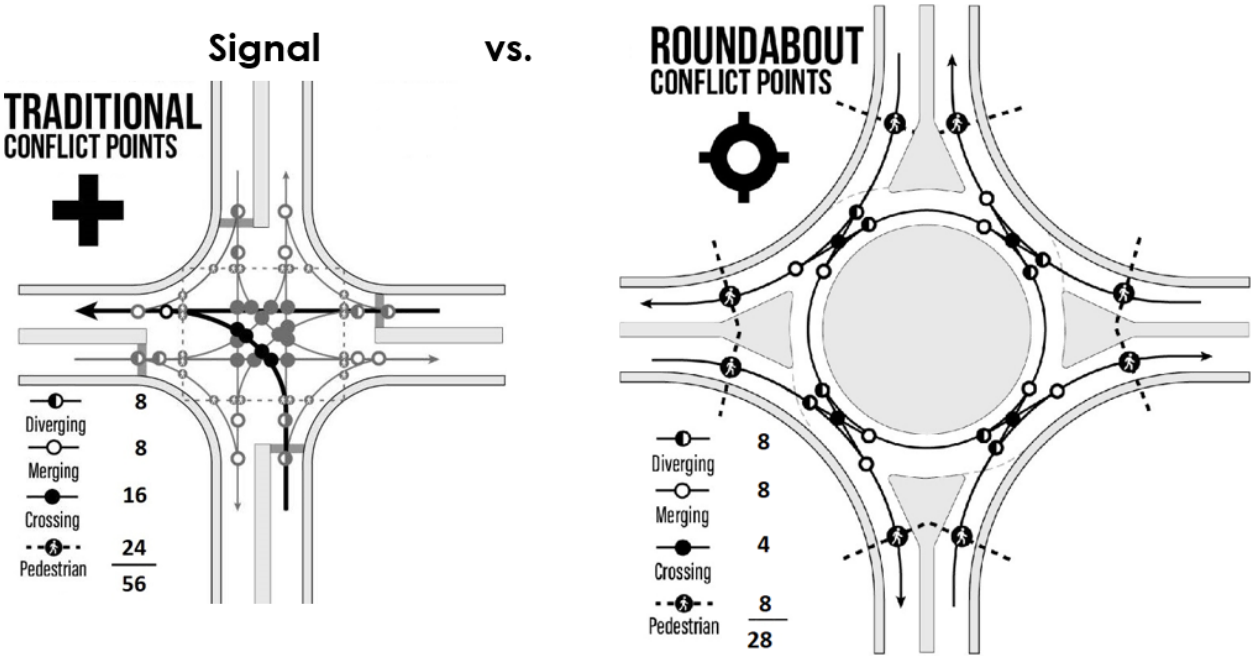
An important element in the consideration of intersection improvement alternatives is safety performance. With Caltrans' adoption of the Safe System Approach, there is an increased emphasis on reducing the number and severity of conflict points at intersections. To implement the Safe Systems Approach for this project, Caltrans considered the Safe Systems concepts for each of the intersection control alternatives considered. The Safe Systems Approach compares the effectiveness of intersection designs based on research-based measures of effectiveness, including conflict points,

conflict point severity, exposure, and intersection complexity. According to the analysis in the Traffic Operations Analysis Report Addendum, the proposed roundabouts (Alternative 1) have the fewest conflict points as well as the lowest conflict point severity out of all the project intersections. Intersections with more conflict points introduce a greater potential for a collision to occur, so alternatives with fewer conflict points would offer better safety performance.

A “conflict point” refers to a spot where two vehicles or a vehicle and pedestrian could potentially collide at an intersection. As shown in Figure 2.1.9.1, a conventional signalized intersection has 32 vehicle and 24 pedestrian conflict points. In comparison, a single-lane roundabout would have 20 vehicle conflict points and 8 pedestrian conflict points. Converting to a roundabout would result in a 38 percent and 67 percent reduction in vehicle and pedestrian conflict points, respectively, with a 75 percent reduction in crossing conflicts. Fewer conflict points would result in fewer opportunities for vehicle and pedestrian collisions.

Conflict points are labeled as diverging, merging, or crossing and pedestrians/bicyclists. By adding short segments of additional lanes at the approaches to intersections, Alternative 2 would increase the number of conflict points at the intersections compared to the existing condition No-Build. Accident data from Caltrans’ Traffic Accident Surveillance and Analysis System (TASAS) for the period between 2017 and 2019 concludes that the project intersections in the eastern half of the corridor limits (York Road to San Benancio Road) had more property damage-only collisions (ranging from 8 to 21 collisions per intersection) compared to the intersections in the western portion (Josselyn Canyon Road to Ragsdale Drive), which had a range of 2 to 5 collisions per intersection.

Figure 2.1.9.1 Comparison of Vehicle-to-Vehicle Conflict Points at Signalized and Roundabout Intersections



Source: FHWA, A Safe System-Based Framework and Analytical Methodology for Assessing Intersections

Roundabout Traffic Safety

Various studies show substantial safety improvements at conventional intersections converted to roundabouts. At traffic signal-controlled intersections, traffic must come to a complete stop in the red signal phase, which causes vehicle queuing (waiting in line). The geometry of roundabouts greatly reduces the 32 movement conflicts present at conventional intersections; yield control intersections such as roundabouts enable rolling queues where traffic slows but does not come to a complete stop. Roundabouts have only eight total conflict points, and the type of conflicts that remain are the same-direction variety, which result in substantially less severity, and as a result less likelihood of injury. Following intersection conversion to roundabout, crash frequencies at converted intersections have been shown to be reduced by up to 29 percent at multilane intersections and 51 percent at single-lane intersections. Studies also show that collisions resulting in severe, debilitating injuries and fatalities in roundabout intersections are rare.

The Insurance Institute of Highway Safety in partnership with the Federal Highway Administration has shown that, compared to signalized intersections, roundabouts result in:

- Up to 37 percent reduction in overall collisions
- Up to 75 percent reduction in injury collisions

- Up to 90 percent reduction in overall fatalities
- 75 percent fewer conflict points than a traditional intersection

Therefore, conversion of standard signalized intersection control to roundabout configurations, particularly single-lane roundabouts, is expected to substantially reduce collision frequency.

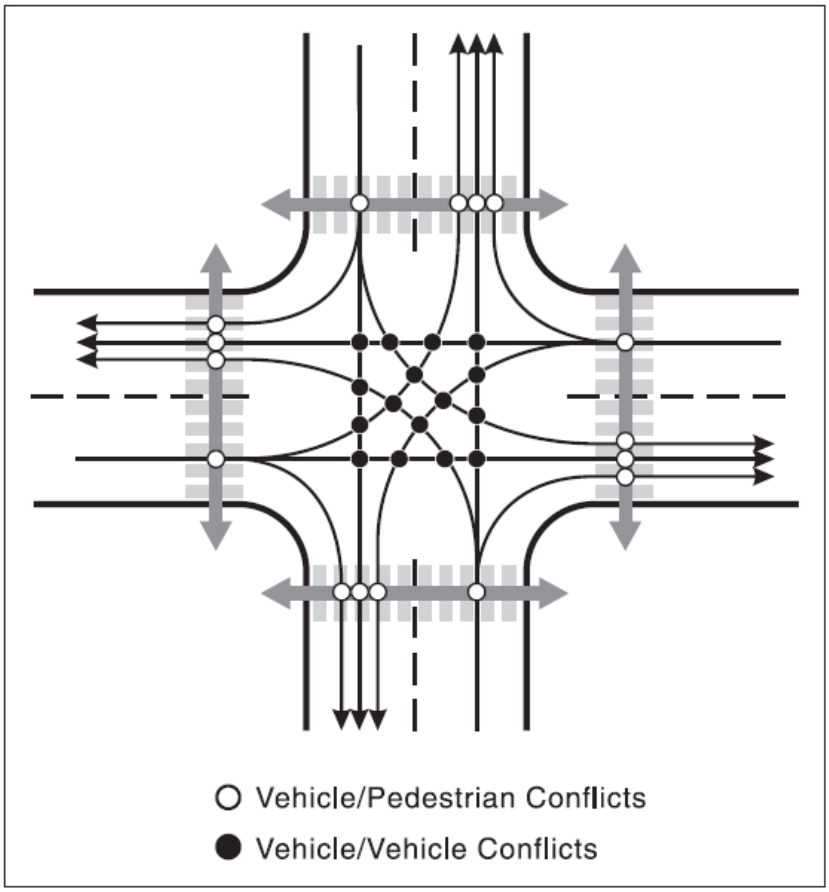
Alternative 1 State Route 68 Roundabout Bicyclist and Pedestrian Safety

The Insurance Institute of Highway Safety in partnership with the Federal Highway Administration has shown that, compared to signalized intersections, roundabouts result in an up to 40 percent reduction in pedestrian collisions. The reduction of the total number of conflict points and collision severity also applies to pedestrians and bicyclists. The geometric features of modern roundabouts also reduce vehicle speed and ensure speed consistency. Lower vehicle speeds reduce crash severity for bicyclists and pedestrians. Crosswalks are designed to cut through the splitter islands, which provides pedestrian refuge between lanes, making it safer to cross a roadway with traffic in both directions of travel.

Crosswalks are also typically set back one vehicle length from the edge of the circulatory segment of the roundabout to allow the driver to focus on pedestrians and bicyclists crossing the lane prior to turning attention to merging with vehicles in the roundabout. Figures 2.1.9.2 and 2.1.9.3 show vehicle-pedestrian-conflicts at signalized intersections and at roundabouts. As is shown in the figures, there are 16 vehicle-pedestrian conflict points in a conventional intersection versus 8 vehicle-pedestrian conflict points in a roundabout.

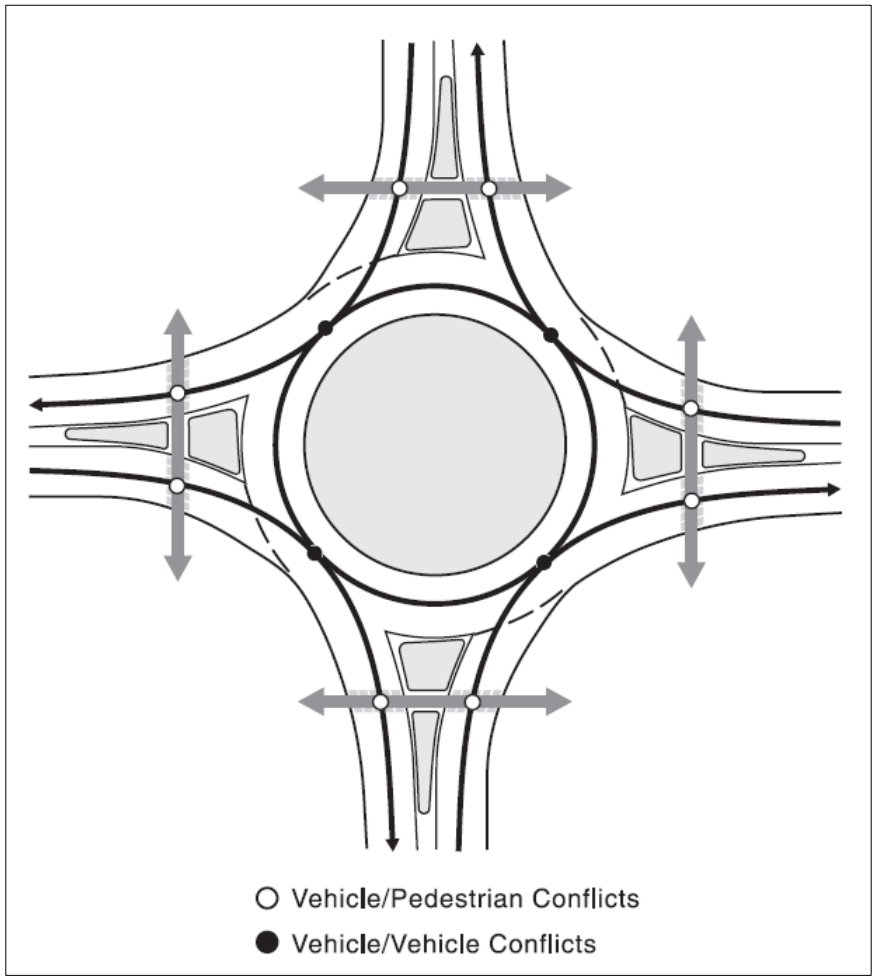
When using modern roundabouts, bicyclists have the option of riding in the traffic lane with motor vehicles through the roundabout or biking on the shared use pedestrian path and crossing traffic lanes using crosswalks. Roadway bike lanes end about 100 feet in advance of the circulatory segment of the roundabout to remind bicyclists to merge into the road or onto the shared pedestrian path via access ramps. Ending the bike lane prior to entry into the roundabout also provides vehicles with an opportunity to be mindful of merging bicyclists before beginning to merge. Bicyclists using the travel lane must yield to pedestrians.

Figure 2.1.9.2 Vehicle to-Pedestrian Conflict Points at Signalized Intersections



Source: Roundabouts: An Informational Guide, Federal Highway Administration Publication Number FHWA-RD-00-067

Figure 2.1.9.3 Vehicle-Pedestrian Conflict Points at a Single-Lane Roundabout



Source: Roundabouts: An Informational Guide, Federal Highway Administration Publication Number FHWA-RD-00-067

As a result, roundabouts are considered safer for pedestrians and bicyclists than traditional signalized intersections because:

- Travel speeds are lower
- Crossing distance is shorter
- Refuge is provided in splitter islands
- Vehicle/pedestrian and vehicle/bicycle conflict points are reduced

Alternative 2 State Route 68 Integrated Corridor Management and Adaptive Signal Control - Bicyclist and Pedestrian Safety

Bicycle and pedestrian routes between the modified signalized intersections will remain as they now exist. Most bicycle and pedestrian routes through the modified signalized intersections will remain as they now exist. The addition of new turning lanes in Alternative 2 would result in wider intersections and the elongation of existing cross walk lengths at the following intersections:

- Josselyn Canyon (east, west, and south legs)
- Olmsted (west, north, and south legs)
- State Route 218 (west and north legs)
- York (east and north legs)
- Pasadera (east and north legs)
- Laureles (east and south legs)
- San Benancio (west and south legs)

Widening of intersections and the resulting elongation of crosswalks across the intersections would impact pedestrians and bicyclists using crosswalks by requiring them to cross a wider intersection in a limited time. However, the crosswalks would be better delineated, and the upgraded signal timing with push buttons for crossing demand would improve the existing conditions at the signalized intersections.

No-Build Alternative

Under the No-Build Alternative, intersection improvements would not be made. Intersection queues would not be reduced, and delays at the existing signalized intersections would continue and worsen over time.

Under the No-Build Alternative, vehicle delay along the entire corridor would be highest and delays would become increasingly greater than existing delay conditions with subsequent future years. No-Build delays are projected to increase from the existing delay condition more than 75 percent in 2035 and by more than 175 percent in 2045 (see Table 2.1.9.9 Daily Vehicle Hours of Delay Comparison of Alternatives).

Monterey Regional Airport

The project is near the Monterey Regional Airport but would not cause a change in air traffic patterns since the project involves in-place modification of existing intersections and does not change or create a new route. Therefore, neither project Alternative 1 nor Alternative 2 would increase airport hazards because of a design feature or incompatible use.

Conclusions – Long-Term Traffic Analysis

The project is a transportation improvement project that would not increase the capacity of State Route 68 or the intersecting cross streets within the project limits or would otherwise cause substantial increases in traffic or vehicle miles traveled through the corridor in future horizon years. Design elements have been incorporated into the Build Alternatives to improve traffic flow, reduce delay, and provide enhanced facilities for bicyclists and pedestrian use of the intersections.

Both Build Alternatives are expected to improve traffic flow and reduce delays in the long term compared with the No-Build Alternative because they would improve operations at intersections along the State Route 68 corridor where delays and bottlenecks currently occur. The No-Build Alternative would not involve modifying existing conditions; therefore, improvements to traffic flow and safety are not anticipated to occur. Both Alternatives 1 and 2 include improvements to wildlife crossings, which are anticipated to reduce the number of collisions due to wildlife crossing.

Alternative 2, while entailing some modification to the existing signalized intersections, is not anticipated to reduce the number of intersection collisions to the extent anticipated for Alternative 1. Alternative 2 would widen some intersections, which would result in elongation of crosswalk lengths, which may affect pedestrian and bicyclist safety when using the crosswalks. Alternative 1 would have fewer potential traffic movement conflict points than Alternative 2.

Vehicle-Wildlife Conflicts

From a traffic safety perspective, the State Route 68 corridor routinely experiences vehicle-wildlife conflicts as documented in the State Route 68 Scenic Highway Plan (Transportation Agency for Monterey County 2017) and the study contained therein that examined wildlife roadkill data along the corridor. The Build Alternatives include the same wildlife crossing improvements at five locations as described in Sections 1.3 and 1.4. The proposed improvements would install new culverts near existing degraded culverts in locations where wildlife activity has been observed along the highway, along with wildlife fencing installation along the edges of the highway to guide mammals to the new culvert. Both Build Alternatives would provide improved conditions to reduce conflicts between vehicles and wildlife within the project limits.

Temporary Construction Impacts

The No-Build Alternative would not involve any construction activities, so no temporary impacts related to construction would occur.

For both Build Alternatives, some impacts to traffic flow and/or routing are expected to occur during construction of the project. It is anticipated that

construction of the improvements at the nine project intersections would occur in several phases, with the intersection locations per phase to be determined. Short-term traffic delays are expected along State Route 68 and cross streets at project intersections throughout the duration of the project. During construction, detours at each intersection would be developed as necessary to ensure continuous access to and from cross streets. Night work is expected to occur during each construction phase and temporary night closures may occur. A traffic management plan will be developed to manage traffic during construction. The Transportation Agency for Monterey County intends to establish an interagency task force to provide input from the public on traffic operations during construction of the project. Pedestrian and bicycle lane facilities may also be closed and re-routed intermittently during construction.

Standard Procedures

The following standard procedures would be included as part of the project to minimize traffic impacts during construction:

TRA-1: To address construction impacts, the Transportation Agency of Monterey County will develop a public outreach plan with input from an interagency task force to ensure public feedback is considered when planning for temporary construction delays. Outreach efforts will take into consideration potential detour locations, and timing of detours and night work. A key component of the outreach plan will be targeted communication and messaging to ensure travelers are informed in advance of the construction process. Prior to the start of construction, affected parties will be contacted for an opportunity to provide input to the public outreach plan or participate in the task force.

TRA-2: Caltrans will implement a traffic management plan during the construction period to reduce transportation/traffic and pedestrian/bicycle impacts associated with construction activities. This plan will include alerting emergency services, local school districts, and the public and all other entities identified in the public outreach plan described in minimization TRA-1.

Avoidance, Minimization, and/or Mitigation Measures

Standard procedures described above would be implemented to manage traffic during construction. No avoidance, minimization, or mitigation measures are required.

2.1.10 Visual/Aesthetics

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and aesthetically (emphasis added)

and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). To further emphasize this point, the Federal Highway Administration, in its implementation of NEPA (23 USC 109[h]), directs that final decisions on projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities" (CA Public Resources Code [PRC] Section 21001[b]).

California Streets and Highways Code Section 92.3 directs Caltrans to use drought-resistant landscaping and recycled water when feasible and incorporate native wildflowers and native and climate-appropriate vegetation into the planting design when appropriate.

Affected Environment

The visual/aesthetics analysis of the proposed project's potential effects on the existing visual environment is based on the Visual Impacts Assessment prepared by Caltrans (October 2, 2023). The project visual (aesthetics) setting, or affected environment, is the area of land that is visible from, adjacent to, and outside of the site, determined by topography, vegetation, and viewing distance.

Regional Landscape

The regional landscape of a project area establishes a frame of reference for comparing the visual effects of the proposed project and determining the significance of these effects. The project area is bounded by the Salinas Valley to the east and Monterey Bay to the west. The former Fort Ord Military Reservation and various land uses therein form the northern edge of the area, and steep mountain ridges to the south of State Route 68 separate the highway corridor and Carmel Valley. The region has prominent landforms, including the Gabilan Mountains east of the city of Salinas, Mount Toro, Jacks Peak, and the Pacific Ocean coastline.

Vegetation is a main component of the visual character of the region. A variety of plant communities and vegetative types surround the State Route 68 corridor, including closed-cone pine and cypress forest, riparian-wetland areas, coastal scrub vegetation, and dense canopies of coastal oak woodland. East of Laureles Grade Road, the vegetation is mostly annual grassland, coastal oak woodland, some mixed chaparral, and coastal scrub.

Land uses in the region are mixed, but open space, and pastureland predominates the Salinas Valley and the State Route 68 corridor. A large portion of the land along State Route 68 remains in open space due to the

preservation of undeveloped portions of the former Fort Ord Military Reservation, now the Fort Ord National Monument property. Development is mostly along edges of communities and major transportation corridors, such as State Route 1, U.S. Route 101, and State Route 68.

State Route 68 serves as a main arterial serving as a commuter route as well as a scenic tourist route between two of Monterey County's principal urbanized areas—the Monterey Peninsula at the west end, and the city of Salinas at the east end. Low-density development is interspersed within the open space-undeveloped rural character along the route. The segment of State Route 68 from post miles R3.94 to 20.10 is known as the Monterey-Salinas Highway. The route within most of the project limits is a two- to four-lane divided conventional highway with turn pockets, 12-foot travel lanes and shoulders from 4 to 10 feet wide. State Route 68 is classified as a freeway from post miles 15.5 to 15.7.

Scenic Highway

In addition to its importance as a key traffic corridor, State Route 68 is also a designated scenic highway. State Route 68 is an Officially Designated Scenic Highway from post mile L4.3 (adjacent to the State Route 1/State Route 68 interchange) to post mile R17.8 (near the intersection of the Salinas River near Salinas). The route is an Eligible State Scenic Highway from post mile 0.00 near Monterey Bay to post mile L4.26 from the city of Monterey to State Route 1. The Scenic Highway designation is based largely on the rural character and lack of urbanization visible along the highway corridor. The visual quality and diversity of the State Route 68 corridor has been recognized as a valuable resource of Monterey County.

Local planning policies emphasize the importance of preserving visual quality and supporting community aesthetic values. The visual quality of the project corridor is protected under the Monterey County General Plan's Conservation and Open Space Element. Goal OS-1 of the Element is to "Retain the character and natural beauty of Monterey County by preserving, conserving, and maintaining unique physical features, natural resources, and agricultural operations." Specifically, Policy OS-1.2 under this goal states that "Development in designated visually sensitive areas shall be subordinate to the natural features of the area."

The project corridor also falls within the County's Greater Monterey Peninsula Area Plan and the Toro Area Plan. Both plans have policies related to visually sensitive areas. Policy T-3.3 in the Toro Area Plan states that portions of the county- and state-designated scenic routes shall be designated as critical viewshed. In addition, a 100-foot building setback is required on all lots adjacent to these scenic routes to provide open space and landscape buffers, excepting driveways and pedestrian walkways. A similar policy, GMP-3.3, is in the Greater Monterey Peninsula Area Plan.

Project Corridor Landscape and Land Uses

Vegetation types are diverse along the project corridor. The western portion contains closed-cone pine and cypress forest; in the middle and easterly sections of the project limits, vegetation transitions to dryer climate ecosystems with foothill woodlands and grasslands with oaks. Creeks with riparian vegetation occur adjacent to State Route 68 and several cross-streets throughout the project limits.

Residential development within the project corridor is on the south side of State Route 68 and on the hillsides, with some residential uses on the north along York Road, between Laguna Seca Golf Ranch and the Laguna Seca Recreation area, between Corral de Tierra Road and San Benancio Road, and on the east side of San Benancio Road and the Toro Regional Park east of the project limits. Development can be seen from State Route 68, though it is mostly screened from view by existing roadside vegetation, landforms, or both.

Commercial development is concentrated in the western end of the project corridor, with the Monterey Regional Airport and Ryan Ranch commercial and office uses. The eastern portion has a few gas stations, restaurants, and convenience shops. Several churches, schools, and recreational lands are scattered throughout the project corridor.

Environmental Consequences

Assessment Methods

The method of analysis of the proposed project's potential impacts on views from and adjacent to State Route 68 generally follows guidance from the Federal Highway Administration, Visual Impact Assessment for Highway Projects (FHWA, March 1981). The first part of the process establishes the existing or baseline conditions, including establishing the visual environment of the project, identifying and assessing the visual resources in the project area, and identifying viewer response to those resources. Visual assessment units and key views are identified. The next part of the analysis is determination of potential visual impacts that the project would cause. The visual appearance of the project alternatives is described and compared with the existing aesthetic conditions and expected viewer response to any changes brought by the project alternatives. Finally, measures are proposed to offset visual effects that the project alternatives would be anticipated to cause.

The focus of the visual impacts analysis is to determine the proposed project's impacts on views from and adjacent to State Route 68 as well as any other potentially critical locations. Elements that might contribute to impacts to views include landscape alteration, visibility of hardscape and structural components of the proposed intersection designs, removal of trees

and other vegetation, and grading and erosion that would alter the overall aesthetic character.

Four visual assessment units within the project limits were established to describe the views of the existing landscape, and an inventory of onsite scenic resources was developed; these visual resources are evaluated and rated for their aesthetic benefit and for their contribution to the visual character of the region. The visual resource inventory is then compared with the features of the proposed project (both Build Alternatives) to determine if there would be any visual conflicts or impacts to the existing visual resources. Photographs from key views and photo simulations of the proposed intersection improvements are used for analysis of the potential visual effects, or changes that the project may cause to the visual character of the project area.

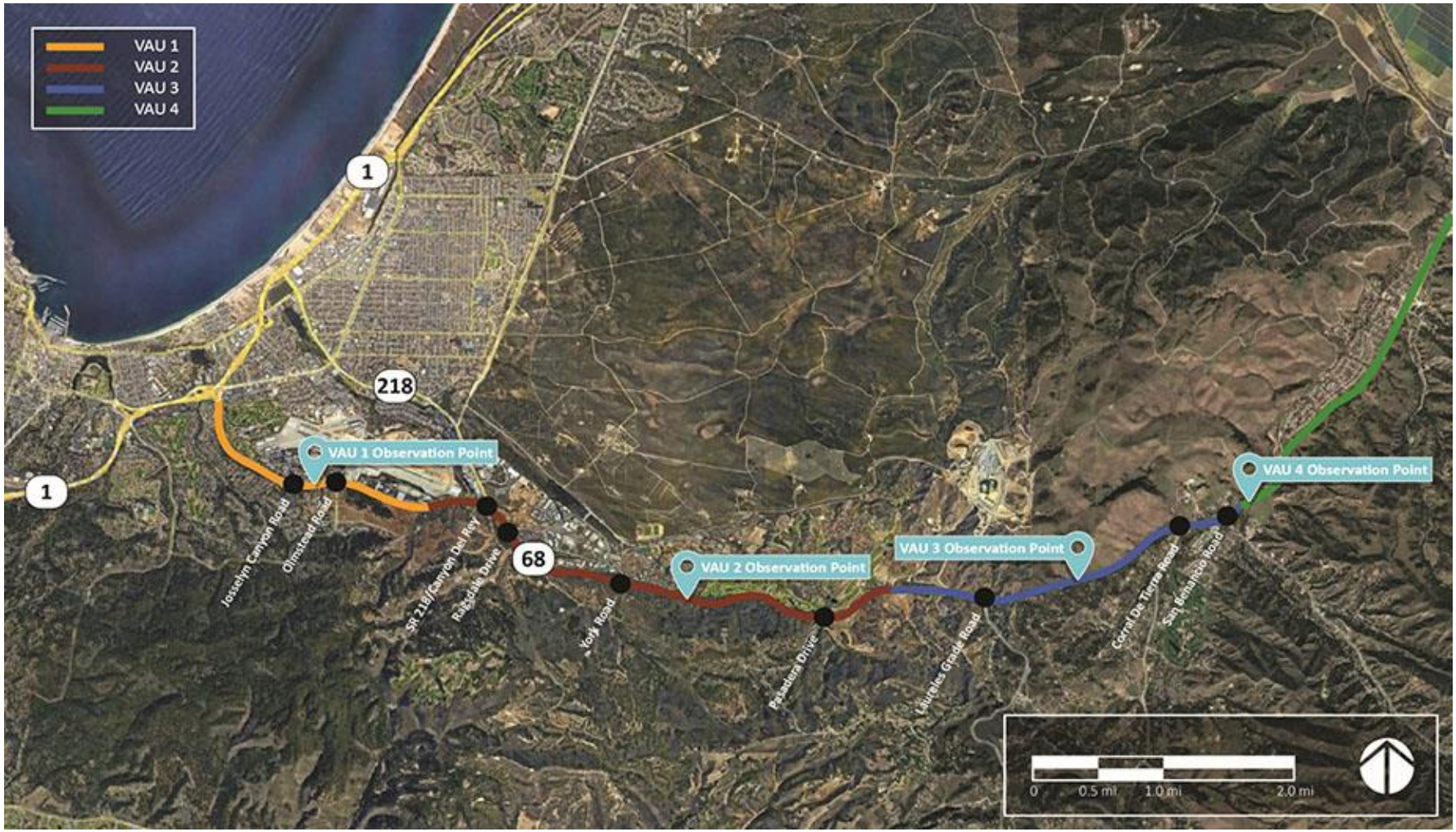
The visual impact assessment includes an emphasis on evaluating the cumulative effects that each of the project intersection modifications, under both Build Alternatives, may have on the overall visual character of the highway corridor when viewed in sequence, given the length of the project area (about 9 miles), rather than solely the individual intersection aesthetic components.

Existing Visual Assessment Units and Key Views

The project portion of the State Route 68 corridor (post miles 4.8 to 13.70) was divided into a selection of four “outdoor rooms,” or visual assessment units, each with varying visual character and quality, to characterize the visual environment.

Figure 2.1.10.1 shows the locations of the four visual assessment units.

Figure 2.1.10.1 Visual Assessment Units



Visual Assessment Unit 1 (see Figure 2.1.10.2) is in the western portion of the corridor, beginning at post mile 4.8 at the westernmost end of the project limits, to just past Olmsted Road. This unit includes the intersections of State Route 68/Josselyn Canyon Road and State Route 68/Olmsted Road. It is characterized by Monterey pines and cypress trees close to the highway edge, creating a narrow shady corridor. Buildings along the northern side of State Route 68 are visible but partially screened from view from the highway.

Figure 2.1.10.2 Visual Assessment Unit 1



Visual Assessment Unit 2 (see Figure 2.1.10.3) is in the western portion of the project corridor from just past Olmsted Road and continuing east to Laguna Seca Recreation Area. The topography varies from steep to rolling hills, with limited views to distant hills. Vegetation consists of oak woodland and pastureland with oaks. Development is limited to low-density residential in the view corridor, with commercial buildings in a business park. Occasional distant views show widely separated hillside residences and ranches. Visual Assessment Unit 2 includes the intersection of State Route 68/State Route 218, a two-lane highway that connects State Route 1 and State Route 68 through the cities of Del Rey Oaks, Sand City, and Seaside. Visual Assessment Unit 2 also includes the State Route 68 intersections with Ragsdale Drive, York Road, and Pasadera Drive.

Figure 2.1.10.3 Visual Assessment Unit 2



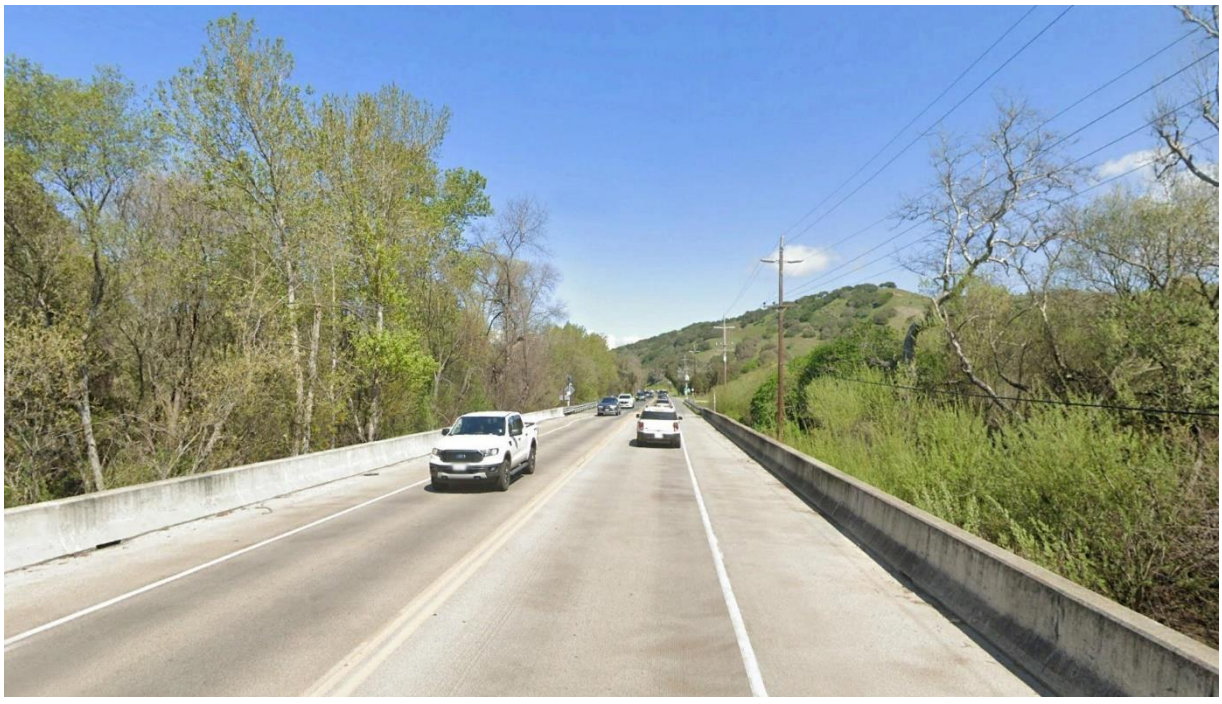
Visual Assessment Unit 3 (see Figure 2.1.10.4) is characterized by distant views of Fort Ord and Toro Park hills and residences on the hillsides on the south side of State Route 68. In this unit, the vegetation and hills are farther away from the roadway opening views. This visual assessment unit contains Laureles Grade Road, which connects State Route 68 and rural residential developments south of the highway. The visual unit also includes the intersections of State Route 68/Corral de Tierra Road and State Route 68/San Benancio Road. The Toro area is considered by the County of Monterey General Plan to be a Scenic viewshed, and Corral de Tierra Road is a county-designated Scenic Route. A small commercial development is in the southwest corner of the intersection. San Benancio Road is a collector street that provides access to several rural residential developments.

Visual Assessment Unit 4 (see Figure 2.1.10.5) is the easternmost of the four visual units and includes the State Route 68 bridge over Toro Creek and the adjacent riparian corridor, forming a distant view zone. Vegetation changes from grasslands and oaks to dense willows and mature sycamore trees. The bridge at San Benancio Road with the dense vegetation on either side visually narrows the corridor, allowing only views for the motorist to the distant hills.

Figure 2.1.10.4 Visual Assessment Unit 3



Figure 2.1.10.5 Visual Assessment Unit 4



A representative viewing location, called a Key View, was selected along the project corridor to best represent the typical visual character of the project

area; it contains unique project area components, and/or affected resources, and represents affected viewer groups. The key view area for the proposed project (Key View 1, in Figure 2.1.10.6) was selected to show the typical changes caused by the project alternatives and associated visual character changes in the project corridor. Key View 1 is generally representative of the likely changes to occur under each of the proposed Build Alternatives of roundabouts or expanded signalized intersections and to provide a reasonable evaluation of the project's overall potential visual impacts.

Figure 2.1.10.6 Key View 1



Key View 1 is within Visual Assessment Unit 1 and looks eastbound on State Route 68 approaching Josselyn Canyon Road. Visual changes that would occur with either of the two Build Alternatives would be visible in the key view, such as tree and vegetation removal, grading, new pavement and striping, new directional signage, lighting, signals, and undergrounding of existing overhead utility lines.

Visual Resources and Resource Change

The visual character and visual quality of the visual resources in the project corridor are described as the baseline on which potential changes caused by the proposed project Build Alternatives are assessed. Resource change is

one of two major elements, the other element being viewer response, for determining visual impacts of a proposed project.

Visual character includes attributes of form (visual mass and shape, for example, tree and vegetation cover and natural conditions), lines, color, texture, dominance (position, size, contrast between developed and undeveloped areas), scale, diversity (variety of visual patterns), and continuity (uninterrupted flow of form, line, color, and textural patterns). These attributes are visually experienced as an integrated whole, for the perceived visual character of the landscape.

The State Route 68 corridor has generally consistent visual form, following the curvilinear form of the landscape, with mostly undeveloped lands in grazing and open space. Vegetation is landscape in shades of greens and yellows in the form of annual grasslands, oak woodland, mixed chaparral, and coastal scrub. The southern side of the project corridor has more of the rural residential land uses on the hillsides; the scale of visible structures is generally consistent with no dominant features. Occasional vertical elements occur in the corridor, such as highway signage, streetlights, and overhead utility lines.

Visual quality is defined using three criteria:

- Vividness – the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements.
- Intactness – the integrity of visual features in the landscape and the extent to which the existing landscape is free from non-typical visual intrusions.
- Unity – the extent to which all visual elements combine to form a coherent, and harmonious visual pattern.

A resource change evaluation is conducted to determine to what degree a proposed action would alter the visual character and/or visual quality of a visual resource setting. A resource change evaluation determines which specific criteria contribute the most to the existing quality of each view, and if change would occur to that criterion as a result of the project. The resource change evaluation is considered in combination with the anticipated viewer response (see discussion that follows) to determine potential levels of visual impact caused by the project.

Separate resource change evaluations were conducted for the key view established for the analysis. A numerical rating between 1 and 7 (7 being the highest rating) was assigned for the visual quality of existing conditions from each viewpoint.

Photo simulations were prepared to show the likely appearance of each of the key views after project construction to assess potential changes and general project appearance. The photo simulations are intended to show a

reasonable representation of the project Build Alternatives approximately 7 to 10 years after construction; the simulations do not include specific design details or specific landscaping components; design and landscaping details would be developed with community involvement during subsequent design review processes.

Numerical ratings were assigned to the proposed view simulations, and any differences between the ratings of the existing and anticipated views informed the degree of resource change that may occur from the proposed project.

Viewer Sensitivity and Viewer Response

The population affected by a proposed project is composed of viewers, who are people whose views of the landscape may be altered by proposed changes within the landscape, and the proposed project, either from physical changes and/or perceived changes to the landscape. Viewer response to changes in the visual environment varies based on multiple aspects such as viewer sensitivity and response. Viewer sensitivity is strongly related to visual preference (values, preconceptions, opinions, historical associations, and community goals). Viewer response assumptions consider viewing proximity, duration of views, activity while viewing, and overall viewing context.

For highway projects, viewer groups include those with views of the road, views from the road, the physical locations of viewer groups, the number of people in the viewer groups, and the duration of the views. Viewers of (or to) the road are those who can see the road project or any of its components from offsite locations such as residences, commercial developments, agricultural and recreational properties. Viewers from the road are primarily motorists, including commuters, tourists, truck drivers, transit riders and drivers, as well as non-motorists (pedestrians, bicyclists).

Viewer response to changes in the project landscape is the second variable, along with Resource Change discussed above, that determine the extent of visual impacts caused by construction and operation of the proposed project. Because of the project area's proximity to visual resources and the importance of the visual environment (Scenic Highway and adjacent roadway designations), the visual analysis of the project assumes a high level of viewer sensitivity throughout the almost 9-mile length of the project. Each of the seven Observer Viewpoints established for the analysis was given a Viewer Response rating of 6 (7 being highest sensitivity).

Planning Policies and Guidelines Related to Aesthetic-Visual Resources

The County of Monterey, City of Monterey, and other cities that surround the project limits maintain planning policies and guidelines to preserve the scenic values of the area, for land use, site and building design and construction. As noted earlier in this section, State Route 68 in the project area is an Officially Designated State Scenic Highway. In addition, the County has designated visually sensitive areas along the State Route 68 corridor in both the Greater

Monterey Peninsula Area Plan and the Toro Area Plan. Laureles Grade Road, between State Route 68 and Carmel Valley Road to the southwest, is a an officially designated County Scenic Route. The County Board of Supervisors has also designated Corral de Tierra, San Benancio, Corral de Cielo, and Underwood roads as county scenic routes. State Route 1 within the City of Monterey is an adopted scenic highway from State Route 68 to the Carmel River.

Both project Build Alternatives are generally consistent, but may not completely align with existing county, city and state visual preservation policies. The key policy is the maintenance of the State Route 68 Scenic Highway designation. Of the two project Build Alternatives, Alternative 1 (Roundabouts) would be the most compatible; Alternative 2 (Signalized intersections) would be the least compatible given the greater urban context created by expanded signalized intersections. The Visual Impact Assessment for State Route 68 Corridor Improvements includes a detailed listing of scenic policies and guidelines for the project area.

Visual Analysis of Build Alternatives

Visual impacts analysis for the proposed project includes assessing changes to the visual resources of the project area and viewshed in combination with the anticipated viewer response to the changes. The analysis considers long-term permanent effects, temporary effects, and the project's contribution to cumulative impacts in combination with other projects in the study area.

The project's impacts on views from public areas include locations from State Route 68 and the proposed intersections, as well as other potentially critical locations such as public parks and trails (Ryan Ranch Park, Laguna Seca Recreation Area, Fort Ord National Monument). Elements of the project designs, such as visibility of hardscape, lighting, tree and other vegetation removal, grading and erosion potential, and roadside signage are assessed that could potentially change the existing terrain and overall aesthetic character of the project area.

Both of the Build Alternatives would have considerable effects on the visual/aesthetic setting of the project in regard to its visual character and quality and would contribute to resource changes along the State Route 68 corridor.

- Visual Character: Both Build Alternatives would be inconsistent with the existing visual character of the State Route 68 corridor, resulting in an increased scale due to retaining walls, increased signage and other roadside elements. These elements would become dominant to the rural surroundings, particularly due to the mass scale and shape of the new retaining walls. The existing diversity would be lessened with removal of a large number of trees and other vegetation. As discussed in Section 2.3, Alternative 1 would remove up to 4,000 trees and Alternative 2 would

remove up to 5,500 trees of varying sizes. Additional vertical elements such as traffic signage and streetlights would generate additional interruption of the visual continuity of the corridor, even with undergrounding of overhead lines.

- Visual Quality: The visual quality of the State Route 68 project corridor would be changed by the Build Alternatives. The existing corridor has scenic vistas of the hills, grazing and other open spaces, and gentle topographic patterns with natural vegetation, which increases the overall vividness with a high level of intactness. Most of the project corridor has a high level of unity, with the western portion less unified with views of surrounding residential, commercial and industrial types of development. The increase in the number and size of retaining walls, widened roadway prism, and barriers would reduce existing intactness. Removal of trees and vegetation as well as landform alteration in certain areas within the 9 miles of the project would result in lower vividness. Unity would decrease with additional highway signage, streetlights, and stoplights (the latter with Alternative 2).
- Resource Change: Both Build Alternatives would contribute toward a resource change on the State Route 68 corridor. The project would cause an increase in scale with construction of retaining walls, increased traffic signage, removal of trees and other vegetation, and other roadside elements that would result in a moderate-high change in both the visual character and visual quality of the corridor. The alteration of the rural character of the project corridor, in combination with the expected sensitivity of viewers, would result in a moderate-high visual resource change.

Visual Impact Ratings and Photo Simulations of Build Alternatives

Table 2.1.10.1 shows the visual impact ratings used to assess viewer response and resource change.

Table 2.1.10.1 Visual Impact Ratings Using Viewer Response and Resource Change

Resource Change	Viewer Response Low (L)	Viewer Response Moderate-Low (ML)	Viewer Response Moderate (M)	Viewer Response Moderate-High (MH)	Viewer Response High (H)
Low (L)	L	ML	ML	M	M
Moderate-Low (ML)	ML	ML	M	M	MH
Moderate (M)	ML	M	M	MH	MH
Moderate High (MH)	M	M	MH	MH	H
High (H)	M	MH	MH	H	H

For the project photo simulations, the key view presented above in Figure 2.1.10.6 was used to show the visual character of the setting and to develop a simulation that would represent how the proposed project would appear at that location, one simulation for each build alternative. Photo simulations are prepared using computer modeling in combination with known dimensions of the existing site elements for visual scale references with the intended result of accurately representing the basic mass, location, and scale of the proposed project elements. Aesthetic treatments such as retaining wall texture and color in the simulations are generic representations; actual aesthetic treatments would be determined during the final design (Plans, Specifications, and Estimates) phase of the project, and would be developed with input from community engagement efforts. Landscaping shown in the simulations shows anticipated plant growth at about seven to 10 years after project construction.

Existing view and proposed view simulations of each of the build alternatives are shown in Figures 2.1.10.7 through 2.1.10.10.

Figure 2.1.10.7 Eastbound State Route 68 Approaching Josselyn Canyon Road



In Figure 2.1.10.7, the visual quality of the existing view from State Route 68 in this area is considered moderately high due to several factors. The Monterey pine trees and cypress are close to the highway edge, creating a narrow shady corridor; the highway is in a slightly curvilinear form following the natural landscape, which contributes to the intactness of the view. Developments are hidden from view behind the dense vegetation and steep topography along the south side of the corridor, contributing to the relatively high degree of visual unity and intactness. Although the intersection is

signalized, and there are overhead utility lines and poles, the natural surroundings dominate, for a unified quality.

Figure 2.1.10.8 Alternative 1 Hardscaped Roundabout



Figure 2.1.10.8 shows the photo simulation of how the intersection would look with the Alternative 1 roundabout as currently proposed (hardscape center island and splitter islands), with two retaining walls, directional signage, and lighting. The design includes additional paved areas for a roundabout, shared bicycle and pedestrian path, bicycle path and splitter island. The retaining wall on the north side of State Route 68 would range in height from about 4 to 22 feet with a length of about 320 feet. The other retaining wall, not visible in this viewpoint, would be along northbound Josselyn Canyon Road and have a concrete barrier; it would be about 192 feet long with a height ranging from 4 to 18 feet. The additional paved footprint, additional directional signage, lighting, and retaining walls would contribute to a more urbanizing effect. Although the retaining wall would be curved, it becomes the dominant element in the view rather than the natural landscape, reducing the intactness and visual unity of the setting. Removal of trees and other vegetation adjacent to the roadway, as well as a hardscaped center island of the roundabout, would also contribute to a more urbanized character of the immediate area.

Figure 2.1.10.9 shows the project simulation of the intersection under Alternative 1 with landscaping. Similar to the hardscaped roundabout, the additional pavement, retaining wall, signage and lighting would reduce the visual quality and vividness rating by creating a more urbanized character in the immediate vicinity. While removal of trees and other vegetation would be required to construct the roundabout and associated features, which would

contribute to an adverse effect on unity and intactness, the vegetative character of the center island and splitter island areas would reduce the urban character and unify the area by making more of a visual connection between the natural surroundings and the landscaped elements.

Figure 2.1.10.9 Alternative 1 Landscaped Roundabout



Figure 2.1.10.10 shows the simulated view of Alternative 2, signalized intersection with lane channelization at the State Route 68/Josselyn Canyon Road intersection.

Figure 2.1.10.10 Alternative 2 Signalized Intersection



Alternative 2 would increase the intersection footprint to accommodate additional lanes. The realignment and widening of Josselyn Canyon Road would require a retaining wall ranging from 4 to 12 feet high and about 100 feet long along the north side of Josselyn Canyon Road (not visible in this viewpoint) to minimize impacts to an adjacent cut slope, which is heavily vegetated with Monterey pine trees. The retaining wall along State Route 68 in this viewpoint is a continuation of the proposed wall from the intersection of State Route 68 and Olmsted Road, which would range from 6 to 24 feet high and about 2,025 feet long. This wall would be linear and an abrupt element having an overall negative effect on the visual unity and intactness of the location. The safety shape at the base of the retaining wall is required because of the wall's immediate proximity to the outer westbound travel lane, which creates an additional built element detracting from the unity. The travel lanes would be linear, negatively affecting the rural character and intactness of the view. Tree and vegetation removal and additional pavement compared with the existing condition would reduce the visual quality and vividness rating by creating a more urban character in the immediate vicinity.

For each of the simulations at the Key View 1, numerical ratings were assigned to reflect the resource change, including the existing condition and each of the proposed alternatives, combined with the anticipated viewer response at the location. As noted in the earlier discussion about viewer response, a high level of existing viewer sensitivity is estimated throughout the almost 9-mile length of the project; the seven Observer Viewpoints established for the analysis were given a Viewer Response rating of 6 out of 7 (7 being highest sensitivity). Positive (+) or negative (-) numerical values were

determined for Resource Change and Viewer Response for the resulting impact assessment. The numerical visual impact ratings analysis for Key View 1 concluded the following:

- Alternative 1 Roundabout with hardscape: --4.1 (negative 4.1)
- Alternative 1 Roundabout with landscaping: --3.7 (negative 3.7)
- Alternative 2 Signals and Lane Channelization: --4.4 (negative 4.4)

The results of the Key View 1 analysis concluded that both of the Build Alternatives, including a variation to include landscaping in Alternative 1, would result in a substantial amount of visual impact, with slight variations. Alternative 2, Signalized Intersections, would have the greatest degree of visual impacts, compared with Alternative 1, Roundabouts, which would have the least; the hardscaped roundabout would have more visual impacts than a landscaped version of the roundabout.

The number of viewpoints associated with the project is infinite and, therefore, it would not be feasible or valuable to attempt to show each potential viewing scenario. As discussed in Visual Assessment Units and Key Views, one key view was selected, Key View 1, to show the typical project changes and potential visual character changes in the project corridor from the Build Alternatives. In summary, the analysis concluded that both of the Build Alternatives and landscaping variation of the roundabout alternative would reduce visual quality to some degree; the types of impacts depend largely on the visual value of the surrounding scenic resources and the effects that the specific project features would have on those resources as perceived from that viewing area.

No-Build Alternative

Under the No-Build Alternative, intersection improvements would not be made and retaining walls and other structures associated with the project would not be constructed. No changes to the visual nature of the State Route 68 corridor and the individual intersections along the route would occur.

Summary of Analysis Conclusions

Permanent Long-Term Visual Changes

The project area has a visual quality that is moderately high, mainly due to the rural character, rolling landform with diverse vegetation types, and lack of urbanization visible along the highway corridor. State Route 68 is an Officially Designated State Scenic Highway in the project area east of State Route 1. Viewer sensitivities are generally expected to have high expectations of scenic quality for the State Route 68 corridor. Local planning policies emphasize the importance of preserving visual quality to community aesthetic values.

The Visual Impact Assessment determined that project would result in substantial alteration of the existing visual environment. Either Build Alternative would increase the urban character: from widening the highway prism, increased traffic signage, elements of roundabouts with Alternative 1 or increased signals with Alternative 2, additional barriers, disturbed landform cut slopes and altered profiles, and construction of additional retaining walls. Each of the alternative designs would cause different and varying degrees of visual change within the project corridor, depending on the specific design elements at each of the project intersections, such as sizes of retaining walls, increased travel lane footprints, signage, and other features at the intersections as discussed below.

Project landscaping and aesthetic treatments to walls and other built elements (to be further defined in the subsequent design phase), would somewhat reduce the urbanizing effect of the project elements, but the long-term permanent visual changes from increased visual scale and hardscape features would be unavoidable and noticeable.

Alternative 1 (State Route 68 Roundabouts)

The Alternative 1 proposed conversion of nine signalized intersections to roundabout design (no signals) would include a central island with apron, two or four 12-foot-wide travel lanes (only the intersection of State Route 218/State Route 68 is proposed for four travel lanes), a landscape buffer, splitter island with landscaping, and road shoulders with backing in each direction. At some locations, retaining walls and/or landform grading in place of walls would be constructed. The center island of the roundabout would be hardscaped to minimize maintenance work (and associated travel lane closures) and to facilitate worker safety; landscaping of the center island may be considered during the final design phase.

Roundabouts would include a pedestrian and bicycle shared-use path, and shared-use crosswalks at each leg of the intersections. Bicycle lanes would lead up to the roundabouts, at which point bicyclists could use the travel lane or access a ramp to the separate shared-use path. All roundabouts would include signage, illumination (streetlights), and striping for pedestrian and bicycle crossings.

The curving shape of roundabouts and associated retaining walls are more visibly compatible with the rural character of State Route 68 and the adjacent natural landforms in the project area.

The roundabout designs allow for greater opportunity for landscaping (aesthetic treatment) compared to Alternative 2, Signals and Lane Channelization. Center islands and splitter islands can be landscaped, slightly reducing the urbanizing effect on the area’s visual character.

Alternative 2 (State Route 68 Integrated Corridor Management and Adaptive Signal Control)

Alternative 2 would make various types of operational improvements at the nine project intersections through localized widening of State Route 68 and/or the intersecting local street to provide dedicated turn lanes, extension of the lane lengths, and provision of new auxiliary through lanes (short sections of additional lane that would taper back to the existing highway width) where needed, and upgrades to the traffic signal systems with adaptive signal control technology to improve traffic flow through the intersection. Road shoulders would be widened where feasible to provide standard 8-foot widths except adjacent to right-turn lanes. Dedicated bicycle lanes would be provided adjacent to dedicated right-turn lanes and auxiliary lanes. Existing crosswalks would be restriped on widened intersection legs, and curb ramps provided adjacent to crosswalks in accordance with Americans with Disabilities Act design standards.

As with the roundabouts design (Alternative 1), the Signals and Lane Channelization (Alternative 2) design elements would include modification or replacement of existing drainage facilities where necessary to accommodate the travel lane and road shoulder improvements. Retaining walls would be constructed where needed to retain cut slopes and minimize impacts to environmental resources. Overhead and underground utility lines and facilities would be relocated or set back where in conflict with the proposed intersection improvements.

Signalized intersections and associated retaining walls are linear in form, contrasting with the natural, curving character of State Route 68. Expansion of the signalized intersections would create larger paved areas than roundabouts and would not provide as much opportunity for landscaping or aesthetically treated paving. Expanded signal hardware and lenses would add to visual clutter of the intersection locations.

Design elements common to both build alternatives are compared below.

Retaining Walls

Both Build Alternatives include retaining walls at various locations and with differing dimensions. Retaining walls would be highly visible and would alter the overall vividness and unity of views of the landscape surrounding the highway corridor.

Alternative 1 would have 11 retaining walls in cut slopes totaling just over 2,500 linear feet within the 9-mile-long project limits. The two highest walls would be at the State Route 68 intersections at Ragsdale Drive and at Josselyn Canyon Road. Both of these walls would range in height from 4 to 22 feet with lengths of 320 to 350 feet. The larger walls would visibly dominate the setting and increase potential for visible graffiti and the

associated loss of visual quality. Retaining walls that follow the curves of the roundabouts are more consistent with the rural character of the corridor and would have a better visual connection to the surrounding natural landscape.

The signalized intersections with lane channelization designs of Alternative 2 would have 13 retaining walls in cut areas, for a total of about 10,200 linear feet of walls. The tallest of the walls would be at the State Route 218/State Route 68 intersection, where the wall would be approximately 4 to 32 feet tall and 353 feet long. A second wall at the same intersection would be 4 to 30 feet tall and approximately 225 feet long. The longest of the retaining walls with Alternative 2 would be at State Route 68/Olmsted Road, at 2,025 feet in length, and from 6 to 24 feet tall. Retaining walls in Alternative 2 would follow the linear legs of the intersection, which would have a more urbanizing effect on the viewshed.

Alternative design elements to reduce the visual dominance of retaining walls include tiering or benching to allow for integral plantings, which would reduce the perceived scale and more urbanized appearance. In addition, landform grading could be implemented in the design to take the place of walls and make the design of both alternatives more consistent with the rural setting. Landform grading was included in the design for both Build Alternatives at the State Route 68/State Route 218 intersection to eliminate the need for a retaining wall at the northeast quadrant that would have been the tallest wall in the project. Landform grading also blends with the adjacent natural topography and vegetation, eliminates the potential for graffiti, and reduces long-term maintenance efforts.

Grading and Landform Alteration

Both Build Alternatives would require extensive grading and landform alteration, and the earthwork and associated areas of disturbance would have a substantive effect on the visual setting in the Scenic Highway corridor. Sharp transitions between the adjacent slope angles and constant flat planes would cause a more engineered visual appearance compared with the existing setting of a more natural landform. Landform-grading all slopes within the project intersection improvement areas would result in a more natural, less engineered transition between constructed cut slopes and the surrounding natural topography.

Wildlife Connectivity Improvements

Both Build Alternatives propose wildlife crossing improvements on State Route 68 at the same five locations that currently have box or pipe culverts. New larger culverts are proposed, with gentle approach slopes at the openings to create a more open and visual clearance for the wildlife. Exclusionary fencing is also included at four of the crossings to guide animals to the culvert structures. Gentle approach slopes to the culvert ends would be created to create openness and visual clearance to encourage wildlife use of

the new larger culverts. Increasing the size of the existing culverts and creating the approach slopes would require excavation into the landscape at both ends to create the necessary clearance and access roads for the construction. Much of the area around the five wildlife crossing locations is heavily vegetated with native shrubs and/or trees. The removal of trees and shrubs to create the approach slopes to the culvert ends would cause a substantial reduction or rural character and visual quality.

Additional Pavement and Concrete Elements

Both Build Alternatives would increase the paved footprints of the intersections, for the roundabouts or expanded lanes, pedestrian and bicycle paths, barriers and retaining walls and other hardscape features. Alternative 1 would have a total of approximately 640 linear feet of concrete barrier. Alternative 2 would have about 175 feet of concrete barrier; the barriers would be treated with color and/or texture, but they would still contribute to the increased engineered visual character of the corridor. Collectively, additional pavement and concrete elements would substantially increase the visual scale and the engineered, urban character compared to the existing more rural character of the corridor.

Landscape Alteration – Vegetation Removal

Both Build Alternatives would result in a substantial amount of vegetation and tree removal. The Natural Environment Study prepared for the project (refer to discussion in Section 2.3 of this document) includes preliminary estimates of the number of native trees that would be removed or adversely affected by the two Build Alternatives at and around the nine project intersections. The trees removed as a result of permanent and temporary impacts would include varying sizes from seedlings to mature trees. Up to 4,000 trees of all sizes are estimated to require removal for the roundabouts (Alternative 1), and up to 5,500 trees are estimated to be removed for the signalized intersection (Alternative 2). About 1,100 to 1,200 coast live oak trees and 300 to 400 Monterey pine trees would be potentially impacted by the roundabouts (Alternative 1), and up to 2,600 to 2,700 coast live oaks and 800 to 900 Monterey pines would be potentially impacted by the Alternative 2 expanded signalized intersections. The balance of the estimated trees impacted would consist of other tree species. Seventy to 80 percent of these impacts are considered to be from temporary construction activities, with the remainder (20 to 30 percent) from permanent project intersection features such as expanded pavement for turn lanes, auxiliary lanes, pathways, retaining walls, and other hardscape features. Mitigation and minimization measures would be implemented for both permanent and temporary impacts to replant trees and vegetation, as prescribed in Section 2.3.

The Alternative 1 roundabouts would provide additional opportunity for replanting vegetation within the splitter islands and potentially the roundabout center island. Both Build Alternatives propose new landscaping, which is

expected to reduce the adverse impacts to the visual character prior to including replacement landscaping. However, because of the high viewer sensitivity within the State Route 68 corridor as a designated Scenic Highway, the visual change associated with such substantial tree and vegetation removal with either Build Alternative would result in a noticeable and substantial degradation of visual character of the highway corridor.

Guardrail

Metal beam guardrail with metal posts would be installed at various locations throughout the proposed project with both Build Alternatives. Guardrail can contribute to visual clutter with highway and road improvement elements and can also be a source of reflectivity and glare. Guardrail and posts would be stained to reduce reflectivity, nonetheless, their addition to the roadside environment would contribute to increasing visual clutter.

Signage, Signals, Fencing, Cable Barrier, Lighting, Zero Emissions Vehicle (ZEV) Charging, and Utilities

New highway signage would be required for both Build Alternatives, directional signs, advance warning signs, and other traffic information; Alternative 1 (Roundabouts) would have slightly more signage than Alterative 2 (Signalized Intersections). Alternative 2 would increase the number of traffic signals at each project intersection and therefore in the overall project corridor.

Fencing to delineate the state highway right-of-way and directional fencing for the wildlife crossings would be included in both Build Alternatives. If chain link fencing is used, it would contribute to the urbanizing character of the corridor in combination with the other project elements and would be visually inconsistent with other fencing in the rural portions of the project limits.

Cable barrier is proposed for both Build Alternatives at the top of retaining walls and drainage structures; it has the same urbanizing effect as additional fencing and guardrail, though typically more visible being on the top of tall structures. Cable barrier would be stained, but it would remain another urbanizing element of the Build Alternatives.

The project intersections currently have both LED (light emitting diode) and incandescent types of street lighting. Proposed lighting for the intersection improvements includes up to one additional overhead electrolier at each of the project intersections and replacement of incandescent lamps with LED lighting. Both types of lighting emit the same level of light, but LED lamps are more efficient. Alternative 2, with the traffic signals in addition to the street lighting, would have a higher overall level of light than Alternative 1.

Overhead utility lines and wires, and utility poles are part of the existing visual setting of the State Route 68 corridor, though poles and utility lines are not

uncommon in rural and agricultural settings, and many communities along the State Route 68 corridor plan to underground overhead facilities due to their cluttering appearance, environmental hazards, and detraction from overall scenic quality. Under both Build Alternatives, utility elements in conflict with the proposed improvements at the intersections would be relocated and overhead lines and wires would be undergrounded in compliance with Public Utilities Code 320.

The project includes the installation of two Zero Emissions Vehicle (ZEV) charging stations on the existing County-operated Park and Ride lot on the east side of Laureles Grade Road, about 280 feet south of State Route 68. As described in Section 1.4.1, the two charging stations would be Level 2 solar-powered systems providing capability for two electric vehicles to charge at the same time. While charging stations have a slightly urbanizing effect, they would be located in an existing parking lot and these types of facilities are becoming more common place and not unexpected by the casual observer; the solar arrays may be partially visible from State Route 68.

Temporary Short-Term Visual Changes

Visual changes during project construction would include addition of construction-related vehicles, workers, equipment, and materials visible within and near the project limits. Storage areas for equipment and vehicles would also be seen in the areas. Construction safety materials would also be present during construction periods, such as temporary K-rail (concrete barrier sections), orange cones, orange fencing, temporary construction-related signage, and other construction devices.

Construction equipment and personnel and related activities would not be unexpected elements at a highway construction site, so viewers may have a reduced viewer sensitivity of the temporary visual disruption caused by the project construction, resulting in moderate short-term visual impacts during project construction. These changes are expected to diminish as mitigation measures are implemented and the site weathers.

Cumulative Visual Impacts

The combination of the proposed project elements to improve the operations at the nine intersections on State Route 68—such as widened sections around the intersections, large retaining walls in places, tree and vegetation removals, increased signage, guardrails and barriers—would result in an extensive visual change of the project area. The cumulative effect of all of these structures and elements would intensify the “human-made” appearance of the area. The project structures would contribute to a cumulative increase of the built character of the corridor.

The visual transition between the project intersection modifications and the existing visual setting (natural landscape and built environment element), would have a considerable effect even if the project has a cohesive design or

presents a series of unrelated elements. The additional elements of retaining walls, barriers, paving and signage among the project features would potentially cause an increase in noticeability of the project as a whole and a cumulative degradation of visual quality.

Other developments are visible within the project viewshed, with few projects built adjacent to the project limits in recent years. The built environment is more noticeable in the western end of the State Route 68 corridor and where the proposed intersection improvements would appear somewhat more consistent with the developed areas.

Both Build Alternatives would contribute to a cumulative increase in the urban character and reduction of visual quality along the State Route 68 corridor. The visual change would be considerably more noticeable due to the scale of the project, with the addition of retaining walls, additional highway signage, tree and vegetation removals, and other road elements. The project would contribute to the alteration of the rural character of the area, which would be potentially adverse when combined with the sensitivity of viewers. Implementation of the measures discussed below in the Avoidance, Minimization, and/or Mitigation Measures section would reduce visual impacts, but the residual effect would remain considerable and adverse.

Standard Measure

The following measure is a standard or regulatory requirement that would be implemented as part of the proposed project:

- All overhead utility lines affected by the project along State Route 68 shall be placed underground by the responsible utility entity per California Public Utilities Commission requirement under Public Utilities Code 320.

Avoidance, Minimization, and/or Mitigation Measures

The following measures would reduce the proposed project's potential long-term visual impacts as seen from State Route 68 and the surrounding area. With implementation of these measures, substantial unavoidable visual impacts would remain.

Avoidance and Minimization Measures

VIS-1. Preserve Vegetation. Prescriptive clearing and grubbing techniques will be used to preserve as much existing vegetation and trees as possible during construction.

VIS-2. Revegetation of Disturbed Areas. All areas disturbed by project construction shall be revegetated, including but not limited to temporary access roads, staging areas, and other areas with native plant species appropriate for each location.

VIS-3. Metal Components. All metal components related to visible down drains and inlets, including but not limited to corrugated metal pipe, flared end sections, connectors, anchorage systems, cable barriers, etc., shall be darkened or colored to blend with the surroundings and to reduce reflectivity. The specific color shall be determined by Caltrans District 5 Landscape Architecture.

VIS-4. Electrical and Traffic Boxes. All visible electrical and traffic-related boxes shall be painted or stained to blend with the surroundings and reduce reflectivity. The specific color shall be determined by Caltrans District 5 Landscape Architecture.

VIS-5. Guardrail. The posts and beams of all new or replaced guardrail shall be colored and/or darkened to blend with the surroundings and to reduce reflectivity. The specific color shall be determined by Caltrans District 5 Landscape Architecture.

VIS-6. Stormwater Prevention Measures. All permanent stormwater prevention measures shall be designed to visually fit with the ornamental or natural landscaped roadsides. Swales, ditches, and basins shall appear as natural as possible. Built structures shall be architecturally treated, colored, or hidden from view with planting as recommended by Caltrans District 5 Landscape Architecture.

VIS-7. Concrete Components. All concrete components related to headwalls, drain inlet aprons, flared end sections, other concrete elements shall be colored to blend with the surroundings and to reduce reflectivity. The specific color shall be determined by Caltrans District 5 Landscape Architecture.

VIS-8. Concrete Medians and Roadside Barriers. All proposed concrete medians and roadside barriers shall include aesthetic treatment such as coloring and/or texturing appropriate for the setting. The aesthetic treatment shall be determined by Caltrans District 5 Landscape Architecture with input from the County of Monterey and local communities.

VIS-9. Roundabout Aesthetic Treatment. Aesthetic treatment shall be applied to all hardscape elements. Sidewalks shall include color if determined appropriate for the surrounding context. Treatments shall compliment the natural and scenic visual setting. If feasible, the center island of the roundabouts shall be landscaped to reduce the urbanizing character and be consistent with local policies and guidelines. The specific types of aesthetic treatments and planting shall be determined by Caltrans District 5 Landscape Architecture with input from the County of Monterey and local communities.

VIS-10. Detectable Warning Surfaces. Detectable warning surfaces shall be a color congruent with local aesthetics as determined by Caltrans District 5 Landscape Architecture.

VIS-11. Rock Slope Protection.

a) All rock slope protection shall be placed in natural-appearing shapes rather than geometric patterns to the greatest extent possible to reduce engineered appearance.

b) Following placement of rock slope protection, the rock shall be colored to blend with the surroundings and to reduce reflectivity. The specific color shall be determined by Caltrans District 5 Landscape Architecture.

VIS-12. Zero Emission Charging Stations. The Zero Emissions Charging Stations shall be sited in a location that is least visible from State Route 68. Any associated aesthetics shall be determined and approved by Caltrans District 5 Landscape Architecture.

VIS-13. Roadway Signage. The signage plan for the project shall consolidate signs as appropriate, avoid redundancy in signage, and locate traffic control cabinets out of sight as reasonably possible.

VIS-14. Lighting. Highway lighting fixtures, including but not limited to, decorative pedestrian-scale fixtures, shall be appropriately shielded, cut-off types to direct lighting downward. Project lighting design shall not exceed the minimum required for operations and safety, consistent with Caltrans and County of Monterey lighting guidelines and standards as well as aesthetic standards. The lighting plan shall be approved by Caltrans District 5 Landscape Architecture.

Mitigation Measures Under CEQA

VIS-15. Landscape Planting. New and replacement planting shall be included to the greatest extent possible to reduce the urbanizing effects of increasing paving, retaining walls, and other built features of the project, and for aesthetic attributes. The following shall be approved by Caltrans District 5 Landscape Architecture:

a. New planting shall be a combination of trees, shrubs, and ground covers as appropriate.

b. New planting shall be native of horticulturally appropriate non-native species.

c. Trees and shrubs shall be planted from the largest container size horticulturally appropriate in order to shorten the amount of time required until they provide substantial visual benefit.

d. New planting shall not be placed such that it would block views of the hills.

e. All plantings shall be maintained until established.

VIS-16. Slope Grading. All excavation slopes shall include slope-rounding and landform grading as appropriate to reduce their engineered appearance and to visually blend with the natural topography of the region.

VIS-17. Retaining Walls. The following measures related to retaining walls shall be implemented during the Plans, Specifications, and Estimates phase of the proposed project:

a) In areas where retaining walls are proposed, landform grading shall be considered where feasible as a replacement for walls or to reduce the size of the walls.

b) Where large retaining walls are proposed and landform grading is not possible as a replacement, the design shall include measures such as benching or tiering to enable opportunities for integral planting.

c) All retaining walls, including associated safety shape, shall include aesthetic treatment such as texture and color appropriate for the location. Any associated concrete gutters and cable barriers shall be integrally colored and/or stained. The aesthetic treatment shall be determined by Caltrans District 5 Landscape Architecture with input from the County of Monterey and local communities.

d) Planting shall be included with all retaining walls to the greatest extent feasible.

2.1.11 Cultural Resources

Regulatory Setting

The term “cultural resources,” as used in this document, refers to the “built environment” (structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including “historic properties,” “historic sites,” “historical resources,” and “tribal cultural resources.” Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places. Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 Code of Federal Regulations 800). On January 1, 2014, the First

Amended Section 106 Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and Caltrans went into effect for Caltrans projects, both state and local, with Federal Highway Administration involvement. The Programmatic Agreement implements the Advisory Council on Historic Preservation's regulations, 36 Code of Federal Regulations 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The Federal Highway Administration's responsibilities under the Programmatic Agreement have been assigned to Caltrans as part of the Surface Transportation Project Delivery Program (23 U.S. Code 327).

The Archaeological Resources Protection Act applies when a project may involve archaeological resources located on federal or tribal land. The Archaeological Resources Protection Act requires that a permit be obtained before excavation of an archaeological resource on such land can take place.

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as "unique" archaeological resources. California Public Resources Code Section 5024.1 established the California Register of Historical Resources and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the California Register of Historical Resources and, therefore, a historical resource. Historical resources are defined in Public Resources Code Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term "tribal cultural resources" to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in Public Resources Code Section 21074(a), a tribal cultural resource is a California Register of Historical Resources or local register eligible site, feature, place, cultural landscape, or object that has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in Public Resources Code Section 21083.2.

Public Resources Code Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the National Register of Historic Places listing criteria. It further requires Caltrans to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register of Historic Places or are registered or eligible for registration as California Historical Landmarks. Procedures for compliance with Public Resources Code Section 5024 are outlined in a Memorandum of Understanding (MOU) between Caltrans and the State Historic Preservation Officer, effective January 1, 2015. For most federal-aid projects on the State

Highway System, compliance with the Section 106 Programmatic Agreement will satisfy the requirements of Public Resources Code Section 5024.

Affected Environment

This section is based on the following technical studies: the Historic Property Survey Report for the Scenic Route 68 Corridor Operational Improvements, Monterey County, California (July 2023), the Archaeological Survey Report for the Scenic Route 68 Corridor Improvements Project (Far Western Anthropological Research Group, Inc., March 2020), the Historical Resources Evaluation Report for the Scenic Route 68 Corridor Improvement Project (JRP Historic Consultants, LLC, August 2020), the Supplemental Archaeological Survey, Extended Phase I and Phase II Testing Report for the Scenic Route 68 Corridor Improvements Project (Far Western Anthropological Research Group, Inc., December 2021), the Draft Programmatic Agreement Between the California Department of Transportation and the California State Historic Preservation Officer Regarding the Scenic Route 68 Corridor Improvement Project (July 2023), and the Draft Cultural Resources Management Plan for the Scenic Route 68 Corridor Improvement Project (prepared by Far Western Anthropological Research Group, Inc., September 2022).

Records Searches

Background research for archaeological resources was conducted for the study area including a records search of materials on file in the Caltrans Cultural Resources Database and a search of records at the Northwest Information Center (File No. 19-0662), part of the California Historical Resources Information System at Sonoma State University in Rohnert Park, California. The records search included a one-half mile radius of the Archaeological Study Area.

Professional qualified architectural historians working for JRP Historical Consulting LLC (JRP) examined previous historic resource inventory and evaluation surveys and reports, and reviewed the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks, and the California Points of Historic Interests Lists, and the Caltrans Historic Bridge Inventory to assess the location of known historic resources within the Architectural Study Area. JRP reviewed the records search conducted by Far Western Anthropological Research Group, Inc. (Far Western) at the Northwestern Information Center, and prior cultural resources studies conducted in the project area. Information about additional background research efforts for historical resources in the project area is provided in the Historical Resources Evaluation Report.

Area of Potential Effects and Study Areas

The Area of Potential Effects for cultural resources studies was established as the maximum extent of the combined footprints of the two Build

Alternatives under consideration for the proposed project. Two Areas of Potential Effects were developed, one for archaeological resources studies and one for architectural history studies. The Area of Potential Effects include all areas where direct and indirect effects are possible. An Area of Direct Impacts was also established to encompass where ground-disturbing activities would occur at each project location (intersection or combination of intersections). The Area of Direct Impacts is the area where project activities would occur—the project work limits—and includes all construction elements of the project such as utility relocations, construction, staging, and temporary roads.

The Architectural Study Area was developed to include State Route 68 between post mile 4.8 west of Josselyn Canyon Road, and post mile 13.7 east of Torero Drive. In general, it includes an adjacent row of historic-era properties in accordance with the Caltrans Standard Environmental Reference, Chapter 2.3.7.1 Establishing the Area of Potential Effects, with some exceptions for large rural properties or those where the built environment is buffered from construction by physical barriers. Where proposed project work would occur within the existing state highway right-of-way, the Architectural Study Area included a 50-foot buffer area from the edge of the highway.

The Archaeological Area of Potential Effects is the maximum extent of the combined footprint of both Build Alternatives as well as all areas of projected ground disturbance, including utility relocations, construction staging, and temporary access roads. In addition, the Archaeological Area of Potential Effects includes the entire plotted boundaries of archaeological sites CA-MNT-3/H and CA-MNT-4, sites that were determined to be at least partially within both of the project's proposed alternatives. The Archaeological Study Area encompasses 204 acres within six discrete segments within the project limits, a 300-foot corridor centered on the existing State Route 68 alignment. Portions of the study area are within the highway right-of-way and other portions are outside of the right-of-way on private property.

Field Survey

Initial field survey work for archaeological resources was conducted from October 30 to November 1, 2017 by Far Western, accompanied by a representative from the Esselen Tribe of Monterey County. Additional survey work was conducted in the eastern end of the project limits on November 20 and 21, 2019. About 27 acres of the 204-acre study area could not be surveyed on foot due to dense vegetation or prohibited access (Permits to Enter were not approved), but just over 4 acres of the 27 acres had been surveyed as part of previous studies, therefore leaving about 23 acres, or 11 percent of the study area not surveyed.

For architectural resources, JRP conducted reconnaissance field surveys of the entire Architectural Survey Area on December 19, 2019 to establish the

Architectural Study Area and the historical resources within the study area also referred to as the survey population. Intensive-level surveys were conducted on April 23 and May 7, 2020, with some limitations in place for safety due to conditions during the early part of the COVID-19 state of emergency.

Native American Consultation

An initial request was made to the Native American Heritage Commission on June 28, 2019 to search the Sacred Lands files for cultural resources within the Scenic Route 68 project; the Native American Heritage Commission responded that the files were negative for cultural resources and provided a list of Native American contacts within the region. In accordance with Section 106 of the National Historic Preservation Act, and as required under CEQA Public Resources Code 21080.3.1, and Assembly Bill 52, Caltrans consulted with pertinent Native American contacts to identify potential Native American resources within the Area of Potential Effects. A Consultation Group was formed for purposes of project consultation among representatives from Native American tribes in the project region. Chapter 4.0, Comments and Coordination, provides additional detail regarding Native American consultation efforts.

Results

Historic-Era Resources: Twenty historic-era properties within the project Architectural Study Area were evaluated, or reevaluated. Nineteen of those properties were found not to meet the significance and integrity evaluation criteria of the National Register of Historic Places and the California Register of Historic Resources. Those resources are listed in Table 2.1.11.1.

One property within the study area, 2999 Monterey Salinas Highway, referenced as CA-MNT-1438/H (P-27-001459), was previously determined eligible for listing in the National Register of Historic Places and California Register of Historical Resources, and is considered an historic property under Section 106 of the National Historic Preservation Act, and an historic resource for the purposes of the California Environmental Quality Act (CEQA). The property includes the Ryan House/Cademartori's Restaurant (currently known as Tarpy's Roadhouse). The Ryan House was built in the mid-1920s in a sprawling Arts and Crafts style, characterized by intricate local stonework. The property also includes multiple outbuildings and landscape features. Stone archways form openings for some of the building's doors, and a prominent archway provides access to the main building's courtyard. The courtyard includes log- and concrete-framed pergolas, a commemorative bas-relief of the American Expeditionary Force of World War I, and a dining alcove with a concrete bench and pedestal set into the masonry walls. In addition to the main building, the property includes contributing outbuilds and landscape features such as circular stone posts flanking the driveway from State Route

68, stone mastery retaining walls and staircases, a stone- and concrete-lined pond, landscaping, and sculptures.

In 1994, Portia Lee and Parsons Brinkerhoff Quade and Douglas, Inc. recommended the residential complex to be eligible for listing on the National Register of Historic Places under Criterion C for its local historical significance as the work of an owner-designer-builder using local stone, rocks and natural materials. A subsequent study by the consulting firm SWCA in 2014 concurred with the eligibility finding and also recommended its eligibility for the California Register of Historic Resources under Criterion 3 as a historic district that included its landscape elements.

The results of the field survey conducted for the project concurred that this resource retains sufficient historic integrity and, therefore, remains eligible for both the National and California registers. This site is also described below under Archaeological Resources because the site is a combination of an historic-era and prehistoric habitation site.

Table 2.1.11.1 lists the historic-era resources evaluated for the project and their respective eligibilities for the National Register of Historic Places and the California Register of Historic Resources. Included are several resources previously evaluated for other projects in the area.

Table 2.1.11.1 Historic-Era Resources Evaluated for National and California Registers

Assessor's Parcel Number	Address/Location	Eligibility for National Register or California Registers
013-271-002-000	1375 Josselyn Canyon Road, Monterey	No
013-271-003-000	1349 Josselyn Canyon Road, Monterey	No
100-241-053-000	1360 Josselyn Canyon Road, Monterey	No
101-231-003-000	1529 Monterey-Salinas Highway, Monterey	No
013-322-006-000	2700 Garden Road, Monterey	No
013-222-008-000	2801 Monterey-Salinas Highway, Monterey	No
013-221-012-000	2901 Monterey-Salinas Highway, Monterey	No
259-021-002-000 Ryan House/ Cademartori Restaurant (currently Tarpy's Roadhouse)	2999 Monterey-Salinas Highway, Del Rey Oaks	**Yes**
012-601-017-000, 012-601-026-000	181 Calle del Oaks, Del Rey Oaks	No
173-071-048-000, 173-071-056-000	10520 York Road, Monterey County	No

Assessor's Parcel Number	Address/Location	Eligibility for National Register or California Registers
173-062-005-000	906 Monterey-Salinas Highway, Monterey County	No
173-062-004-000	900 Monterey-Salinas Highway, Monterey County	No
173-062-002-000	902 Monterey-Salinas Highway, Monterey County	No
173-031-010-000	918 Monterey-Salinas Highway, Monterey County	No
161-641-018-000, 161-641-019	2 Corral de Tierra Road, Monterey County	No
161-641-017-000	12 Corral de Tierra Road, Monterey County	No
161-541-001, -002, and -003-000, 616-571-001-000	23799 Monterey-Salinas Highway, Monterey County	No
161-061-004-000	8 San Benancio Road, Monterey County	No
161-061-003-000	727 Monterey-Salinas Highway, Monterey County	No (previously determined)
161-011-084-000	715 Monterey-Salinas Highway, Monterey County	No (previously determined)
El Toro Creek Bridge	Bridge Number 44 0264 (State owned)	No (previously determined)

Archaeological Resources: Records searches indicate that 81 previous cultural resource studies have been conducted within a one-half-mile radius of the study area; of those, 41 of the studies are within or bisect the direct study area. Thirty-six resources were previously recorded within the one-half-mile records search radius. Seven of those 36 resources are in or bisect the project study area: three are prehistoric habitation sites, two are multi-component sites consisting of a prehistoric habitation site and a historic-era residential site. Each of the seven sites is briefly described below. Due to the sensitive nature of prehistoric resources and the need for confidentiality, the locations of specific prehistoric resources are not disclosed in this Draft Environmental Impact Report/Environmental Assessment.

CA-MNT-3/H (P-27-000139)

This site is a late prehistoric habitation with midden originally recorded in 1948. Multiple investigations of the site have been conducted over the years and in 1989 it was determined to be eligible for the National Register of Historic Places with concurrence from the State Historic Preservation Officer. The archaeological investigations conducted for the proposed project focused on the previously untested portions of the site within the project Area of Potential Effects to determine whether or not those portions contributed to the qualities for which the previously tested portion of the site was found eligible.

Extended Phase I testing of portions of the site within the project area revealed very sparce surficial and deeply buried archaeological deposits. It was recommended that these deposits do not to contribute to the qualities for which the site was found eligible due to the low density and diversity of cultural materials recovered.

CA-MNT-4/267 (P-27-000140/000373)

Sites MNT-4 and MNT-267 were both recorded in 1948 as small prehistoric habitation sites. During a testing program in 1975 the two sites were combined as a complex as they overlapped. The site is referred to herewith as CA-MNT-4. Phase II testing of a small portion of the entire site complex conducted as part of studies for another project in the area in 2005 concluded with identification of intact deposits and a recommendation of the site being eligible for listing.

The investigation of another portion of the site complex for the proposed Scenic Route 68 Corridor Improvements project determined that no further site testing would be conducted due to sensitive biological resources in the area. Cultural resource testing will resume when the biological federal jurisdictional permits have been received to allow testing within jurisdictional areas. Consultation to determine effects to potential cultural resources will be ongoing with the State Historic Preservation Officer and Caltrans Cultural Studies Office.

CA-MNT-1262 (P-27-001299)

This site is a prehistoric habitation originally recorded in 1984. Extended Phase I testing conducted by Far Western in support of the project included testing portions of the site within the project study area and resulted in negative findings. The site boundaries were redrawn to exclude the areas of negative findings and the site record was updated.

CA-MNT-280 (P-27-000385)

Site MNT-280 was originally recorded in 1950 as the Fort Ord Military Reservation occupation site destroyed by bulldozing activity in 1940. Extended Phase 1 testing conducted by Far Western in support of the project determined that the portions of CA-MNT-280 that were mapped within the project area resulted in negative findings. The site boundaries were redrawn to exclude areas of negative findings and the site record was updated.

CA-MNT-1438/H (P-27-001459)

Site CA-MNT-1438/H is a combination prehistoric and historic site that includes the Ryan House/Cademartori Restaurant (Tarpy's Roadhouse) and a prehistoric habitation site. The Ryan House was originally constructed as an Arts and Crafts style home built in the mid-1920s using local stone. It has since been converted into a restaurant. The property also includes several character defining landscape features including circular stone posts flanking

the driveway from State Route-68, stone masonry retaining walls and staircases, a stone and concrete lined pond, landscaping and sculptures. This property is the only historic-era resource in the Area of Potential Effects determined to be eligible for both the National Register of Historic Places and California Register of Historical Resources. Refer to additional description above under Historic-Era Resources.

The prehistoric habitation site on the same property (CA-MNT-723/P-27-000803) was originally recorded in 1977 noting one burial (no associated documentation was filed); a 1993 study found that 90 percent of the site was disturbed by various construction projects of local development. The archaeological investigation by Far Western for this project resulted in negative findings within the Study Area.

P-27-002715

This site is a single-family California Ranch-style residence constructed in 1953. The residence is a single story cross gabled, medium pitched wood shingle roof, with walls of modern adobe and vertical board and batten. The style is a typical example of post-World War II architecture of the region. Previous study conducted in 2003 recommended the residence as not eligible for listing in the National or California Registers.

P-27-002868

This resource is an isolated brown silicate flake documented in 2002 by a prior study. The record indicates the site may be a larger site with a subsurface deposit.

Environmental Consequences

Build Alternatives

Buried Archaeological Site Assessment

A buried archaeological site assessment, referencing data from the Soil Survey Geographic Database, the California Mines and Geology and in-house geographic information systems data, shows nine main landforms associated with nine distinct soil types; modeling of the relationships of area water, slopes and elevation data concluded that most of the project area (about 86 percent) has either Low or Lowest potential for buried archaeological sites. However, the eastern portion of the project area (about 14 percent of the area) has Moderate to Highest potential for buried sites.

Both Build Alternatives have the potential for deep ground disturbance (over 3 feet of depth) during construction. Therefore, buried archaeological remains could be encountered by earth disturbance activities.

Extended Phase I and Phase II archaeological evaluations were conducted in July 2020 and focused on five of these previously recorded archaeological sites: CA-MNT-3, CA-MNT-4, CA-MNT-280, CA-MNT-1262, and CA-MNT-

1438/H. Extended Phase I studies resulted in negative findings at sites CA-MNT-280, -1262, and -1438/H, so Phase II studies were not conducted at those sites.

As sites MNT-3 and -4 were previously determined eligible for listing on the National Register of Historic Places as part of studies for other projects, testing for the proposed project focused on untested portions of those sites. The Area of Direct Impact for Alternative 1 overlaps a small portion of CA-MNT-4. A thin and sparse archaeological deposit was sampled at site CA-MNT-4, however, due to insufficient data recovered, a recommendation of National Register Eligibility could not be made by the investigation conducted for the proposed project.

The Area of Direct Impact for Alternative 2 overlaps a portion of site CA-MNT-3. The testing of CA-MNT-3 was limited to the existing highway right of way due to denial of access by a property owner. The sparse archaeological deposits identified in the testing were determined to not contribute to the qualities for which the site was previously determined eligible for listing on the National Register. However, large portions of the remainder of the site remain untested and contributing and non-contributing areas were not identified in previous studies. Archaeologists for the proposed State Route 68 Corridor project assume that the untested portions of site CA-MNT-3 within the project Area of Potential Effect have a high potential to contain buried archaeological deposits, that possibly contribute to the overall eligibility of the site.

In addition to sites MNT-3 and MNT-4, another area considered to have elevated buried site sensitivity could not be sampled due to concerns of impacting sensitive biological resources. As a result, the decision was made to conduct further testing as part of a phased program approach. Therefore, the potential effects of Alternative 1 and Alternative 2 on this additional area is undetermined until testing is completed as part of the Programmatic Agreement and Cultural Resources Management Plan.

Build Alternatives. The Supplemental Archaeological Survey, Extended Phase I and Phase II Testing report concluded that Alternative 1 (Roundabouts) would not impact any of the five previously recorded sites in the Archaeological Study Area.

Alternative 2 would not impact sites CA-MNT-4, -280, -1262, or -1438/H. However, it may potentially impact an untested portion of CA-MNT-3 that was previously determined eligible for listing on the National Register. In addition, because both Build Alternatives would have deep ground disturbance (more than 3 feet in depth) as part of construction work, areas within the project limits with elevated archaeological sensitivity would be tested as part of the Programmatic Agreement and Cultural Resources Management Plan described below.

If any unanticipated pre-historic cultural resources are discovered during project construction, all earth-moving activity around the immediate discovery area would be diverted until a qualified archaeologist can assess the nature and significance of the find. If human remains are discovered, the county coroner should be contacted. If the coroner thinks that the remains are Native American, the procedures prescribed in Measure Cultural-4 shall be followed.

Because 100 percent of the Area of Potential Effects could not be surveyed, Caltrans, pursuant to the Programmatic Agreement Stipulation 12, is taking a phased approach to the identification, evaluation, and application of the Criteria of Adverse Effect for this undertaking (the project). For this approach, the project includes the preparation of a project-specific Programmatic Agreement between Caltrans and the State Historic Preservation Officer, in addition to a Cultural Resources Management Plan. The Programmatic Agreement and Cultural Resources Management Plan provide guidance on a phased approach to ensure greater efficiency in the compliance process to enable any Build Alternative that would be selected as the Preferred Alternative in the Final Environmental Impact Report/Environmental Assessment to move forward.

The Cultural Resources Management Plan for the Scenic Route 68 Corridor Improvements (dated September 2022) presents a systematic approach to testing to determine the project's effects on potential sensitive archaeological resources, and prescriptive treatment steps pending the findings of completed testing. If any buried sites are found, they will be evaluated for national/state register eligibility and then analyzed to determine if the project would have any potential to adversely affect historic properties. Any adverse effects would be addressed by implementing the Cultural Resources Management Plan, including pre-construction, construction, and post-construction procedures. The post-construction procedures include the finding of effect analysis process.

Native American Consultation

Caltrans has consulted with the project's Native American consultation group since the initial planning phase of the project. Consultation will continue throughout the Section 106 process. Caltrans has invited the consultation group members to sign as a concurring party on the Programmatic Agreement and will offer them the opportunity to participate in the implementation and the proposed project. Other tribes or Native American groups who attach religious or cultural significance to historic properties that may be affected by the undertaking will be invited to participate as consulting parties in the Section 106 process.

Historic Built Environment Resources Assessment

During the preliminary design phase of the project, adjustments were made to the design of Alternative 2 (Signals and Lane Channelization) just west of the State Route 218/State Route 68 intersection. The reason was to shift the

alignment of State Route 68 slightly to the south because the original plan for widening would have impacted the character-defining circular gate posts adjacent to the state highway right-of-way that contribute to the Ryan House/Cademartori Restaurant (Tarpy's Roadhouse) (CA-MNT-1438/H) property. The design adjustments made to Alternative 2 also avoided impacts to those identified historic features. Alternative 1 (Roundabout) at that intersection would not encroach onto the CA-MNT-1438/H site. Therefore, neither Build Alternative would adversely affect the one historic-era property eligible for listing in the National Register of Historic Places and/or the California Register of Historical Resources within the Architectural Study Area.

Because the remaining historic-era cultural resources within the Area of Potential Effects have been determined to be ineligible for either the National Register of Historic Places or the California Register of Historical Resources, the Build Alternatives do not have potential to adversely affect any historic-era cultural resources.

There are historic properties protected by Section 4(f) of the Department of Transportation Act of 1966 within the project vicinity. However, the project (the two Build Alternatives) would not "use" those properties as defined by Section 4(f). Please see Appendix A, under the heading "Section 4(f) De Minimis Determinations" for additional details.

Anticipated Section 106 Finding of Effect for the Project as a Whole

Within the project Area of Potential Effect for historic resources there are three cultural sites that have been determined eligible for inclusion in the National Register of Historic Places. Two of the historic properties are archaeological sites CA-MNT-3 and CA-MNT-4, and one is an historic-era resource CA-MNT-1438/H. The historic-era resource would be avoided with no direct effects by both project Build Alternatives 1 and 2.

Because testing of archaeological sites CA-MNT-3 and CA-MNT-4 within the project Area of Potential Effect was not able to be completed due to sensitive biological resource concerns, the procedures for completion of testing are documented in the Cultural Resources Management Plan for the Scenic Route 68 Corridor Improvements (dated September 2022). Completed testing will determine the project's effects on potential sensitive archaeological resources and their potential for eligibility for the National Register of Historic Places. Any adverse effects would be addressed by implementing the Cultural Resources Management Plan, including pre-construction, construction, and post-construction procedures. The post-construction procedures include the final finding of effect analysis process.

However, based on the project Area of Potential Effect, and the Area of Potential Impact for Alternative 1 which is likely to affect a small portion of CA-MNT-4, and the Area of Potential Impact for Alternative 2 which may affect portions of CA-MNT-3, and that both sites were previously determined eligible for listing on the

National Register of Historic Places, the project is anticipated to have an "adverse effect" on the two known pre-historic sites. Utility relocations associated with the build alternatives may impact portions of these sites. In addition, the build alternatives may have an "adverse effect" on the additional area of high sensitivity for buried resources. Overall, the project as a whole would have an adverse effect on historic properties.

Both Build Alternatives have the potential for deep ground disturbance (over 3 feet of depth) during construction, and therefore, buried archaeological remains could be encountered by earth disturbance activities. If unexpected cultural materials are discovered during project construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find, as prescribed in Measure CR-3 in the Avoidance, Minimization, and/or Mitigation Measures section. If human remains are discovered, California Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains and the County Coroner contacted. See Measure CR-4 below.

No-Build Alternative

Under the No-Build Alternative, intersection improvements would not be made and retaining walls and other structures associated with the Build Alternatives would not be constructed; as a result, there would not be any disturbance of intact archaeological resources or historic-era built environment resources eligible for listing on the National or California registers.

Avoidance, Minimization, and/or Mitigation Measures

The following mitigation measures (under CEQA) would be implemented to reduce any potential, project-related adverse effects to cultural resources in the project area.

CR-1. Programmatic Agreement and Cultural Resources Management Plan. The project would adhere to the requirements specified in the Programmatic Agreement between the California Department of Transportation and the California State Historic Preservation Officer Regarding the Scenic Route 68 Corridor Improvements Project, Monterey County (dated August 8, 2023) and the Cultural Resources Management Plan for the Scenic Route 68 Corridor Improvements (dated September 2022).

Within 30 days of Caltrans District 5 and the City determining that all fieldwork required under Stipulation II has been completed, District 5 shall provide a brief letter report to the Programmatic Agreement parties and any additional interested parties. The letter report will summarize the field efforts and construction monitoring and any preliminary finds that resulted from them.

If Caltrans determines that historic properties were affected by the undertaking in accordance with the procedures specified in the Cultural

Resources Management Plan, Caltrans will ensure the preparation and distribution of a Final Monitoring Report in accordance with the process specified in the Programmatic Agreement.

If Caltrans determines the project would have an adverse effect on historic properties, Caltrans shall consult with the Programmatic Agreement parties on implementation of a mitigation program in accordance with the processes for Mitigation of Adverse Effects specified in the Cultural Resources Management Plan. If the project results in no adverse effects to historic properties, there will be no obligation to develop alternative mitigation options.

CR-2. Treatment of Native American Remains if Discovered. Human remains and related items of Native American origin discovered during the implementation of the terms of the Programmatic Agreement and the proposed project will be treated in accordance with State Health and Safety Codes and Public Resources Code Section 5097.98(a) through (d). All activities within the vicinity of the discovery will be stopped and the Caltrans Archaeologist will be notified immediately and consulted on how to proceed. A written report shall be prepared within 48 hours of notification of the Caltrans Archaeologist. A reburial plan will be developed in consultation with the Most Likely Descendent and implemented prior to construction as a condition of treatment in the event human remains are encountered.

CR-3. Discovery of Unanticipated Cultural Effects. If during construction activities, Caltrans determines that either the undertaking would affect a previously unidentified property that may be eligible for the National Register of Historic Places or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with Stipulation XV.B of the Section 106 Programmatic Agreement. Caltrans at its discretion may, pursuant to 36 Code of Federal Regulations Section 800.13(c), assume any discovered property to be eligible for inclusion in the National Register of Historic Places.

CR-4. Discovery of Native American Remains. If any unanticipated pre-historic cultural resources are discovered during project construction, all earth-moving activity around the immediate discovery area would be diverted until a qualified archaeologist can assess the nature and significance of the find. If human remains are discovered, California Health and Safety Code Section 7050.5 states that further disturbances and activities should stop in any area or nearby area suspected to overlie remains, and the county coroner should be contacted. If the coroner thinks that the remains are Native American, the coroner shall notify the Native American Heritage Commission representative, who, pursuant to Public Resources Code Section 5097.98, would then notify the Most Likely Descendent. At this time, the person who discovered the remains would contact Terry Joslin, Caltrans' District 5 Native American Coordinator, to coordinate with the Most Likely Descendent on the

respectful treatment and disposition of the remains. Further provisions in Public Resources Code 5097.98 are to be followed as applicable.

2.2 Physical Environment

2.2.1 Hydrology and Floodplain

Regulatory Setting

Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration requirements for compliance are outlined in 23 Code of Federal Regulations 650 Subpart A. To comply, the following must be analyzed:

- Practicability of alternatives to any longitudinal encroachments.
- Risks of the action.
- Impacts on natural and beneficial floodplain values.
- Support of incompatible floodplain development.
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values affected by the project.

The base floodplain is defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the base floodplain.”

Affected Environment

Hydraulic information was obtained from the Location Hydraulic Study prepared by Caltrans, dated December 21, 2020, and the Location Hydraulic Study Addendum dated September 28, 2023.

Natural and Beneficial Floodplain Values

Undisturbed or minimally disturbed floodplains provide natural and beneficial floodplain values that include, but are not limited to, fish, wildlife, plants, open space, natural beauty, scientific study, outdoor recreation, agriculture, aquaculture, forestry, natural moderation of floods, water quality maintenance, and groundwater recharge (23 Code of Federal Regulations Section 650.105).

Project Floodways and Flood Zones

Within the project limits, the State Route 68 highway alignment runs parallel to and crosses in various locations two Regulatory Floodways: one west and one east of the Laureles Grade intersection. The National Flood Insurance

Program defines a “regulatory floodway” as the channel of a river or other watercourse and the adjacent land areas that must be reserved to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height (usually 1 foot). The regulatory floodways are within the overall 100-year floodplain, or alternatively referred to as the 1-percent annual chance floodplain and/or the base flood elevation area, as defined in the Regulatory Setting section above, and as described below. Not all floodplains have Regulated Floodways.

In addition, the project limits encompass several Federal Emergency Management Agency Flood Insurance Rate Maps. These maps show that most of the project site is within Flood Zone X, which is defined as areas determined to be outside of the 0.2 percent annual chance floodplain (also known as the 500-year flood zone). However, the Location Hydraulic Study found that the project has some spot locations within or near the base floodplain (the 100-year flood zone) in Zones A, AE, and/or AO, defined as follows (source: https://www.fema.gov/about/glossary):

- Zone A: Area with a 1 percent annual chance of flooding (base floodplain) and a 26 percent chance of flooding over the life of a 30-year mortgage. No depths or base flood elevations are shown within these zones.
- Zone AE: Area with a 1 percent annual chance of flooding (base floodplain) where base flood elevations are provided.
- Zone AO: River or stream flood hazard areas, and areas with a 1 percent or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26 percent chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.

The following two project intersections and single bridge location directly intersect with one or more of these zones:

- Canyon Del Rey Boulevard/State Route 218 – Flood Zones A, AE, and AO
- Ragsdale Drive – Flood Zone A
- El Toro Creek Bridge, east of San Benancio Road – Flood Zone AE

The following three project intersections are within close proximity to zones that have a 1 percent chance of flooding:

- York Road – near but not within Flood Zone A
- Pasadera Drive – near but not within Flood Zone AE
- San Benancio Road – near but not within Flood Zone AE

The following proposed wildlife crossing locations are also within close proximity to zones that have a 1 percent chance of flooding:

- Wildlife Crossing #1 at York Road – near but not within Flood Zone A
- Wildlife Crossings #2 and 3 west of Pasadera Drive – near but not within Flood Zone AE
- Wildlife Crossing #5 – near but not within Flood Zone AE

Flood Insurance Rate Maps were obtained from the Federal Emergency Management Agency, and project locations were overlaid on each map, as shown in Figures 2.2.1.1 through 2.2.1.5. Because the western portion of the project containing the State Route 68/Josselyn Canyon Road and State Route 68/Olmsted Road intersections does not include any special Federal Emergency Management Agency flood zones, a map for that area is not included here.

Figure 2.2.1.1. Flood Zone Map – State Route 68/State Route 218 and State Route 68/Ragsdale Drive Intersections.

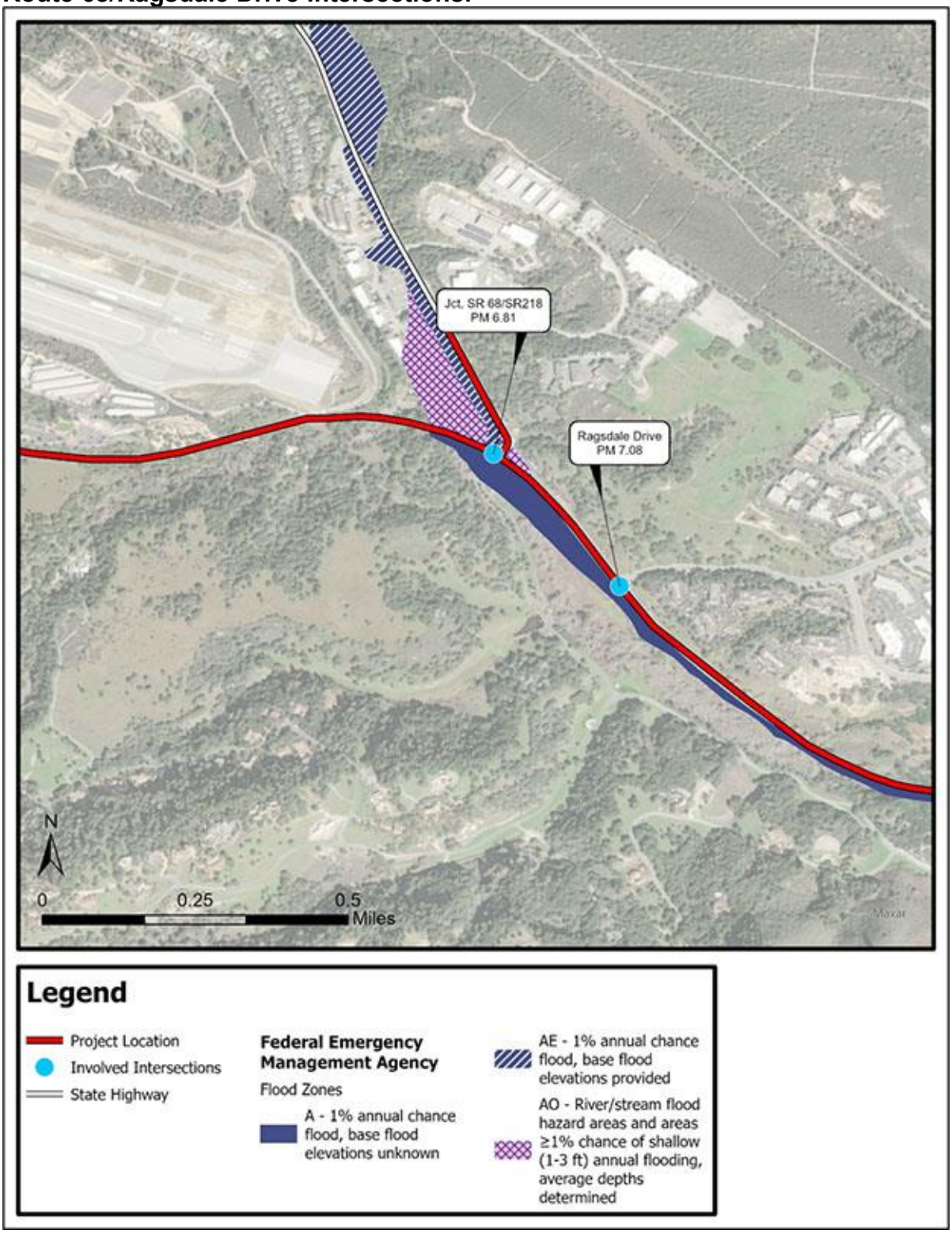


Figure 2.2.1.2. Flood Zone Map – State Route 68/York Road Intersection.

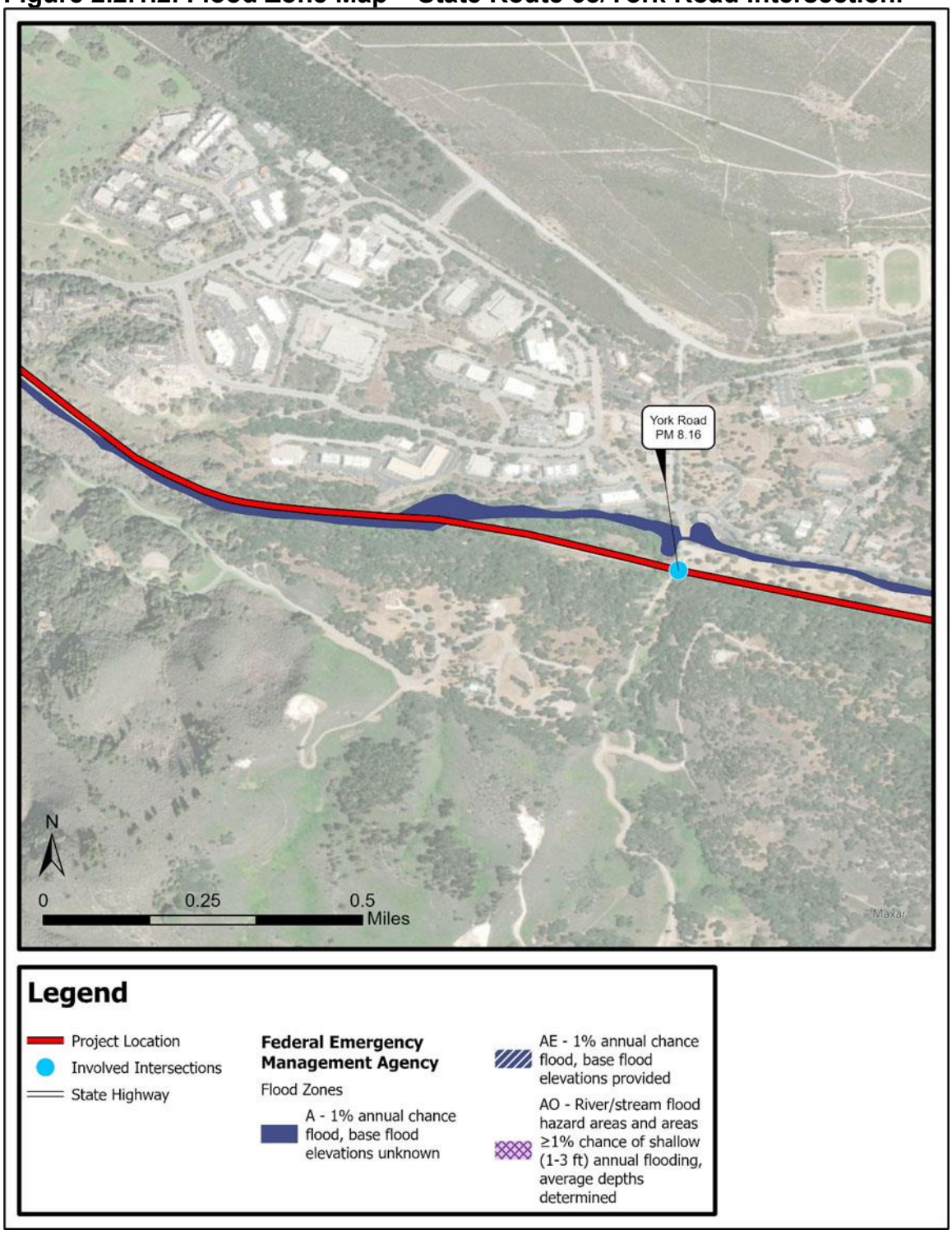


Figure 2.2.1.3. Flood Zone Map – State Route 68/Pasadera Drive Intersection.

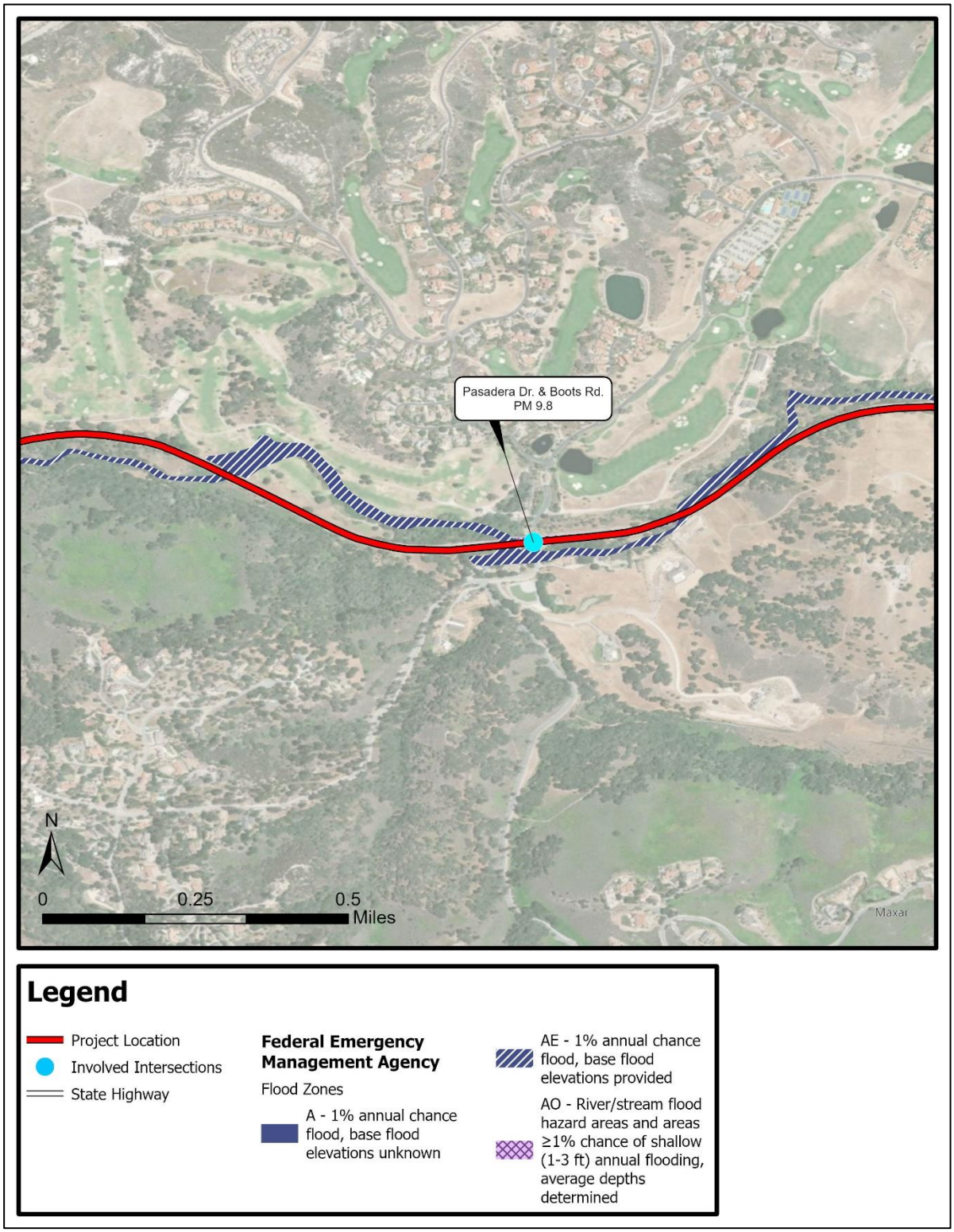


Figure 2.2.1.4. Flood Zone Map – State Route 68/Laureles Grade Intersection.

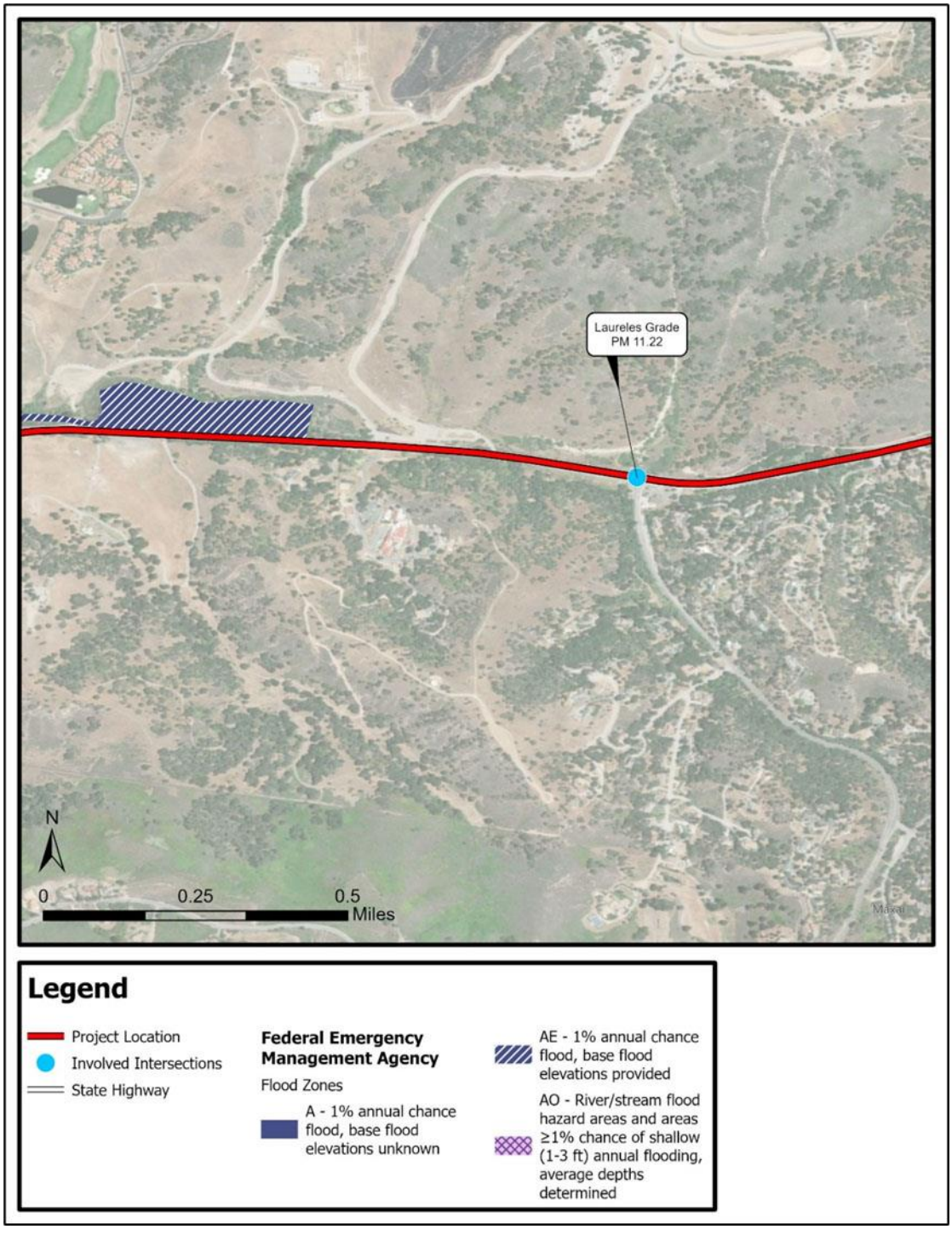
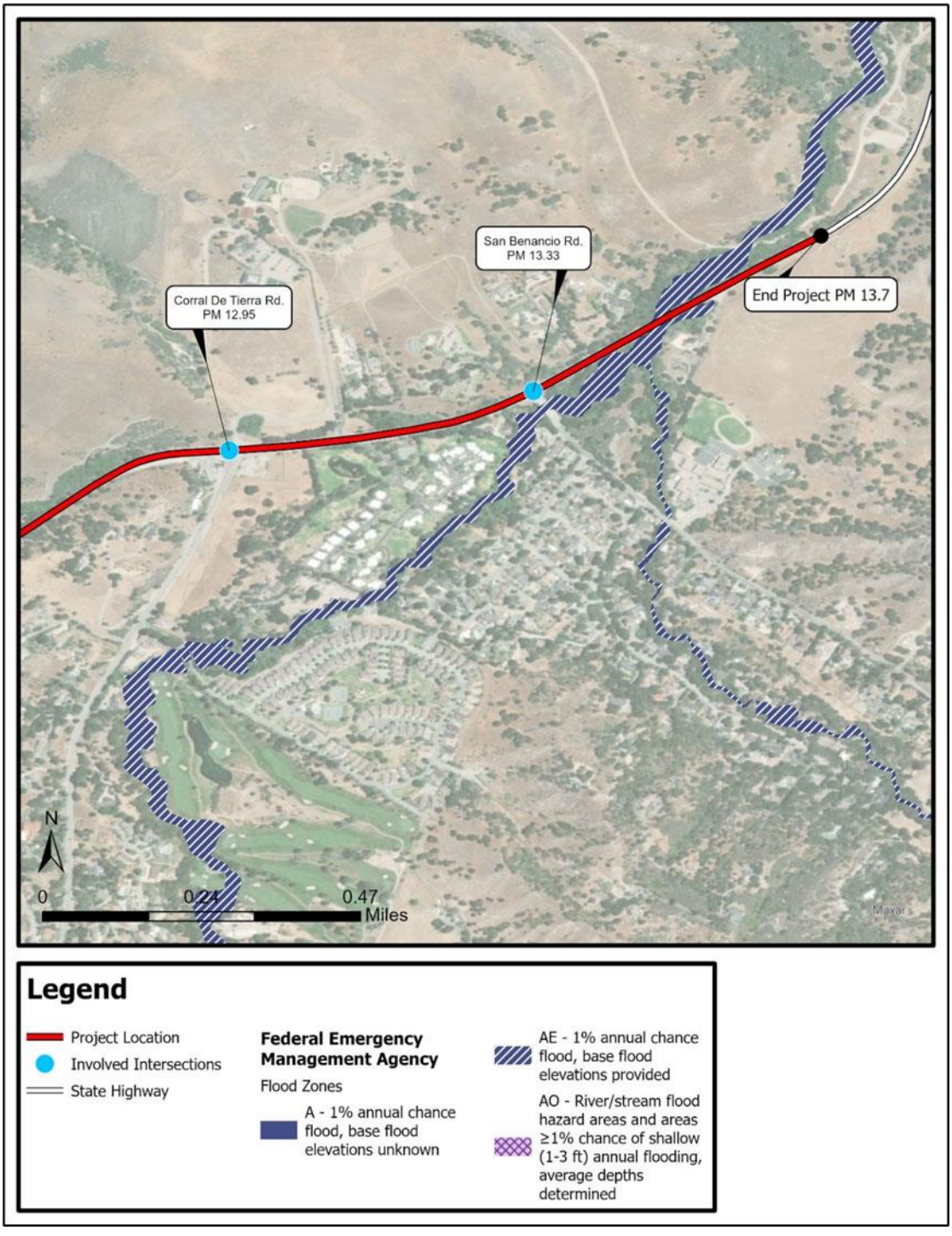


Figure 2.2.1.5. Flood Zone Map – State Route 68/Corral De Tierra Road and State Route 68/San Benancio Road Intersections.



Environmental Consequences

Build Alternatives

Under both Build Alternatives, some work locations are within the 100-year flood zone (Canyon Del Rey Boulevard/State Route 218, Ragsdale Drive, and El Toro Creek Bridge), and other project locations are near the 100-year flood zone.

Under either Build Alternative, the project would not result in significant impacts to natural and beneficial floodplain values (as defined in 23 Code of Federal Regulation Section 650.105) or support probable incompatible floodplain development such as commercial development or urban growth.

Under Alternative 1, the preliminary design for the roundabouts would avoid encroachment into Regulatory Floodways and the 1 percent annual chance flood discharge would be conveyed without increasing base flood elevations. Further, under Build Alternative 1 there would be no longitudinal encroachment of floodplains, and no significant risks to floodplains associated with the project.

Alternative 2, the expanded signalized intersection design, would involve incursion into the Regulatory Floodway and potentially result in longitudinal encroachment into the adjacent floodplain near the State Route 68/San Benancio Road intersection. This is because Build Alternative 2 includes widening of the State Route 68 bridge over El Toro Creek east of the intersection to accommodate two lanes of travel in each direction and a tapered striped median.

El Toro Creek at the location of the bridge crossing is identified as a Regulatory Floodway Zone AE with Base Flood Elevations determined, and with floodplain areas located adjacent to the floodway. The potential exists for encroachment into the floodplain and Regulatory Floodway at the State Route 68 El Toro Creek bridge under Alternative 2 because the bridge widening would require the addition of four new columns in the floodway to support the additional lanes (for a total of six columns). Therefore, Alternative 2 would have a potential adverse effect on the Regulated Floodway of El Toro Creek due to the installation of additional bridge support columns.

If Alternative 2 is chosen as the preferred alternative, the design of the State Route 68 El Toro Creek bridge improvements would be revised and refined after confirmation from the Federal Emergency Management Agency of the existing State Route 68 El Toro Creek bridge base flood elevation and hydraulic model. The existing bridge hydraulic design components and flood capacity would be analyzed for potential accommodation of the additional bridge columns. Alternative 2 would be designed to maintain the base flood elevation within the Regulated Floodway in accordance with federal regulations and associated Caltrans design criteria, to the extent feasible. If the findings of final design review and investigations determine that the

Alternative 2 bridge design would raise or otherwise change the base flood elevation and there are no feasible avoidance alternatives to achieve the project improvements, Caltrans would file a Conditional Letter of Map Revision with the federal government, the process for which would add substantial time and costs to the project.

The project Build Alternatives would incorporate Standard Specifications, design features, and practices to help address potential impacts related to Regulated Floodways and natural and beneficial floodplain values.

No-Build Alternative

Under the No-Build Alternative, intersection improvements would not be made and retaining walls and other structures associated with the build alternatives would not be constructed within or near the 100-year flood zone.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures would be required for Alternative 1.

Measure HYD-1 (Mitigation under CEQA) would be implemented for Build Alternative 2.

HYD-1. Alternative 2 Expanded Signalized Intersections. If Alternative 2 is selected as the Preferred Alternative during the Plans, Specifications, and Estimates phase of the project, Caltrans will coordinate with the Federal Emergency Management Agency to confirm the base flood elevation of El Toro Creek at the State Route 68 bridge crossing. Additional hydraulic design review and revisions will be conducted as necessary for bridge alterations related to the State Route 68/San Benancio Road intersection improvements in accordance with Caltrans' and federal design criteria to maintain the existing base flood elevation. If the findings of final design review and investigations determine that the Alternative 2 bridge design would raise or otherwise change the base flood elevation and there are no feasible avoidance alternatives to achieve the project improvements, Caltrans would file a Conditional Letter of Map Revision with the federal government.

2.2.2 Water Quality and Stormwater Runoff

Regulatory Setting

Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System permit. A point source is any discrete conveyance such as a pipe or a human-made ditch. This act and its amendments are known today as the Clean Water Act. Congress has

amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the National Pollutant Discharge Elimination System permit scheme. The following are important Clean Water Act sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the National Pollutant Discharge Elimination System, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the U.S. Army Corps of Engineers.

The goal of the Clean Water Act is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."

The U.S. Army Corps of Engineers issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cau.se minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of the U.S. Army Corps of Engineers' Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the U.S. Army Corps of Engineers' decision to approve is based on compliance with U.S. Environmental Protection Agency's (U.S. EPA) Section 404 (b)(1) Guidelines (40 Code of Federal Regulations Part 230), and whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines were developed by the U.S. EPA in conjunction with the U.S. Army Corps of Engineers and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The guidelines state that the U.S. Army Corps of Engineers may not issue a permit if there is a least environmentally damaging practicable alternative (also known as LEDPA) to the proposed discharge that would

have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. The U.S. EPA defines "effluent" as "wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall." In addition, every permit from the U.S. Army Corps of Engineers, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 Code of Federal Regulations 320.4. A discussion of the least environmentally damaging practicable alternative determination, if any, for the document is included in the Wetlands and Other Waters section.

State Requirements: Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the Clean Water Act and regulates discharges to waters of the state. Waters of the State include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Also, it prohibits discharges of "waste" as defined, and this definition is broader than the Clean Water Act definition of "pollutant." Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements and may be required even when the discharge is already permitted or exempt under the Clean Water Act.

The State Water Resources Control Board and Regional Water Quality Control Boards are responsible for establishing the water quality standards (objectives and beneficial uses) required by the Clean Water Act and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable Regional Water Quality Control Board Basin Plan. In California, Regional Water Quality Control Boards designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect those uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the State Water Resources Control Board identifies waters failing to meet standards for specific pollutants. These waters are then state listed in accordance with Clean Water Act Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (National Pollutant Discharge Elimination System permits or Waste Discharge Requirements), the Clean Water Act requires the establishment of Total

Maximum Daily Loads (TMDLs), which specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The State Water Resources Control Board administers water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, Total Maximum Daily Loads, and National Pollutant Discharge Elimination System permits Regional Water Quality Control Boards are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

National Pollutant Discharge Elimination System (NPDES) Program

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the Clean Water Act requires the issuance of National Pollutant Discharge Elimination System permits for five categories of storm water discharges, including Municipal Separate Storm Sewer Systems (MS4s). An MS4 is defined as "any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that is designed or used for collecting or conveying storm water." The State Water Resources Control Board has identified Caltrans as an owner/operator of an MS4 under federal regulations. Caltrans' MS4 permit covers all Caltrans rights-of-way, properties, facilities, and activities in the state. The State Water Resources Control Board or the Regional Water Quality Control Board issues National Pollutant Discharge Elimination System permits for five years, and permit requirements remain active until a new permit has been adopted.

The Caltrans MS4 Permit, ORDER 2022-0033-DWQ NPDES NO. CAS000003 (adopted on June 22, 2022, and effective on January 1, 2023) has three basic requirements:

1. Caltrans must comply with the requirements of the Construction General Permit (see below);

2. Caltrans must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and

3. The Caltrans storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs), to the maximum extent practicable, and other measures as the State Water Resources

Control Board determines to be necessary to meet the water quality standards.

To comply with the permit, Caltrans developed the Statewide Storm Water Management Plan to address storm water pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The Statewide Storm Water Management Plan assigns responsibilities within Caltrans for implementing storm water management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The Statewide Storm Water Management Plan describes the minimum procedures and practices Caltrans uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of Best Management Practices. The proposed project will be programmed to follow the guidelines and procedures outlined in the latest Statewide Storm Water Management Plan to address storm water runoff.

Construction General Permit

Construction General Permit, ORDER WQ 2022-0057-DWQ (adopted on September 8, 2022 and effective on September 1, 2023). The permit regulates storm water discharges from construction sites that result in a Disturbed Soil Area (DSA) of 1 acre or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation result in soil disturbance of at least 1 acre must comply with the provisions of the General Construction Permit. Construction activity that results in soil disturbances of less than 1 acre is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the Regional Water Quality Control Boards. Operators of regulated construction sites are required to develop Storm Water Pollution Prevention Plans (SWPPPs); to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The Construction General Permit separates projects into Risk Levels 1, 2, and 3. Risk levels are determined during the planning and design phases and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective Storm Water Pollution Prevention Plans. In accordance with the Caltrans Statewide Storm Water Management Plan

and Standard Specifications, a Water Pollution Control Program is necessary for projects with Disturbed Soil Area less than 1 acre.

Section 401 Permitting

Under Section 401 of the Clean Water Act, any project requiring a federal license or permit that may result in a discharge to a water of the U.S. must obtain a 401 Certification, which certifies that the project will be in compliance with state water quality standards. The most common federal permits triggering 401 Certification are Clean Water Act Section 404 permits issued by the U.S. Army Corps of Engineers. The 401 permit certifications are obtained from the appropriate Regional Water Quality Control Board, dependent on the project location, and are required before the U.S. Army Corps of Engineers issues a 404 permit.

In some cases, the Regional Water Quality Control Board may have specific concerns with discharges associated with a project. As a result, the Regional Water Quality Control Board may issue a set of requirements known as Waste Discharge Requirements under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. Waste Discharge Requirements can be issued to address both permanent and temporary discharges of a project.

Affected Environment

Water quality and stormwater information for the project environment was obtained from the July 27, 2023 Water Quality Technical Memo prepared by Caltrans, and the Stormwater Data Report dated February 28, 2023 prepared by Caltrans.

The project lies in the Monterey Peninsula Hydrologic Area and undefined Hydrologic Sub-Area (HSA) within the Salinas Hydrologic Unit (HSA #309.50). The project study area crosses through several watersheds mapped by the U.S. Geological Survey, which drain west into Monterey Bay in the Pacific Ocean (western portion of site) and east into El Toro Creek, which then flows to the Pacific Ocean via the Salinas River (eastern portion of site).

The receiving water bodies are Canyon Del Rey Creek and El Toro Creek. Other potential receiving water bodies include Watson Creek and Harper Creek, depending on the natural flow of drainage. The receiving waters for this project are not listed as impaired on the federal Clean Water Act Section 303(d) list.

The 2019 Central Coast Regional Water Quality Control Board Basin Plan does not list the receiving waters for this project as including the following beneficial uses:

- Cold (uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates)
- Spawn (uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish)
- Migratory (uses of water that support habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish)

Therefore, the receiving water risk for this project is characterized as low. There are no Drinking Water Reservoirs and/or Recharge Facilities within the project limits.

There is an existing permanent Caltrans maintenance facility (stockpile/decanting) near the western project limits on State Route 68. The contractor would not be allowed to use this or any other Caltrans maintenance facility without prior approval by the district Maintenance Stormwater Coordinator. This project is not located in a Significant Trash Generating Area, per the December 2018 Trash Implementation Plan.

Environmental Consequences

Build Alternatives

Alternative 1 would convert nine existing signalized intersections within the State Route 68 corridor into one- or two-lane roundabouts. Alternative 2 would modify the same nine existing signalized intersections with improvements to lane configurations and lengths, as well as upgrades to signal systems and equipment. Both alternatives also propose installation of new culverts at five locations along State Route 68 to facilitate large mammal crossing movement, and installation of directional fencing to deter wildlife from entering onto State Route 68. Additional features of the proposed project include relocation of utility lines as needed, improvements to bicycle and pedestrian facilities, and installation of two electric vehicle charging stations.

With either alternative, the project would involve earthwork (for example excavation, grading, trenching, compaction), use of curing compounds, hot mixed asphalt (HMA) paving, clearing/grubbing, and other activities. Preliminary estimates are that Alternative 1 would result in 24.95 acres of disturbed soil area and 1.58 acres of net new impervious surface area within the project limits. Alternative 2 would result in 59.54 acres of disturbed soil area and 11.95 acres of net new impervious surface area. Final estimates of disturbed soil area and net new impervious surface area will be provided in the Final Stormwater Data Report that will be created after the release of this environmental review document.

There are currently no Treatment Best Management Practices within or near the project limits. Both Build Alternatives would require Treatment Best Management Practices to treat 100 percent of the water quality volume (stormwater runoff)

generated by the new and replaced impervious surfaces they would create. Because Alternative 2 would result in greater areas of disturbed soil and new impervious surface, the amount of stormwater treatment capacity needed would be greater than with Alternative 1. After a preferred project alternative has been selected, the project design team would map all contributing drainage areas and proposed Treatment Best Management Practices.

The roadway design includes Treatment Best Management Practices such as ditches and slopes. The design team anticipates that 100 percent treatment would be possible; however, if the selected alternative cannot treat 100 percent of the required water quality volume, Alternative Compliance would be required.

By incorporating appropriate engineering design and robust stormwater Best Management Practices during construction (see "Avoidance, Minimization, and/or Mitigation Measures" below), short-term water quality impacts from the project are anticipated to be minimal. The project would not have the potential to directly discharge stormwater within the project limits to the site's receiving water bodies. Long-term impacts pertaining to water quality are not anticipated.

No-Build Alternative

Under the No-Build Alternative, intersection improvements would not be made and retaining walls and other structures associated with the Build Alternatives would not be constructed; therefore, project-related impacts to water quality and stormwater runoff would not occur.

Under either Build Alternative, effective combinations of temporary and permanent erosion and sediment controls would be used during construction to address potential impacts related to water quality and stormwater runoff. Stormwater management for the site would be coordinated through the contractor with Caltrans construction personnel to effectively manage erosion from Disturbed Soil Areas by implementing a Storm Water Pollution Prevention Plan.

The following measures, taken from the July 27, 2023 Water Quality Technical Memo are based on Best Management Practices that would be included in (but not limited to) the Storm Water Pollution Prevention Plan for the project:

Temporary Soil Stabilization

- Minimize active Disturbed Soil Areas during the rainy season using scheduling techniques.
- Preserve existing vegetation to the maximum extent feasible.
- Implement temporary protective cover/erosion control on all non-active Disturbed Soil Areas and soil stockpiles.

- Control erosive forces of stormwater runoff with effective storm flow management such as temporary concentrated flow conveyance devices, earthen dikes, drainage swales, lined ditches, outlet protection/velocity dissipation devices, and slope drains as determined feasible.

Temporary Sediment Controls

- Implement linear sediment controls such as fiber rolls, check dams, or gravel bag berms on all active and non-active Disturbed Soil Areas during the rainy season.
- To further help prevent sediment discharge, stabilized construction site entrances, and temporary drainage inlet protection, street sweeping and vacuuming would be necessary.
- Implement appropriate wind erosion controls year-round.

Non-Storm Water Management

The appropriate non-storm water Best Management Practices would be implemented year-round as follows:

- Water conservation practices are implemented on all construction sites and wherever water is used.
- The project area includes areas defined by a high groundwater elevation. Multiple earthwork and excavation operations would potentially encounter groundwater during construction activities. Dewatering Best Management Practices may need to be implemented.
- Paving and grinding procedures are implemented where paving, surfacing, resurfacing, grinding, or saw cutting may pollute stormwater runoff or discharge to the storm drain system or watercourses.
- Procedures and practices designed for construction contractors to recognize illicit connections or illegally dumped or discharged materials on a construction site and report incidents to the Resident Engineer.
- The following activities must be performed at least 100 feet from concentrated flows of stormwater, drainage courses, and inlets if within the floodplain and at least 50 feet if outside of the floodplain: stockpiling materials, storing equipment and liquid waste containers, washing vehicles or equipment, fueling, and maintaining vehicles and equipment.
- Concrete curing may be used during the installation and construction of retaining walls, sidewalks, and Americans with Disabilities Act (ADA)-compliant curb ramps. Proper procedures would minimize pollution of runoff during concrete curing.

Avoidance, Minimization, and/or Mitigation Measures

The Build Alternatives would incorporate the project features and practices outlined above to help address potential impacts related to water quality and

stormwater runoff. No avoidance, minimization, and/or mitigation measures are required.

2.2.3 Geology, Soils, Seismicity and Topography

Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects "outstanding examples of major geological features." Topographic and geologic features are also protected under the California Environmental Quality Act (CEQA).

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Structures are designed using Caltrans Seismic Design Criteria, which provide the minimum seismic requirements for highway bridges designed in California. A bridge's category and classification will determine its seismic performance level and which methods are used for estimating the seismic demands and structural capabilities. For more information, see the Caltrans Division of Engineering Services, Office of Earthquake Engineering, Seismic Design Criteria.

Affected Environment

Geological and related information for the project area was obtained from the Revised District Preliminary Geotechnical Report for Highway 68 Corridor Improvement dated August 8, 2021, as well as the project Paleontological Identification Report/Paleontological Evaluation Report dated July 2023 (see also Section 2.2.4). Additional data and mapping of geologic hazards for the project area are available from the Monterey County Geographic Information Systems (GIS) Department.

Geologic Setting

Regional Geologic Setting

The project area sits in the greater Monterey-Salinas region on the northern edge of the Santa Lucia Range, which is part of the Coast Ranges Geomorphic Province. The area is characterized by northwest-southeast trending mountains and fault zones, including the San Gregorio, Monterey Bay-Tularcitos, Reliz-Rinconada, and Chupines. These ridges, peaks, and valleys have been created over the past roughly 30 million years by movement along the San Andreas Fault Zone, causing the creation and filling of deep marine basins and the subsequent folding, faulting, and uplift of these and other sediments above sea level.

Local Geologic Setting

In the project area, the State Route 68 corridor runs along various west-east trending valley floors, including those of Canyon Del Rey and El Toro creeks. The creeks and the highway follow folds within the local marine and terrestrial sedimentary rock formations, which are more often exposed to the south of the roadway. The valley floor soils consist of floodplain and other sediment deposits washed down from the surrounding hills over eons. Other rock formations in or near the project area include old sand dune and coastal terrace deposits, thick beds of silt and gravel, and six- to 18 million-year-old layers of Santa Margarita Formation and Monterey Formation marine sedimentary rock.

In the project area, State Route 68 crosses and/or parallels three mapped, northwest/southeast-trending strands of the Chupines Fault. The U.S. Geological Survey reports that the Chupines Fault has likely been active within the past 15,000 years, though none of the three fault traces in the project area are currently known to be active. The nearest known active fault to the project site is the San Andreas, about 30 miles to the east.

Physiography and Topography

In most of the project area, the State Route 68 corridor stays in drainages that are surrounded by higher ground. The west end of the project area sits at about 112 feet above sea level, 0.4 mile west of Josselyn Canyon Road. Continuing east, the highway climbs to roughly 260 feet in elevation east of Olmsted Road before descending back to 120 feet above sea level at the State Route 68/State Route 218 intersection.

State Route 68 then climbs east steadily for nearly 5 miles up the west-flowing Canyon del Rey Creek watershed to a saddle at 500 feet elevation 0.4 mile east of Laureles Grade, repeatedly crossing back and forth over the creek as it ascends. Beyond the saddle, the road then descends the east-flowing El Toro Creek watershed to roughly 240 feet above sea level at the project's eastern boundary, east of the State Route 68/San Benancio Road intersection and the Toro Creek bridge.

The State Route 68 corridor is nestled between higher land to both the north and south. On the north, the highway consists of eroded ridges that rise to approximately 950 feet above mean sea level near Fort Ord National Monument. To the south, a west-east ridge between State Route 68 and the parallel Carmel River Valley ascends first gradually, and then sharply, as the road heads east toward Laureles Grade, Corral de Tierra Road, and San Benancio Road.

Though the terrain within the project area is the result of ongoing geologic processes, human development has modified the topography of the State Route 68 corridor as well. Previously disturbed deposits of artificial fill that are not included on geologic maps may be present underneath or adjacent to the roadway.

Surface Water and Groundwater

Surface Water

The project area lies along two named seasonal creeks: Canyon del Rey Creek, which flows west to the Pacific Ocean, and east-flowing El Toro Creek, which is a tributary to the Salinas River. The highway corridor also intersects and/or parallels several other unnamed tributary drainages that feed into Canyon del Rey Creek, El Toro Creek, or otherwise drain to the Pacific Ocean. These drainages follow the orientation of folds within the local marine and terrestrial sedimentary rock units.

Groundwater

Groundwater levels can fluctuate with the change of the seasons, seasonal rainfall, drought, and effects of sea level rise. The project area overlies parts of two groundwater basins: the Salinas Valley-Seaside (3-004.08), and the Salinas Valley-Monterey (3-004.10). The portion of the project area that is west of the State Route 68/State Route 218 intersection (south of the Monterey Regional Airport) does not overlie an identified groundwater basin.

Groundwater information from nearby irrigation wells along State Route 68 was obtained from the California Department of Water Resources, Water Data Library Station Map. Data from the irrigation wells in the vicinity of the proposed project show that the groundwater elevations range from 128.4 feet to 159.7 feet below ground surface; however, many proposed structures lie adjacent to streams and culverts.

Rock/Soils

Rocks

The project area is part of a complex of granitic and metamorphic rock types overlain by thick layers of marine and nonmarine sedimentary rocks. This complex is known as the Salinian Block and is separated from the Great Valley Block to the east by the San Andreas Fault Zone, and the Coastal Block to the west by the Sur-Nacimiento-Rinconada fault zone.

Geologic units in the project area include rocks and soil deposited by water, wind, and earth movements such as landslides; coastal terrace deposits of rocks and soil that were once covered by the Pacific Ocean; and marine sedimentary rocks such as sandstone, conglomerate, shale, and diatomite that make up the Santa Margarita and Monterey Formations. Artificial fill, which is not included on geologic maps, may also be present underneath or adjacent to the roadway.

Soils

Soil data was collected and reviewed from the U.S. Department of Agriculture (USDA) web soil survey portal (2021). The project area includes a variety of soil types, including loamy sands, sandy loams, clay loams, fine sands, and loams, some of which have formed from water-, wind-, and landslide-

deposited sediments. Most (about 76 percent) soils in the project area are described as moderately erodible and capable of producing moderate runoff. The U.S. Department of Agriculture soil descriptions apply to the upper 6 feet of the soil, but erosive susceptibility can extend below 6 feet in depth.

Geologic Hazards

Geologic hazards that could potentially affect the project area include seismic hazards (strong ground shaking, liquefaction, fault rupture, seismically induced landslides, rock falls, settlement, and/or subsidence) and non-seismically induced earth movement.

Seismic Hazards

Seismic hazards are associated with proximity to active earthquake faults and include strong ground shaking, liquefaction, fault rupture, tsunami, seismically induced landslides, rock falls, settlement, and subsidence.

The County of Monterey's Geographic Information Systems (GIS) Mapping and Data website maps all known earthquake epicenters in the county from 1931 to 2001 (County of Monterey, 2021). This online tool does not show any known historical earthquakes in, or within 4 miles of, the project area during that time period.

Strong Ground Shaking: A preliminary assessment of earthquake ground shaking was conducted for the each of the nine project intersections. The assessment returned estimates of horizontal peak ground acceleration ranging from 0.49g to 0.52g, corresponding to estimated maximum ground shaking magnitudes of 6.7 to 6.8 on the Moment magnitude scale. The shaking generated by this amount of energy could be perceived as Very Strong (VII) to Destructive (VIII) on the Modified Mercalli Intensity Scale, depending on the observer's location.

Liquefaction (where soil transforms into a jellylike consistency): Monterey County's Geographic Information Systems website shows that much of the State Route 68 corridor within the project area has high susceptibility to liquefaction (County of Monterey, 2021). As of this writing, additional information is needed to better assess liquefaction potential. A future investigation would include the collection and analysis of soil samples for liquefaction potential at each project intersection, with the results presented in the Geotechnical Design Report.

Fault Rupture: The project site is not situated within an Earthquake Fault Zone (Alquist-Priolo) as identified by the California Geologic Survey. However, the western strand of the Chupines Fault passes approximately 450 feet north of the State Route 68/State Route 218 intersection to approximately 400 feet southeast of the intersection. The middle strand of the Chupines Fault crosses approximately 1,000 feet west of the State Route 68/York Road intersection and associated retaining walls. The eastern strand of the

Chupines Fault crosses approximately 570 feet west of the State Route 68/Pasadera Drive intersection and associated retaining walls (U.S. Geological Survey, 2004). The U.S. Geological Service reports that the Chupines Fault has likely been active within the past 15,000 years. Surface fault rupture occurring from known active faulting is considered possible.

Tsunami: The project area is not located within a tsunami hazard zone.

Seismically induced Landslides: During an earthquake, strong ground motion caused by seismic wave transmission can cause loss of soil strength and ground failure, leading to landslides on sloping land. Representative slope angles in the project area range from 1 to 53 percent. Landslide potential throughout the project area is low to moderate, except for a 1.6-mile stretch of State Route 68 from York Road to 0.12 mile west of Pasadera Drive, which is adjacent to steep hill slopes along the south side of the roadway.

Rockfalls: Rockfall potential is low for the project limits because most (more than 94 percent) of the natural representative slopes are less than 40 degrees. Cut slopes within the project limit range from 45 to 60 degrees but do not have a history of producing rockfall. Rock outcrops are not common due to the weathering characteristics of the bedrock. Depth to bedrock is predominantly greater than 6 feet below the surface.

Settlement: Soils and rock supporting any structural elements within the project scope would be investigated and analyzed for potential settlement. Mitigation practices during construction would be implemented to amend or replace soils for the allowable amount of settlement at each element.

Subsidence: Based on the U.S. Department of Agriculture soil survey, less than 1 percent of the project limits is prone to moderate subsidence. The Rindge muck, with a potential of approximately 5 feet of settlement, is located along the northwest margins of the intersection of State Route 68 and State Route 218. Most of the intersection is underlain by artificial fill and did not show signs of significant settlement during site visits in 2021 and 2022. Subsidence due to changes in the landscape or surface water management is not anticipated.

Non-Seismically Induced Earth Movement Hazards

In addition to seismically triggered landslides, mass earth movement may be induced by heavy precipitation (especially over long periods), stream erosion, changes in groundwater, disturbance by human activities, or any combination of these factors. As noted above, landslide potential in the project area is mostly characterized as low to moderate. The portion of the project site between roughly York Road and Pasadera Drive may be at higher risk for this type of hazard due to the steep terrain south of State Route 68 in that area.

Other Hazards

Volcanic Hazards

The project area is not located within a known volcanic hazard zone.

Hazards Relating to Economic/Mineral Resources

According to the California Geological Survey Mineral Land Classification Map for the project area (see Monterey County 2007 General Plan Draft Environmental Impact Report, Section 4.5.1 Mineral Resources, September 2008), the project limits cross near and adjacent to areas identified with having known aggregate (sand and gravel) resources. Caltrans' Geographic Information Systems resource mapping library shows no mineral deposits within the project limits.

Environmental Consequences

Build Alternatives

In general, geologic hazards on a project site can be avoided, reduced to an acceptable level, or accommodated. Both Build Alternatives would require grading, trenching, and other earthwork operations for the construction of retaining walls, concrete barriers, culvert improvements, and more. These activities have the potential to expose construction workers and the traveling public to the effects of erosion, seismic hazards, and/or non-seismically related earth movement.

More information regarding groundwater elevations and potential for structural disturbances from surface fault rupture or liquefaction would be obtained during the final project design phase to better assess the nature of geologic hazards on the project site prior to construction. The results of these studies would be presented in the project Geotechnical Design Report.

In addition, project activities would cause visual impacts to topographic and other landscape features along State Route 68, a designated California Scenic Route. The final project design would incorporate measures to limit the alteration of high-quality visual resources.

Potential Exposure to Geologic Hazards

During the project construction phase, workers may be exposed to the effects of erosion, seismic hazards (strong shaking, ground rupture, liquefaction, slumping, slope failure), and/or non-seismically related ground failure (debris flow, dam collapse, avalanche). Some of these effects could be exacerbated in areas with artificial fill or certain soil types (for example, expansive soils). During the project operational phase, travelers using the roadway may be exposed to effects from the same geologic hazards listed above.

Implementation of safe engineering and construction practices, including compliance with Caltrans and the California Division of Occupational Safety and Health (Cal-OSHA) safety requirements, mean that project construction and

operation would not exacerbate existing geologic hazards in the project area and would not expose workers and travelers to increased levels of these hazards.

Design Elements to Protect Against Liquefaction

Soil liquefaction is the conversion of soil into a fluid-like mass during an earthquake or other seismic event. Liquefaction potential is influenced by soil compactness, particle size, and degree of water saturation. Soil consisting of unconsolidated sediments like that often found in stream beds tends to have a higher potential for liquefaction.

The project area is not known to contain any active earthquake faults; the nearest known active fault is the San Andreas, approximately 30 miles to the east. Soil samples would be collected for each project intersection during the final project design phase. Liquefaction potential would be assessed and presented in the Preliminary Geotechnical Design Report. Standard engineering practices to avoid, limit, or accommodate soil liquefaction would then be incorporated into the final project design.

Erosion Control Practices

Standard specifications and Best Management Practices would be implemented during construction at project work locations for control of erosion and sedimentation from the construction work areas, as further discussed in Section 2.2.2, Water Quality and Stormwater Runoff.

Measures to Protect Against Seismic Hazards

The use of safe engineering and construction practices on the project, which would be based on data obtained during the project's final design phase and presented in the project Geotechnical Design Report, means that project structures would be designed and built to withstand defined levels of ground acceleration and fault offset, as applicable.

Design Elements to Reduce Visual Impacts

Project-related impacts to visual features would be reduced by the incorporation of design features including maximum feasible preservation of existing vegetation, installation of new landscaping, landform grading that blends with the natural topography of the region, aesthetic treatments to walls and other built elements, undergrounding of existing overhead utility lines, and others. However, it is predicted that impacts to visual features from the project would be substantial under either Build Alternative. See Section 2.1.10, Visual/Aesthetics, for more details.

Impacts to Known Mineral Resources

No known mineral deposits exist within the project limits. Therefore, the project would be unlikely to have undesirable effects pertaining to mineral resources.

Potential Visual Impacts from Landform Modification

Both Build Alternatives would require cut/fill operations and installation of retaining walls, drainage swales, and other engineered features. These activities would result in changes to roadway scale, amount of hardscape, lighting, and views of agricultural and open space, varying topography, and native vegetation including oak woodlands. Because State Route 68 is a designated California Scenic Highway and the community places high value on these visual resources, even moderate alteration of the existing terrain or overall aesthetic character along State Route 68 would be considered a substantial visual impact. The project design would reduce aesthetic impacts by using texturing and staining to darken reflective materials, as well as by preserving existing native vegetation to the extent feasible and replanting areas where vegetation would be removed for project construction. However, the residual effect of the Build Alternatives on the visual character of the project vicinity would be a substantial impact. See the analysis of visual impacts in Section 2.1.10, Visual/Aesthetics, for more information.

No-Build Alternative

Under the No-Build Alternative, intersection improvements would not be made and retaining walls and other structures associated with the project would not be constructed. Therefore, impacts related to geologic, soils, seismic, and topographic hazards would not occur.

Under either Build Alternative, the following standard measures would be implemented to help address potential impacts related to erosion, sedimentation, seismic hazards, slope stability and liquefaction-prone areas. Erosion and sedimentation control measures are discussed in Section 2.2.2, Water Quality and Stormwater Runoff.

Erosion and Sedimentation

Standard Specifications and Best Management Practices would be implemented during construction at project work locations for control of erosion and sedimentation from the construction work areas.

Seismic Hazards, Slope Stability, and Liquefaction

The project design would be based on the results of geotechnical studies conducted throughout the project area and would follow current State of California seismic engineering standards to ensure maximum strength and safety of all constructed features under both static and dynamic (earthquake-caused ground shaking) conditions, as well as associated hazards such as seismic-related ground failure (rupture, landslide, liquefaction). Slope compaction specifications would be applied to project designs for slopes and embankment areas in liquefaction and landslide-prone areas of the project limits so as not to cause potential instability of the soils onsite or offsite. Also, the project would not increase groundwater levels in the work areas and would, therefore, not increase the liquefaction potential of soils in project construction areas.

After implementation of the above procedures and based on the impacts analysis discussed above, it is expected that construction of either of the Build Alternative designs would not directly or indirectly cause adverse effects relating to geology, soils, seismicity or topography, except for predicted impacts to visual features, including landform modification. This topic is discussed in Section 2.1.10, Visual/Aesthetics.

Avoidance, Minimization, and/or Mitigation Measures

The project Build Alternatives would incorporate the project features and practices outlined above to help address potential impacts related to geologic, soils, seismic, and topographic hazards. No avoidance, minimization, and/or mitigation measures are required aside from those related to visual impacts. See the measures listed in Section 2.1.10, Visual/Aesthetics, for more information.

2.2.4 Paleontology

Regulatory Setting

Paleontology is a natural science focused on the study of ancient animal and plant life as it is preserved in the geologic record as fossils. Several federal statutes specifically address paleontological resources, their treatment, and funding for mitigation as a part of federally authorized projects:

- 16 U.S. Code 431-433 (the “Antiquities Act”) prohibits appropriating, excavating, injuring, or destroying any object of antiquity situated on federal land without the permission of the Secretary of the Department of Government having jurisdiction over the land. Fossils are considered “objects of antiquity” by the Bureau of Land Management, the National Park Service, the Forest Service, and other federal agencies.
- 16 U.S. Code 470aaa (the Paleontological Resources Preservation Act) prohibits the excavation, removal, or damage of any paleontological resources located on federal land under the jurisdiction of the Secretaries of the Interior or Agriculture without first obtaining an appropriate permit. The statute establishes criminal and civil penalties for fossil theft and vandalism on federal lands.
- 23 U.S. Code 1.9(a) requires that the use of federal-aid funds must be in conformity with all federal and state laws.
- 23 U.S. Code 305 authorizes the appropriation and use of federal highway funds for paleontological salvage as necessary by the highway department of any state, in compliance with 16 USC 431-433 above and state law.

Under California law, paleontological resources are protected by the California Environmental Quality Act (CEQA).

Affected Environment

Scientifically sensitive paleontological resources are geologic deposits or identified sites containing individual fossils or assemblages of fossils that are unique or unusual, diagnostically, or stratigraphically important or add to the existing body of knowledge.

A preliminary Paleontology Review was completed for this project in October 2019, and a Paleontological Identification Report/Paleontological Evaluation Report was completed in July 2023. The Paleontological Identification Report/ Paleontological Evaluation Report documents seven geologic formations within the project limits, presented in Table 2.2.4.1. These formations are shown as having a high to low potential for encountering sensitive paleontological resources in the Paleontological Sensitivity Mapping Project published by Caltrans and California State University, Fresno in June 2000.

Table 2.2.4.1 Geologic Units Found Along the State Route 68 Corridor

Geologic Unit/ Age	Description	Fossils Known	Paleontological Potential
Alluvial deposits (Qal); younger flood-plain deposits (Qyf); older flood-plain deposits (Qof)/ Holocene	Unconsolidated sands, silts, and clays deposited by streams and rivers	Geologic age too young to contain fossils	Low Potential
Colluvium (Qc)/ Holocene	Unconsolidated sand and silt deposited by slope wash and mass movement	Geologic age too young to contain fossils	Low Potential
Older eolian (dune) deposits (Qod)/ Pleistocene	Weakly consolidated, well sorted sand dune deposits	None reported; depositional setting of sand dunes unlikely to preserve fossils	Low Potential
Coastal terrace deposits (Qtc, Qcts)/ Pleistocene	Uplifted coastal terraces composed of marine sandstones with thin gravel-rich layers	None known near project corridor; marine invertebrates and rare vertebrates (e.g., whale, mammoth, mastodon) known from elsewhere on Central California coast	High Potential
Unnamed Continental Deposits (Qcd)/ Pleistocene	Nonmarine sandstones with pebble and cobble gravel interbeds. Contains some deposits of marine origin.	None reported from unnamed deposits; Pleistocene mammals known from deposits of similar age and depositional environment in southern Monterey and San Luis Obispo counties	High Potential

Geologic Unit/ Age	Description	Fossils Known	Paleontological Potential
Santa Margarita Formation (Tsm)/ Late Miocene	Shallow marine sandstones and conglomerates	Clam and snail fossils known from State Route 68 corridor; marine vertebrates known from elsewhere on the Central Coast	High Potential
Monterey Formation, diatomite (Tmd)/ Late Miocene	Marine deposits of silty diatomite	Marine vertebrates, especially mammals such as whales, early pinnipeds, sea cows, desmostylians	High Potential

Environmental Consequences

Build Alternatives

The Paleontological Identification Report/Paleontological Evaluation Report identifies ground surface or shallow subsurface occurrences of the Monterey Formation, Santa Margarita Formation, unnamed continental deposits, and coastal terrace deposits as having the highest potential for disturbance of fossils in the project area. The report notes that all nine project intersections contain at least one occurrence of a rock formation with high paleontological potential.

Disturbance of fossil-bearing rock could occur either directly through earthwork operations (grading, trenching, possibly large-diameter drilling) or indirectly through effects of exposure such as vandalism or weathering due to exposure of the rock formations. Project features and activities with the potential to cause impacts to paleontological resources include:

- Retaining walls and landform grading: large excavation footprint required for constructing retaining wall foundations, hillslopes would need to be cut back at some intersections.
- Wildlife Crossings: excavations would be required for installation of 10-foot by 10-foot, and 10-foot by 12-foot below-ground box culverts.
- Drainage Swales: excavations would be required for creation of swales.
- Utility undergrounding: trenching would be required for underground conduit.

Both Build Alternatives have the potential to result in direct impacts to scientifically significant paleontological resources, mostly due to construction of retaining walls, landform grading, and wildlife crossings. The number and location of retaining walls differ between the two Build Alternatives, with the walls required for Alternative 2 expected to require more extensive earthwork that would disturb high paleontological potential deposits, particularly the Monterey Formation. Impacts from wildlife crossings, drainage swales, and utility undergrounding would be about the same for each alternative. Potential impacts to paleontological resources with either Build Alternative

would be mitigated with implementation of a Paleontological Mitigation Plan as prescribed in measures PALEO-1 and PALEO-2.

No-Build Alternative

Under the No-Build Alternative, intersection improvements would not be made, retaining walls and other structures associated with the project would not be constructed, and no construction-related ground-disturbing activities would occur. As a result, there would be no risk of disturbance to below-ground paleontological resources.

Cumulative Impacts Relating to Paleontology

As noted above, the project Paleontological Identification Report/Paleontological Evaluation Report, dated July 2023, identified seven fossil-bearing geologic formations within the project limits (Table 2.2.4.1). These formations have varying potential for construction crews to encounter sensitive paleontological resources. Project-related construction activities, including construction of retaining walls, landform grading, trenching, and possibly large-diameter drilling, could adversely affect paleontological resources by disturbing sediments of the Monterey Formation, Santa Margarita Formation, unnamed continental deposits, and/or coastal terrace deposits.

The project Cumulative Impact Analysis found that of the 22 other current and reasonably foreseeable projects in the Monterey region, nine of those could potentially result in significant impacts to paleontological resources. The analysis determined that the proposed project has the potential to contribute to an adverse cumulative impact to paleontological resources.

The project would reduce potential impacts to paleontological resources through implementation of measures PALEO-1 and PALEO-2, described in the next section below. The Paleontological Mitigation Plan that would be created during the project's design phase would require qualified paleontological monitors to oversee ground-disturbing activities in high-paleontological-potential areas. Procedures for fossil recovery, preparation, identification, and curation would be specified.

Regarding cumulative impacts, the Paleontological Identification Report/Paleontological Evaluation Report for the project states that paleontological resources on the Central Coast are not experiencing a cumulative effect from current and reasonably foreseeable future projects. Exposures of paleontologically sensitive strata in this region include large swaths of rural and mountainous terrain that are unlikely to be disturbed by human activities and would only be minimally affected by natural processes. The relatively small percentage of paleontologically sensitive strata in the area that may be disturbed by current or future development would be offset by mitigation strategies required for regulatory compliance. As such, the Paleontological Identification Report/Paleontological Evaluation Report found

that the potential impacts from the Build Alternatives would not contribute to a cumulative effect on paleontological resources.

Avoidance, Minimization, and/or Mitigation Measures

Mitigation Measures PALEO-1 and PALEO-2 prescribe preparation and implementation of a Paleontological Monitoring Plan for the preferred alternative when selected.

PALEO-1. Preparation of Paleontological Mitigation Plan. A Paleontological Mitigation Plan shall be prepared during the design phase of the project and implemented during project construction. The Paleontological Mitigation Plan shall include provisions for paleontological monitoring during excavations that may disturb deposits of high paleontological potential, and procedures for fossil recovery, fossil preparation and identification, and fossil curation.

PALEO-2. Implementation of Paleontological Mitigation Plan. Qualified paleontological monitor(s), under the direction of a Principal Paleontologist, shall be present during ground-disturbing activities in areas of high paleontological potential, as outlined in the paleontological mitigation plan. Monitors have the authority to temporarily halt or divert earthwork in the event of a fossil discovery. If scientifically significant fossils are discovered, they shall be recovered from the field, prepared in a fossil preparation laboratory, identified to the lowest taxonomic level, and curated into a recognized paleontological specimen repository with adequate storage and a permanent curator. A Paleontological Mitigation Report outlining the results of the paleontological mitigation program shall be prepared and submitted to Caltrans.

2.2.5 Hazardous Waste and Materials

Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage, and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health, and land use.

The main federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, and the Resource Conservation and Recovery Act of 1976 (RCRA). The purpose of the Comprehensive Environmental Response, Compensation and Liability Act, often referred to as “Superfund,” is to identify and cleanup abandoned contaminated sites so that public health and welfare are not compromised. The Resource Conservation and Recovery Act

provides for “cradle to grave” regulation of hazardous waste generated by operating entities. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control Standards, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

California regulates hazardous materials, waste, and substances under the authority of the California Health and Safety Code and is also authorized by the federal government to implement the Resource Conservation and Recovery Act in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact groundwater and surface water quality. California regulations that address waste management and prevention and cleanup of contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

Affected Environment

Hazardous waste and materials information was obtained from a Hazardous Waste Initial Site Assessment prepared by Caltrans for the proposed project, dated September 26, 2023. The site assessment documented existing and potential hazardous waste risks identified through searches of the GeoTracker, EnviroStor, and CalGEM databases.

The project site consists of nine signalized intersections along 8.9 miles (post mile 4.8 to post mile 13.7) of the State Route 68 corridor between Monterey and

Salinas. Immediately to the north of the project site is Fort Ord National Monument, a 28,000-acre former U.S. Army base that is a U.S. Environmental Protection Agency Superfund site. Cleanup of munitions and groundwater contamination has been completed on nearly 12,000 acres of the property and is ongoing. Also, potential hazards, including former gas stations with underground tanks, are located adjacent to the project site.

The potential for hazardous waste-related impacts on the project site is based on an assessment of the existing conditions and the potential that implementation of the proposed project would result in the disturbance of existing hazardous conditions through disruption of existing facilities or would result in discharges during project construction.

Leaking Underground Storage Tanks

The Hazardous Waste Initial Site Assessment identified three cases (all closed) of underground storage tank leakage within 1,000 feet of the project site. At two of these sites (GeoTracker ID numbers T10000002861 and T10000003114), both storage tanks and fuel dispensers were leaking. These two sites have the potential to impact the proposed project due to the presence of petroleum hydrocarbons in shallow soils (5 feet or less). Database information indicates that these hydrocarbons exist in the subsurface adjacent to the Caltrans right-of-way on the south side of the State Route 68/Corral de Tierra Road intersection.

In addition to the cases noted in the Hazardous Waste Initial Site Assessment, review of the California Environmental Protection Agency database indicated three active groundwater contamination plumes north of State Route 68 on the Fort Ord property, north of the State Route 68/Corral de Tierra intersection. The plumes are some distance from State Route 68, and there is no known contamination associated with them in the project area.

Aerially Deposited Lead (ADL)

The historic use of leaded gasoline in automobiles has resulted in soils along roadways throughout California containing elevated concentrations of lead. Some of this soil may be safely reused on project sites, while in other cases the soil must be exported and disposed of as hazardous waste. Two studies conducted on the project site, from 2007 and 2010, presented differing results regarding the presence of hazardous levels of aerially deposited lead (greater than 80 mg/kg total lead).

Lead-Containing Paint (LCP) and Asbestos-Containing Materials (ACM)

The project includes work on the El Toro Creek Bridge on State Route 68 under Alternative 2. Historically, bridges and other transportation structures sometimes used construction materials including lead-containing paint and asbestos.

Yellow Thermoplastic or Traffic Stripe

Yellow thermoplastic traffic striping paint used by Caltrans until approximately 2006 contained lead in high enough amounts that the material is classified as hazardous waste upon removal. White striping paint also contains lead in smaller amounts.

Treated Wood Waste (TWW)

Caltrans guardrail and thrie beam barrier supports, piles, and signposts often consist of wood that has been treated with chemical preservatives to prevent rot or insect attack. This treated wood is classified as hazardous waste upon removal.

Naturally Occurring Asbestos

A review of geologic mapping and mineral hazard maps indicates that naturally occurring asbestos is not present on the project site.

Unexploded Ordnance

Fort Ord, a 28,000-acre former U.S. Army post immediately north of State Route 68 in the project vicinity, is a designated Superfund site. Extensive investigation and cleanup efforts, including of military munitions, have occurred and are ongoing. According to the California Environmental Protection Agency, it is possible that in past decades some ordnance could have been mistakenly fired toward State Route 68 from Fort Ord during military training exercises. Although no unexploded ordnance is known to exist on the State Route 68 Corridor Improvements project site, the potential presence of live munitions is possible.

Environmental Consequences

Build Alternatives

The project Hazardous Waste Initial Site Assessment report, dated September 26, 2023, states that the project can proceed with very little risk of impacts due to unanticipated hazardous waste or other contamination-related issues. However, both Build Alternatives would require grading, trenching, and other earthwork operations for the construction of retaining walls, concrete barriers, culvert improvements, and more. Therefore, the potential exists for project construction to encounter unanticipated hazardous chemicals in the soil, as well as to release hazardous chemicals from existing roadway materials.

If an unanticipated discovery or accidental release were to occur, it could cause project delays resulting from the need for remediation, and associated changes to project scope and costs. Such events are unlikely but could potentially result in adverse health impacts to construction workers and members of the traveling public, as well as undesired environmental impacts. Caltrans has developed Standard Specifications and Best Management Practices to implement in the event of an unanticipated discovery or accidental release.

Leaking Underground Storage Tanks

The project's Hazardous Waste Initial Site Assessment report identified two locations on the southwest side of the State Route 68/Corral de Tierra Road intersection adjacent to the proposed project as being the locations of former leaking underground storage tank cases. The State of California's GeoTracker water quality database lists these cases as closed, with cleanup completed as of 2017 and 2020. However, residual contaminant plumes remain at each storage tank site.

Project design revisions were made to result in minimal encroachment upon these properties under Build Alternative 1 and avoid the gas station properties altogether under Build Alternative 2. However, if pollutants are present (petroleum hydrocarbons in shallow soils of 5 feet or less) and dewatering of groundwater is needed during construction, the potential would still exist for direct discharge of pollutants into the environment within the project limits.

Aerially Deposited Lead (ADL)

Aerially deposited lead from the historical use of leaded gasoline exists along roadways throughout California. As a result, soils with elevated concentrations of lead may exist within the project limits on the state highway system right-of-way. Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed under the July 1, 2016, aerially deposited lead agreement between Caltrans and the California Department of Toxic Substances Control. This aerially deposited lead agreement allows such soils to be safely reused within the project limits as long as all requirements of the aerially deposited lead agreement are met.

Studies conducted on the project site in 2007 and 2010 indicate there is a potential for aerially deposited lead to be present within the project corridor. Therefore, the potential exists for earth-moving activities to disturb it and expose workers to lead-containing dust.

Lead-Containing Paint (LCP) and Asbestos-Containing Materials (ACM)

Because Alternative 2 would include widening of the El Toro Creek Bridge, the potential exists for asbestos-containing materials and lead-containing paint to be disturbed, removed, or disposed of if they are present.

Yellow Thermoplastic or Traffic Stripe

Older, lead-containing yellow thermoplastic traffic striping paint has already been removed from the project limits by earlier Caltrans projects. Therefore, the remaining yellow traffic stripe or thermoplastic and all-white striping or thermoplastic striping is expected to contain lead at lower, non-hazardous concentrations.

Treated Wood Waste (TWW)

The project site has the potential to contain chemically treated wooden supports, piles, and signposts that are considered to be hazardous waste upon removal.

Naturally Occurring Asbestos

Because naturally occurring asbestos is not known to be present on the project site, no environmental consequences are expected to arise from this hazard.

Unexploded Ordnance

Unexploded ordnance is not known to exist within the project limits. However, because of the remote possibility that some military ordnance could have been fired toward State Route 68 from the Fort Ord property during past military training exercises, the potential exists for the discovery of live munitions during project implementation, creating an explosive safety hazard for workers and the public. In the unlikely event that unexploded ordnance is encountered during construction, procedural protocols released by former Fort Ord shall be followed, including stopping all work in the vicinity of the discovery and calling emergency services (911) to report what has been found.

No-Build Alternative

Under the No-Build Alternative, intersection improvements would not be made and retaining walls and other structures associated with the project would not be constructed. As a result, there would be no risk of disturbance to existing hazardous waste materials in the project locations.

Standard and Non-Standard Special Provisions

The following Standard and Non-Standard Special Provisions are taken from the Hazardous Waste Initial Site Assessment dated September 26, 2023. Under either Build Alternative, these actions would be implemented to ensure the proper handling, treatment, and disposal of routine hazardous materials/wastes as needed during construction to protect the health of workers, the public, and the environment.

Leaking Underground Storage Tanks

Two inventoried, former leaking underground storage tank sites exist on the south side of the State Route 68/Corral de Tierra Road intersection. Although the project has been designed to avoid disturbance of residual contaminant plumes underlying these properties, it is recommended that a Non-Standard Special Provision (NSSP) be included in the Standard Special Provisions to cover handling, testing, and disposal of petroleum hydrocarbon-impacted soil and groundwater in the event unanticipated petroleum hydrocarbon impacts are encountered during construction.

Aerially Deposited Lead (ADL)

The Hazardous Waste Initial Site Assessment report recommends that an aerially deposited lead study be conducted during the project's Design Phase (Plans, Specifications, and Estimates). This study would provide the information necessary to determine any special handling or disposal requirements for lead-contaminated soil in compliance with the 2016 Aerially Deposited Lead Agreement between Caltrans and the Department of Toxic Substances Control.

Depending on the outcome of the aerially deposited lead soil testing, applicable Standard Special Provisions would then be implemented – specifically, SSP 14-11.08, "Regulated Material Containing Aerially Deposited Lead," and/or SSP 7-1.02K(6)(j)(iii) for management of unregulated soils. In either case, the Construction Contractor would be required to develop and implement a Lead Compliance Plan during construction to ensure the health and safety of workers and the environment.

Lead-Containing Paint (LCP) and Asbestos-Containing Materials (ACM)

An asbestos and lead-based paint study of the El Toro Creek bridge structures is recommended during the project's Plans, Specifications, and Estimates phase. Based on the outcome of this study, a Standard Special Provision would be implemented to ensure proper removal, handling, and disposal of asbestos-containing materials and lead-based paints, if present, at a permitted disposal facility.

Yellow Thermoplastic or Traffic Stripe

Once the pavement removal method is known, the appropriate Standard Special Provisions for removal of nonhazardous pavement markings would be determined during the project design phase to ensure proper removal, handling, and disposal of any generated traffic striping waste at a permitted disposal facility.

Treated Wood Waste (TWW)

The construction contract for the proposed project would include a Standard Special Provision requiring the proper management and disposal of treated wood waste. California Department of Toxic Substances Control guidance for the Management of Treated Wood Waste would be included as part of the Plans, Specifications, and Estimates package to ensure compliance with current Department of Toxic Substances Control regulations.

Avoidance, Minimization, and/or Mitigation Measures

The project Build Alternatives would incorporate the project features, provisions, and standard measures outlined above to help address potential hazardous waste and materials. No avoidance, minimization, and/or mitigation measures are required.

2.2.6 Air Quality

Regulatory Setting

The Federal Clean Air Act, as amended, is the main federal law that governs air quality, while the California Clean Air Act is its companion state law. These laws, and related regulations by the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board, set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards. National and state ambient air quality standards have been established for six criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO2), ozone (O3), lead (Pb), and sulfur dioxide (SO2), and particulate matter (PM)—which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM10) and particles of 2.5 micrometers and smaller (PM2.5). In addition, state standards exist for visibility-reducing particles, sulfates, hydrogen sulfide (H2S), and vinyl chloride. The national and state standards are set at levels that protect public health with a margin of safety and are subject to periodic review and revision. Both state and federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under the National Environmental Policy Act (NEPA). In addition to this environmental analysis, a parallel “Conformity” requirement under the Federal Clean Air Act also applies.

Conformity

The conformity requirement is based on Federal Clean Air Act Section 176(c), which prohibits the U.S. Department of Transportation and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to State Implementation Plan (SIP) for attaining the National Ambient Air Quality Standards. “Transportation Conformity” applies to highway and transit projects and takes place on two levels: the regional (or planning and programming) level and the project level. The proposed project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and “maintenance” (former nonattainment) areas for the National Ambient Air Quality Standards, and only for the specific National Ambient Air Quality Standards that are or were violated. U.S. EPA regulations at 40 Code of Federal Regulations. 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for National Ambient Air Quality Standards and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the National Ambient Air Quality

Standards for carbon monoxide (CO), nitrogen dioxide (NO2), ozone (O3), particulate matter (PM10 and PM2.5), and in some areas (although not in California), sulfur dioxide (SO2). California has nonattainment or maintenance areas for all of these transportation-related "criteria pollutants" except SO2, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the Federal Clean Air Act to be covered in transportation conformity analysis. Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years (for the RTP) and 4 years (for the FTIP). RTP and FTIP conformity uses travel demand and emission models to determine whether or not the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements of the Federal Clean Air Act and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), Federal Highway Administration, and Federal Transit Administration (FTA) make the determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the Federal Clean Air Act. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept and scope and the "open-to-traffic" schedule of a proposed transportation project are the same as described in the RTP and FTIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Project-level conformity is achieved by demonstrating that the project comes from a conforming RTP and TIP; the project has a design concept and scope that has not changed significantly from those in the RTP and TIP; project analyses have used the latest planning assumptions and EPA-approved emissions models; and in particulate matter areas, the project complies with any control measures in the SIP. Furthermore, additional analyses (known as hot-spot analyses) may be required for projects located in CO and particulate matter nonattainment or maintenance areas to examine localized air quality impacts.

Affected Environment

Information regarding project-related air quality impacts was obtained from an Air Quality and Greenhouse Gas Technical Memo, dated July 28, 2023, that was prepared by Caltrans for the project.

The project site lies in the Monterey Bay region, outside the state-designated Coastal Zone. The area is characterized by dry summers, rainy winters, prevailing northwesterly winds, and mild year-round temperatures. During summer, a high-pressure cell centered over the northeastern Pacific Ocean results in stable meteorological conditions in the region; during winter, the Pacific high-pressure cell weakens, resulting in increased precipitation and storm activity.

To protect public health against the effects of exposure to air pollution, the federal Clean Air Act requires that ambient air quality must meet the standards for criteria air pollutants in all locations generally accessible to the public (see Table 2.2.6.1). The project is in the North Central Coast Air Basin, which consists of Monterey, Santa Cruz, and San Benito Counties. The Monterey Bay Air Resources District regulates air quality in the basin where air quality is generally good. The North Central Coast Air Basin is currently in attainment for all federal ambient air quality standards but is in nonattainment for state standards for airborne particulates less than 10 microns in diameter (PM10) (see Table 2.2.6.2).

The Federal Highway Administration's conformity guidelines include certain categories of projects that are exempt from local and regional air quality analysis because they would have little if any potential to degrade air quality and, therefore, an air quality conformity determination would not be required. Based on review of the federal guidelines, the project would qualify for an exemption under Title 40 Code of Federal Regulations Part 93, Section 93.127 "Projects exempt from regional emissions analyses" as an intersection channelization project.

Projects that would not degrade air quality in the basin are consistent with the Monterey Bay Air Resources District's state air quality attainment goals as stated in the State Implementation Plan (the 2012-2015 Air Quality Management Plan).

For the notes in the following tables, refer to notes section below Table 2.2.6.2.

Table 2.2.6.1. State and Federal Criteria Air Pollutant Effects and Sources

Pollutant	Principal Health and Atmospheric Effects	Typical Sources
Ozone (O3)[8]	High concentrations irritate lungs. Long-term exposure may cause lung tissue damage and cancer. Long-term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include many known toxic air contaminants. Biogenic VOC may also contribute.	Low-altitude O3 is almost entirely formed from ROG or VOC and NOX in the presence of sunlight and heat. Major sources include motor vehicles and other mobile sources, solvent evaporation, and industrial and other combustion processes.
Respirable Particulate Matter (PM10)[9]	Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased cancer and mortality. Contributes to haze and reduced visibility. Includes some toxic air contaminants. Many aerosol and solid compounds are part of PM10.	Dust- and fume-producing industrial and agricultural operations; combustion smoke; atmospheric chemical reactions; construction and other dust-producing activities; unpaved road dust and re-entrained paved road dust; natural sources (wind-blown dust, ocean spray).
Fine Particulate Matter (PM2.5)[9]	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most diesel exhaust particulate matter—a toxic air contaminant—is in the PM2.5 size range. Many aerosol and solid compounds are part of PM2.5.	Combustion, including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning. Also formed through atmospheric chemical (including photochemical) reactions involving other pollutants, including NOX, SOX, ammonia, and ROG.
Carbon Monoxide (CO)	CO interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen. CO also is a minor precursor for photochemical O3.	Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.
Nitrogen Dioxide (NO2)[10]	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. Contributes to acid rain. Part of the “NOX” group of O3 precursors.	Motor vehicles and other mobile sources; refineries; industrial operations.
Sulfur Dioxide (SO2)[11]	Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, and steel. Contributes to acid rain. Limits visibility.	Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing; some natural sources like active volcanoes. Limited contribution possible from heavy-duty diesel vehicles if ultra-low sulfur fuel not used.

Pollutant	Principal Health and Atmospheric Effects	Typical Sources
Lead[12,13]	Disturbs gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also a toxic air contaminant and water pollutant.	Lead-based industrial processes like battery production and smelters. Lead paint, leaded gasoline. Aerially deposited lead from gasoline may exist in soils along major roads.
Visibility Reducing Particles[14]	Reduces visibility. Produces haze. Note: not related to the Regional Haze program under the Federal Clean Air Act, which is oriented primarily toward visibility issues in National Parks and other "Class I" areas.	See Particulate Matter, above.
Sulfates	Premature mortality and respiratory effects. Contributes to acid rain. Some toxic air contaminants attach to sulfate aerosol particles.	Industrial processes, refineries and oil fields, mines, natural sources like volcanic areas, salt-covered dry lakes, and large sulfide rock areas.
Hydrogen Sulfide	Colorless, flammable, and poisonous. Respiratory irritant. Neurological damage and premature death. Headache, nausea.	Industrial processes such as refineries and oil fields, asphalt plants, livestock operations, sewage treatment plants, and mines. Some natural sources like volcanic areas and hot springs.
Vinyl Chloride[12]	Neurological effects, liver damage, and cancer. Also considered a toxic air contaminant.	Industrial processes.

Refer to notes section below Table 2.2.6.2.

Table 2.2.6.2. State and Federal Criteria Air Pollutant Standards

Pollutant	Averaging Period	Concentration[3] (California Standard[1])	Concentration[3] (National Standard - Primary[2,3,5])	Basin Attainment Status – State	Basin Attainment Status – National
Ozone (O3)[8]	1 Hour	0.09 ppm (180 µg/m3)	None/Not Applicable	A	U/A
Ozone (O3)[8]	8 Hour	0.070 ppm (137 µg/m3)	0.070 ppm (137 µg/m3)	A	U/A
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m3	150 µg/m3	N	U
Respirable Particulate Matter (PM10)[9]	Annual Arithmetic Mean	20 µg/m3	None/Not Applicable	N	U
Fine Particulate Matter (PM2.5)[9]	24 Hour	None/Not Applicable	35 µg/m3	A	U/A
Fine Particulate Matter (PM2.5)[9]	Annual Arithmetic Mean	12 µg/m3	12.0 µg/m3	A	U/A
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m3)	35 ppm (40 mg/m3)	A (Monterey County)	U/A
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m3)	9 ppm (10 mg/m3)	A (Monterey County)	U/A
Carbon Monoxide (CO)	8 Hour (Lake Tahoe)	6 ppm (7 mg/m3)	None/Not Applicable	A (Monterey County)	U/A
Nitrogen Dioxide (NO2)[10]	1 Hour	0.18 ppm (339 µg/m3)	100 ppb (188 µg/m3)	A	U/A
Nitrogen Dioxide (NO2)[10]	Annual Arithmetic Mean	0.030 ppm (57 µg/m3)	0.053 ppm (100 µg/m3)	A	U/A
Sulfur Dioxide (SO2)[11]	1 Hour	0.25 ppm (655 µg/m3)	75 ppb (196 µg/m3)	A	U/A
Sulfur Dioxide (SO2)[11]	3 Hour	None/Not Applicable	None/Not Applicable	A	U/A

Pollutant	Averaging Period	Concentration[3] (California Standard[1])	Concentration[3] (National Standard - Primary[2,3,5])	Basin Attainment Status – State	Basin Attainment Status – National
Sulfur Dioxide (SO2)[11]	24 Hour	0.04 ppm (105 µg/m3)	0.14 ppm (for certain areas)[11]	A	U/A
Sulfur Dioxide (SO2)[11]	Annual Arithmetic Mean	None/Not Applicable	0.030 ppm (for certain areas)[11]	A	U/A
Lead[12,13]	30 Day Average	1.5 µg/m3	None/Not Applicable	A	U/A
Lead[12,13]	Calendar Quarter	None/Not Applicable	1.5 µg/m3 (for certain areas)[12]	A	U/A
Lead[12,13]	Rolling 3-Month Average	None/Not Applicable	0.15 µg/m3	A	U/A
Visibility Reducing Particles[14]	8 Hour	See footnote 14	No Federal Standards	U	None/Not Applicable
Sulfates	24 Hour	25 µg/m3	No Federal Standards	A	None/Not Applicable
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m3)	No Federal Standards	U	None/Not Applicable
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m3)	No Federal Standards	None/Not Applicable	None/Not Applicable

State Ambient Air Quality Standards Area Designations (all pollutants): A = Attainment; N = Nonattainment; NA-T = Nonattainment-Transitional; U = Unclassified

National Ambient Air Quality Standards Area Designations for PM10: A = Attainment; N = Nonattainment; U = Unclassifiable

National Ambient Air Quality Standards Area Designations for O3, PM2.5, CO, and NO2: N = Nonattainment; U/A = Unclassifiable/Attainment

National Ambient Air Quality Standards Area Designations for SO2 and Lead: N = Nonattainment; U = Unclassifiable; U/A = Unclassifiable/Attainment

Footnotes in Tables:

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, 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.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, 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 PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. 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.

(4. N/A - deleted)

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

(6. N/A - deleted)

(7. N/A - deleted)

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m3 to 12.0 µg/m3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3, as was the annual secondary standard of 15 µg/m3. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (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.

11. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' 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.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3)as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Environmental Consequences

Build Alternatives

The proposed project alternatives would not increase the capacity of State Route 68 in the project area, and therefore they would not have the ability to degrade local air quality over the long term. In addition, if Alternative 1 (roundabouts) was implemented, the project would likely reduce traffic congestion and idling ("stop and go" activity) to the extent that overall air quality would be improved in the area. No further long-term air quality analysis is required.

Construction Emissions

Although relatively short-lived, project construction activity can have substantial temporary impacts on local air quality depending on the extent of excavation, soil transport, and subsequent fill operations needed. These impacts include release of particulate emissions (airborne dust) from earthwork activities as well as airborne pollutant emissions from construction equipment. The latter include carbon monoxide (CO), nitrogen oxides (NOX), volatile organic compounds (VOCs), directly emitted particulate matter (PM10 and PM2.5), and toxic air contaminants (TACs), such as diesel exhaust particulate matter (DPM). In addition, construction activities can be expected to temporarily increase traffic congestion in the area, resulting in increases in emissions from traffic during the delays. Thus, implementation of either one of this project's build alternatives is anticipated to result in a temporary increase in airborne pollutant and fugitive dust emissions.

An Air Quality and Greenhouse Gas Technical Memo, dated July 28, 2023, was prepared for the project. Memo preparation was informed by the Caltrans document "Interim Guidance: Determining CEQA significance for GHG Emissions," dated May 31, 2018. The Caltrans Construction Emissions Tool (CAL-CET) was used to calculate construction-related greenhouse gas emissions for the project, using the model's default settings for a Mainline Improvement project.

Estimated duration of project construction activities is 2,180 working days under Alternative 1, and 2,695 working days under Alternative 2. Alternative 1 was projected to produce 514 tons per year of carbon dioxide (CO2) which, in combination with other project-generated greenhouse gases, equates to a total release of 4,862 tons of CO2 equivalent emissions over the duration of the project. Alternative 2 was projected to result in 468 tons per year of CO2 and a project total of 5,430 tons of CO2 equivalent emissions over the project's duration. These estimates are based on assumptions made during the environmental planning phase of the project and are considered "ballpark" projections.

While the Monterey Bay Air Resources District has established daily construction emission thresholds for many types of projects, small highway projects like this one do not fit into the district's typical purview of jurisdiction,

which typically includes residential, commercial, and industrial projects. Due to the small scope of work in the community, this project presents minimal potential to subject surrounding sensitive receptors to inhalable construction emissions that would be considered significant. It is anticipated that the use of standard construction dust and emission minimization practices and procedures would result in particulate matter (dust) and equipment emissions that would be well within the Monterey Bay Air Resources District daily thresholds.

No-Build Alternative

Under the No-Build Alternative, no intersection improvements would be made. Intersection queues would not be reduced, and delay caused by bottlenecks at the signalized intersections would continue. The overall average travel speed through the corridor during peak hours of operation would continue to slow during peak hours, and vehicles would likely use extra fuel while idling and accelerating in stop-and-go traffic and alternating between slower and faster speeds. As a result, project-related air quality improvements would not be achieved.

Under either Build Alternative, the following project features and practices would be implemented during construction to address potential impacts related to air quality. By incorporating these dust control measures, appropriate engineering design, and robust stormwater Best Management Practices, short-term air quality impacts to the project area would be minimal and would be well within the Monterey Bay Air Resources District daily thresholds.

Dust and Emissions Minimization

Standard construction dust and emissions minimization practices and procedures would be implemented during project construction.

Related Water Pollution Control Measures

The project-level Stormwater Pollution Prevention Plan would also help protect air quality by requiring water pollution control measures that cross-correlate with dust emission minimization, such as covering soil stockpiles, watering haul roads, and watering excavation and grading areas.

Avoidance, Minimization, and/or Mitigation Measures

The project Build Alternatives would incorporate the project features and standard practices outlined above to help address potential effects related to air quality. No avoidance, minimization, and/or mitigation measures are required.

Climate Change

Neither the U.S. Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration has issued explicit guidance or methods to conduct project-level greenhouse gas analysis. The Federal Highway Administration emphasizes concepts of resilience and sustainability in highway planning, project development, design, operations, and maintenance. Because there

have been requirements set forth in California legislation and executive orders on climate change, the issue is addressed in Section 3.3 of the California Environmental Quality Act (CEQA) chapter of this document. The CEQA analysis may be used to inform the National Environmental Policy Act (NEPA) determination for the project.

2.2.7 Noise

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA) provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

California Environmental Quality Act

CEQA requires a strictly baseline-versus-build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless those measures are not feasible. The rest of this section will focus on the NEPA/Title 23 Part 772 of the Code of Federal Regulations (23 CFR 772) noise analysis; see Chapter 3 of this document for further information on noise analysis under CEQA.

National Environmental Policy Act and 23 CFR 772

For highway transportation projects with Federal Highway Administration involvement (and Caltrans, as assigned), the Federal-Aid Highway Act of 1970 and its implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations include noise abatement criteria that are used to determine when a noise impact would occur. The noise abatement criteria differ depending on the type of land use under analysis. For example, the noise abatement criterion for residences (67 dBA) is lower than the noise abatement criterion for commercial areas (72 dBA).

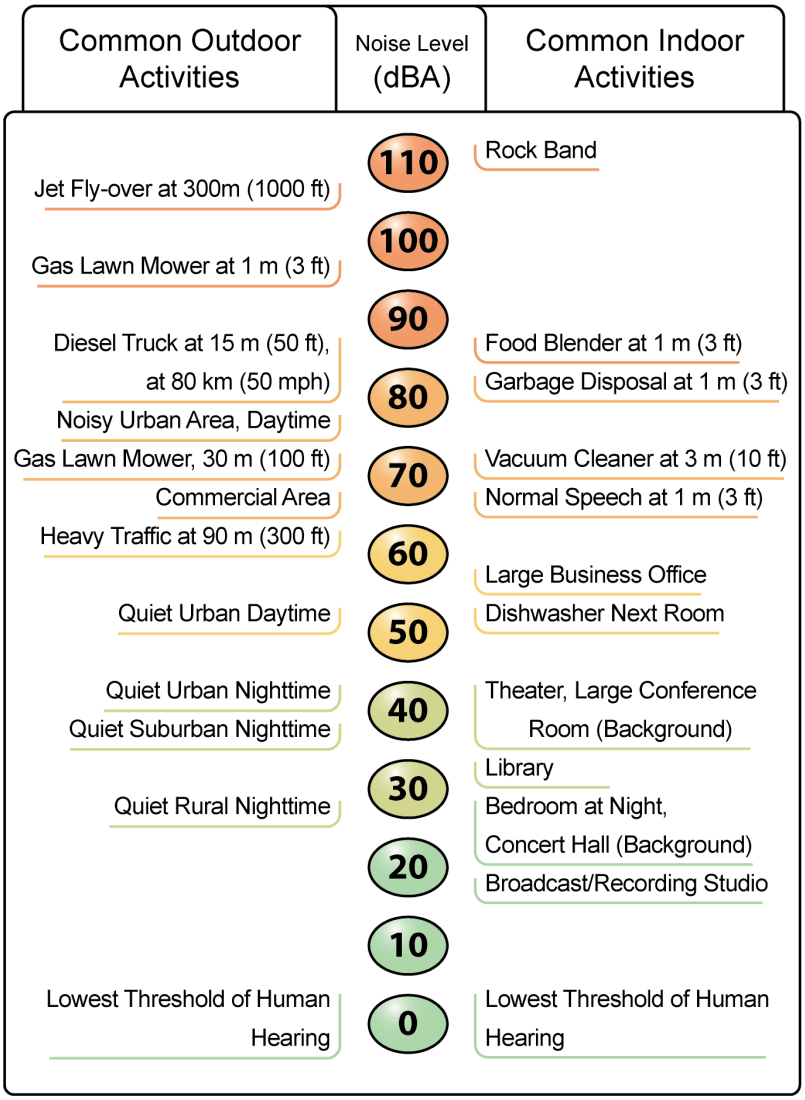
Table 2.2.7.1 lists the noise abatement criteria for use in the NEPA/23 CFR 772 analysis.

Table 2.2.7.1 Noise Abatement Criteria

Activity Category	Noise Abatement Criteria, Hourly A- Weighted Noise Level, Leq(h)	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B (includes undeveloped lands permitted for this activity category)	67 (Exterior)	Residential.
C (includes undeveloped lands permitted for this activity category)	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A–D or F.
F	No noise abatement criteria—reporting only	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical, etc.), and warehousing.
G	No noise abatement criteria—reporting only	Undeveloped lands that are not permitted.

Figure 2.2.7.1 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise levels discussed in this section with common activities.

Figure 2.2.7.1 Noise Levels of Common Activities



According to the Caltrans Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, May 2011, a noise impact occurs when the predicted future noise level with the project substantially exceeds the existing noise level (defined as a 12 dBA or more) or when the future noise level with the project approaches or exceeds the noise abatement criteria. A noise level is considered to approach the noise abatement criteria if it is within 1 dBA of the noise abatement criteria.

If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

The Caltrans Traffic Noise Analysis Protocol sets forth the criteria for determining when an abatement measure is feasible and reasonable.

Feasibility of noise abatement is basically an engineering concern. Noise abatement must be predicted to reduce noise by at least 5 dB at an impacted receptor to be considered feasible from an acoustical perspective. It must also be possible to design and construct the noise abatement measure for it to be considered feasible. Factors that affect the design and constructability of noise abatement include, but are not limited to, safety, barrier height, topography, drainage, access requirements for driveways, presence of local cross streets, underground utilities, other noise sources in the area, and maintenance of the abatement measure. The overall reasonableness of noise abatement is determined by the following three factors: 1) the noise reduction design goal of 7 dB at one or more impacted receptors; 2) the cost of noise abatement; and 3) the viewpoints of benefited receptors (including property owners and residents of the benefited receptors).

Affected Environment

Information pertaining to project-related short term and long-term noise impacts was obtained from a Noise Study Report prepared by Caltrans, dated June 15, 2023, and a Noise Abatement Decision Report prepared by Caltrans, dated July 2023.

The project site consists of nine signalized intersections along 8.9 miles (post mile 4.8 to post mile 13.7) of the State Route 68 corridor between Monterey and Salinas.

Short-Term Measurements for Model Calibration

Short-term noise measurements were taken at each of four representative monitoring locations for 10 minutes each on a single day (Monday, December 19, 2022) to obtain data needed for calibration of the traffic noise model. Measurements were taken during off-peak hours when traffic was observed to be flowing at approximately the posted speed limit (55 miles per hour). Figure 2.2.7.2 shows the short-term monitoring locations.

Figure 2.2.7.2. Short-Term Noise Monitoring Locations



Existing Noise Environment for Identified Sensitive Receptors

Although the Noise Study Report evaluates all developed land uses within the project site, noise impact analysis is considered only for areas of frequent human use that would benefit from a lowered noise level ("sensitive receptors"). Specifically, these are locations with defined outdoor activity areas such as residential backyards, common use areas at multi-family residences, and recreational outdoor areas like playgrounds, where project activities could potentially exceed noise abatement criteria (thresholds) and cause undesirable impacts to public use and enjoyment.

Because four of the nine project intersections did not meet the criteria to be considered sensitive receptors, noise impact analysis was conducted for the following five intersections:

- State Route 68/Josselyn Canyon Road
- State Route 68/Olmsted Road
- State Route 68/Pasadera Drive
- State Route 68/Laureles Grade
- State Route 68/San Benancio Road

Across these five intersections, a total of 19 sensitive receptors (designated R-1 through R-19) were identified. The following pages provide a series of figures (2.2.7.3 to 2.2.7.7) showing the locations of these receptors near each of the five intersections listed above.

Figure 2.2.7.3. Sensitive Receptors – State Route 68/Josselyn Canyon Road Intersection



Figure 2.2.7.4. Sensitive Receptors – State Route 68/Olmsted Road Intersection

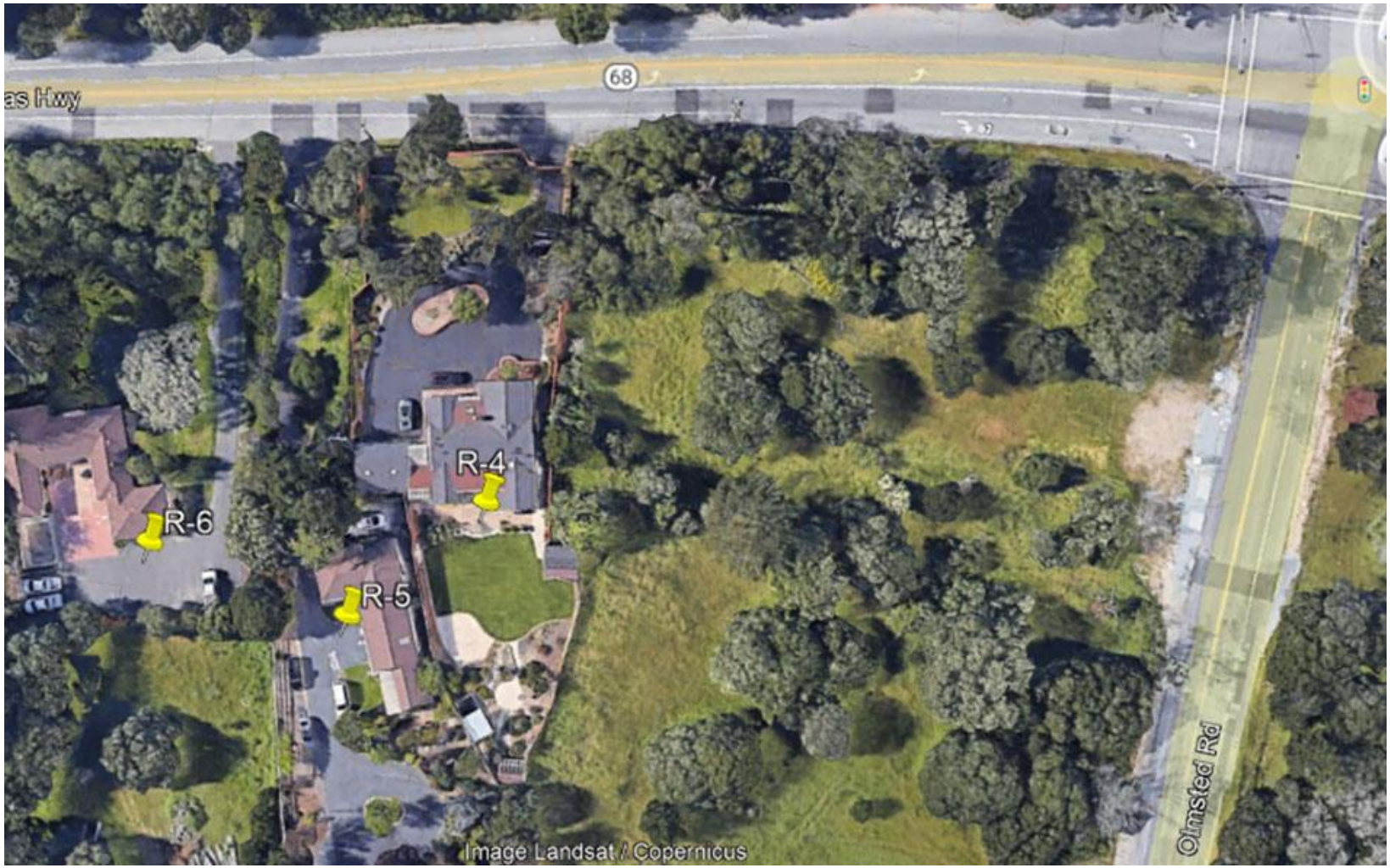


Figure 2.2.7.5. Sensitive Receptors – State Route 68/Pasadera Drive Intersection



Figure 2.2.7.6. Sensitive Receptors – State Route 68/Laureles Grade Intersection

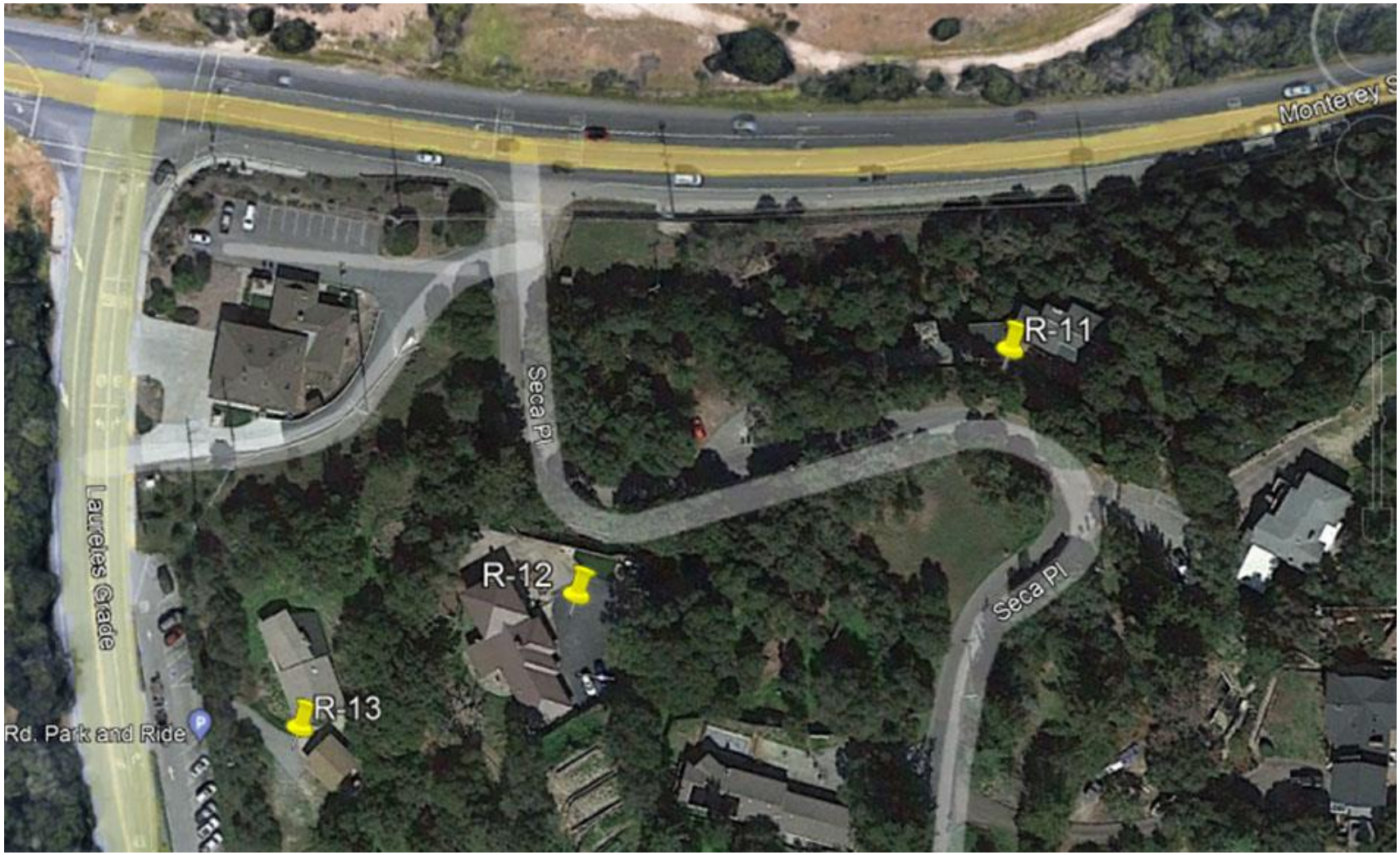


Figure 2.2.7.7. Sensitive Receptors – State Route 68/San Benancio Road Intersection



Environmental Consequences

Build Alternatives

Alternative 1 – Roundabouts

Alternative 1, converting intersections to roundabouts, would not involve any substantial widening of State Route 68 or the addition of auxiliary lanes. Under this alternative, one- and two-lane roundabouts would be placed with minimal change from the original intersection configuration, leading to no extensive substantial change in distance between the sensitive receptors and noise sources. In addition, the absence of acceleration and deceleration cycles from a dead stop, in combination of with slower, freely moving traffic (most of the time) through the roundabout, would lead to lower noise than that for Future No-Build conditions. Therefore, Alternative 1 would be classified as a Type III project, and would not require implementation of any noise abatement measures.

Alternative 2 – Signals and Lane Channelization

Like Alternative 1, Alternative 2 would not increase roadway capacity or traffic volume. However, because Alternative 2 would add auxiliary lanes in some locations, shifting traffic noise closer to certain sensitive receptors, Alternative 2 would be classified as a Type I project and would therefore be subject to consideration of noise abatement measures.

The project Noise Study Report identified 19 potential sensitive receptors (R-1 through R-19) at five of the project intersections. However, the report found that thresholds for excessive noise resulting from the project (noise increases of 12 or more decibels [dBA], or increases exceeding the noise abatement criteria threshold of 67 decibels) would be exceeded at only one of these receptors: the outdoor recreational area (basketball court)/parking area at the Living Hope Church of the Nazarene (Receptor R-1) at 1375 Josselyn Canyon Road, Monterey. Specifically, the Noise Study Report found that implementation of Alternative 2 could increase noise levels at that location by up to 1 decibel (1 dBA). That is, the existing 67-decibel noise level at that location could potentially increase to 68 decibels. A noise level increase of less than 3 decibels (3 dBA) is considered to be imperceptible.

Receptor R-1 was studied further, and a Noise Abatement Decision Report was written by Caltrans. The other 18 sensitive noise receptors identified in the Noise Study Report (R-2 through R-19) were predicted not to experience noise increases of 12 or more decibels, nor to exceed the noise abatement criteria threshold of 67 decibels. Therefore, noise abatement measures for those receptors were not considered in the noise analysis.

The Noise Abatement Decision Report for Receptor R-1 notes that, although installation of an 8- to 12-foot sound barrier would reduce Alternative 2-associated traffic noise to acceptable levels at the basketball court/parking area, this barrier would not be feasible from a construction cost perspective because it would exceed the cost allowance for this type of structure.

Also, the roadway alignment of State Route 68 is planned for widening in that particular spot to accommodate an eastbound auxiliary through lane as well as realignment of an open channel ditch, meaning that the basketball court will likely be removed regardless and construction of a sound barrier would not be needed.

No-Build Alternative

Under the No-Build Alternative, no intersection improvements would be made. Intersection queues would not be reduced, and delay caused by bottlenecks at the signalized intersections would continue and presumably increase over time. The overall average travel speed through the corridor during peak hours of operation would continue to slow during peak hours, with vehicles braking and alternating between slower and faster speeds, likely resulting in continuation or increase of the existing noise associated with stop-and-go traffic during peak hours.

In addition, the No-Build Alternative would not result in exceedance of noise abatement criteria at the lone sensitive receptor predicted to experience significant project-related noise impacts (under Alternative 2 only), the church-owned basketball court/parking area at 1375 Josselyn Canyon Road.

Avoidance, Minimization, and/or Abatement Measures

For the reasons stated above, no avoidance, minimization, and/or mitigation measures related to noise are required under either Build Alternative.

2.2.8 Energy

Regulatory Setting

The National Environmental Policy Act (NEPA) (42 U.S. Code Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

The California Environmental Quality Act (CEQA) Guidelines Section 15126.2(b) and Appendix F, Energy Conservation, require an analysis of a project's energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources.

Affected Environment

The State Route 68 corridor is a key interregional travel route providing east-west access for travel between the coast and U.S. Highway 101 in the Salinas Valley. State Route 68 is an important travel corridor for commercial activity, regional commuters, and residential access. As a designated scenic route, State Route 68 is also a key route for tourists and visitors to the Monterey Peninsula and provides access to important attractions, including

the Laguna Seca Raceway, multiple golf courses, Toro Regional Park, the Monterey Regional Airport, and the connection to State Route 218.

Within the project limits, State Route 68 is a two-lane highway containing nine lighted, signalized intersections. Many, if not most, of the nine project intersections are three-legged interchanges that each have two existing light fixtures (electroliers). At least some of these electroliers currently use energy-efficient light-emitting diode (LED) luminaires. Pavement condition of the roadway is currently considered to be acceptable and not in need of rehabilitation.

In 2016, annual average daily traffic volumes ranged from 23,000 to 25,700 trips per day along segments of the corridor. The Association of Monterey Bay Area Governments' (AMBAG) Travel Demand Model projects that by 2040 annual average daily traffic volumes along the corridor will range from approximately 25,000 to 32,000 trips per day.

As noted in the Transportation Agency for Monterey County's Final State Route 68 Scenic Highway Plan (Transportation Agency for Monterey County 2017), the project intersections experience recurring bottlenecks during peak travel hours that cause congestion throughout the State Route 68 corridor. This congestion likely results in inefficient energy use and increased emission of air pollutants, as the speeding and rapid acceleration/braking that characterizes stop-and-go traffic can decrease fuel economy by anywhere from 10 percent to 40 percent (U.S. Department of Energy, Energy Saver: Fuel Economy; https://www.energy.gov/energysaver/fuel-economy).The optimum speed for fuel efficiency is 50 to 55 miles per hour (U.S. Department of Energy, no date).

Greenhouse gas emissions analysis conducted for the *Final State Route 68 Scenic Highway Plan* found that under baseline conditions, the State Route 68 corridor (including stretches outside the project area) generates 30 tons of greenhouse gas emissions daily during the morning/evening peak periods. Without the modifications to intersection operations proposed by the project, it is likely that congestion and emissions of air pollutants including greenhouse gases would continue and worsen over time (see Section 2.1.8, Traffic and Transportation/Pedestrian and Bicycle Facilities).

Environmental Consequences

Construction Energy Consumption

For both Build Alternatives, project construction would consume mostly diesel and gasoline fuels through operation of heavy-duty construction equipment, material deliveries, and debris hauling.

Projected energy consumption from construction activity was developed by obtaining fuel consumption projections in gallons from the Caltrans Construction Emission Tool (CAL-CET), using the model's default settings for a Mainline Improvement project. CAL-CET models both emissions and fuel consumption based on project-specific information.

The CAL-CET results were reported in the Caltrans project Air Quality and Greenhouse Gas Technical Memo dated July 28, 2023. Based on the estimated number of working days for each Build Alternative, as well as estimated maximum daily average fuel use, the project is estimated to result in the consumption of up to 808,500 gallons of diesel fuel and 237,160 gallons of gasoline over the duration of construction, depending on the alternative chosen (Table 2.2.8.1 and Table 2.2.8.2). Alternative 1 is projected to last 2,180 working days; Alternative 2 is expected to last 2,695 working days.

Table 2.2.8-1. Predicted Construction Phase Fuel Consumption, Alternative 1

Metric	Diesel Fuel	Gasoline Fuel
Daily Average (gallons of fuel per day)	159	43
Max Daily Average (gallons of fuel per day)	337	103
Annual Average (gallons of fuel per year)	34,613	9,302
Total Consumption over Project Duration (gallons)	734,660	224,540

Table 2.2.8-2. Predicted Construction Phase Fuel Consumption, Alternative 2

Metric	Diesel Fuel	Gasoline Fuel
Daily Average (gallons of fuel per day)	141	37
Max Daily Average (gallons of fuel per day)	300	88
Annual Average (gallons of fuel per year)	31,701	8,317
Total Consumption over Project Duration (gallons)	808,500	237,160

Long-Term Operational Energy Consumption of Build Alternatives

The project area sits within the jurisdiction of the Association of Monterey Bay Area Governments (AMBAG). The project is included in the Association of Monterey Bay Area Governments' *Metropolitan Transportation Plan/Sustainable Communities Strategy* (MTP/SCS) as a regionally significant revenue constrained project. The project is also identified as a priority in Monterey County's 2018 *Regional Transportation Plan* to address congestion.

Operational Phase – Both Build Alternatives

Reducing intersection queues and eliminating delay caused by bottlenecks at the signalized intersections would improve the overall average travel speed through the corridor during peak hours of operation, resulting in improved fuel efficiency. In general, most vehicles have an optimum traveling speed range at which the vehicle will perform at a most efficient fuel economy, approximately 50 to 55 miles per hour (U.S. Department of Energy, Energy Saver: Fuel Economy. https://www.energy.gov/energysaver/fuel-economy, no date). Projects that improve or smooth traffic flow during peak travel demand periods or reduce stop-and-go conditions improve fuel economy, and therefore reduce overall energy consumption in the project area. Both Alternative 1 and Alternative 2 are anticipated to improve travel flow during peak hours and reduce bottlenecks that result in stop-and-go traffic.

For both Build Alternatives, an average of one additional, high-efficiency LED luminaire would be installed at most project intersections to provide the required amount of illumination at night. Any existing incandescent street lighting at each intersection would also be replaced with this type of lighting. LED lighting consumes about 75 percent less electricity than typical incandescent bulbs (U.S. Department of Energy 2014b). These energy conservation features are consistent with state and local policies to reduce energy use. Specific project lighting details would not be confirmed until the project's Plans, Specifications, and Estimates phase.

Operational Phase – Alternative 1

Alternative 1 proposes to modify nine existing signalized intersections to one- or two-lane roundabouts. Various studies comparing roundabout operations to signalized intersection operations show that roundabouts reduce stops and idling, resulting in a 25 to 30 percent decrease in fuel consumption. Reduction of fuel consumption is anticipated to be greater in Alternative 1 than for Alternative 2, due to the continuous traffic flow allowed by roundabouts.

Energy use would be further reduced under Alternative 1, compared to Alternative 2, due to the former's lack of traffic signal lights to operate or maintain, as these are not needed with roundabouts.

Alternative 1 also incorporates improved active transportation elements by improving pedestrian and bicycle access and safety through each of the intersection roundabouts, which could result in partial offsets to fuel consumption due to more people choosing to walk or bike rather than driving. Overall, a net reduction of energy use is anticipated under Alternative 1 due to decreased traffic congestion, leading to greater efficiency and fuel economy.

Operational Phase – Alternative 2

In Alternative 2, intersections would continue to be signalized and additional street lighting would be added. Both signals and street lighting would be

designed using LEDs to minimize energy consumption. Therefore, energy requirements for the signalized intersection operation are anticipated to remain the same or less as existing use. Alternative 2 proposes to reconfigure lanes by adding additional turning lanes and deepening storage lanes to reduce stop-and-go traffic conditions and improve flow. As noted above, improving traffic flow is anticipated to improve vehicle fuel economy and reduce energy consumption.

No-Build Alternative

Under the No-Build Alternative, no intersection improvements would be made. Intersection queues would not be reduced, and delay caused by bottlenecks at the signalized intersections would continue. The overall average travel speed through the corridor during peak hours of operation would continue to slow during peak hours, and vehicles would likely use extra fuel while idling and accelerating in stop-and-go traffic and alternating between slower and faster speeds. The No-Build Alternative would not result in any improvements to energy efficiency.

Summary

The Build Alternatives do not add roadway capacity, and both would improve the flow of traffic through the State Route 68 corridor through operational improvements to existing signalized intersections. Therefore, the project is unlikely to increase direct energy consumption though increased fuel use. In addition, energy conservation features incorporated into project operation described below, such as energy-efficient lighting, would reduce indirect energy use and are consistent with state and local policies to reduce energy use.

Project Energy-Reduction Features and Practices

Under either Build Alternative, the practices listed below would be implemented during construction to reduce potential impacts related to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources. See also the project features and practices identified in Section 2.2.6, Air Quality, which would also reduce potential impacts.

During the construction phase, the energy use required would be minimized wherever possible through scheduling, appropriate equipment operation, recycling of materials, as applicable, and implementation of greenhouse gas reduction strategies (see Section 3.3.4**,** Greenhouse Gas Reduction Strategies). It is anticipated that over time, the fuel conserved due to improved traffic flow through the corridor would more than offset energy use during construction. In addition, while construction would result in a short-term increase in energy use, construction design features would help conserve energy. For example, recycled materials would be used where feasible. Recycled products typically have lower manufacturing and transport energy costs since they do not use raw materials, which must be mined and transported to a processing facility.

Per Caltrans Best Management Practices, newer or well-maintained equipment that is more energy efficient will be used during construction. The following standard best management practices would be used to minimize energy use:

- The contractor would consolidate material delivery whenever possible to promote efficient vehicle and energy use. The contractor would schedule material deliveries during non-rush hours to minimize fuel lost during traffic congestion.
- The contractor would maintain equipment and machinery in good working condition and inspect it regularly. Inspection records would be maintained by the contractor.
- For diesel equipment, only California Air Resources Board-approved diesel fuel would be authorized for use during construction.
- Operators would avoid leaving equipment and vehicles idling for more than 10 minutes when said equipment is parked or not in use.
- Equipment found operating on the project that has not been inspected or has oil leaks would be shut down and subject to citation.

Avoidance, Minimization, and/or Mitigation Measures for Construction Impacts

The Build Alternatives would incorporate the construction-phase project features and practices outlined above to help address potential impacts related to air quality. No avoidance, minimization, and/or mitigation measures related to inefficient, wasteful, and/or unnecessary energy consumption are required.

2.3 Biological Environment

The discussion presented in this section of the Draft Environmental Impact Report/Environmental Assessment is adapted from, and summarizes information provided in, the Caltrans Natural Environment Study (with Preliminary Jurisdictional Delineation report) written for the project, dated October 2023. The purpose of the Natural Environment Study is to assess the potential for project activities to result in adverse impacts to biological resources. Because the information presented in the Draft Environmental Impact Report/Environmental Assessment is a summary, the Natural Environment Study should be consulted for full details regarding biological resources data for the project area.

2.3.1 Natural Communities

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat

fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed in the Threatened and Endangered Species section, Section 2.3.5. Wetlands and other waters are discussed in Section 2.3.2.

Affected Environment

Information for this section comes from the Natural Environment Study (with Preliminary Jurisdictional Delineation report) dated October 2023.

The project lies in northern Monterey County, within and to the east of the City of Monterey. The western end of the project is approximately 1.3 miles inland from the Pacific Ocean. The project is outside the state-designated Coastal Zone. Topography in the Biological Study Area is highly variable, ranging from nearly flat areas to moderate hills with elevations ranging from approximately 100 to 500 feet above mean sea level, with the lowest elevations in the west and highest in the eastern parts of the project limits. The region features a Mediterranean climate, with warm to hot, dry summers and mild to cool, wet winters. Average annual rainfall is approximately 19 inches, most of which occurs during the winter months.

Biological Study Area

The discussion presented in the Natural Environment Study and this Draft Environmental Impact Report/Environmental Assessment is based on the project's Biological Study Area, which is generally defined as the area that may be temporarily or permanently, and directly or indirectly, impacted by construction and construction-related activities. For this project, the Biological Study Area is identical to the project's Area of Potential Impact.

These impact areas form a subset of (are smaller than) the overall Biological Study Area. They include proposed construction work areas, any associated access roads and staging areas, and nearby potential habitat areas. See "Environmental Consequences" in this section for additional information on how impact areas are characterized.

The Biological Study Area consists of six distinct locations that are based on groupings of the nine project intersections, which total approximately 213 acres (see Table 2.3.1.1). Refer also to Figure 1.4 in Section 1.4.1 (six sheets) for maps of the six study locations.

Table 2.3.1.1. Study Area Locations and Associated Intersections in the Biological Study Area

Study Location Number	Name	Intersection(s)	Intersection Number	Area (acres)
1	Josselyn Canyon and Olmsted Roads	State Route 68/Josselyn Canyon Road, and State Route 68/Olmsted Road	1 and 2	37.63
2	State Route 218 (Canyon del Rey Blvd.) and Ragsdale Drive	State Route 68/State Route 218 (Canyon del Rey Boulevard), and State Route 68/Ragsdale Drive	3 and 4	36.50
3	York Road	State Route 68/York Road	5	28.77
4	Pasadera Drive	State Route 68/Pasadera Drive	6	30.60
5	Laureles Grade	State Route 68/Laureles Grade	7	26.91
6	Corral de Tierra and San Benancio Roads	State Route 68/Corral de Tierra Road, and State Route 68/San Benancio Road	8 and 9	52.44

Vegetation Communities

The Biological Study Area supports a variety of habitat types, from dry forests to herbaceous wetlands. Coast live oak woodland and forest are dominated by coast live oak (*Quercus agrifolia*) and is the most common plant community in the Biological Study Area. Monterey pine forest and woodland habitat are dominated by Monterey pine (*Pinus radiata*) trees as a forest canopy. Other native habitat types include seasonal wetlands, willow thickets, wild oats-annual brome grasslands, and coyote brush scrub.

The entire Biological Study Area has been modified either historically or recently as part of ongoing land management activities. Biological communities are fragmented by the presence of highways and major roads as well as commercial, recreational, and residential development. Invasive plant species are abundant throughout the project area. Hydrologic modifications, development, and pollutants have more than likely substantially reduced habitat values in the region compared to less developed areas. Despite these limitations, the variety of natural communities in the Biological Study Area and large tracts of open space in the region are expected to support a wide variety of

flora and fauna. Indeed, Caltrans has documented 400 different plant taxa and 60 different wildlife taxa during field surveys for the project.

The Natural Environment Study identifies 12 natural and semi-natural biological communities and four cultivated (human-made) landscapes in the Biological Study Area (see Tables 2.3.1.2a and 2.3.1.2b). Cultivated landscapes are included in the Natural Environment Study because these areas also provide wildlife habitat. For notes in the tables, see the explanations listed after Table 2.3.1.2b.

Table 2.3.1.2a. Land Cover Types in the Biological Study Area

Vegetation Type[1]-- Natural and Semi-Natural Communities	Alliance Name[1]-- Natural and Semi-Natural Communities	State Status[2]-- Natural and Semi-Natural Communities	Habitat Types[3]-- Natural and Semi-Natural Communities	Map Code[4]-- Natural and Semi-Natural Communities	Area in Biological Study Area (acres)-- Natural and Semi-Natural Communities
Arroyo Willow Thickets	*Salix lasiolepis* - Shrubland Alliance	S4	Valley Foothill Riparian	AW	23.14
California Sagebrush Scrub	*Artemisia californica (Salvia leucophylla)* - Shrubland Alliance	S5	Coastal Scrub	CS	1.4
Chamise Chaparral	*Adenostoma fasciculatum* - Shrubland Alliance	S5	Chamise-Redshank Chaparral	CC	0.19
Coast Live Oak Woodland and Forest	*Quercus agrifolia* - Forest & Woodland Alliance	S4	Coastal Oak Woodland	OW	54.79
Coyote Brush Scrub	*Baccharis pilularis* - Shrubland Alliance	S5	Coastal Scrub	CB	6.48
Monterey Pine Forest and Woodland	*Pinus radiata* - Forest and Woodland Alliance	S3	Closed-Cone Pine-Cypress	MP	20.4
Pale Spike Rush Marshes	*Eleocharis macrostachya* -Herbaceous Alliance	S4	Fresh emergent wetland, Wet meadow	PS	0.97

Vegetation Type[1]-- Natural and Semi-Natural Communities	Alliance Name[1]-- Natural and Semi-Natural Communities	State Status[2]-- Natural and Semi-Natural Communities	Habitat Types[3]-- Natural and Semi-Natural Communities	Map Code[4]-- Natural and Semi-Natural Communities	Area in Biological Study Area (acres)-- Natural and Semi-Natural Communities
Purple Needlegrass Grassland	*Nassella pulchra* - Herbaceous Alliance	S3/S4	Perennial Grassland	PG	1.13
Red Willow Riparian Woodland and Forest	*Salix laevigata* - Forest and Woodland Alliance	S3	Valley Foothill Riparian	RW	7.4
Western Rush Marshes	*Juncus patens* - Provisional Herbaceous Alliance	S4?	Freshwater Emergent Wetland, Wet Meadow	WR	0.32
White-root Beds	*Carex barbarae* - Herbaceous Alliance	S2?	Wet Meadow	WB	0.48
Wild Oats - Annual Brome Grasslands	*Avena* spp. – *Bromus* spp. - Herbaceous Semi-Natural Alliance	NA	Annual Grassland	AG	6.8

Table 2.3.1.2b. Land Cover Types in the Biological Study Area

Vegetation Type[1]-- Cultivated Landscapes	Alliance Name[1]-- Cultivated Landscapes	State Status[2]-- Cultivated Landscapes	Habitat Types[3]-- Cultivated Landscapes	Map Code[4]-- Cultivated Landscapes	Area in Biological Study Area (acres)-- Cultivated Landscapes
Lawn	NA	NA	NA	LA	3.14
Ornamental and Landscape Plantings	NA	NA	NA	OR	8.54
Ruderal	NA	NA	NA	RU	22.72
Developed	NA	NA	NA	DV	14.05

1. Plant community names generally follow classification in A Manual of California Vegetation (California Native Plant Society) except where the Alliance names in A Manual of California Vegetation include species that were not observed in the Biological Study Area. See descriptions below for more information.

2. S1: Critically Imperiled. At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.

S2: Imperiled. At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.

S3: Vulnerable. At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.

S4 or higher: Apparently Secure. At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.

?: Inexact Numeric Rank. Denotes inexact numeric rank.

The California Department of Fish and Wildlife considers Ranks 1-3 rare.

3. Habitat types follow California Wildlife Habitat Relationships and are based on the cross walk between plant communities and California Wildlife Habitat Relationships in A Manual of California Vegetation (California Native Plant Society).

4. Please see Figures 10 through 15 in the Natural Environment Study.

Coast Live Oak Woodland and Forest

Together, coast live oak woodland and forest is the most common plant community in the Biological Study Area, occupying 54.79 acres and typically found on dry hill slopes and canyon walls. Commonly associated woody species in this plant community include poison oak (*Toxicodendron diversilobum*), toyon (*Heteromeles arbutifolia*), California buckeye (*Aesculus californica*), Monterey pine (*Pinus radiata*), California blackberry (*Rubus ursinus*), and coyote brush (*Baccharis pilularis*). Common herbaceous species in this plant community vary depending on overstory density, with species diversity higher in open woodlands than in dense forest stands.

This plant community is common in coastal California and is not considered a sensitive natural community by the California Department of Fish and Wildlife. The coast live oak woodland and forest community provides a number of important ecosystem services, including wildlife habitat, air pollution removal, carbon sequestration, and natural beauty. Coast live oaks have certain legal protections under the Monterey County Code of Ordinances, Chapter 16.60: Preservation of Oak and other Protected Trees. Most of the natural plant communities found in the Biological Study Area contain examples of native coast live oak trees that are protected by this ordinance.

Monterey Pine Forest and Woodland

The Monterey pine forest and woodland community occupies 20.4 acres in the Biological Study Area, forming an open to continuous canopy. Coast live oak is co-dominant in the tree canopy, and poison oak is one of the dominant species in the understory. Shrub and herbaceous layer density in this community is variable. Common shrub species include manzanitas (*Arctostaphylos* spp.),

poison oak, and French broom (*Genista monspessulana*). Invasive grasses such as common velvetgrass (*Holcus lanatus*) and Italian ryegrass (*Lolium multiflorum*) dominate the understory in woodland settings.

The Monterey pine forest and woodland community is a sensitive natural community within its natural range of three discrete locations in California (the Monterey Peninsula, Año Nuevo, and Cambria). Only one-half of this community's historical extent remains undeveloped on the Monterey Peninsula. Native Monterey pine stands are threatened by urban development, genetic contamination, pine pitch canker disease, and forest fragmentation. Nevertheless, Monterey pine is a common tree in the Biological Study Area, interspersed with residential and commercial development.

Other Sensitive Natural Communities

White-root Beds

Patches of Santa Barbara sedge (*Carex barbarae*; also called white-root) occupy 0.48 acre within the Biological Study Area, forming either nearly pure monocultures or occurring in mixed-species patches. These beds occur on low road shoulders throughout the Biological Study Area, often adjacent to roadside ditches/swales and sometimes on dry hill slopes. This community is tolerant of shading and is sometimes seen adjacent to and shaded by coast live oak woodlands or arroyo willow thickets, where *Carex barbarae* plants also occur in the understory. The California Department of Fish and Wildlife considers this community to be rare.

Red Willow Riparian Forest and Woodland

The Biological Study Area contains 7.4 acres of this plant community, which within the project limits is found only along El Toro Creek in the Corral de Tierra–San Benancio project location. Red willow (*Salix laevigata*) is dominant or co-dominant in the tree canopy with arroyo willow (*Salix lasiolepis*) and black cottonwood (*Populus trichocarpa*), accompanied by a dense understory of stinging nettle (*Urtica dioica*), California blackberry, and seedling trees. Although red willow is a common species in California and elsewhere, the *Salix gooddingii-Salix laevigata* Forest and Woodland Alliance and the *Salix laevigata/Salix lasiolepis* Association are considered rare by the California Department of Fish and Wildlife.

Purple Needlegrass Grassland

The Natural Environment Study identifies 1.13 acres of this plant community in the Biological Study Area. Purple needlegrass (*Stipa pulchra* or *Nassella pulchra*) is a native perennial bunchgrass that is widespread throughout California and is the California State Grass. Fire suppression and land management changes have likely led to reductions in overall coverage of purple needlegrass grasslands in California. The purple needlegrass grasslands in the Biological Study Area are small and co-dominated with

annual grasses and forbs present in another plant community, wild oats-annual brome grasslands.

Habitat Connectivity

Habitat connectivity is the degree to which the landscape facilitates or impedes animal movement and other ecological processes, such as seed dispersal. Linkages, or movement corridors, between habitat areas provide avenues for genetic exchange, access to forage and denning areas, and access to alternative territories. These corridors can be fragmented by housing, roads, fences, energy facilities, and other human-made barriers. Regional and statewide conservation efforts have identified the Highway 68 Scenic Plan Study Area as a critical wildlife link connecting the coast of Monterey to the Sierra de Salinas Range.

Due to the high importance of habitat connectivity in the region and a desire to address the high number of wildlife-vehicle collisions on State Route 68 within the project limits, the Transportation Agency for Monterey County (TAMC) funded a Wildlife Connectivity Analysis study (Transportation Agency for Monterey County 2017) examining wildlife passage through existing culverts and bridges in the area. The study's goals included quantifying wildlife roadkill incidents along the State Route 68 corridor, identifying roadkill "hotspots" (areas with particularly high numbers of collisions), and providing recommendations to reduce the number of wildlife-vehicle collisions occurring. Reducing wildlife crossing attempts on busy roadways provides a number of benefits, such as enhancing safety for both drivers and wildlife and reducing costs associated with wildlife-vehicle collisions.

Roadkill surveys conducted every two weeks throughout 2016 recorded 60 roadkill observations within the project limits, mostly near bridges and culverts. These results were then combined with data from other sources for the same area from 2005 to 2020, including Caltrans traffic safety reports and data from the Monterey County Society for the Prevention of Cruelty to Animals (SPCA), California Highway Patrol, and the California Roadkill Observation System, to arrive at a summary of estimated wildlife roadkill at or near the project intersections. The results are shown in Table 2.3.1.3. The project Natural Environment Study notes that, due to data limitations, these numbers are almost certainly underestimates.

Table 2.3.1.3. Summary of Wildlife Roadkill Incidents in the Project Area

Species	Josselyn/ Olmsted	State Route 218/ Ragsdale	York	Pasadera	Laureles	Corral De Tierra/ San Benancio	Total
Badger	No value	1	No value	No value	No value	1	2
Bobcat	No value	No value	No value	2	No value	1	3
Coyote	1	1	2	No value	No value	1	5
Deer	5	2	14	18	19	9	67
Hawk/Owl	1	No value	4	3	5	2	15
Mountain Lion	No value	No value	1	No value	No value	No value	1
Opossum	No value	1	No value	No value	No value	No value	1
Raccoon	1	2	No value	No value	2	No value	5
Skunk	No value	No value	1	1	No value	3	5
Unknown	No value	No value	1	No value	No value	No value	1
Pond Turtle	No value	No value	No value	No value	1	1	2
Wild Turkey	No value	2	No value	No value	1	No value	3
Total	8	9	23	24	28	18	110

Based on the Wildlife Connectivity Analysis study's identification of roadkill hotspots, the project was designed to incorporate five wildlife passage improvements (undercrossings) in the form of enlarged culverts to be placed at existing culvert locations. Fencing would also be installed to keep animals off the roadway and guide them into the undercrossings. At some locations, the fencing would end at a natural landform to discourage animals from walking around the end of the fence and entering the roadway. The undercrossings would incorporate gentle approach slopes at their openings to create openness and visual clearance, which should encourage wildlife to use them.

The proposed wildlife crossing improvements at each location are shown in Table 2.3.1.4 and shown in the preliminary design plan illustrations in Appendix H for both Build Alternatives. For Table 2.3.1.4, see notes explained right after the table. In the table, culvert types are identified as follows: CBC = concrete box culvert; CSP = corrugated steel pipe; RCB = reinforced concrete box; RCP = reinforced concrete pipe; culvert sizes are height by width by length (in feet), except where noted.

Table 2.3.1.4 Summary of Proposed Wildlife Connectivity Improvements

Site and Post Mile[1]	Existing Structure[2,3]	Proposed Structure[2]	Additional Design Information[3]
Site 1 – York Road Culvert PM 8.12	4’ x 6’ x 60’ CBC	8’ x 8’ x 85’ RCB	• New culvert to be located 18’ west of existing culvert, which will be abandoned in place • Excavation 90-100’ north and 75-85’ south to conform to existing flow lines and improve visibility for large animal movement • Install exclusionary fencing along both sides of State Route 68
Site 2 – West of Pasadera Drive-Boots Road (roadkill hotspot) PM 9.41 (eastbound near the Water District property across from the golf course)	3.5’ diameter x 60’ long CSP	12’ x 11’ x 90’ RCB	• New culvert to be located 450’ west of evaluated roadkill hotspot • No alterations to existing culvert at regulated floodway • Excavation 85-95’ south to conform to existing flow lines and improve visibility for large animal movement • Construct 75’ x 150’ outlet basin to the north. Excavate a smaller pond to the south to ensure proper drainage • Install exclusionary fencing along both sides of State Route 68 from west of Pasadera Drive to the new culvert
Site 3 - Boots Road Culvert PM 9.67	4.5’ diameter x 60’ long CSP	8’ x 8’ x 125’ RCB	• New culvert to be located 450’ west of evaluated roadkill hotspot • No alterations to existing culvert at regulated floodway • Excavation 20-30’ north and 60-70” south to conform to existing flow lines and improve visibility for large animal movement • Install exclusionary fencing along both sides of State Route 68
Site 4 - Laureles Grade Culvert PM 11.15	2-2.3’ x 1.8’ x 60’ long CSP	8’ x 8’ x 170’ RCB	• New culvert to be located 50’ west of existing culvert which will be abandoned in place • Excavate 1,800’ long ditch 45-55’ north and 60-70’ south to conform to existing flow lines and improve visibility for large animal movement
Site 5 – Box Culvert West of San Benancio Road PM 13.19	5’ x 5’ x 55’ RCB	7’ x 7’ x 100’ RCB	• New culvert to be located 50’ west of existing culvert which will be abandoned in place • Excavation 15-25’ north and 25-35’ south to conform to existing flow lines and improve visibility for large animal movement • Install exclusionary fencing along both sides of State Route 68

Table notes:

1. Based on evaluated wildlife crossings in 2017 Wildlife Connectivity Analysis (Appendix B of the project Natural Environment Study).
2. Culvert types: CBC = concrete box culvert; CSP = corrugated steel pipe; RCB = reinforced concrete box; RCP = reinforced concrete pipe; Culvert sizes are height x width x length (in ft) except where noted.
3. See preliminary plans in Appendix A of the Natural Environment Study.

The Wildlife Connectivity Analysis did not evaluate aquatic species movement, but many of the existing structures, streams, and riparian areas within the project limits may facilitate passage across State Route 68 for semi-aquatic species such as amphibians and reptiles. Fish passage is not considered applicable to the streams draining directly to Monterey Bay due to low flow and substantial barriers lower in the system. Steelhead trout and their habitat in El Toro Creek, which drains east from the project site into the Salinas River, are discussed in Section 2.3.5, Threatened and Endangered Species.

Environmental Consequences

The project would result in both temporary and permanent, and direct and indirect, impacts to natural communities and habitats within the project limits.

At each of the six project locations, permanent impact areas occupy the smallest physical area and are surrounded by the slightly larger temporary impact areas. Both of these are situated inside the larger overall Biological Study Area for each location. Temporary impacts are mostly associated with clearing and grading for cut or fill slopes and temporary construction access, while permanent impacts are locations where habitat would be permanently displaced for various project features, such as road widening or retaining walls.

Examples of direct impacts include vegetation removal and grading; examples of indirect impacts include soil compaction, erosion, pathogen or invasive species introduction, and road maintenance activities among others.

Because the project involves construction adjacent to an existing highway corridor in semi-rural developed areas, all predicted impacts would occur in areas that have already been affected by road, commercial, or residential development. Therefore, project-related effects on the natural communities described in this document are not expected to include indirect impacts such as habitat fragmentation, disruption of wildlife corridors or fish passage, or changes to the ecological function or regional/statewide distribution of these communities overall.

Several local, regional, State, and/or federal habitat protection plans overlay portions of the project area:

- Fort Ord Multi-Species Habitat Conservation Plan (Denise Duffy and Associates, Inc. 2020)
- Resource Management Plan for the Southern Diablo Mountain Range and Central Coast of California, Record of Decision (U. S. Department of Interior, Bureau of Land Management 2007)
- Fort Ord Reuse Plan, Conservation Element (EDAW, Inc. and EMC Planning Group, Inc. 1996)
- Monterey County (2010) General Plan Conservation Element, Fort Ord Master Plan, Greater Monterey Peninsula Area Plan, and Toro Area Plan
- City of Monterey (2005) General Plan Conservation Element
- General Plan Update for the City of Del Rey Oaks (Denise Duffy and Associates 1997), Conservation Element

In addition, the California Oak Woodlands Protection Act (Senate Concurrent Resolution No. 17) requests that state agencies with land use planning duties offset removal of certain oak trees when they are part of a woodland community. Monterey County and the City of Monterey also have oak tree replacement standards that Caltrans may elect to follow.

Table 2.3.1.5 shows the estimated acreage of project-related impacts to the natural community/habitat types in the Biological Study Area. The acreage for each category is split out by Build Alternative and by temporary-versus-permanent impacts.

Table 2.3.1.5. Potential Impacts to Special-Status Natural Communities in the Biological Study Area

Regulatory Authority/ Habitat Type	Total Habitat in Biological Study Area (Acres)	Alternative 1 Temporary Impacts (Acres)	Alternative 1 Permanent Impacts (Acres)	Alternative 2 Temporary Impacts (Acres)	Alternative 2 Permanent Impacts (Acres)
USACE Wetlands	2.78	0.595	0.295	1.038	0.222
USACE Other Waters of the U.S. (Streams)	3.44	0.463	0.118	1.138	0.432
CDFW Stream Habitat	4.64	0.575	0.171	1.410	0.532
CDFW Riparian and Streambank	30.95	3.220	0.671	9.031	1.365
CDFW Ponds	0.16	0	0	0.019	0

Regulatory Authority/ Habitat Type	Total Habitat in Biological Study Area (Acres)	Alternative 1 Temporary Impacts (Acres)	Alternative 1 Permanent Impacts (Acres)	Alternative 2 Temporary Impacts (Acres)	Alternative 2 Permanent Impacts (Acres)
RWQCB Wetlands	2.78	0.595	0.295	1.038	0.222
RWQCB Streams	3.44	0.463	0.118	1.138	0.432
RWQCB Riparian	30.95	3.057	0.431	8.733	1.365
RWQCB Ponds	0.16	0	0	0.019	0
RWQCB Stormwater Ditches	0.20	0.034	0.047	0.052	0.076
CDFW (CEQA) Coast Live Oak Woodland	54.79	6.761	1.170	15.393	3.027
CDFW (CEQA) Monterey Pine Forest	20.40	1.885	0.547	7.094	2.452
CDFW (CEQA) White-root Beds	0.48	0.013	0.043	0.153	0.001
CDFW (CEQA) Red Willow Riparian Forest	7.40	0.258	0.267	1.660	0.266
CDFW (CEQA) Purple Needlegrass Grassland	1.13	0.089	0.027	0.313	0

USACE: U.S. Army Corps of Engineers

CDFW: California Department of Fish and Wildlife

RWQCB: Regional Water Quality Control Board

All wetlands in the study area are 3-parameter wetlands. Some do not meet current Corps definitions of adjacency; however, for this study Caltrans has conservatively evaluated all three parameter wetlands as potentially subject to Corps permitting requirements for impact assessment. Stream habitat subject to California Department of Fish and Wildlife regulation includes instream wetlands.

The Natural Environment Study provides preliminary estimates of numbers of native trees that could be temporarily or permanently impacted (removed or otherwise adversely affected) by the project. The trees removed would vary in size from seedlings to mature trees. Areas of permanent impacts are more likely to have trees removed, as these areas are often intended for installation of new or replacement hardscape surfaces. In contrast, temporary impact areas—though slightly larger in area than permanent impact areas—may require less tree removal depending on final project design. Temporary impact areas are typically intended for replanting/rehabilitation. Tree removals would be greater under Alternative 2 because it has a substantially larger project footprint.

The Natural Environment Study estimates that within the project limits up to 4,000 trees may be impacted under Alternative 1, and up to 5,500 trees may be impacted under Alternative 2. Up to approximately 3,600 of these would be coast live oaks and Monterey pines; see the discussions of Coast Live Oak Woodland and Forest, and Monterey Pine Forest and Woodland, below for more details. The balance would consist of other tree species. Seventy to 80 percent of these impacts would be considered temporary, with the remainder considered permanent.

These estimates were derived from sampling in representative tree stands per habitat type in the project area. More detailed numbers are not available at this stage of project development because mapping of all individual trees in the project limits has not been done. The sampling results were used to calculate average numbers of trees per unit area and habitat type, and then extrapolated to the total area of the habitat type within the project limits. The resulting numbers given in the preceding paragraph therefore represent estimates from average densities of trees in similar habitat types.

Coast Live Oak Woodland and Forest

The project would result in both temporary and permanent, and direct and indirect, impacts to the coast live oak woodland and forest natural community. As noted above, Alternative 1 would result in direct impacts to approximately 1,100 to 1,200 coast live oak trees (up to 900 temporary and 300 permanent impacts), while Alternative 2 would result in impacts to approximately 2,600 to 2,700 coast live oaks (up to 2,200 temporary and 500 permanent impacts).

Despite the anticipated oak removals, the project is not expected to substantially degrade the quality or quantity of coast live oak woodland habitat in the eco-region from a biological perspective due to its abundance and health. Because the project involves widening adjacent to an existing highway corridor and typically in semi-rural developed areas, all predicted impacts would occur within stands that have already been impacted by road, commercial, or residential development. Also, Avoidance, Minimization, and Mitigation Measures (including compensatory mitigation measures under

CEQA) would be implemented to reduce long-term impacts to oak woodlands and coast live oak trees in the project area.

Monterey Pine Forest and Woodland

The project would result in both temporary and permanent impacts to the Monterey pine forest and woodland natural community. This is considered a sensitive natural community due to the limited native range of Monterey pine and ongoing threats, including urban development, genetic contamination, pine pitch canker disease, and forest fragmentation.

As noted above, Alternative 1 would result in impacts to as many as 300 to 400 Monterey pines (up to 200 temporary and 200 permanent impacts), while Alternative 2 would result in the removal of approximately 800 to 900 Monterey pines (up to 650 temporary and 250 permanent impacts).

Because the project involves widening adjacent to an existing highway corridor and typically in semi-rural developed areas, all predicted impacts would occur within stands that have already been impacted by road, commercial, or residential development. Also, Avoidance, Minimization, and Mitigation Measures (including compensatory mitigation measures under CEQA) would be implemented to reduce long-term impacts to Monterey pine forest and woodland in the project area.

Other Natural Communities

Temporary and permanent project-related impacts are expected to be associated with grading, construction access, road widening, etc. as described previously for coast live oak woodland and forest and Monterey pine forest and woodland. All impacts would take place in areas that are already affected by road, commercial, or residential development. Avoidance, minimization, and mitigation measures would be implemented to reduce long-term impacts to these natural communities.

The design features, standard measures, and Best Management Practices listed in Section 2.3.2 would be implemented to reduce project-related impacts to coast live oak woodland, Monterey pine forests, and other natural communities under either Build Alternative. In addition, the Avoidance, Minimization, and/or Mitigation Measures listed below apply to both Build Alternatives and would be implemented to further reduce potential impacts.

Avoidance, Minimization, and/or Mitigation Measures

Coast Live Oak Woodland and Forest

BIO-1. Coast Live Oak Woodland and Forest: Avoidance. Design and construct the project to avoid as many oak trees as possible.

BIO-2. Coast Live Oak Woodland and Forest: Alternatives to Tree Removal. When feasible, oak trees will be trimmed or pruned rather than removed.

BIO-3. Coast Live Oak Woodland and Forest: Habitat Restoration. Oak woodland habitats that are temporarily impacted will be restored with a diversity of native plant species that occur in oak woodlands in the region.

Monterey Pine Forest and Woodland

BIO-4. Monterey Pine Forest and Woodland: Avoidance. Design and construct the project to avoid as many Monterey pine trees as possible.

BIO-5. Monterey Pine Forest and Woodland: Alternatives to Tree Removal. When feasible, Monterey pines will be trimmed or pruned rather than removed.

BIO-6. Monterey Pine Forest and Woodland: Replanting. Monterey pines will be planted in suitable habitat areas, using locally sourced material from the Monterey population if feasible.

BIO-7. Monterey Pine Forest and Woodland: Habitat Restoration. Monterey Pine Forest habitats that are temporarily impacted will be restored with native plant species that occur in Monterey Pine Forest habitats in the region.

Other Natural Communities

BIO-8. Other Natural Communities: Habitat Restoration. Purple Needlegrass Grassland and White-root Beds communities that are temporarily impacted will be restored with native plant species that occur in respective communities in the region.

BIO-9. Other Natural Communities: Minimization of Clearing and Grubbing. Where feasible, clearing and grubbing will be limited to the smallest footprint possible in temporary impacted areas so that roots of these species can persist and potentially resprout once construction is complete.

Compensatory Mitigation Measures under CEQA for Impacts to Natural Communities

Coast Live Oak Woodland and Forest; Monterey Pine Forest and Woodland

BIO-10. Compensatory Mitigation: Coast Live Oak Woodland and Monterey Pine Forest Natural Communities. Compensatory mitigation is proposed at a 1:1 ratio (acreage) for temporary impacts and a 3:1 ratio (acreage) for permanent impacts to Coast Live Oak Woodland and Forest, and Monterey Pine Forest and Woodland. Mitigation for both temporary and permanent impacts to each of these natural communities is expected to be completed on-site, within or adjacent to existing habitat of the same type on

Caltrans right-of-way within the project area, as well as off-site if sufficient area is not available on-site. Off-site mitigation would be conducted in coordination with a local land conservancy or restoration group.

Please refer to Section 3.2.2 for additional discussion regarding mitigation for impacts to coast live oak woodland and Monterey pine forest.

Red Willow Riparian Woodland and Forest

BIO-11. Compensatory Mitigation: Other Natural Communities. Compensatory mitigation for riparian impacts described in the following paragraph (Jurisdictional Wetlands and Other Waters) would offset project impacts to Red Willow Riparian Woodland and Forest Habitat.

2.3.2 Wetlands and Other Waters

Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (33 U.S. Code 1344), is the main law regulating wetlands and surface waters. One purpose of the Clean Water Act is to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands.

Waters of the U.S. include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. The lateral limits of jurisdiction over non-tidal water bodies extend to the ordinary high water mark, in the absence of adjacent wetlands. When adjacent wetlands are present, Clean Water Act jurisdiction extends beyond the ordinary high water mark to the limits of the adjacent wetlands. To classify wetlands for the purposes of the Clean Water Act, a three-parameter approach is used that includes the presence of: hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils formed during saturation/inundation); all three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

Section 404 of the Clean Water Act establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers with oversight by the U.S. Environmental Protection Agency (U.S. EPA).

The U.S. Army Corps of Engineers issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities

when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of U.S. Army Corps of Engineers' Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the U.S. Army Corps of Engineers' decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (40 Code of Federal Regulations Part 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines were developed by the U.S. EPA in conjunction with the U.S. Army Corps of Engineers and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The guidelines state that the U.S. Army Corps of Engineers may not issue a permit if there is a "least environmentally damaging practicable alternative" (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (Executive Order 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, the order states that a federal agency, such as the Federal Highway Administration and/or Caltrans, as assigned, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to the construction and (2) the proposed project includes all practicable measures to minimize harm. A Wetlands Only Practicable Alternative Finding must be made.

At the state level, wetlands and waters are regulated mainly by the State Water Resources Control Board, the Regional Water Quality Control Boards and the California Department of Fish and Wildlife. In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or the Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify the California Department of Fish and Wildlife before beginning construction. If the California Department of Fish and Wildlife determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. California Department of Fish and Wildlife jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the U.S. Army Corps of Engineers may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the California Department of Fish and Wildlife.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements and may be required even when the discharge is already permitted or exempt under the Clean Water Act. In compliance with Section 401 of the Clean Water Act, the Regional Water Quality Control Boards also issue water quality certifications for activities that may result in a discharge to waters of the U.S. This is most frequently required in tandem with a Section 404 permit request. See the Water Quality section for more details.

Affected Environment

Information for this section comes from the Preliminary Jurisdictional Delineation Report appended to the project Natural Environment Study, dated October 2023.

Jurisdictional wetlands, other waters, and riparian habitat in the project area are regulated by the U.S. Army Corps of Engineers under the Clean Water Act, California's Central Coast Regional Water Quality Control Board, and/or the California Department of Fish and Wildlife. Delineation refers to the process of identifying and locating aquatic resources (including wetlands) on a property or in a specific area. Areas that meet the triple criteria of containing hydrophytic vegetation, hydric soils, and wetland hydrology may be classified as wetlands.

To determine potential impacts of the project on jurisdictional wetlands and other waters within and near the project limits, Caltrans biologists conducted wetland delineation studies at six locations within three watersheds in the Biological Study Area (see Figure 2.3.2.1; see also Table 2.3.1.1 in Section 2.3.1). Project boundaries for each of the six proposed work locations (nine intersections), as well as project area waterways as taken from National Hydrography Dataset and National Wetland Inventory databases, are shown in Figure 2.3.2.2 (six sheets).

Jurisdictional features that were identified in the Jurisdictional Delineation Study Area include in-stream and adjacent wetlands, as well as some three-parameter wetlands that are not immediately adjacent to streams or other waterways; multiple ephemeral and intermittent streams (including named streams such as Canyon del Rey Creek and El Toro Creek); streambanks and riparian zones; stormwater ditches; and artificial ponds. In total, Caltrans identified wetland resources totaling 2.78 acres, including 1.2 acres of in-stream wetlands and 1.58 acres of adjacent wetlands not directly within a stream channel. Non-wetland streambeds measured to ordinary high water mark total 3.44 acres (see Table 2.3.1.5 in Section 2.3.1).

All wetlands within the study area are either within a stream or adjacent to a stream that has a traceable connection to the Pacific Ocean, and therefore they are assumed to be subject to U.S. Army Corps of Engineers jurisdiction. Also, 1.27 acres of three-parameter wetlands that do not meet the current definition of adjacency were also mapped and are shown as state wetlands in mapping and

tables. Caltrans expects that the project would impact both waters of the United States and waters of the State. Therefore, the project would require a Water Resources Discharge permit from the Regional Water Quality Control Board, which would include the Clean Water Act Section 401 water quality certification. Because rules defining the extent of U.S. Army Corps of Engineers jurisdiction have changed over the course of this project, further evaluation of jurisdictional status would be updated with permit applications if needed.

In general, streams in the western three-quarters of the Biological Study Area flow west or northwest directly into the Pacific Ocean, while those in the eastern one-quarter flow east into the Salinas River (via El Toro Creek) and then into the Pacific Ocean. Some of these drainage reaches are wetland waters; others are non-wetland streams.

While the drainages and wetlands in the Biological Study Area are not known to be traditionally navigable, the streams have a continuous surface connection to the Pacific Ocean and meet federal and/or state criteria as Wetlands and Waters of the U.S., and Waters of the State. Also, the Regional Water Quality Control Board and California Department of Fish and Wildlife assert jurisdiction over riparian habitat and streambanks. The Regional Water Quality Control Board may also assert jurisdiction over artificial ponds and stormwater ditches that contain water and have the potential to affect beneficial uses of waters of the State. The California Department of Fish and Wildlife may also assert jurisdiction over artificial ponds due to the potential for the presence of special-status wildlife.

In addition to potential Clean Water Act waters, during the Jurisdictional Delineation Study, Caltrans also mapped 29.37 acres of woody riparian areas, 0.98 acre of other, herbaceous or unvegetated, streambanks, and 0.6 acre of vegetated rock slope protection streambanks potentially subject to Regional Water Quality Control Board and California Department of Fish and Wildlife jurisdiction. Caltrans also identified three artificially constructed ponds, which occupy 0.16 acre of the study area. Some roadside ditches constructed in uplands that regularly contained water during the wet season occupy about 0.2 acre of the study area, and may be subject to Regional Water Quality Control Board jurisdiction as Waters of the State.

Figure 2.3.2.1 Project Area Watersheds and Major Streams

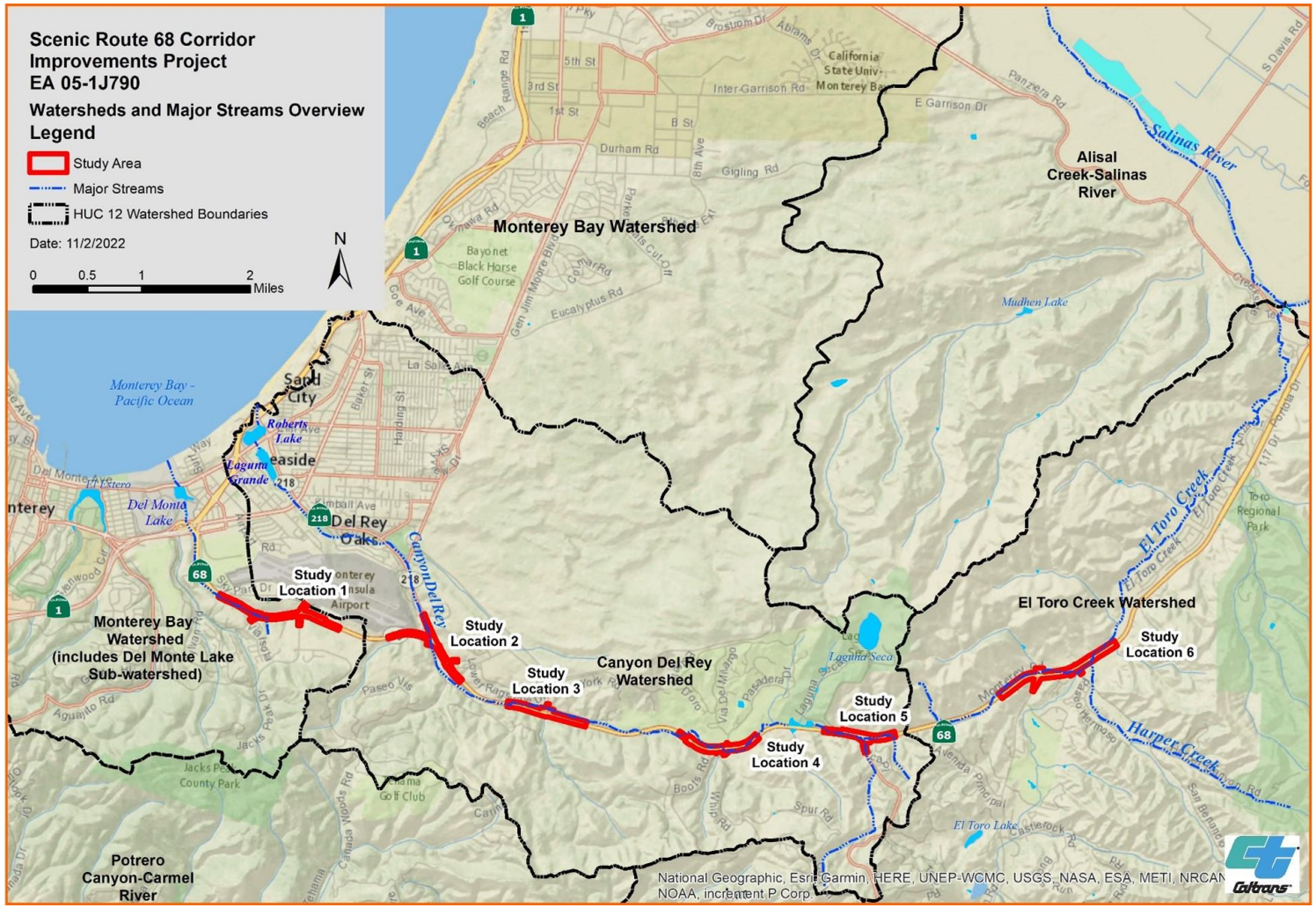


Figure 2.3.2.2 National Hydrography Dataset/National Wetland Inventory Data, Study Location 1 (Sheet 1 of 6)

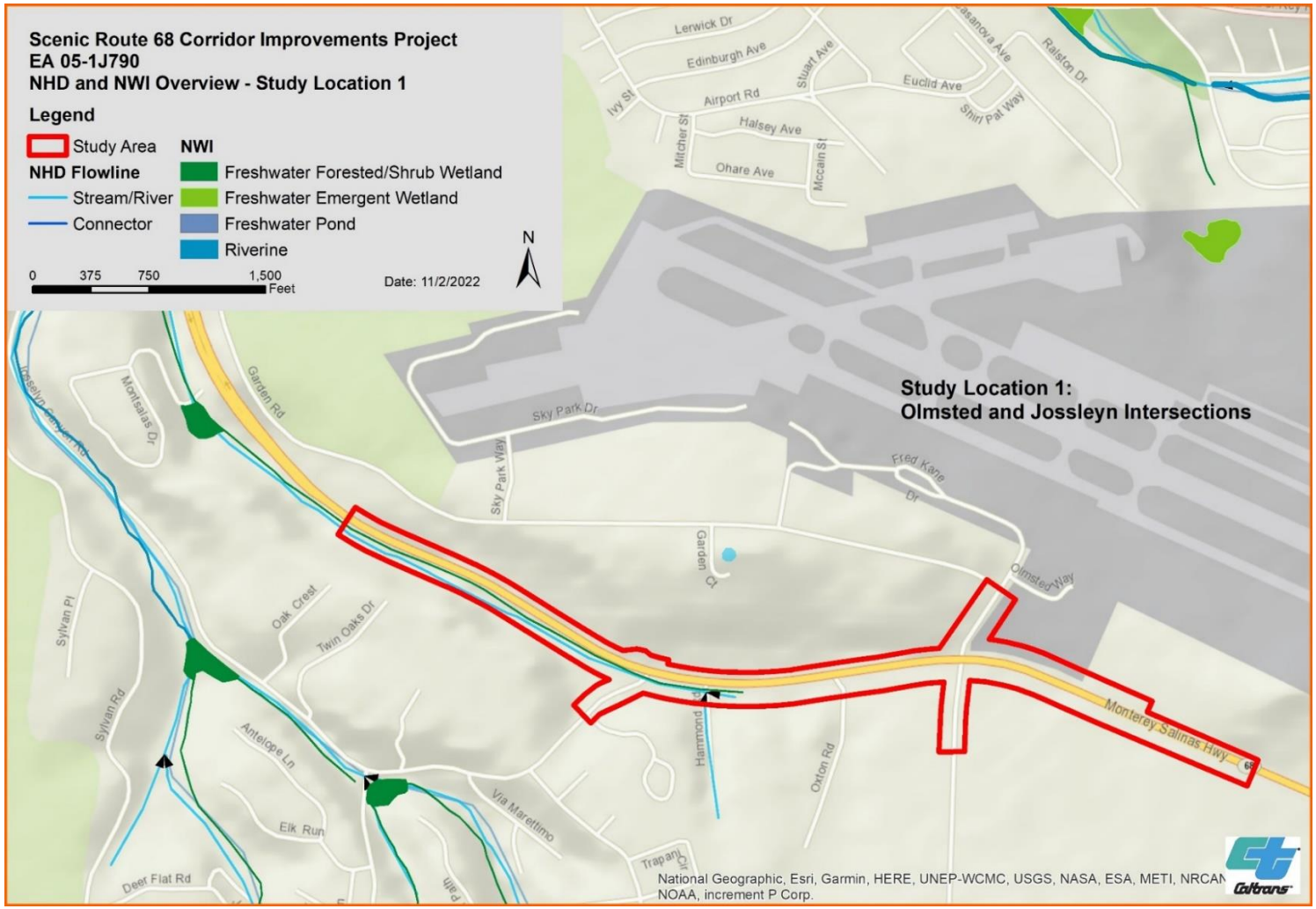


Figure 2.3.2.2 National Hydrography Dataset/National Wetland Inventory Data, Study Location 2 (Sheet 2 of 6)

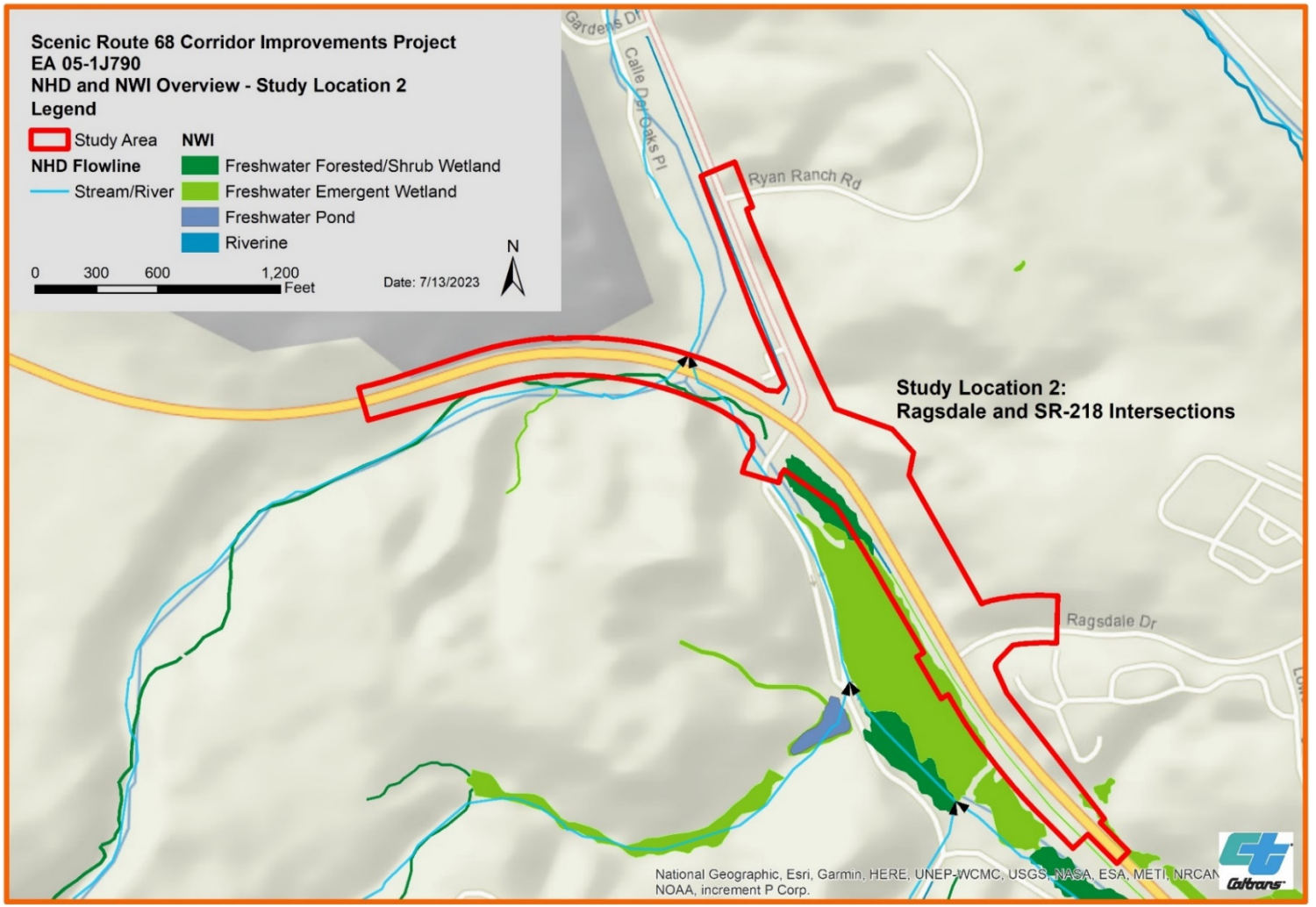


Figure 2.3.2.2 National Hydrography Dataset/National Wetland Inventory Data, Study Location 3 (Sheet 3 of 6)

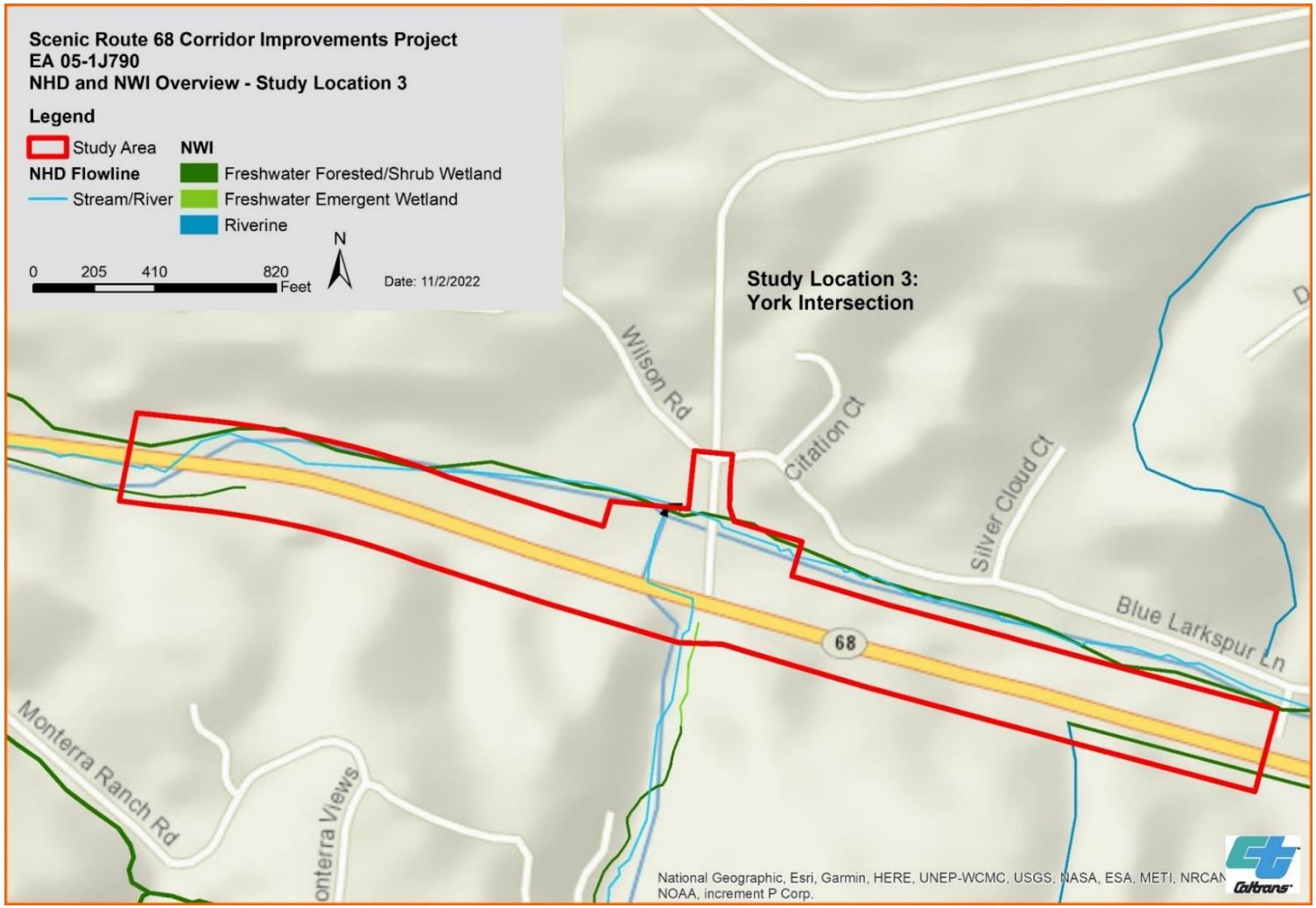


Figure 2.3.2.2 National Hydrography Dataset/National Wetland Inventory Data, Study Location 4 (Sheet 4 of 6)

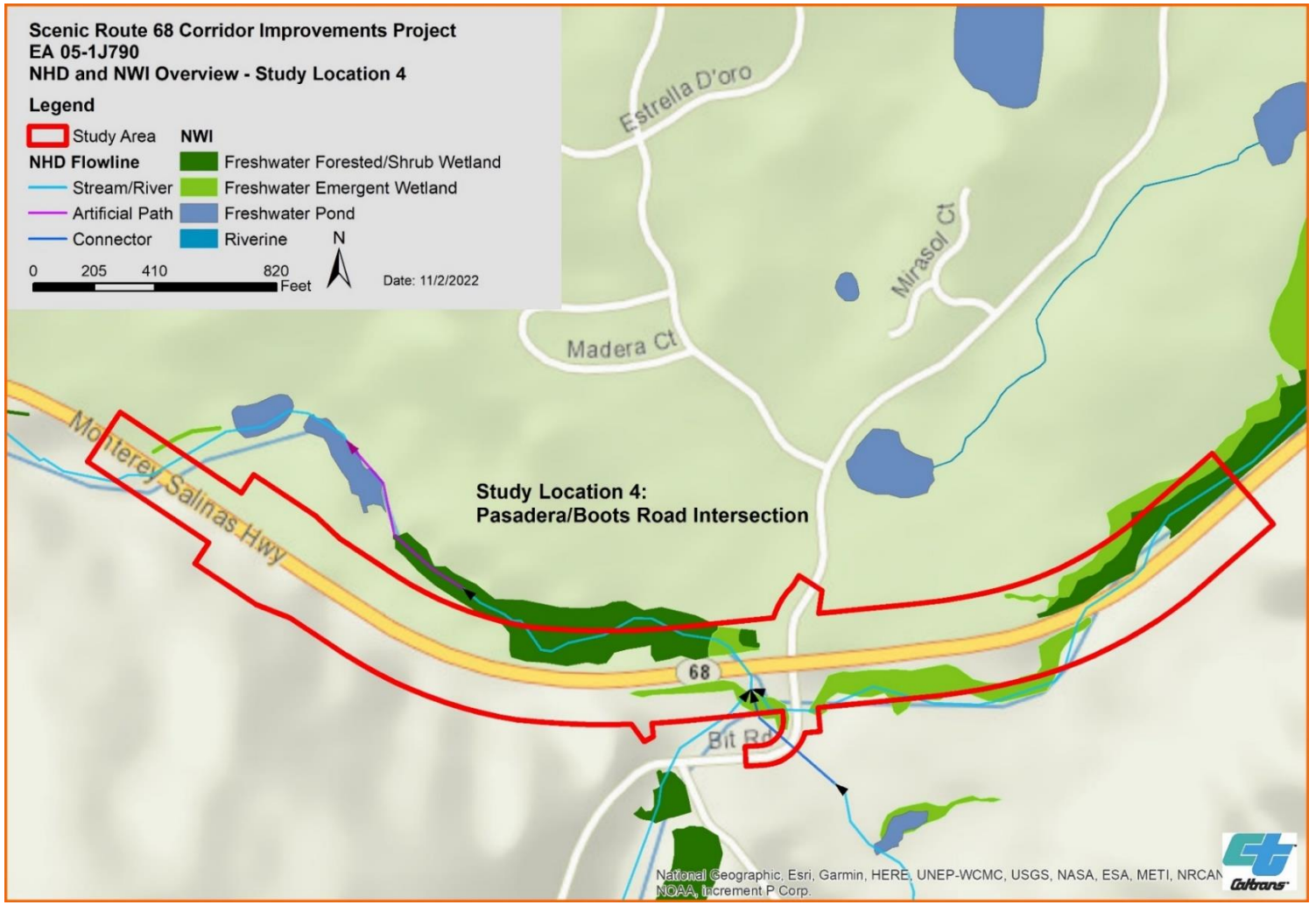


Figure 2.3.2.2 National Hydrography Dataset/National Wetland Inventory Data, Study Location 5 (Sheet 5 of 6)

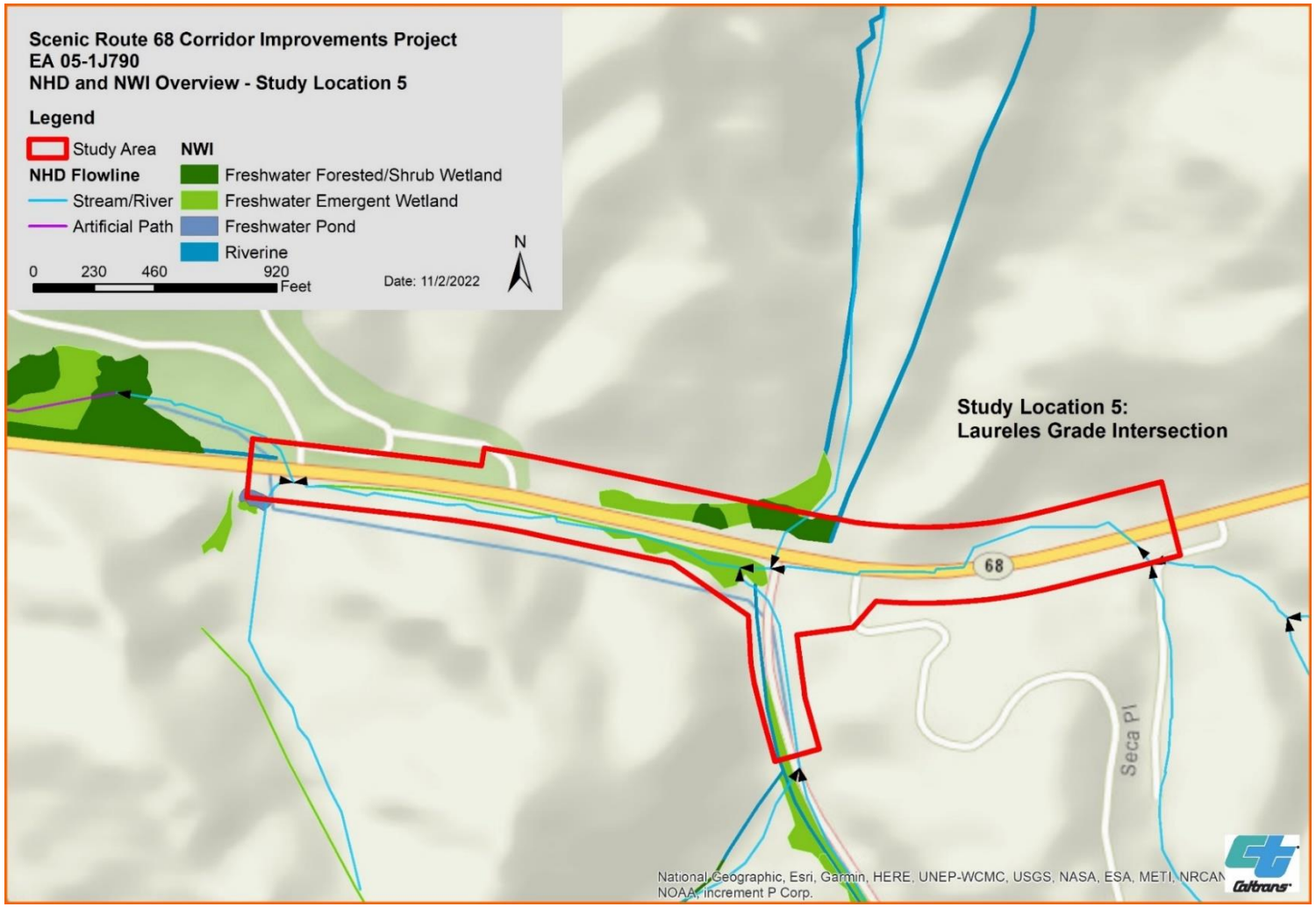
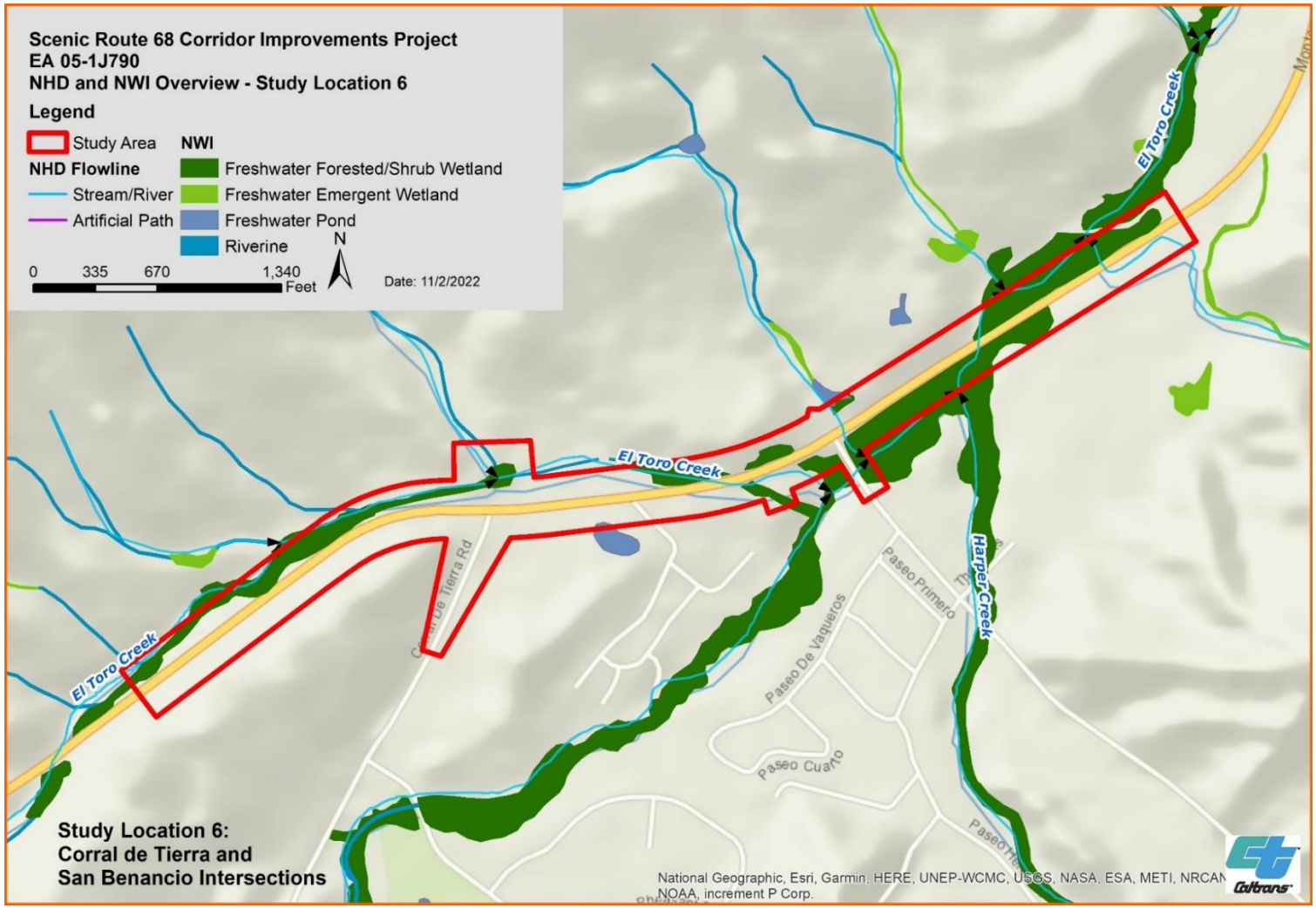


Figure 2.3.2.2 National Hydrography Dataset/National Wetland Inventory Data, Study Location 6 (Sheet 6 of 6)



Environmental Consequences

The purpose of the project is to improve intersection operations and wildlife connectivity along an 8.9-mile stretch of State Route 68 in Monterey County. Two build alternatives are under consideration in this project. Alternative 1 would replace nine existing signalized intersections with roundabouts; Alternative 2 would retain the signalized intersections, but with enhanced lane configurations. See Section 1.7 for discussion regarding other alternatives that were considered but ultimately dismissed.

Under either Build Alternative, the project would have the potential to adversely affect jurisdictional features in the watersheds of Del Monte Lake, Canyon Del Rey Creek, and El Toro Creek, including in-stream and adjacent wetlands, as well as some three-parameter wetlands that are not immediately adjacent to streams or other waterways; multiple ephemeral and intermittent streams (including named streams such as Canyon del Rey Creek and El Toro Creek); streambanks and riparian zones; stormwater ditches; and artificial ponds.

Temporary impacts would be associated mostly with clearing and grading for cut or fill slopes and temporary construction access; permanent impacts would occur in locations where habitat would be displaced for various project features such as roadway or retaining walls. Because Alternative 2 has a larger construction footprint and contains more jurisdictional features and area than Alternative 1, impacts to jurisdictional features under Alternative 2 are anticipated to be greater than those under Alternative 1.

As shown in Table 2.3.1.5 (Section 2.3.1), the project could result in the disturbance of up to 2.78 acres of wetlands and 3.44 acres of other waters (streams) that are under the jurisdiction of the U.S. Army Corps of Engineers, and to impact up to 4.64 acres of stream habitat, 30.95 acres of riparian and streambank habitat, and 0.16 acre of ponds under California Department of Fish and Wildlife jurisdiction.

Upon selection of a preferred alternative for the project, Caltrans will submit applications for permits to the U.S. Fish and Wildlife Service, the California Department of Fish and Wildlife, the U.S. Army Corps of Engineers, and the Regional Water Quality Control Board for project impacts related to wetlands and jurisdictional waters of the U.S., impacts to listed species and their habitats, and water quality certification under Section 401 of the Clean Water Act, as follows:

- U.S. Fish and Wildlife Service: Biological Opinion and Take Permit for California red-legged frog and California tiger salamander; Letter of concurrence for least Bell's vireo
- California Department of Fish and Wildlife: 1602 Streambed Alteration Agreement; 2081 Incidental take permit for California tiger salamander;

2081 Incidental take permit for tri-colored blackbird; 2081 Incidental take permit for geotechnical subsurface drilling in jurisdictional waters; 2081 Incidental take permit for completion of archaeological field studies

- U.S. Army Corps of Engineers: 404 Nationwide or Individual Permit
- Regional Water Quality Control Board: 401 Certification

Permit applications would be submitted during the Plans, Specifications, and Estimates phase of the project after the environmental document phase is completed. See Section 4.2 for additional information regarding coordination with other public agencies.

The Build Alternatives have been designed to reduce potential impacts to wetlands and other waters to the extent feasible, in part through the use of standardized project measures that are used on most, if not all, Caltrans projects and which were not developed in response to any specific environmental impact resulting from the proposed project. For issues pertaining to wetlands and other waters (both Waters of the United States and Waters of the State), these include the following:

- Prior to construction, Caltrans will obtain permits and agreements from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and the California Department of Fish and Wildlife, as applicable to project impacts.
- Prior to developing project plans and specifications and regulatory permit applications, Caltrans will obtain survey data on native trees within the jurisdictional boundary and proposed grading limits, including species and size.
- Caltrans will minimize impacts to protected habitats wherever feasible by developing project plans and specifications to minimize native vegetation removal, specifying that vegetation in wetlands and riparian areas be trimmed above the ground surface rather than grubbing out roots wherever feasible, limiting temporary impact areas, removing invasive species, and revegetating temporary impact areas with a diversity of native species appropriate to habitats to be restored.
- Caltrans will prepare a Mitigation and Monitoring Plan (MMP) to offset impacts to natural vegetation and protected habitats, including aquatic resources. The Mitigation and Monitoring Plan will be consistent with federal and state regulatory requirements and will be amended with regulatory permit conditions, as required. Where feasible, jurisdictional resources areas will be restored, enhanced, and re-established within the right-of-way. Caltrans will implement the Mitigation and Monitoring Plan as necessary during construction and immediately following project completion.
- Prior to construction, the Contractor will prepare and sign a Water Pollution Control Plan or a Storm Water Pollution Prevention Plan that complies with the Caltrans Stormwater Quality Handbook. Provisions of this plan will be

implemented during and after construction as necessary to avoid and minimize erosion and stormwater pollution in and near the work area.

- No construction activities shall be conducted in drainages between November 1 through April 30 without prior written approval by the State Water Resources Control Board or Regional Water Quality Control Board. If work will be conducted in drainages during this timeframe, detailed plans and descriptions for proposed activities to occur in drainages must be submitted to the Regional Water Quality Control Board at least 21 working days prior to the start of the proposed work.
- Staging areas for equipment and vehicle fueling and storage will be located at least 100 feet away from the top of bank of any stream or aquatic area, and in a location where fluids or accidental discharges cannot flow into the stream or aquatic area. Stationary equipment must have secondary containment while operating within or less than 100 feet from jurisdictional areas.

See Table 1-5 in Section 1.4.1 for a complete listing of Standard Measures and Best Management Practices intended to reduce project-related environmental impacts.

Avoidance, Minimization, and/or Mitigation Measures

In addition to the measures described above, the following Avoidance, Minimization, and Mitigation Measures apply to both Build Alternatives and would be implemented to address potential project-related impacts to jurisdictional wetland and other waters areas (both Waters of the United States and Waters of the State):

BIO-12. Jurisdictional Wetlands and Other Waters: Environmentally Sensitive Areas. Prior to ground-disturbing activities, Environmentally Sensitive Area boundary markers or fencing will be installed around jurisdictional resources, habitat for special-status animals designated to be protected, and the dripline of trees to be protected within the project limits. Caltrans-defined Environmentally Sensitive Areas will be noted on design plans and delineated in the field prior to the start of construction activities.

BIO-13. Jurisdictional Wetlands and Other Waters: Hazardous Material Spill Cleanup. During construction, all project-related hazardous materials spills within the project site will be cleaned up immediately. Readily accessible spill prevention and cleanup materials will be kept on site at all times by the contractor during construction.

BIO-14. Jurisdictional Wetlands and Other Waters: Pollution and Erosion Control. During construction, pollution and erosion control measures will be implemented. Fencing, fiber rolls, or barriers will be installed as needed between the project construction features and any stream, waterbody, or riparian habitat. Discharge of wet concrete, concrete dust,

sediment, construction debris or other pollutants into any stream or waterbody would be prevented.

BIO-15. Jurisdictional Wetlands and Other Waters: Invasive Plant and Pathogen Removal/Avoidance. During construction, the project will avoid spreading invasive species and pathogens by requiring that weeds designated for removal will be removed prior to disturbing surface soils and disposed of the same day they are removed. All nursery stock and imported soil will be certified free of weeds, *Phytophthora* (fungus-like plant damaging microorganisms), and other plant diseases. Construction equipment will be confirmed clean and free of soil containing seeds and and/or invasive plant material prior to entering the construction site to avoid/minimize the spread of invasive species within the construction area.

BIO-16. Jurisdictional Wetlands and Other Waters: Landscape Restoration. After construction has been completed, natural contours and vegetation will be restored as closely as possible to their original condition, following landscaping plans and the Mitigation and Monitoring Plan.

Compensatory Mitigation Measures under CEQA for Impacts to Jurisdictional Wetlands and Other Waters

BIO-17. Compensatory Mitigation: Jurisdictional Wetlands and Other Waters. The goal of compensatory mitigation in this section is to prevent a net loss of wetlands or other aquatic resource acreage, functions, and values. Several types of compensatory mitigation are available to offset impacts to wetlands, other waters, and riparian habitat including creation, rehabilitation, and enhancement. Compensatory mitigation is proposed at a 1:1 ratio (acreage) for temporary impacts and a 3:1 ratio (acreage) for permanent impacts to wetland, stream, streambank, and riparian aquatic resources.

Mitigation for temporary impacts, and possibly for permanent impacts, is expected to be completed on-site within suitable habitat areas on Caltrans right-of-way. Additional mitigation for permanent impacts may also need to be completed off-site at an existing mitigation bank or in coordination with a local land conservancy or restoration group.

2.3.3 Plant Species

Regulatory Setting

The U.S. Fish and Wildlife Service and California Department of Fish and Wildlife have regulatory responsibility for the projection of special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. Special-status is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and

endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act and/or the California Endangered Species Act. Please see the Threatened and Endangered Species section (Section 2.3.5) in this document for detailed information about these species.

This section of the document discusses all other special-status plant species, including California Department of Fish and Wildlife species of special concern, U.S. Fish and Wildlife Service candidate species, and California Native Plant Society rare and endangered plants.

The regulatory requirements for Federal Endangered Species Act can be found at 16 U.S. Code Section 1531, et seq. See also 50 Code of Federal Regulations Part 402. The regulatory requirements for California Endangered Species Act can be found at California Fish and Game Code, Section 2050, et seq. Caltrans projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act (CEQA), found at California Public Resources Code, Sections 21000-21177.

Affected Environment

Information for this section comes from the Natural Environment Study (with Preliminary Jurisdictional Delineation report) dated October 2023.

All species discussed in this section are listed by the California Native Plant Society as having special status in the California Rare Plant Ranks database. For discussion regarding the federally listed as endangered Yadon's piperia, see Section 2.3.5.

Special-Status Manzanitas

Four special-status manzanitas were found during surveys of the Biological Study Area by Caltrans biologists: Hooker's manzanita (*Arctostaphylos hookeri*), toro manzanita (*Arctostaphylos montereyensis*), sandmat manzanita (*Arctostaphylos pumila*), and Pajaro manzanita (*Arctostaphylos pajaroensis*). All four manzanitas are evergreen shrubs endemic to the northern Central Coast of California (Santa Cruz to northern Monterey and western San Benito counties). These species are considered rare in California and elsewhere and fairly or seriously endangered in California (California Rare Plant Ranks 1B.1 or 1B.2) due to causes including development, urbanization, military activities at Ford Ord, agriculture, fire suppression, and competition with *Eucalyptus* species and other non-native plants.

Pajaro and sandmat manzanitas were found in the western portion of the Biological Study Area, growing in sandy soil and associated with the coast live oak woodland or Monterey pine forest plant communities. Hooker's manzanita is a common ornamental plant throughout the State Route 68 corridor and was observed in landscaped areas at many of the project

intersections. However, these were cultivated individuals and therefore not considered rare plants. Only one example of a potentially non-cultivated Hooker's manzanita was seen. Toro manzanita was observed only at the Laureles Grade location.

Congdon's Tarplant

Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) is a California Rare Plant Ranks 1B.1 species that is seriously endangered in California. This subspecies of tarplant is found on the western part of the Central California Coast from the western Bay Area to San Luis Obispo County. Congdon's tarplant often grows on disturbed sites in sparsely vegetated, low-lying grassland habitats that are seasonally flooded or saturated.

In the Biological Study Area, Congdon's tarplant was found near the State Route 68 intersections with Laureles Grade and Corral de Tierra Road. Approximately 70 to 150 individuals were seen, though as an annual plant its distribution and abundance can vary from year to year.

Lewis' Clarkia

Lewis' clarkia (*Clarkia lewisii*) is a California Rare Plant Ranks watch list species that is ranked 4.3 for plants of limited distribution and is not very threatened in California. It is found mostly west of the Coast Ranges from Monterey to San Diego Counties in coastal scrub, woodland, and chaparral habitats. Several clusters of Lewis' clarkia were observed in the northwest portion of the State Route 218/Ragsdale Drive location among annual grasses in openings around coast live oak trees. This species is an annual plant, and its distribution and abundance can vary considerably from year to year.

Monterey Pine

Monterey pine (*Pinus radiata*) is found throughout the Biological Study Area but is considered rare only in its natural stands, as described in Section 2.3.1. The only natural stands of Monterey pine within the Biological Study Area are near the State Route 68 intersections with Josselyn Canyon Road and Olmsted Road.

Environmental Consequences

Special-Status Manzanitas

Both Build Alternatives would result in temporary impacts to Toro, Pajaro and sandmat manzanitas and permanent impacts to sandmat manzanita. Alternative 2 has a substantially larger permanent and temporary footprint than Alternative 1, and therefore Alternative 2's impacts to special-status manzanitas would be greater. Potential direct impacts to manzanitas from the project include removal of vegetation and grading activities; indirect impacts may include soil compaction, erosion, pathogen or invasive species introduction, and road maintenance activities, among others.

Congdon's Tarplant

Both Build Alternatives could result in temporary impacts to approximately half of the Congdon's tarplant populations near the State Route 68/Laureles Grade and State Route 68/Corral de Tierra Road intersections. The project has the potential to directly impact Congdon's tarplant through vegetation removal and grading activities, and indirectly impact this plant through spread of invasive species and road maintenance activities.

Lewis' Clarkia

Both Build Alternatives could result in temporary impacts to the populations of Lewis' clarkia at the State Route 68/State Route 218 and State Route 68/Ragsdale Drive intersections. The project has the potential to directly impact Lewis' clarkia through vegetation removal and grading activities, and indirectly impact this species through spread of invasive species and road maintenance activities.

Monterey Pine

Based on the subsampling described in Section 2.3.1, Alternative 1 may result in a total removal of approximately 300 to 400 Monterey pine trees, and Alternative 2 may result in a total removal of approximately 800 to 900 Monterey pine trees, varying in size from seedlings (less than 2 inches in diameter) to very mature trees greater than 24 inches in diameter.

Alternative 2 has a much larger permanent and temporary footprint compared with Alternative 1, and therefore impacts to Monterey pines for Alternative 2 would be greater. Temporary impacts would primarily be associated with clearing and grading for cut or fill slopes and temporary construction access; permanent impacts would occur where habitat would be displaced for various project features such as road widening or retaining walls. Direct impacts to Monterey pine would include tree removal and grading; indirect impacts could include soil compaction, erosion, pathogen or invasive species introduction, and road maintenance activities, among others.

For all special-status plant species discussed in this section, the design features, standard measures, and Best Management Practices listed for jurisdictional areas (see Section 2.3.2) would also help reduce project-related impacts to special-status plants.

Avoidance, Minimization, and/or Mitigation Measures

The following Avoidance, Minimization, and/or Mitigation Measures apply to both Build Alternatives and would be implemented to reduce potential impacts to special-status plant species. Compensatory mitigation under CEQA would not be required.

Special-Status Manzanitas

BIO-18. Special-Status Manzanitas: Avoidance. Design and construct the project to avoid as many special-status manzanitas as possible.

BIO-19. Special-Status Manzanitas: Alternatives to Removal. When feasible, special-status manzanitas will be trimmed or pruned rather than removed, preserving the root system as much as possible.

BIO-20. Special-Status Manzanitas: Preconstruction Surveys. A qualified biologist will perform additional botanical surveys between two and three years prior to construction to update species presence, area of occupied suitable habitat, and restoration and Environmentally Sensitive Area boundaries. The limits of Environmentally Sensitive Areas will be established to avoid crushing sensitive roots.

BIO-21. Special-Status Manzanita: Replanting and Habitat Restoration. Using locally sourced material if feasible, special-status manzanitas will be planted in suitable habitat areas along with other native species appropriate for those habitats.

Congdon's Tarplant

BIO-22. Congdon's Tarplant: Preconstruction Surveys and Seed Collection. A qualified biologist will perform additional botanical surveys between two and three years prior to construction to update species presence, area of occupied suitable habitat, and restoration and Environmentally Sensitive Area boundaries. Additionally, seeds from individuals within the impact areas will be collected for replacement planting/restoration at the end of construction.

BIO-23. Congdon's Tarplant: Soil and Duff Salvage. Caltrans will develop plans and specifications to minimize impacts to Congdon's tarplant by salvaging the top three inches of soil and duff from permanent and temporary impact areas and replacing it to the same general location or suitable landscape settings (within 500 feet).

BIO-24. Congdon's Tarplant: Habitat Restoration. Annual grassland habitats that are temporarily impacted and within range of Congdon's tarplant will be restored with native grass and forb species.

Lewis' Clarkia

BIO-25. Lewis' Clarkia: Soil and Duff Salvage. Caltrans will develop plans and specifications to minimize impacts to Lewis' clarkia by salvaging the top three inches of soil and duff from permanent and temporary impact areas and replacing it to the same general location and suitable habitat conditions (within 500 feet).

BIO-26. Lewis' Clarkia: Seed Collection. Depending on timing of potential impacts, mature seed may be collected from impacted plants and redistributed in suitable habitat areas in the right-of-way.

Monterey Pine

Applicable general Avoidance, Minimization, and Mitigation measures included for Monterey Pine Forest would be implemented to reduce potential impacts to Monterey pine trees from the proposed project under either build alternative.

2.3.4 Animal Species

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries), and the California Department of Fish and Wildlife are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in the Threatened and Endangered Species Section 2.3.5. All other special-status animal species are discussed here, including California Department of Fish and Wildlife fully protected species and species of special concern, and U.S. Fish and Wildlife Service or NOAA Fisheries candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

- California Environmental Quality Act
- Sections 1600—1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

The federal Bureau of Land Management manages Fort Ord National Monument, which shares approximately 2.5 miles of border with the proposed project on the north side of State Route 68, east of the State Route 68/Laureles Grade intersection. This area consists of large contiguous open space that is designated by Monterey County for habitat management and public recreational use. The Bureau of Land Management manages the property to protect numerous unique features, including rare and unique flora

and fauna. The property is not an officially designated wildlife or waterfowl refuge. The U.S. Department of the Army also continues to manage approximately half of the former military base.

Where the project would require work on Bureau of Land Management property, all applicable conservation planning and resource management regulations would be followed (see Environmental Consequences, Section 2.3.1).

Affected Environment

Information for this section comes from the Natural Environment Study (with Preliminary Jurisdictional Delineation report) dated October 2023.

Special-Status and Other Nesting Birds

All migratory birds that are native to the United States are protected under the federal Migratory Bird Treaty Act, while California Fish and Game Code Section 3503 protects all nesting birds (including non-native species).

Focused nesting bird surveys were not performed for the project. The Biological Study Area has suitable nesting habitat for many bird species, including some special-status species, but no state or federally listed bird species are known or expected to occur in or near the Biological Study Area. Nor does the Biological Study Area contain designated critical habitat for any listed bird species. All bird observations during the numerous biological survey efforts for this project were documented; refer to Appendix E of the Natural Environment Study.

Monarch Butterfly

The monarch butterfly (*Danaus plexippus*) is a candidate for listing under the Federal Endangered Species Act. Western populations of this species migrate to coastal California to overwinter in wind-protected tree groves (eucalyptus, Monterey pine, cypress) within 5 miles of the coast where nectar and water sources are located nearby.

The nearest known monarch butterfly overwintering site is in Monterey, approximately 1 mile west of the western extent of the project limits. Although potentially suitable overwintering and nectar habitat is found in the Biological Study Area, during Caltrans surveys of the Biological Study Area, no monarch individuals or host plants, milkweed (*Asclepias* spp.), were observed.

Crotch Bumble Bee

The Crotch bumble bee (*Bombus crotchii*) is a candidate for listing as endangered under the California Endangered Species Act. This species was historically common in the Central Valley of California, but the population has sharply declined with its overall range having been reduced by about 75 percent.

Crotch bumble bees were not observed during Caltrans surveys of the Biological Study Area, but suitable foraging habitat for this species is present throughout the Biological Study Area and they are known from the region. Suitable nesting/overwintering habitat may also be present in less disturbed parts of the Biological Study Area, but use of the area for nesting is considered unlikely given high levels of ambient disturbance, proximity to the existing highway, and the overall low quality of the habitat present when higher quality habitat is available outside the Biological Study Area.

Roosting Bats

Roosting bat species are addressed in the project's Natural Environment Study as a group because they have similar habitat requirements, vulnerabilities, and needs in terms of protective measures. Day roosts and maternity roosts are often regarded as the most important habitat to protect because they allow for reproduction that perpetuates colonies. Availability of this type of habitat may be a limiting factor for many bat populations and may influence species distribution.

There are no records of roosting bats within or in near the Biological Study Area. No focused surveys for bats were performed, and no bats were observed during the various biological survey efforts for the project. Roosting habitat was evaluated only near possible impact areas. Suitable habitat for crevice-roosting bats may be present in the woodland and forest habitats of the Biological Study Area in trees with snags, cavities, or sloughing bark. The El Toro Creek Bridge (Alternative 2 only) may also have suitable crevice roosting habitat. In addition, the five State Route 68 culverts proposed for replacement as part of the wildlife crossing improvements are of suitable size and may contain suitable habitat for cave-roosting bats.

Special-status bat species that may roost within the Biological Study Area include the pallid bat (*Antrozous pallidus*) and western red bat *(Lasiurus blossevillii*), both of which are State of California Species of Special Concern. Other non-special-status bat species may also roost in the Biological Study Area; these are also protected under State law.

Monterey Dusky-Footed Woodrat and American Badger

The Monterey dusky-footed woodrat (*Neotoma macrotis luciana*) and American badger (*Taxidea taxus*) are both listed as State of California Species of Special Concern.

The Monterey dusky-footed woodrat, one of the 11 described subspecies of the dusky-footed woodrat, inhabits Monterey and northern San Luis Obispo Counties in grasslands, scrub, and wooded areas. Dusky-footed woodrats are well known for their large stick nests typically located in dense brush and placed on the ground against or straddling a log or exposed roots of a standing tree.

The American badger is widely distributed in California and western North America, though comparatively uncommon or absent from some areas where they historically occurred. This species prefers open habitats such as grasslands, oak savannahs, and shrublands. Badgers are excellent diggers, excavating burrows in relatively loose soils to create dens for protection, sleeping, birth, food storage, and as sites for foraging. Badgers have large home ranges, spanning hundreds to thousands of acres.

Focused surveys for special-status mammals were not performed for the project. During Caltrans surveys in the Biological Study Area, no woodrats were seen, but woodrat nests were noted in dense scrub and oak woodland habitats. No badgers or potential badger burrows were seen, but this species is known from portions of the Biological Study Area and suitable habitat occurs in some places along the outer edges of the highway right-of-way.

Northern California Legless Lizard, Western Pond Turtle, and Two-Striped Garter Snake

The Northern California legless lizard (*Anniella pulchra*), western pond turtle (*Emys marmorata*), and two-striped garter snake (*Thamnophis hammondii*) are all listed as State of California Species of Special Concern.

The Northern California legless lizard is found in upland habitats in the Coast Ranges from the Bay Area south to the Mexican border. Its preferred habitat is slightly moist, sandy or loose organic soils of coastal dune, valley-foothill, chaparral, and coastal scrub habitats, typically with abundant leaf litter. Legless lizards forage for insects, larvae, and spiders at the base of shrubs at or below leaf litter, taking shelter under logs, boards, or rocks.

The western pond turtle was historically present in most Pacific slope drainages between the Oregon and Mexican borders. Populations are declining throughout their range. Pond turtle habitat consists of year-round ponds along foothill streams and broad washes near the coast. Although this species is mostly aquatic, upland habitat (open grassland with clay or silt soils near aquatic sites) is required for reproduction, estivation, and overwintering.

The two-striped garter snake is distributed from the southeastern slope of the Diablo Range and the Salinas Valley south along the coast to the Mexican border. This highly aquatic species is associated with permanent or semi-permanent bodies of water in a variety of habitats from sea level to 8,000 feet. Two-striped garter snakes forage mostly in and along streams, taking fish, amphibians, and their eggs or larvae. They nest and hide in small mammal burrows near aquatic habitat.

Focused surveys for special-status reptiles were not performed for this project, and no individuals from these species were observed, but suitable habitat was noted in various locations in and near the Biological Study Area.

Environmental Consequences

Special-Status and Other Nesting Birds

Both Build Alternatives could result in temporary, direct and/or indirect impacts to nesting birds; however, permanent impacts to nesting birds from the project are not expected. Construction activities have the potential to create temporary, direct and indirect impact to nesting birds, eggs, and young birds. Direct impacts may include vegetation removal and site grading; indirect impacts may include changes to perching, foraging, and/or nesting behaviors because of construction-related disturbances such as noise or vibration.

As noted previously, the federal Migratory Bird Treaty Act and California Fish and Game Code Section 3503 protect native migratory bird species and all nesting birds, respectively. Implementation of either Build Alternative would fully comply with the applicable legal requirements.

The temporary loss of vegetation supporting potential nesting habitat would be offset by revegetation efforts for the project. Implementation of the avoidance and minimization measures listed in the following section would further reduce the potential for adverse project-related impacts to nesting bird species. These measures include scheduling vegetation removal outside the typical nesting season, using exclusionary methods to prevent birds from occupying nests in the construction zone, and conducting nesting bird surveys and establishing buffer areas around any active nests, as needed.

Monarch Butterfly

The project would result in temporary and permanent impacts to Monterey pine forest, grassland, and scrub habitats within the Biological Study Area, which has the potential to affect monarch butterflies. Temporary impacts would be associated mostly with clearing and grading for cut or fill slopes and temporary construction access; permanent impacts would occur where habitat would be displaced for various project features, such as road widening or retaining walls.

However, the likelihood of monarch butterflies being present within the Area of Potential Impact is considered low due to poor habitat conditions and higher quality overwintering and foraging habitat outside of the Biological Study Area. As described in the following section, grassland and scrub habitats that are temporarily impacted by the project would be reseeded with native grass and flowering plant species post-construction.

Crotch Bumble Bee

The project would result in temporary and permanent impacts to grassland and scrub habitats within the Biological Study Area that have the potential to support foraging and nesting Crotch bumble bees. Temporary impacts would be associated mostly with clearing and grading for cut or fill slopes and temporary

construction access; permanent impacts are where habitat would be displaced for various project features, such as road widening or retaining walls.

For the reasons explained in the preceding section, it is expected that the project would not result in state take (construction-related mortality) of this species. Additional Crotch bumble bee surveys would be conducted during the project design phase, per California Department of Fish and Wildlife guidance. If Crotch or other special-status bumble bees are observed using the project area, Caltrans would apply to the California Department of Fish and Wildlife for an Incidental Take Permit (2081 permit).

Other measures that would be implemented to protect this species are listed in the following section. These include worker awareness training, biologist examination of blooming flowering plants slated for removal, installation of Environmentally Sensitive Area fencing as needed, and onsite habitat replacement (if needed) at a minimum 1-to-1 ratio.

Roosting Bats

Permanent impacts to roosting bats are not anticipated. Bats are not expected to roost near busy road intersections when higher quality roosting habitat is available nearby. However, the project could result in temporary impacts to roosting bats as a result of clearing vegetation and grading for cut or fill slopes and temporary construction access. Injury or mortality could occur if bats are roosting when trees are removed. Bats may also be temporarily displaced, if present, during construction activities to repair culverts (Alternatives 1 and 2) and install additional bridge pilings at the State Route 68 bridge over El Toro Creek (Alternative 2 only).

Because suitable snag and tree roosting habitat are present within the Biological Study Area and tree removal is anticipated for this project, measures to protect roosting bats would be required. As detailed in the following section, these would include avoidance of tree removal during typical bat maternity roosting season, conducting pre-activity surveys, and using exclusionary measures as needed and feasible. Repair of each culvert would require bat exclusion for no more than one season. When construction is complete and exclusion is removed, potential roosting habitat would be restored.

Monterey Dusky-Footed Woodrat and American Badger

The project would result in temporary and permanent impacts to nesting and burrowing habitat for the Monterey dusky-footed woodrat and American badger, respectively. Temporary impacts are associated mostly with clearing and grading for cut or fill slopes and temporary construction access; permanent impacts occur where habitat would be displaced for various project features, such as road widening or retaining walls. Injury or mortality could occur via accidental crushing by worker foot traffic or construction equipment.

Monterey dusky-footed woodrat middens are present within the Biological Study Area, and the presence of the American badger is considered unlikely given the poor habitat conditions within the project limits and availability of higher quality habitat nearby. The risk of injury or mortality to either species is considered low with the implementation of the measures proposed to protect jurisdictional areas (wetlands and other waters), oak woodlands, the California red-legged frog, and the California tiger salamander.

The main impact that the project would have on the Monterey dusky-footed woodrat and American badger pertains to habitat connectivity. Wider intersections and roadways would reduce the chances for successful highway crossings. However, the existing condition is already poor due to high levels of traffic. The wildlife crossings included in the project may help improve habitat connectivity for both species.

Northern California Legless Lizard, Western Pond Turtle, and Two-Striped Garter Snake

The project has the potential to adversely affect the Northern California legless lizard, western pond turtle, and two-striped garter snake if these species are found burrowing or nesting in the Area of Potential Impact. However, the chances are low that any of these special-status reptile species would occur within the Area of Potential Impact based on lack of documented observations of the species, poor habitat conditions, higher quality burrowing and nesting habitat outside of the Biological Study Area, and limited access between the higher quality habitat and the Area of Potential Impact. The project is not expected to appreciably reduce the quality or amount of suitable habitat for any of these special-status reptiles.

Avoidance, Minimization, and/or Mitigation Measures

The following Avoidance, Minimization, and/or Mitigation Measures apply to both Build Alternatives and would be implemented to reduce potential impacts to special-status animal species. Compensatory mitigation under CEQA would not be required.

Special-Status and Other Nesting Birds

BIO-27. Special-Status and Other Nesting Birds: Construction Scheduling and Buffer Areas. Schedule vegetation removal between September 1 and February 14, outside of the typical bird nesting season. If construction activities are proposed to occur within 100 feet of potential habitat during the nesting season (February 15 to August 31), a nesting bird survey will be conducted by a qualified biologist no more than three days prior to construction. If an active nest is found, the Caltrans biologist will determine an appropriate buffer based on the habits and needs of the species. The buffer area will be avoided until a qualified biologist has determined that juveniles have fledged and are no longer dependent on the nest.

BIO-28. Special-Status and Other Nesting Birds: Observance of Legal Protections. Active bird nests shall not be disturbed, and eggs or young birds covered by the Migratory Bird Treaty Act and California Fish and Game Code Section 3503 shall not be killed, destroyed, injured, or harassed at any time.

BIO-29. Special-Status and Other Nesting Birds: Exclusionary Methods. During construction before typical nesting season, active exclusionary methods will be implemented to prevent birds from occupying nests in the construction zone. Removal of inactive nests will be monitored by a qualified biologist.

Monarch Butterfly

BIO-30. Monarch Butterfly: Habitat Restoration. Grassland and scrub habitats that are temporarily impacted during construction will be replaced onsite using a seed mixture containing native grass species and locally present, native flowering species with a one-year plant establishment period.

Crotch Bumble Bee

BIO-31. Crotch Bumble Bee: Preconstruction Surveys and Agency Coordination. During the design phase, focused bumble bee surveys will be conducted to determine if Crotch bumble bee occurs in the project area. If Crotch bumble bee is identified in the project area, Caltrans will coordinate with the California Department of Fish and Wildlife and, if necessary, a 2081 Incidental Take Permit will be acquired.

BIO-32. Crotch Bumble Bee: Surveys for Nesting Bees. Surveys will occur prior to ground disturbance for nesting bumble bees. No work will occur within 50 feet of an active Crotch bumble bee nest unless approved by the California Department of Fish and Wildlife.

BIO-33. Crotch Bumble Bee: Worker Awareness Training. A Worker Environmental Awareness Training will be provided for all construction personnel prior to the start of any ground-disturbance or vegetation removal to discuss Crotch bumble bee identification, ecology, habitat, and avoidance and minimization measures.

BIO-34. Crotch Bumble Bee: Flowering Plant Inspection. Blooming flowering plants that are scoped for removal would be inspected by a qualified biologist immediately prior to work to ensure that no bumble bees are on or near the plant. If a bumble bee is identified on or adjacent to vegetation that is to be removed, work in that area would not proceed until the bumble bee leaves the area of its own accord.

BIO-35. Crotch Bumble Bee: Environmentally Sensitive Areas. Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing shall be installed, as appropriate, around Crotch bumble bee feeding and nesting habitat to be avoided. Environmentally Sensitive Areas shall be noted on

design plans and delineated in the field prior to the start of construction activities.

BIO-36. Crotch Bumble Bee: Replacement of Impacted Habitat. Areas of suitable Crotch bumble bee habitat that are temporarily impacted during construction will be replaced onsite at a minimum ratio of 1:1.

Roosting Bats

BIO-37. Roosting Bats: Construction Scheduling, Roost Surveys, Exclusionary Methods, and Buffer Areas. Tree removal shall be scheduled to occur from September 2 to January 31, outside of the typical bat maternity roosting season, if possible, to avoid potential impacts to roosting bats. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat during the bat maternity roosting season (February 1 to September 1), a bat roost survey shall be conducted by a biologist determined qualified by Caltrans within 14 days prior to construction. The biologist(s) conducting the preconstruction surveys will also identify the nature of the bat utilization (i.e., no roosting, night roost, day roost, maternity roost) and determine if passive bat exclusion will be necessary and feasible. If an active day roost is found, a qualified Caltrans biologist shall determine an appropriate buffer based on the habits and needs of the species. The buffer area shall be avoided until a qualified biologist has determined that roosting activity has ceased, or exclusionary methods have successfully evicted roosting bats.

BIO-38. Roosting Bats: Preconstruction Surveys of Culverts. Prior to culvert construction activities for the proposed wildlife crossing improvements, a preconstruction survey for roosting bats shall be conducted by a biologist determined to be qualified by Caltrans within 14 days prior to construction. The biologist(s) conducting the preconstruction surveys will identify the nature of the bat utilization (i.e., no roosting, night roost, day roost, maternity roost) and determine if passive bat exclusion will be necessary and feasible. The qualified biologist will provide oversight on exclusion methods and installation and will determine whether exclusionary methods have successfully evicted roosting bats.

BIO-39. Roosting Bats: Avoidance of Active Maternity Roosts. If bats are found by a qualified biologist to be maternity roosting, active bat maternity roosts shall not be disturbed or destroyed until pups are volant (capable of flight).

BIO-40. Roosting Bats: Exclusion Zones. In areas where an occupied roost can be avoided, readily visible exclusion zones shall be established using Environmentally Sensitive Area fencing. The size/radius of the exclusion zone(s) shall be determined by a qualified biologist.

BIO-41. Roosting Bats: Habitat Incorporation into Wildlife Crossings. Where feasible, bat habitat may be incorporated into the large wildlife crossing culverts within the project area.

Monterey Dusky-Footed Woodrat and American Badger

Applicable Avoidance, Minimization, and Mitigation Measures included for jurisdictional areas, oak woodlands, California red-legged frog, and California tiger salamander would be implemented to reduce potential impacts to Monterey dusky-footed woodrat and American badger under either build alternative of the project.

Compensatory Mitigation under CEQA

Impacts to potential habitat for Monterey dusky-footed woodrat and American badger would be offset by site restoration within the project limits using native plant species or at offsite mitigation areas associated with compensatory mitigation for jurisdictional areas, oak woodlands, and Monterey Pine Forest. No additional compensatory mitigation is necessary or proposed.

Northern California Legless Lizard, Western Pond Turtle, and Two-Striped Garter Snake

Applicable Avoidance, Minimization, and Mitigation Measures included for jurisdictional areas, California red-legged frog, and California tiger salamander would be implemented to reduce potential impacts to Northern California legless lizard, western pond turtle, and two-striped garter snake under either build alternative of the project.

Compensatory Mitigation under CEQA

Impacts to potential habitat for Northern California legless lizard, western pond turtle, and two-striped garter snake would be offset by site restoration within the project limits or at offsite mitigation areas associated with compensatory mitigation for jurisdictional areas. No additional compensatory mitigation is necessary or proposed.

2.3.5 Threatened and Endangered Species

Regulatory Setting

The main federal law protecting threatened and endangered species is the Federal Endangered Species Act: 16 U.S. Code Section 1531, et seq. See also 50 Code of Federal Regulations Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (and Caltrans, as assigned), are required to consult with the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) to ensure that they are not

undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take Statement or a Letter of Concurrence. Section 3 of Federal Endangered Species Act defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act, California Fish and Game Code Section 2050, et seq. The California Endangered Species Act emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife is the agency responsible for implementing the California Endangered Species Act. Section 2080 of the California Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California Endangered Species Act allows for take incidental to otherwise lawful development projects; for these actions, an Incidental Take Permit is issued by California Department of Fish and Wildlife. For species listed under both Federal Endangered Species Act and California Endangered Species Act requiring a Biological Opinion under Section 7 of Federal Endangered Species Act, the California Department of Fish and Wildlife may also authorize impacts to California Endangered Species Act species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

Affected Environment

Information for this section comes from the Natural Environment Study (with Preliminary Jurisdictional Delineation report) dated October 2023.

Yadon's Piperia

Yadon's piperia (*Piperia yadonii*) is listed as Endangered under the Federal Endangered Species Act and is listed by the California Native Plant Society as California Rare Plant Rank 1B.1 (plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California).

This species is a perennial herb in the Orchidaceae (Orchid family) endemic to northern Monterey County, occurring in maritime chapparal, Monterey pine, bishop pine, and Gowen cypress forests. Threats to the recovery of this species include habitat loss and fragmentation, invasive plants, herbivory, disease, and mowing for fuel reduction.

Caltrans biologists conducting rare plant surveys for the project observed Yadon's piperia in Monterey Pine Forest habitat in the vicinity of Olmsted Road. Most of the population is over 80 feet from State Route 68 and is outside the Biological Study Area, though many individual plants were seen within the Biological Study Area, including several within 30 feet of the existing right-of-way boundary for State Route 68. Designated critical habitat for this species does not occur within or adjacent to the Biological Study Area; the nearest critical habitat is at Jacks Peak, about 0.5 mile south of the Josselyn Canyon Road-Olmsted Road project location.

The Biological Study Area contains approximately 4.88 acres of potentially suitable habitat for Yadon's piperia, including both sides of State Route 68 in the Monterey Pine Forest around the Josselyn Canyon Road-Olmsted Road location. The plants currently occupy only a small portion of the available suitable habitat (most likely less than 1 percent, or 0.049 acre).

California Red-Legged Frog

The California red-legged frog (*Rana draytonii*) is listed as Threatened under the federal Endangered Species Act and is a State of California Species of Special Concern. This species historically ranged from Marin County southward to northern Baja California; currently, Monterey, San Luis Obispo, and Santa Barbara counties support the largest remaining populations within California.

The California red-legged frog uses aquatic, riparian, and upland habitats and tends to breed in surface waters that exhibit little or no flow, are at least 2.3 feet deep, and persist until at least early June. The U.S. Fish and Wildlife Service considers all aquatic and riparian areas within the range of the species, and any landscape features that provide cover and moisture, to be potentially suitable habitat for this species.

No federally designated critical habitat for the California red-legged frog is found in or near the project area, and no individuals were seen by Caltrans biologists during surveys of the project area. However, informal observations have been previously reported in the area, and the species is presumed

present based on the existence of suitable stream and pond habitats in the Biological Study Area.

California Tiger Salamander

The California tiger salamander (*Ambystoma californiense*) is listed as Threatened under the California Endangered Species Act. Under the Federal Endangered Species Act, only the Central California Distinct Population Segment (DPS) of this species is listed (Threatened).

The California tiger salamander is a relatively large, stocky, terrestrial salamander than can range in size from 6 to 9.5 inches long in adulthood. Historically, the Central California population of this species was native to valleys and foothills of the San Joaquin-Sacramento River valleys and the Central Coast. At present, although widely distributed, the species is known to exist in only small pockets of its former range. The main causes of the decline are habitat loss and fragmentation, and predation by introduced predators.

The California tiger salamander requires both terrestrial and aquatic habitat. It lives most of its life in small mammal burrows found in upland grassland and oak woodland habitats, migrating up to 1.24 miles during wet season (November-April) to mate in breeding ponds before returning to its upland burrows.

Protocol surveys for the California tiger salamander were not conducted for the project, and no individuals were observed during surveys. The project vicinity does not contain any designated critical habitat for this species, but the area contains a range of potentially suitable upland habitat (grassland, ruderal and non-native vegetation areas, scrub, Monterey Pine Forest, Coast Live Oak Woodland, and riparian habitats). Also, although no potential breeding habitat for this species is found within the Biological Study Area, suitable breeding habitat is found nearby and within accessible distance from the upland habitat. This includes ponds on Fort Ord National Monument and U.S. Army Fort Ord property where adult and juvenile California tiger salamanders have been observed and which are less than 1,000 feet north of the State Route 68/Corral de Tierra Road and State Route 68/San Benancio Road project intersections.

South-Central California Coast Steelhead Trout

The south-central California Coast Distinct Population Segment of steelhead trout (*Oncorhynchus mykiss irideus*) is listed as Threatened under the Federal Endangered Species Act and is a State of California Species of Special Concern.

Steelhead are the anadromous (oceangoing) form of rainbow trout and are genetically identical to the latter. Steelhead historically ranged from Alaska southward to the California-Mexico border. Extensive urbanization and development of water projects during the 20th century caused large declines and extirpations (local extinctions) among steelhead populations. The South-Central California Coast Distinct Population Segment of steelhead includes

naturally spawned, anadromous fish originating below natural and human-made impassable barriers from the Pajaro River south to, but not including the Santa Maria River.

Optimal in-stream steelhead habitat consists of clear, cool water with a shallow gradient, abundant cover (submerged branches, rocks, logs), well-vegetated stream margins, relatively stable water flow, and equal amounts of pools and riffles. Steelhead migrate up coastal drainages following the first substantial seasonal rainfall, after storm runoff has breached sandbars at the mouths of water bodies and drainages, allowing fish passage to upstream spawning and rearing habitats. Spawning typically occurs during the spring in riffle areas that consist of clean, coarse gravels. Juveniles (smolts) and post-spawning adults migrate from freshwater to the ocean from March to July, depending on stream flows.

The project area does not contain any designated critical habitat for steelhead. No protocol surveys were conducted for aquatic species in the Biological Study Area, and no steelhead were observed during general habitat surveys. The streams that drain the Monterey Bay and Canyon Del Rey watersheds do not contain suitable in-stream aquatic habitat for South-Central California Coast steelhead due to low streamflow and numerous, substantial barriers lower in the watershed.

However, El Toro Creek, which drains the eastern one-quarter of the project area and connects to the Pacific Ocean via the Salinas River, does have the potential to serve as suitable steelhead habitat when the creek is flowing. Research conducted by the National Marine Fisheries Service indicates that several reaches of El Toro Creek contain potentially suitable steelhead habitat. In addition, California Department of Fish and Wildlife staff observed a dead, egg-bearing adult steelhead in El Toro Creek outside of the eastern project limits in 2020. Therefore, the presence of steelhead in El Toro Creek within the Biological Study Area is possible.

Tricolored Blackbird

The tricolored blackbird *(Agelaius tricolor)* is listed as a Threatened species under the California Endangered Species Act and is also a State of California Species of Special Concern. This species was observed during surveys for a previous Caltrans project along State Route 68 west of the Laureles Grade intersection. However, the Biological Study Area for the current project does not contain suitable nesting habitat for the tricolored blackbird and contains only marginally suitable foraging habitat.

Environmental Consequences

Yadon's Piperia

The Natural Environment Study found that Alternative 1 could result in temporary impacts to 0.136 acre of potentially suitable Yadon's piperia habitat,

but no permanent impacts; Alternative 2 could result in 1.987 acres of temporary impacts and. 0.247 acre of permanent impacts (see Table 2.3.5.1). However, the habitat loss would not occur within designated critical habitat and would be in an area that is already highly fragmented by roads and development. Neither Build Alternative would result in permanent impacts to any Yadon's piperia plants observed in the Biological Study Area. Nevertheless, the Federal Endangered Species Act Section 7 preliminary effects determination is that the project may affect, and is likely to adversely affect, Yadon's piperia.

Table 2.3.5.1 Impacts to Potential Yadon's Piperia Habitat

Regulatory Authority/Habitat: U.S. Fish and Wildlife Service	Total in BSA	Alt. 1 Temp. (acres)	Alt. 1 Perm. (acres)	Alt. 2 Temp. (acres)	Alt. 2 Perm. (acres)
Potentially suitable Yadon's piperia habitat	4.884	0.136	0	1.987	0.247

The potential for adverse project-related impacts to this species is higher under Alternative 2 than under Alternative 1 due to the former's larger footprint and greater disturbance of potentially suitable habitat. Direct, temporary impacts would be associated mostly with clearing and grading for cut or fill slopes and temporary construction access; direct, permanent impacts would occur where habitat would be displaced for various project features such as road widening or retaining walls. Indirect impacts may occur through soil compaction, erosion, pathogen or invasive species introduction, and road maintenance activities among others.

California Red-Legged Frog

The project may result in both temporary and permanent, direct and indirect impacts to the California red-legged frog, if the species is present in the work areas, through impacts to potential aquatic breeding habitat and adjacent upland riparian habitat (see Table 2.3.5.2), as well as to individual frogs.

Table 2.3.5.2 Impacts to Potential California Red-Legged Frog Habitat

Regulatory Authority/Habitat: U.S. Fish and Wildlife Service	Alt. 1 Temp. (acres)	Alt. 1 Perm. (acres)	Alt. 2 Temp. (acres)	Alt. 2 Perm. (acres)
California Red-Legged Frog potential breeding habitat	0.262	0.049	0.607	0.116
California Red-Legged Frog upland habitat	1.548	0.24	3.45	0.567

Project construction could result in direct injury or mortality to California red-legged frogs during vegetation clearing and grading in riparian or wetland habitat adjacent to suitable breeding habitat or during diversion/dewatering activities in breeding habitat. Injury or mortality could occur via accidental crushing by worker foot traffic or construction equipment. These effects would be temporary, lasting during construction only.

Indirect impacts, which could be temporary or long term, may include stress to individual frogs from capture and relocation (if necessary), erosion and sedimentation affecting water quality, increased habitat fragmentation due to intersection widening, or longer distances that individual frogs would have to travel to seek shelter and new breeding areas.

Because Alternative 2 would impact more jurisdictional features (wetlands and other waters) and more suitable habitat for the California red-legged frog than Alternative 1 would, impacts to this species would be higher under Alternative 2.

The risk of injury or mortality from any of these potential impacts is considered low due to limited observations of this species and generally poor habitat conditions in the Biological Study Area. The limited number of California red-legged frog records in the region may be due to poor water quality and the presence of predators such as bullfrogs that are common in urban aquatic areas.

Nevertheless, the Federal Endangered Species Act Section 7 preliminary effects determination is that the project may affect, and is likely to adversely affect, the California red-legged frog. The basis for this determination is that the presence of this species has been inferred and there is a potential for adverse effects.

Proposed measures to protect the California red-legged frog during project implementation would reduce project-related impacts to this species and are listed in the following section. These measures include the requirement that only U.S. Fish and Wildlife Service-approved biologists capture and handle the California red-legged frog (if needed), pre-construction surveys, worker awareness training, and more. See the Avoidance, Minimization, and Mitigation Measures section below for more information.

California Tiger Salamander

The project may result in both temporary and permanent, direct and indirect impacts to the California tiger salamander, if the species is present in the work areas, through impacts to upland habitat within dispersal range of known or potential breeding sites (see Table 2.3.5.3), and to individual salamanders. The project would not have any adverse effects on California tiger salamander breeding habitat.

Table 2.3.5.3 Impacts to Potential California Tiger Salamander Habitat

Regulatory Authority/Habitat: U.S. Fish and Wildlife Service	Alt. 1 Temp. (acres)	Alt. 1 Perm. (acres)	Alt. 2 Temp. (acres)	Alt. 2 Perm. (acres)
California Tiger Salamander potential breeding habitat	0	0	0	0
California Tiger Salamander upland habitat	17.3	4.704	37.41	6.777

Project construction could result in direct injury or mortality to the California tiger salamander during vegetation clearing and grading. Construction activities have the potential to cause temporary impacts such as crushing California tiger salamanders that are in burrows, moving across the landscape, or seeking shelter in leaf litter. No impacts to potential or known breeding habitat would occur because this type of habitat is not present in the Biological Study Area.

The project could also cause indirect impacts, both temporary and long-term, to this species. These include changes in normal feeding and sheltering behavior patterns due to construction-related noise, vibration, and night lighting, which could result in stress and increased mortality due to desiccation or predation. The planned installation of protective fencing around work areas to exclude California tiger salamanders could also disrupt their ability to travel, potentially reducing access to limited upland dispersal habitat and causing more competition for burrows and food resources. Also, if this species is present, individuals would be captured and relocated away from the work areas, causing additional stress and possible mortality.

Additional project-related indirect impacts could result from the unavailability of construction-disturbed upland habitat during construction and restoration, and habitat fragmentation as travel distances may increase between known breeding habitat (ponds) at Fort Ord and suitable upland habitat. Other potential breeding habitat exists in the general area and within dispersal range of the project Area of Potential Impact, but all are on private property and the quality of this habitat and whether these areas are used by California tiger salamander are unknown.

Because Alternative 2 impacts more jurisdictional features and more suitable habitat for the California tiger salamander than Alternative 1 would, impacts would be higher under Alternative 2.

The risk of injury or mortality from any of these potential impacts is considered low due to numerous barriers such as large housing developments, commercial properties, and high-use recreational areas between known California tiger salamander breeding ponds and the project

area. State Route 68 is also a barrier to movement of this species due to high traffic volume and limited safe crossing opportunities.

Regardless, the Federal Endangered Species Act Section 7 preliminary effects determination is that the project may affect, and is likely to adversely affect, the California tiger salamander. The basis for this determination is that California tiger salamander presence has been inferred and there is a potential for adverse effects.

The wildlife crossing improvements included in the project may create safer opportunities for this species to cross State Route 68 to access suitable habitat. In addition, some of the proposed Avoidance, Minimization, and Mitigation Measures to protect the California red-legged frog during project implementation would also benefit the California tiger salamander. These include Caltrans obtaining all needed permits and agreements from the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife, shielding to restrict construction lighting at night to the immediate work area, the requirement that only U.S. Fish and Wildlife Service-approved biologists capture and handle California tiger salamanders, and Caltrans preparation of a species protection and relocation plan for approval by the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife. Caltrans intends to perform a more in-depth habitat suitability evaluation during regulatory coordination to determine specific mitigation requirements for this species.

South-Central California Coast Steelhead

Alternative 1 of the project would not involve work within potentially suitable habitat for South-Central California Coast steelhead. Although paving would occur on the San Benancio Road bridge over El Toro Creek, a potentially occupied stream, work would be confined to the top of the bridge and the contractor would be required to implement whatever measures are necessary to prevent loss of any material into the stream. Therefore, Alternative 1 is expected to have no effect on this species.

Alternative 2 would involve work within suitable habitat for South-Central California Coast steelhead at the State Route 68 bridge over El Toro Creek. To support the proposed bridge widening in Alternative 2's design, four new piers would be installed within the creek channel (for a total of six piers). Stream diversion and dewatering may be necessary depending on the flow conditions at the time of construction, and heavy equipment access into the channel would also likely be required. Alternative 2 may therefore affect this species.

Potential temporary, direct impacts to South-Central California Coast steelhead (if present) during the bridge work under Alternative 2 include becoming stranded in portions of the creek that must be dewatered, becoming caught in dewatering pumps, or made vulnerable to predation from foraging birds and mammals. Potential temporary or long-term, indirect impacts to steelhead from

the proposed action include sediment deposition downstream of the work area, which may adversely impact downstream water quality.

These potential direct and indirect impacts to steelhead may be avoided through the use of appropriate Avoidance, Minimization, and Mitigation Measures to protect the streambanks and channel of El Toro Creek during construction. Nevertheless, the Federal Endangered Species Act Section 7 preliminary effects determination is that the project may affect, and is likely to adversely affect, South-Central California Coast steelhead. Avoidance, Minimization, and Mitigation Measures noted previously that pertain to jurisdictional wetlands, the California red-legged frog, and the California tiger salamander would also reduce potential impacts to South-Central California Coast steelhead.

Additional measures proposed to protect steelhead during project work include monitoring by a National Marine Fisheries Service-approved biologist, worker awareness training, requiring any work in the channel to take place during the dry season when flows are at their lowest, controlling erosion on the work sites to prevent siltation in the channel, and more. See the following section for a full listing of Avoidance, Minimization, and Mitigation Measures that address potential impacts to this species.

Tricolored Blackbird

Suitable wetland nesting habitat for the tricolored blackbird does not occur in the Biological Study Area, and only marginally suitable foraging habitat is present. The California Endangered Species Act determination for this species is that the project would result in no take. No additional studies are recommended.

For all project activities, design features, standard measures, and Best Management Practices would be implemented to reduce project-related impacts to Threatened and Endangered species under either Build Alternative. These include, but are not limited to, the following actions.

- During proposed project activities, trash that may attract predators will be properly contained, removed from the work site, and disposed of regularly. Following construction, trash and construction debris will be removed from work areas.
- All refueling, maintenance, and staging of equipment and vehicles will occur at least 60 feet from riparian habitat or water bodies and in a location from where a spill would not drain directly toward aquatic habitat (e.g., on a slope that drains away from the water). The monitor will ensure contamination of habitat does not occur during such operations. Prior to the onset of work, Caltrans will ensure that a plan is in place for prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

- To control sedimentation during and after proposed action implementation, Caltrans will implement the Best Management Practices outlined in any authorizations or permits issued under the authorities of the Clean Water Act that it receives for the specific proposed action. If Best Management Practices are ineffective, Caltrans will attempt to remedy the situation immediately in coordination with the U.S. Fish and Wildlife Service.

In addition, the Avoidance, Minimization, and/or Mitigation Measures listed in the following section apply to both Build Alternatives and would be implemented to further reduce potential impacts.

Avoidance, Minimization, and/or Mitigation Measures

Yadon's Piperia

Applicable general Avoidance, Minimization, and/or Mitigation measures included in this document for Monterey Pine Forest and Woodland would be implemented to reduce potential project-related impacts to Yadon's piperia.

The following measures would also be implemented to reduce impacts to this species under either build alternative, though particularly for Build Alternative 2, because several of these plants were found in the existing right-of-way boundary for State Route 68 under this alternative:

BIO-42. Yadon's Piperia: Agency Consultation. Prior to construction, Caltrans will consult with the US Fish and Wildlife Service regarding impacts to Yadon's piperia.

BIO-43. Yadon's Piperia: Preconstruction Surveys. A qualified biologist will perform additional botanical surveys between two and three years prior to construction to update occupied suitable habitat, to flag locations where bulbs may be collected (if necessary), and to support placement of Environmentally Sensitive Area boundaries. Additionally, the surveys will identify suitable restoration sites if Yadon's piperia is found within an area to be impacted and must be relocated. Field surveys will be conducted in the early season when leaves have emerged, but grass cover is low.

BIO-44. Yadon's Piperia: Soil and Duff Salvage; Seed Collection and Storage. If Yadon's piperia is found within the area to be impacted, seeds, bulbs, and topsoil containing its mycorrhizal associations will be collected by qualified individuals at the appropriate season from the project's impact areas and other collection sites approved by the US Fish and Wildlife Service one to two years prior to construction. Seed will be collected in the summer, processed, and stored according to seed storage best practices for up to two years before being planted. Bulbs and soil will be collected and translocated in the late fall when the plants are most dormant (anticipated to be October - December).

BIO-45. Yadon's Piperia: Plant Translocation. The plant materials will be translocated into designated and suitably protected sites within range of the Monterey population. The translocation sites will be prepared in advance by clearing invasive and competing vegetation. Site preparation and translocation work will be implemented by hand to avoid compacting the soil.

BIO-46. Yadon's Piperia: Translocation Site Monitoring. Following completion of the seed and bulb relocation efforts, a qualified biologist will monitor the translocation site for four consecutive years to quantify and document the number of individuals that emerge, the presence of non-native vegetation, and overall success of the translocation efforts.

BIO-47. Yadon's Piperia: Translocation Site Maintenance. Invasive and competing vegetation will be removed from the translocation site by hand during the monitoring program.

California Red-Legged Frog

Caltrans anticipates the proposed project would qualify for Federal Endangered Species Act incidental take coverage under the Programmatic Biological Opinion for Federal Highway Administration projects with potential impacts to California red-legged frog (US Fish and Wildlife Service No. 8-8-10-F-58), which includes the Avoidance, Minimization, and Mitigation measures below, in addition to measures pertaining to jurisdictional areas mentioned above (see Section 2.3.2) and which would be implemented for either project alternative.

BIO-48. California Red-Legged Frog: Biologist Qualifications and Capture/Relocation of Frogs. Only US Fish and Wildlife Service-approved biologists will participate in activities associated with the capture and handling of California red-legged frogs. Biologists authorized under the Programmatic Biological Opinion do not need to resubmit their qualifications for subsequent projects conducted pursuant to the Programmatic Biological Opinion, unless the US Fish and Wildlife Service has revoked their approval at any time during the life of the Programmatic Biological Opinion.

BIO-49. California Red-Legged Frog: Biologist Qualifications and Initiation of Construction. Ground disturbance will not begin until written approval is received from the US Fish and Wildlife Service that the biologist(s) is qualified to conduct the work. Caltrans will request approval of the biologist(s) from the US Fish and Wildlife Service.

BIO-50. California Red-Legged Frog: Preconstruction Surveys and Capture/Relocation. A US Fish and Wildlife Service-approved biologist will survey the proposed action area no more than 48 hours before the onset of work activities. If any life stage of the California red-legged frog is found and these individuals are likely to be killed or injured by work activities, the approved biologist will be allowed sufficient time to move them from the site

before work activities begin. The US Fish and Wildlife Service-approved biologist will relocate the California red-legged frogs the shortest distance possible to a location that contains suitable habitat and will not be affected by the activities associated with the proposed action. The relocation site should be in the same drainage to the extent practicable. Caltrans will coordinate with the US Fish and Wildlife Service on the relocation site prior to the capture of any California red-legged frogs.

BIO-51. California Red-Legged Frog: Worker Awareness Training. Before any activities begin on a proposed action, a US Fish and Wildlife Service-approved biologist will conduct a training session for all construction personnel. At a minimum, the training will include a description of the California red-legged frog and its habitat, the specific measures that are being implemented to conserve the California red-legged frog for the current proposed action, and the boundaries within which the proposed action may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

BIO-52. California Red-Legged Frog: Monitor Designation; Procedure in the Event of Unanticipated Adverse Effects to Frogs. A US Fish and Wildlife Service-approved biologist will be present at the work site until California red-legged frogs have been relocated out of harm's way, workers have been instructed, and disturbance of the habitat has been completed. After this time, Caltrans will designate a person to monitor onsite compliance with minimization measures. The US Fish and Wildlife Service-approved biologist will ensure that this monitor receives the training outlined in the previous measure, as well as training in the identification of California red-legged frogs. If the monitor or the US Fish and Wildlife Service-approved biologist recommends that work be stopped because California red-legged frogs would be affected in a manner not anticipated by Caltrans and US Fish and Wildlife Service during the review of the proposed action, they will notify the resident engineer (the engineer that is directly overseeing and in command of construction activities) immediately. The resident engineer will either resolve the situation by eliminating the adverse effect immediately or by requiring that actions that are causing these effects be halted. If work is stopped, Caltrans and US Fish and Wildlife Service will be notified as soon as is reasonably possible.

BIO-53. California Red-Legged Frog: Landscape Restoration. Habitat contours will be returned to their original configuration to the greatest extent that is feasible at the end of the proposed project. This measure will be implemented in all areas disturbed by activities associated with the proposed action, unless the US Fish and Wildlife Service and Caltrans determine that it is not feasible, or modification of original contours would benefit the California red-legged frog.

BIO-54. California Red-Legged Frog: Construction Footprint Limitation; Environmentally Sensitive Areas. The number of access routes, size of staging areas, and the total area of activity will be limited to the minimum necessary to achieve the proposed action. Environmentally Sensitive Areas will be established to confine access routes and construction areas to the minimum area necessary to complete construction and minimize the impact to California red-legged frog habitat; this goal includes locating access routes and construction areas outside of wetlands and riparian areas to the maximum extent practicable.

BIO-55. California Red-Legged Frog: Construction Scheduling. Caltrans will attempt to schedule work for times of the year when impacts to the California red-legged frog would be minimal. For example, work that would affect large pools that may support breeding would be avoided, to the maximum degree practicable, during the breeding season (November through May). Isolated pools that are important to maintain California red-legged frogs through the driest portions of the year would be avoided, to the maximum degree practicable, during the late summer and early fall. Habitat assessments, surveys, and technical assistance between Caltrans and US Fish and Wildlife Service during proposed action planning will be used to assist in scheduling work activities to avoid sensitive habitats during key times of year.

BIO-56. California Red-Legged Frog: Dewatering. If a work site is to be temporarily dewatered by pumping, intakes will be completely screened with wire mesh not larger than 0.2 inch to prevent California red-legged frogs from entering the pump system. Water will be released downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any diversions or barriers to flow will be removed in a manner that would allow flow to resume with the least disturbance to the substrate. Alteration of the streambed will be minimized to the maximum extent possible; any imported material will be removed from the streambed upon completion of the proposed action.

BIO-57. California Red-Legged Frog: Water Impounding. Unless approved by the US Fish and Wildlife Service, water will not be impounded in a manner that may attract California red-legged frogs.

BIO-58. California Red-Legged Frog: Invasive Wildlife Removal. A US Fish and Wildlife Service-approved biologist will permanently remove any individuals of invasive species, such as bullfrogs, crayfish, and centrarchid fishes, from the proposed project area to the maximum extent. The US Fish and Wildlife Service-approved biologist will be responsible for ensuring these activities are in compliance with the California Fish and Game Code.

BIO-59. California Red-Legged Frog: Calculation of Permanently Disturbed Area. If Caltrans demonstrates that disturbed areas have been

restored to conditions that allow them to function as habitat for the California red-legged frog, these areas will not be included in the amount of total habitat permanently disturbed.

BIO-60. California Red-Legged Frog: Prevention of Disease Transfer. To ensure that diseases are not conveyed between work sites by the US Fish and Wildlife Service-approved biologist, the fieldwork code of practice developed by the Declining Amphibian Task Force will be followed at all times.

BIO-61. California Red-Legged Frog: Habitat Restoration. The proposed action area will be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area, using locally collected plant materials to the extent practicable. Invasive plants will be controlled to the maximum extent practicable. This measure will be implemented in all areas disturbed by activities with the proposed action, unless the US Fish and Wildlife Service and Caltrans have determined that it is not feasible or practical.

BIO-62. California Red-Legged Frog: Herbicide Use Protocols. Caltrans will not use herbicides as the primary method to control invasive plants. However, if Caltrans determines the use of herbicides is the only feasible method for controlling invasive plants at a specific proposed action area, it will implement the following additional measures to protect California red-legged frog:

a. Caltrans will not use herbicides during the breeding season for California red-legged frog.

b. Caltrans will conduct surveys for California red-legged frog immediately prior to the start of herbicide use. If found, California red-legged frog will be relocated to suitable habitat far enough from the proposed action area so that no direct contact with herbicide would occur.

c. Black locust and other invasive plants will be cut and hauled out by hand and painted with glyphosate-based products, such as Aquamaster® or Rodeo®.

d. Licensed and experienced Caltrans staff or a licensed and experienced contractor will use a hand-held sprayer for foliar application of Aquamaster® or Rodeo® where large monoculture stands occur at an individual proposed action area.

e. All precautions will be taken to ensure that no herbicide is applied to native vegetation.

f. Herbicides will not be applied on or near open water surfaces (no closer than 60 feet from open water).

g. Foliar applications of herbicide will not occur when wind speeds are in excess of three miles per hour.

h. No herbicides will be applied within 24 hours of forecasted rain.

i. Application of herbicides will be done by qualified Caltrans staff or contractors to ensure that overspray is minimized, application is made in accordance with the label recommendations, and required and reasonable safety measures are implemented. A safe dye will be added to the mixture to visually denote treated sites. Application of herbicides will be consistent with the US Environmental Protection Agency's Office of Pesticide Programs Endangered Species Protection Program county bulletins.

j. All herbicides, fuels, lubricants, and equipment will be stored, poured, or refilled at least 60 feet from riparian habitat or water bodies in a location where a spill would not drain directly toward aquatic habitat. Caltrans will ensure that a plan is in place for a prompt and effective response to accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

BIO-63. California Red-Legged Frog: Project Completion Report. Upon completion of the proposed action, Caltrans will ensure that a Project Completion Report is completed and provided to the US Fish and Wildlife Service Ventura Field Office.

BIO-64. California Red-Legged Frog: Agency Permits/Agreements. Caltrans will obtain permits and agreements from US Fish and Wildlife Service and California Department of Fish and Wildlife, as applicable to project impacts.

BIO-65. California Red-Legged Frog: Shielding of Night Lighting. Project plans and specifications will ensure that temporary construction lighting and permanent night lighting are shielded from illuminating natural habitat outside of the work limits.

BIO-66. California Red-Legged Frog: Handling of Special-Status Animals. Only biologists approved by US Fish and Wildlife Service and California Department of Fish and Wildlife will participate in activities associated with the capture, handling, and monitoring of California tiger salamander and other special-status animals.

BIO-67. California Red-Legged Frog: Species Protection and Relocation Plan. Caltrans will prepare a species protection and relocation plan for

approval by US Fish and Wildlife Service and California Department of Fish and Wildlife to comply with applicable regulatory permits.

California Tiger Salamander

Some of the Avoidance, Minimization, and Mitigation measures included in this document for California red-legged frog would also help protect California tiger salamander from potential project-related impacts. Please refer to measures BIO-64 through BIO-67 noted earlier.

South-Central California Coast Steelhead

To minimize impacts to fish and other aquatic life, the proposed construction activities within El Toro Creek would occur during the non-rainy season when stream flows are at their lowest. Due to the low volume of summer flow (if any), a water diversion system may not be necessary. Therefore, steelhead may have continual access to the low stream channel during construction activities.

Implementation of the Avoidance, Minimization, and Mitigation measures pertaining to jurisdictional areas, California red-legged frog, and California tiger salamander mentioned above as well as the additional measures listed below would serve to reduce potential project-related adverse effects from Alternative 2 (there are no anticipated adverse effects from Alternative 1) to south-central California coast steelhead and their habitat:

BIO-68. South-Central California Coast Steelhead: Biologist Qualifications. Caltrans would retain a National Marine Fisheries Service-approved biologist(s) with expertise in anadromous salmonid biology, including handling, collecting, and relocating salmonids; salmonid/habitat relationships; and biological monitoring of salmonids. To ensure that all biologists working on the project are qualified to conduct fish collections in a manner which minimizes all potential risks to steelhead, Caltrans would submit the resumes of candidate biologists to National Marine Fisheries Service for review and approval prior to conducting the work. Electrofishing, if used, would be performed by a qualified biologist and conducted according to the National Marine Fisheries Service Guidelines for Electrofishing Waters Containing Salmonids Listed under the Endangered Species Act. The biological monitor(s) would monitor placement and removal of any required stream diversions/dewatering and only the approved biologist would capture stranded steelhead and other native fish species and relocate them to suitable habitat, as appropriate. The approved biologist(s) would note the number of steelhead observed in the affected area, the number of steelhead relocated, and the date and time of the collection and relocation. Caltrans or the biologist would notify National Marine Fisheries Service one week prior to capture activities in order to provide an opportunity for National Marine Fisheries Service staff to observe the activities.

BIO-69. South-Central California Coast Steelhead: Worker Awareness Training. Prior to construction, all personnel would participate in an environmental awareness training program conducted by a qualified biologist. The program shall include a description of steelhead, steelhead critical habitat, its legal/protected status, avoidance/minimization measures to be implemented during the project, and the implications of violating federal Endangered Species Act and permit conditions.

BIO-70. South-Central California Coast Steelhead: Dewatering. If pumps are needed to temporarily dewater the site, intakes would be screened according to the National Marine Fisheries Service's Pump Intake Screen Criteria for Water Drafting to prevent steelhead and other sensitive aquatic species from entering the pump system (typically wire mesh no larger than five-millimeter). The pumps would be checked daily, at a minimum, to ensure a dry work environment and minimize adverse effects to aquatic species and habitats.

BIO-71. South-Central California Coast Steelhead: Capture, Handling, and Relocation. Steelhead would be handled with extreme care and kept in water to the maximum extent possible during rescue activities. All captured fish would be kept in cool, shaded, aerated water protected from excessive noise, jostling, or overcrowding any time they are not in the stream, and fish would not be removed from this water except when released. To avoid predation, the biologists would have at least two containers and segregate young-of-year fish from larger age-classes and other potential aquatic predators. Captured steelhead would be relocated, as soon as possible, to a suitable instream location in which suitable habitat conditions are present to allow for adequate survival of transported fish and fish already present.

BIO-72. South-Central California Coast Steelhead: Notification of Dead/Injured Steelhead to the National Marine Fisheries Service. If any salmonids are found dead or injured, the biological monitor would contact National Marine Fisheries Service immediately. The purpose of the contact is to review the activities resulting in take, determine if additional protective measures are required, and to ensure appropriate collection and transfer of salmonid mortalities and tissue samples. All salmonid mortalities would be retained.

BIO-73. South-Central California Coast Steelhead: Site Visits by (or Approved by) the National Marine Fisheries Service. Caltrans would allow any National Marine Fisheries Service employee(s) or any other person(s) designated by National Marine Fisheries Service, to accompany field personnel to visit the project site during activities.

BIO-74. South-Central California Coast Steelhead: Exclusion of Fill Material from Waterways. Fill material for cofferdams/in-stream diversions would be fully confined with the use of plastic sheeting, sandbags, or with

other non-porous containment methods, such that sediment does not come in contact with stream flow or in direct contact with the natural streambed. All loose fill material for cofferdams or access ramps would be completely removed from the channel by October 31.

BIO-75. South-Central California Coast Steelhead: Creek Restoration; Written Report to the National Marine Fisheries Service. Once construction is completed, all project-introduced material (pipe, gravel, cofferdam, etc.) would be removed, leaving the creek as it was before construction. Excess materials would be disposed of at an appropriate disposal site. Caltrans must provide a written report to National Marine Fisheries Service by January 15 of the year following construction of the project. The report must contain, at a minimum, the following information:

a. Project Construction and Fish Relocation Report -- The report(s) must include the dates construction began and was completed; a discussion of design compliance including: vegetation installation, and post-construction longitudinal profile and cross sections; a discussion of any unanticipated effects or unanticipated levels of effects on salmonids, including a description of any and all measures taken to minimize those unanticipated effects and a statement as to whether or not the unanticipated effects had any effect on Endangered Species Act-listed fish; the number of salmonids killed or injured during the project action; and photographs taken before, during, and after the activity from photo reference points.

b. Fish Relocation -- The report must include a description of the location from which fish were removed and the release site including photographs; the date and time of the relocation effort; a description of the equipment and methods used to collect, hold, and transport salmonids; if an electrofisher was used for fish collection, a copy of the logbook must be included; the number of fish relocated by species; the number of fish injured or killed by species and a brief narrative of the circumstances surrounding Endangered Species Act-listed fish injuries or mortalities; and a description of any problems which may have arisen during the relocation activities and a statement as to whether or not the activities had any unforeseen effects.

c. Post-Construction Vegetation Monitoring and Reporting – Caltrans must develop and submit for National Marine Fisheries Service's review a plan to assess the success of revegetation of the site. A draft of the revegetation monitoring plan must be submitted to National Marine Fisheries Service for review and approval prior to the beginning of the in-stream work season. Reports documenting post-project conditions of vegetation installed at the site would be prepared and submitted annually for the first five years following project completion, unless the site is documented to be performing poorly, then monitoring

requirements would be extended. Reports would document vegetation health and survivorship and percent cover, natural recruitment of native vegetation (if any), and any maintenance or replanting needs. Photographs must be included. If poor establishment is documented, the report must include recommendations to address the source of the performance problems.

Tricolored Blackbird

Tricolored blackbird is not expected to be impacted by the proposed project. Therefore, no Avoidance, Minimization, and Mitigation measures are proposed for this species.

Compensatory Mitigation Measures under CEQA for Impacts to Threatened and Endangered Species

Yadon's Piperia

BIO-76. Compensatory Mitigation: Yadon's Piperia. Compensatory mitigation would be required as a result of direct and indirect impacts to this species. Impacts to Yadon's piperia would be fully mitigated in coordination with US Fish and Wildlife Service through a Biological Opinion document. Although Caltrans has proposed measures to offset direct impacts to Yadon's piperia, final mitigation measures would be developed during coordination with the US Fish and Wildlife Service. The proposed measures are similar to those that were included in the Biological Opinion for a project at the Monterey Regional Airport (US Fish and Wildlife Service 2019).

At this time, Caltrans proposes offsetting temporary and permanent impacts to Yadon's piperia occupied habitat at a ratio of 2-to-1 (acres impacted to acres mitigated) through the translocation efforts described above. Habitat preservation and/or enhancement may also be performed as needed to fulfill the mitigation ratio. Mitigation is expected to be completed off-site, at a location within range and suitable habitat conditions for the Monterey peninsula population of Yadon's piperia, in coordination with a local land conservancy or restoration group.

California Red-legged Frog

BIO-77. Compensatory Mitigation: California Red-Legged Frog. Impacts to potential habitat for California red-legged frog would be offset by site restoration within the project limits using native plant species, at off-site mitigation areas associated with compensatory mitigation for jurisdictional areas, or by purchasing mitigation credits from a US Fish and Wildlife Service-approved conservation bank such as Sparling Ranch Conservation Bank. Compensatory mitigation would replace potential breeding, non-breeding aquatic, and upland habitat, in-kind.

California Tiger Salamander

BIO-78. Compensatory Mitigation: California Tiger Salamander. Compensatory mitigation would be required as a result of indirect and direct impacts to California tiger salamander. Any impacts to this species would need to be fully mitigated in coordination with US Fish and Wildlife Service and California Department of Fish and Wildlife through the Biological Opinion and 2081 Incidental Take Permit processes, respectively. Upon completion of the project, Caltrans would restore temporarily impacted areas on-site with appropriate native vegetation.

Caltrans also anticipates permanently preserving suitable offsite habitat as compensation for the loss of California tiger salamander upland habitat. The amount of compensatory habitat is anticipated to be a minimum of 2-to-1 for permanent impacts and 1-to-1 for temporary impacts, but final compensatory mitigation would be determined in coordination with California Department of Fish and Wildlife and US Fish and Wildlife Service during the permitting process.

Caltrans anticipates that California tiger salamander mitigation credits would be purchased from the Sparling Ranch Conservation Bank. Additionally, the inclusion of wildlife crossing improvements into this project has the potential to decrease road mortality, as well as the indirect benefit of reducing habitat fragmentation.

2.3.6 Invasive Species

Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Oder 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.” Federal Highway Administration guidance issued August 10, 1999 directs the use of the State’s invasive species list, maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

Affected Environment

Information in this section comes from the Natural Environment Study (with Preliminary Jurisdictional Delineation report) dated October 2023.

The Natural Environment Study for the project notes that invasive plant species and noxious weeds are abundant throughout the project area and in the Biological Study Area. Sixty-five terrestrial plant species observed by

Caltrans biologists in the Biological Study Area are listed as invasive in the California Invasive Plant Council's (Cal-IPC) online database. This constitutes roughly 16 percent of all vascular plants observed in the area. Eight of these species are considered "High" (of high concern) on Cal-IPC's list: hottentot fig (*Carpobrotus edulis*), cape ivy (*Delairea odorata*), English ivy (*Hedera helix*), perennial pepperweed (*Lepidium latifolium*), French broom (*Genista monspessulana*), Himalayan blackberry (*Rubus armeniacus*), foxtail brome (*Bromus rubens*), and pampas grass (*Cortaderia jubata*). Another 30 species observed in the Biological Study Area are considered "Moderate," and 27 species are considered "Limited."

Nine of these species are also on the California Department of Food and Agriculture's noxious weed list: bull thistle (*Cirsium vulgare*), cape ivy, Italian thistle (*Carduus pycnocephalus*), tocalote (*Centaurea melitensis*), perennial pepperweed, field bindweed (*Convolvulus arvensis*), French broom, Kikuyu grass (*Cenchrus clandestinus*), and pampas grass. No invasive aquatic plant species were observed in the Biological Study Area.

Non-native wildlife was observed during surveys in the Biological Study Area, but none of the observed species are considered invasive. Although not observed, the American bullfrog (*Lithobates catesbeianus*) is expected to occur in the ponds and potentially other aquatic habitats, and wild pigs (*Sus scrofa*) may occur throughout the Biological Study Area.

Environmental Consequences

In compliance with the Executive Order on Invasive Species (Executive Order 13112) and guidance from the Federal Highway Administration, the landscaping and erosion control included in the project would not use plant species listed as invasive. None of the species on the California list of invasive species is used by Caltrans for erosion control or landscaping.

All equipment and materials would be inspected for the presence of invasive species and cleaned if necessary. In areas of particular sensitivity, extra precautions would be taken if invasive species are found in or next to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance and minimization measures would be implemented to avoid the spread of invasive plants and noxious weeds.

BIO-79. Invasive Plant Species Removal. As part of the project's landscaping, highly invasive and noxious weeds would be removed and replaced by California native plants suitable for the area (and locally collected, if possible).

BIO-80. Timing of Weed Removal. Weeds designated for removal would be removed prior to any soil disturbance.

BIO-81. Certification of Weed- and Disease-Free Materials. Nursery stock and imported soil would be certified weed- and disease-free.

BIO-82. Use of Clean Equipment. Construction equipment would be inspected and cleaned if necessary to ensure it is free of soil containing seeds and and/or invasive plant material prior to entering the construction sites.

BIO-83. Invasive Aquatic Wildlife Removal. Any invasive aquatic wildlife species observed within the project limits would be permanently removed by the project's monitoring biologist(s), as feasible.

Please refer to Avoidance, Minimization, and Mitigation measures BIO-15 (Section 2.3.2) and measures BIO-45, BIO-46, BIO-47, BIO-58, BIO-61, and BIO-62 (Section 2.3.5), for additional details regarding measures to address invasive plant and animal species.

2.3.7 Cumulative Impacts

Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, altering of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as change in community character, traffic patterns, housing availability, and employment.

California Environmental Quality Act Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under the National Environmental Policy Act can be found in 40 Code of Federal Regulations Section 1508.7.

Affected Environment

This section addresses the potential for the proposed project to contribute to regional cumulative impacts to the resources listed below. Information in this section comes from the project Cumulative Impact Analysis Technical Report dated October 2023. The cumulative impact analysis was conducted in accordance with the eight-step cumulative impact analysis methodology developed by the California Department of Transportation (Caltrans) in cooperation with the Federal Highway Administration and the U.S. Environmental Protection Agency.

Based on reporting in the technical studies conducted for the project, the Cumulative Impact Analysis report identified the following resources as potentially being at risk of adverse cumulative environmental effects when considered in combination with other past, present, and reasonably foreseeable future projects in the region:

- Biological Resources
    - Jurisdictional wetlands, other waters, and riparian habitat
    - California red-legged frog
    - California tiger salamander
    - South-Central California Coast steelhead
    - Sensitive Natural Communities and Plant Species
        - Coast Live Oak Woodland and coast live oak trees
        - Monterey Pine Forest and Monterey pine trees
    - Yadon's piperia
- Visual/Aesthetic Resources
- Paleontological Resources

Biological Resources

Because a cumulative impact analysis must take into account other projects within the region, the Resource Study Area (RSA) discussed for each of the biological resources listed above is much larger than the project Biological Study Area. (For this project, the Biological Study Area is identical to the project's Area of Potential Impacts, i.e., it is limited to the immediate areas of proposed construction). The Resource Study Areas for the resources listed above are depicted in Figures 2.3.7.1 through 2.3.7.5.

Figure 2.3.7.1 – California Red-Legged Frog and Jurisdictional Wetlands, Other Waters, and Riparian Habitat Resource Study Area

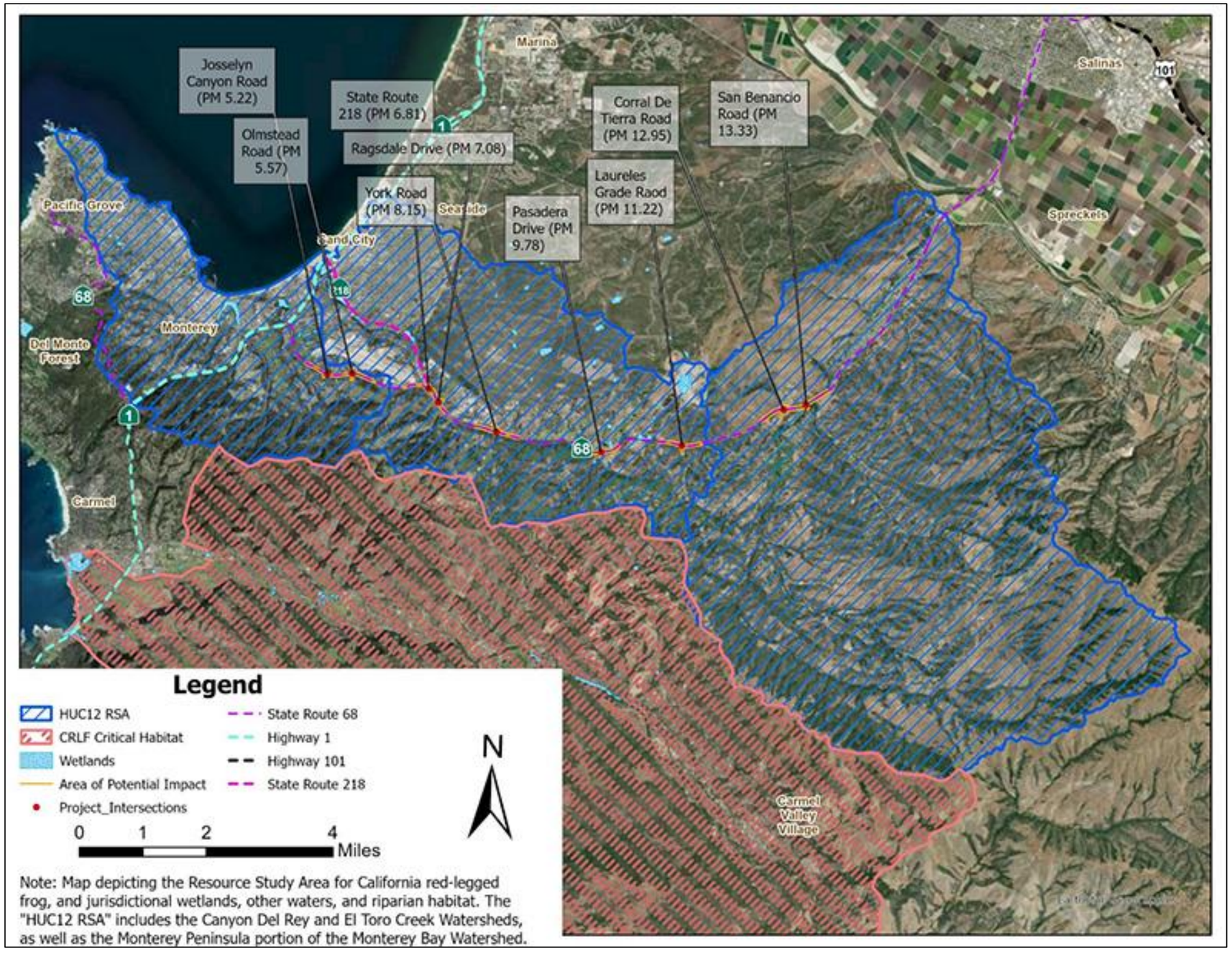


Figure 2.3.7.2 – California Tiger Salamander Resource Study Area

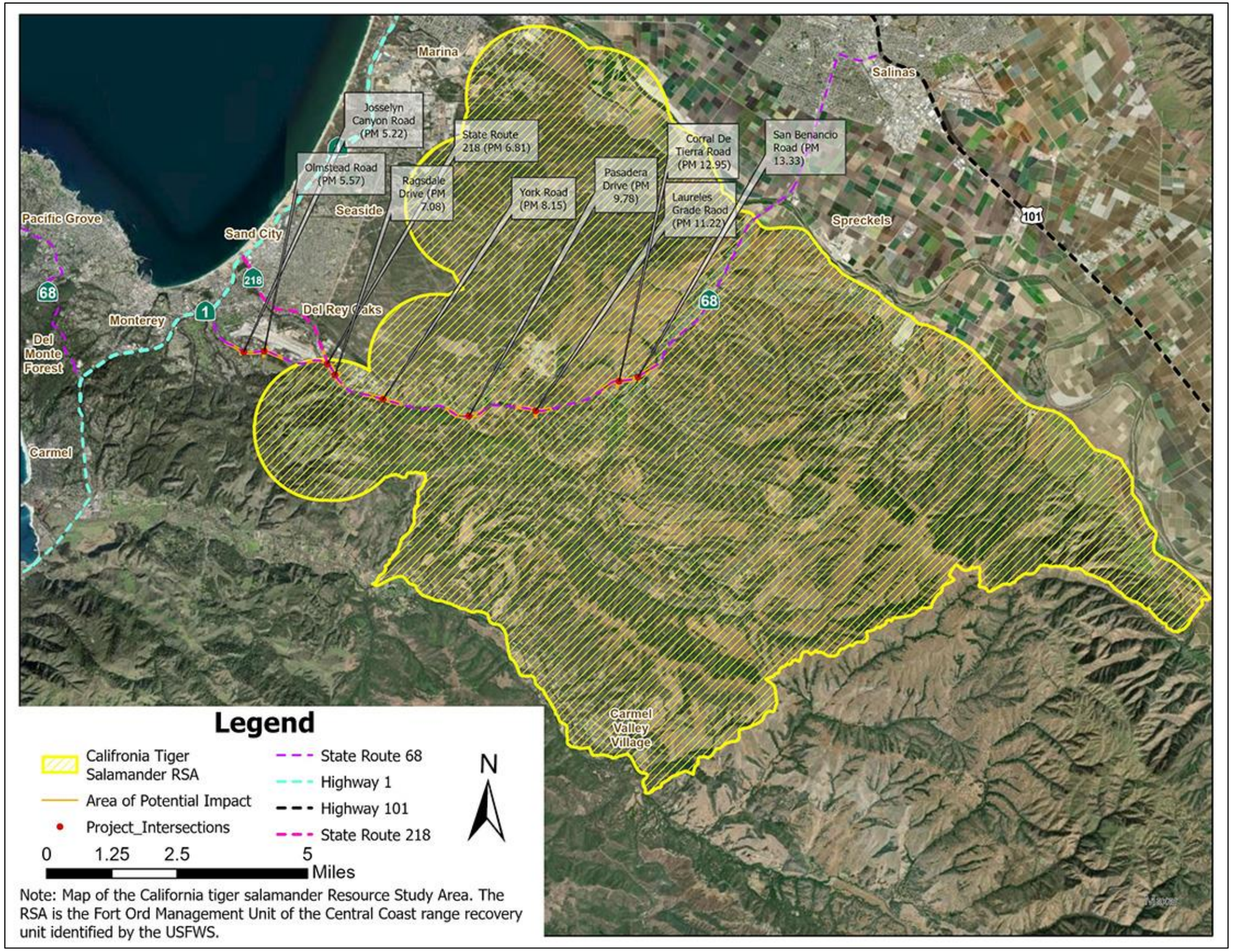


Figure 2.3.7.3 – South-Central California Coast Steelhead Resource Study Area

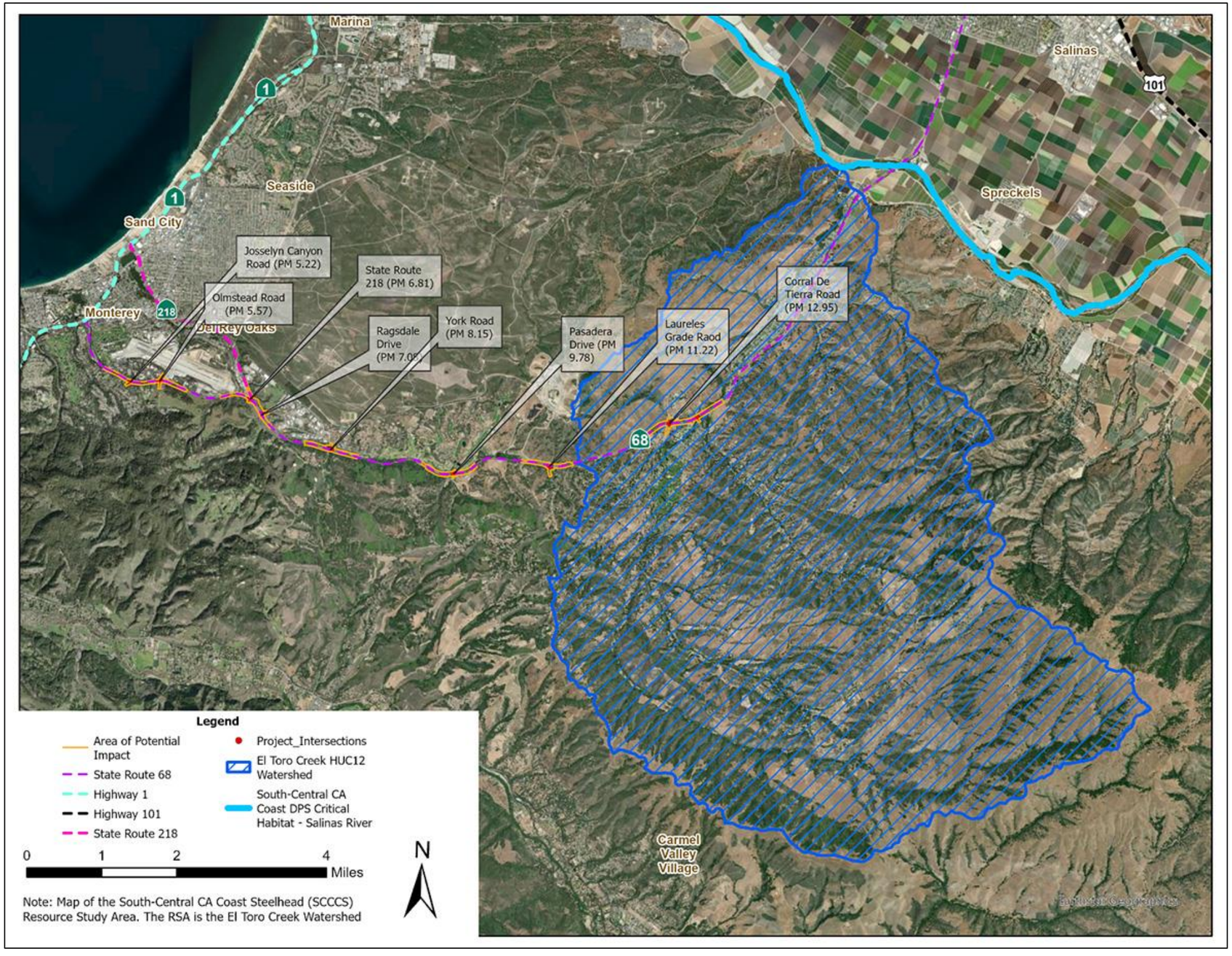


Figure 2.3.7.4 – Coast Live Oak Woodland Habitat Resource Study Area

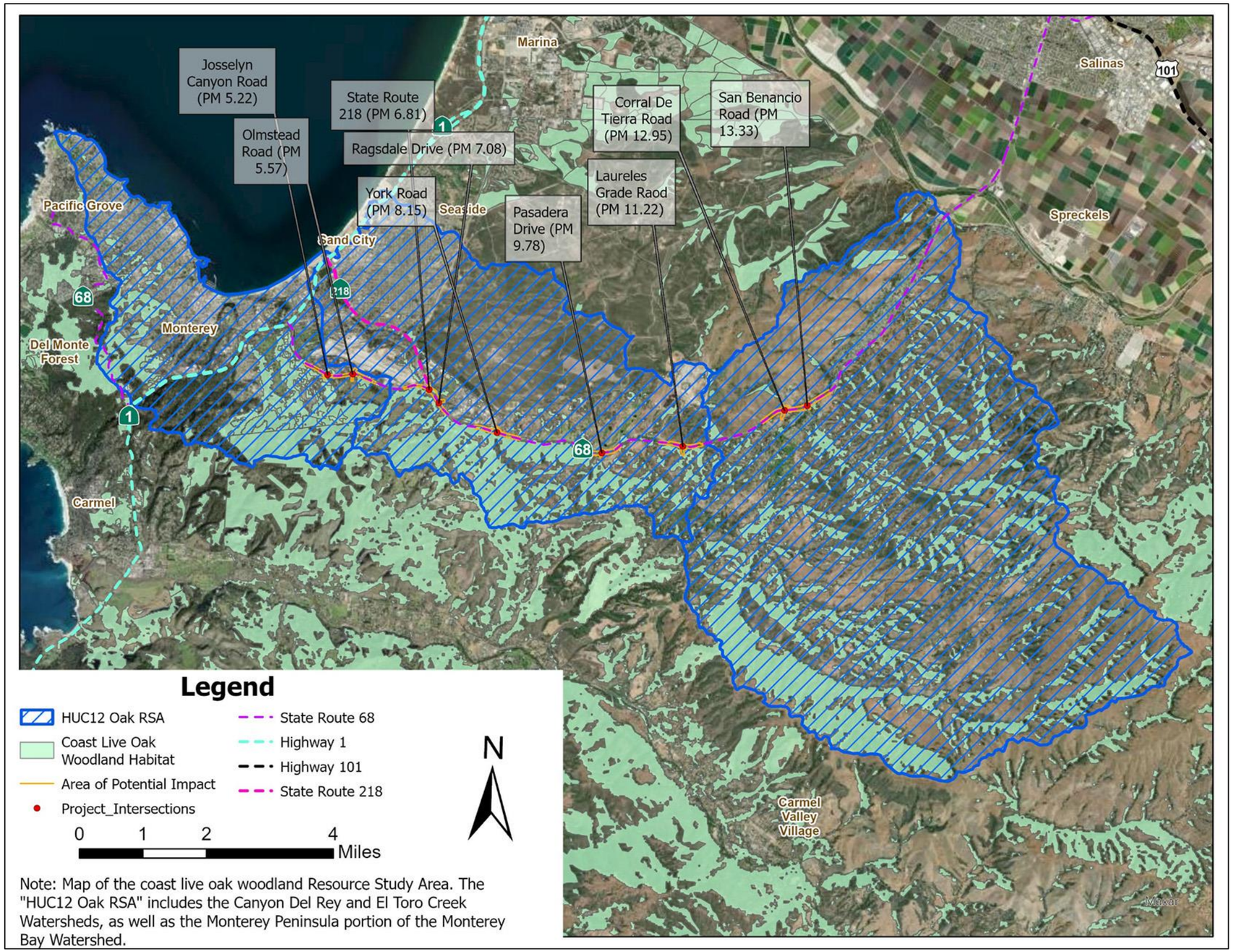
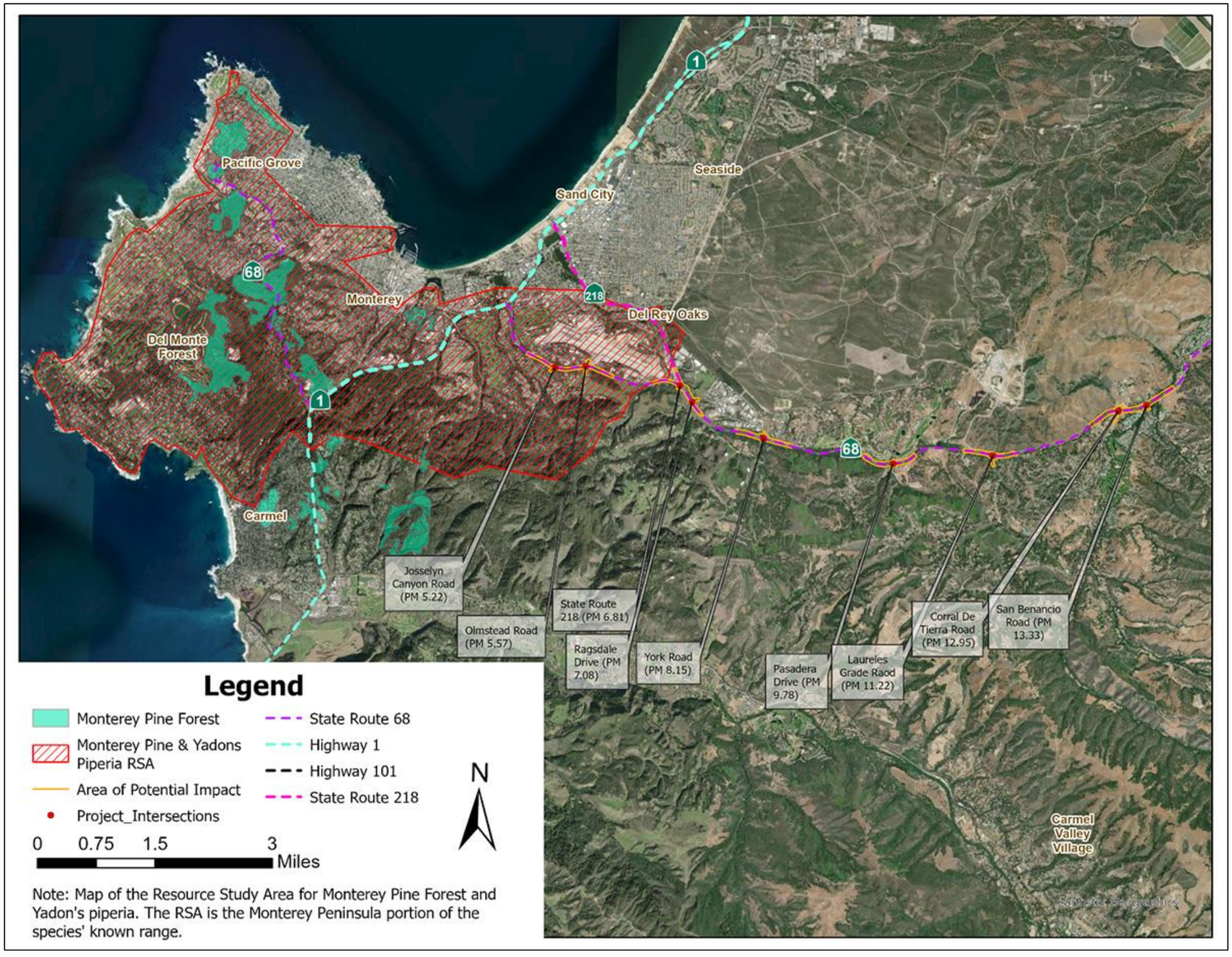


Figure 2.3.7.5 – Monterey Pine Forest Habitat and Yadon's Piperia Resource Study Area



Jurisdictional Wetlands, Other Waters, and Riparian Habitat

The Resource Study Area for jurisdictional wetlands, other waters, and riparian habitat for this project includes the Canyon del Rey and El Toro Creek watersheds, as well as the Monterey Peninsula portion of the Monterey Bay watershed (see Figure 2.3.7.1).

The Cumulative Impact Analysis noted that over the past few decades, the watersheds composing the wetlands/other waters/riparian habitat Resource Study Area for this project have undergone substantial changes due to land conversion for agricultural uses, residential development, and other facets of urbanization. As a result, there has been large-scale loss or degradation of wetlands and the ecological functions they support in the region, and many of the remaining wetlands in the area are in poor health. This situation has led to natural resources regulatory agencies requiring restoration and revegetation measures to offset any further depletion of wetlands and riparian habitats in projects within their respective jurisdictions.

California Red-Legged Frog

The project's Resource Study Area for the California red-legged frog is identical to that for jurisdictional wetlands, other waters, and riparian habitat (see Figure 2.3.7.1).

The California red-legged frog is listed as Threatened under the Federal Endangered Species Act and is a State of California Species of Special Concern. This species inhabits coastal drainages and was once found from Marin County southward to northern Baja California, but has been extirpated from 70 percent of its historic range. Main causes of this decline include overharvesting in the 19th century, habitat loss, and predation and competition from introduced species such as the American bullfrog. Monterey, San Luis Obispo, and Santa Barbara counties support the largest remaining populations within California. The Cumulative Impact Analysis found that, overall, the California red-legged frog population is considered to be in a state of poor and declining health.

California Tiger Salamander

The project Resource Study Area for the California tiger salamander is the Fort Ord Management Unit of the Central Coast Range recovery unit identified by the U.S. Fish and Wildlife Service (see Figure 2.3.7.2).

The Central California Distinct Population Segment (DPS) of this species was listed as Threatened under the Federal Endangered Species Act in 2004, and the entire species was State-listed as Threatened throughout its range by the California Department of Fish and Wildlife in 2010. The Central California Distinct Population Segment was once widely found in the valleys and foothills around the San Joaquin and Sacramento Rivers, and along the Central California Coast. Although still somewhat widely distributed, the Central California Distinct Population Segment is currently known only from scattered and limited pockets within its overall distribution range. The primary causes of decline include habitat loss and fragmentation, and encroachment of non-native predators.

The Cumulative Impact Analysis found that in the California tiger salamander Resource Study Area for this project, habitat fragmentation—including in and near the Biological Study Area—is widespread, resulting in ongoing species decline. Although the Fort Ord Management Unit contains breeding ponds and suitable upland habitat, increasing urbanization surrounding these areas has limited the ability for the species to disperse into other breeding areas.

South-Central California Coast Steelhead

This project's Resource Study Area for South-Central California Coast steelhead is the El Toro Creek watershed (see Figure 2.3.7.3).

The South-Central California Coast Distinct Population Segment of steelhead trout is listed as Threatened under the Federal Endangered Species Act and is a State of California Species of Special Concern. Once abundant in Southern and Central California coastal drainages, this population experienced rapid decline in the mid- and late 20th century due to massive post-war urbanization and water development projects that diverted or otherwise altered aquatic habitat. Periods of extended drought have brought additional challenges. Although habitat restoration and water conservation projects to benefit steelhead continue to be pursued, the South-Central California Coast steelhead population is considered to be in a state of poor health.

Sensitive Natural Communities and Plant Species

Coast Live Oak Woodland and Coast Live Oak Trees: The Resource Study Area for the Coast Live Oak Woodland natural community and coast live oak trees includes the Canyon del Rey and El Toro Creek watersheds, as well as the Monterey Peninsula portion of the Monterey Bay watershed (see Figure 2.3.7.4).

Coast Live Oak Woodland is common in coastal California and is not considered a sensitive natural community by the California Department of Fish and Wildlife. This natural community and species have been adversely impacted as the region has experienced land use changes such as agricultural expansion and urban development, fire suppression practices that have disrupted the natural fire ecology of oak woodlands, effects from grazing and overgrazing, and climate change. Sudden Oak Death disease is another concern that has emerged over the past two decades. However, the overall health of Coast Live Oak Woodland and coast live oak trees within the project Resource Study Area is considered good.

Monterey Pine Forest and Monterey Pine Trees: The project Resource Study Area for the Monterey Pine Forest natural community and Monterey pine trees is the Monterey Peninsula portion of this species' native range (see Figure 2.3.7.5).

Monterey Pine Forest and Woodland is a sensitive natural community within its natural range of three discrete locations in California (the Monterey Peninsula, Año Nuevo, and Cambria). The Monterey pine population on the Monterey Peninsula has been fragmented by extensive agricultural conversion and residential, urban, and recreational development since the 19th century, with the result that currently only one-half of the historical extent of Monterey pine forest in the area remains undeveloped. The status of

native Monterey pine stands on the Monterey Peninsula is considered stable due to preservation, regulation, and revegetation efforts but threats. including urban development, genetic contamination, pine pitch canker disease, and forest fragmentation, remain.

Yadon's Piperia

The project Resource Study Area for Yadon's piperia is identical to that for Monterey Pine Forest Habitat (see Figure 2.3.7.5).

This species is listed as Endangered under the Federal Endangered Species Act and is listed by the California Native Plant Society as California Rare Plant Rank 1B.1 (plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California). Yadon's piperia is endemic to northern Monterey County and occupies a limited range on the Monterey Peninsula, on the Prunedale Hills, and as a small, isolated population in the Big Sur area. The main cause of decline in this species is habitat loss due to development. Other concerns include herbivory, competition from invasive plant species, and possibly the effects of fire exclusion. The Cumulative Impact Analysis found that this species is in a state of declining health.

Visual/Aesthetic Resources

The proposed project's Resource Study Area for Visual Resources/Aesthetics is the area included within a 500-foot buffer around State Route 68 through the project limits, with the western terminus of the Resource Study Area at the State Route 1/State Route 68 interchange, and the eastern terminus at the River Road/Reservation Road/State Route 68 interchange.

The project intersections are located within the Monterey County-designated State Route 68 Scenic Corridor, an attractive rural/semi-rural landscape that has experienced some development over the past century but retains much of its natural beauty, which is prized by residents and visitors alike. The area is bounded by the Salinas Valley to the east and Monterey Bay to the west, while the hilly open space of the former Fort Ord Military Reservation occupies much of the area's northern edge. To the south, steep mountain ridges separate the State Route 68 corridor from Carmel Valley. The project Visual Impact Assessment report notes that the built environment is more noticeable along the western end of the State Route 68 corridor, where the proposed intersection improvements would appear more consistent with existing development.

Paleontological Resources

The project's Resource Study Area for paleontological resources includes all areas within the southern portion of the Coast Ranges Geomorphic Province where geologic units with High Paleontological Potential form outcrops (see Table 2.2.4.1). These areas of outcrop extend approximately from the San Francisco Bay south to the Santa Ynez Valley. In particular, the Monterey Formation, Santa Margarita Formation, unnamed continental deposits, and/or coastal terrace deposits have high potential for construction crews to encounter sensitive paleontological resources.

Environmental Consequences

Biological Resources

Jurisdictional Wetlands, Other Waters, and Riparian Habitat

The project has the potential to impact jurisdictional wetlands, other waters, and riparian habitat that are regulated by the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and Central Coast Regional Water Quality Control Board (see Table 2.3.1.5). The project could affect:

- Up to 2.78 acres of wetlands and 3.44 acres of other waters of the U.S. (streams) that are under the jurisdiction of the U.S. Army Corps of Engineers
- Up to 4.64 acres of stream habitat, 30.95 acres of riparian and streambank habitat, and 0.16 acre of ponds under California Department of Fish and Wildlife jurisdiction
- Central Coast Regional Water Quality Control Board jurisdiction overlaps most of the above and also includes 0.20 acre of stormwater ditches in the Biological Study Area

Temporary impacts would be associated mostly with clearing and grading for cut or fill slopes and temporary construction access; permanent impacts are where habitat would be displaced from construction for various project features, such as road widening or retaining walls.

The Cumulative Impact Analysis reported on 22 other past, present, and reasonably foreseeable future projects in the Monterey region, many of which are transportation or other public works projects. The analysis found that 18 of those projects could potentially result in adverse impacts to jurisdictional wetlands, other waters, and riparian habitat. As a result, the Cumulative Impact Analysis made the finding that the proposed project could be expected to contribute to an adverse cumulative impact to jurisdictional wetlands, other waters, and riparian habitat when added to other past, present, and reasonably foreseeable future actions in the Resource Study Area for this habitat type.

California Red-Legged Frog

The project has the potential to result in temporary and permanent impacts to California red-legged frog aquatic breeding habitat and adjacent upland riparian habitat. Short-term, direct impacts could include injury or mortality to California red-legged frogs during vegetation clearing and grading or during diversion/dewatering activities. Indirect impacts, which could be temporary or long-term, may include stress from capture and relocation (if necessary), erosion and sedimentation affecting water quality, increased habitat fragmentation due to intersection widening, or longer distances that individual frogs would have to travel to seek shelter and new breeding areas. Impacts would be greater under Alternative 2 than under Alternative 1, due to the former's larger footprint and greater encroachment into jurisdictional features and suitable habitat for this species.

The Cumulative Impact Analysis found that of the 22 other past, present, and reasonably foreseeable future projects in the Monterey region, 14 could potentially result in adverse impacts to the California red-legged frog. While the potential for considerable impacts to this species from the current project is expected to be low, the

Federal Endangered Species Act Section 7 preliminary effects determination is that the project may affect, and is likely to adversely affect, the California red-legged frog. The Cumulative Impact Analysis made the finding that the project could be expected to contribute to an adverse cumulative impact to the California red-legged frog when added to other past, present, and reasonably foreseeable future actions in the Resource Study Area for this species.

California Tiger Salamander

The project has the potential to result in temporary and permanent impacts to the California tiger salamander. Short-term, direct impacts could include injury or mortality to this species due to crushing or burrow disturbance during vegetation clearing and grading. Indirect impacts, which could be temporary or long term, may include changes in normal feeding and sheltering behavior patterns due to construction-related noise, vibration, and night lighting; stress from capture and relocation (if necessary); and inability to access suitable upland habitat due to (1) construction in temporary impact areas, prior to habitat restoration or (2) installation of temporary tiger salamander exclusionary fencing around construction areas preventing travel to seek shelter or food resources. Impacts would be greater under Alternative 2 than under Alternative 1, due to the former's larger footprint and greater encroachment into suitable habitat for this species.

The Cumulative Impact Analysis found that of the 22 other past, present, and reasonably foreseeable future projects in the Monterey region, 13 could potentially result in adverse impacts to the California tiger salamander. Although the risk of injury or mortality to this species from this project is considered low, the Federal Endangered Species Act Section 7 preliminary effects determination is that the project may affect, and is likely to adversely affect, the California tiger salamander. The Cumulative Impact Analysis made the finding that the project could be expected to contribute to an adverse cumulative impact to the California tiger salamander when added to other past, present, and reasonably foreseeable future actions in the Resource Study Area for this species.

South-Central California Coast Steelhead

Alternative 2 of the project has the potential to result in temporary and permanent impacts to South-Central California Coast steelhead. Alternative 1 would not result in impacts to this species. Under Alternative 2, widening of the State Route 68 bridge over El Toro Creek would require the installation of four new piers in the creek channel. Because stream diversion and dewatering may be necessary, depending on flow conditions during construction, the potential exists for direct impacts such as individual steelhead becoming stuck in dewatering pumps or being exposed to increased predation from foraging birds and/or mammals while confined to landlocked pools. Indirect impacts would include the potential for adverse effects to water quality downstream of the bridge construction site because of sediment deposition.

The Cumulative Impact Analysis found that of the 22 other past, present, and reasonably foreseeable future projects in the Monterey region, four of these could potentially result in adverse impacts to South-Central California Coast steelhead. Although the risk of injury or mortality to this species from this project is considered low,

the Federal Endangered Species Act Section 7 preliminary effects determination is that the project may affect, and is likely to adversely affect, South-Central California Coast steelhead. The Cumulative Impact Analysis made the finding that the project could be expected to contribute to an adverse cumulative impact to South-Central California Coast steelhead when added to other past, present, and reasonably foreseeable future actions in the Resource Study Area for this species.

Sensitive Natural Communities and Plant Species

Coast Live Oak Woodland and Coast Live Oak Trees: The project has the potential to result in temporary and permanent impacts to coast live oak woodlands and coast live oak trees under both Build Alternatives. Short-term, direct impacts could include clearing and grading for cut/fill slopes, and preparation and use of temporary construction access areas. Permanent, direct impacts would include habitat displacement from the construction of project features, such as retaining walls, and road widening activity. Potential temporary or permanent indirect impacts could include root compaction, erosion, introduction or spread of pathogens or invasive plant species, and post-construction road maintenance actions.

The potential for disturbance of oaks and oak woodland is higher under Alternative 2 than under Alternative 1 because of the former's larger construction footprint. According to the Natural Environment Study, Alternative 1 may result in impacts to approximately 1,100 to 1,200 coast live oaks (900 temporary and 300 permanent impacts), and Alternative 2 could result in impacts to approximately 2,600 to 2,700 coast live oaks (2,200 temporary and 500 permanent impacts).

The Cumulative Impact Analysis found that of the 22 other past, present, and reasonably foreseeable future projects in the Monterey region, 17 could potentially result in adverse impacts to coast live oak woodlands and coast live oak trees. Although the project would entail loss of oak trees in oak woodland habitats, the project is not expected to substantially degrade the quality or quantity of coast live oak woodland habitat in the Resource Study Area from a biological perspective, due to the abundance and overall good health of this species and natural community in the ecoregion. Nevertheless, the Cumulative Impact Analysis made the finding that the project could potentially contribute to an adverse cumulative impact on coast live oak woodlands and coast live oak trees when added to other past, present, and reasonably foreseeable future actions in the oak woodland Resource Study Area.

Monterey Pine Forest and Monterey Pine Trees: The project has the potential to result in temporary and permanent impacts to the Monterey Pine Forest natural community and Monterey pine trees under Both Build Alternatives. Short-term, direct impacts could include clearing and grading for cut/fill slopes, and preparation and use of temporary construction access areas. Permanent, direct impacts would include habitat displacement from the construction of project features, such as retaining walls, and road widening activity. Potential temporary or permanent indirect impacts could include root compaction, erosion, introduction or spread of pathogens or invasive plant species, and post-construction road maintenance actions.

The potential for disturbance of Monterey Pine Forest and Monterey pine trees is higher under Alternative 2 than under Alternative 1 because of the former's larger construction footprint. According to the Natural Environment Study, Alternative 1 could result in impacts to approximately 300 to 400 Monterey pines (200 temporary and 200 permanent impacts), and Alternative 2 could result in impacts to approximately 800 to 900 Monterey pines (650 temporary and 250 permanent impacts).

The Cumulative Impact Analysis found that of the 22 other past, present, and reasonably foreseeable future projects in the Monterey region, nine of these could potentially result in adverse impacts to the Monterey Pine Forest natural community and Monterey pine trees. Although the anticipated impacts from the project are located adjacent to an existing highway corridor in existing, semi-rural developed areas, and therefore have already been impacted by road, commercial, and residential development, the Cumulative Impact Analysis made the finding that the project could potentially contribute to an adverse cumulative impact to Monterey Pine Forest and Monterey pine trees when added to other past, present, and reasonably foreseeable future actions in the Monterey Pine Forest and Monterey pine tree Resource Study Area.

Yadon's Piperia

The project has the potential to result in temporary, but not permanent, impacts to Yadon's piperia plants under both Build Alternatives. Both Build Alternatives could cause permanent and temporary impacts to potentially suitable habitat for this species, although no designated critical habitat would be affected because none exists within the Biological Study Area.

The potential for adverse impacts to this species and its habitat is higher under Alternative 2 than under Alternative 1, due to the former's larger footprint and greater disturbance of potentially suitable habitat. Alternative 1 may result in up to 0.136 acre of temporary impacts and no permanent impacts to suitable Yadon's piperia habitat, while Alternative 2 could result in up to 1.987 acres of temporary impacts and 0.247 acre of permanent impacts to potentially suitable habitat.

Short-term, direct impacts could include clearing and grading for cut/fill slopes, and preparation and use of temporary construction access areas. Permanent, direct impacts would include habitat displacement from the construction of project features, such as retaining walls, and road widening activity. Potential temporary or permanent indirect impacts could include root compaction, erosion, introduction of pathogens or invasive plant species, and post-construction road maintenance actions.

The Cumulative Impact Analysis found that of the 22 other past, present, and reasonably foreseeable future projects in the Monterey region, five of these could potentially result in adverse impacts to this species. Although the risk of injury or mortality to this species from this project is considered low, the Federal Endangered Species Act Section 7 preliminary effects determination is that the project may affect, and is likely to adversely affect, Yadon's piperia. The Cumulative Impact Analysis made the finding that the project could contribute to an adverse cumulative impact to Yadon's

piperia when added to other past, present, and reasonably foreseeable future actions in the Resource Study Area for this species.

Visual/Aesthetic Resources

The project Visual Impact Assessment report states that either of the proposed project alternatives would alter the existing rural character of the project area through roadway expansion, removal of trees and vegetation, and the addition of retaining walls, signage, fencing, guardrails, and barriers. Visual impacts would be amplified by the large scale of the project, resulting in the most concentrated assembly of highway structures in the region. The potential for project-related effects to visual and aesthetic resources is higher under Alternative 2 than under Alternative 1 due to the former's larger footprint and the greater amount of ground disturbance and vegetation removal that would be required.

The Cumulative Impact Analysis found that of the 22 other past, present and reasonably foreseeable future projects in the Resource Study Area, nine of these could potentially result in adverse impacts to visual/aesthetic resources. The analysis report made the finding that the proposed project is anticipated to contribute to an adverse cumulative impact to visual/aesthetic resources in the designated Resource Study Area.

Paleontological Resources

The proposed project has the potential to result in adverse impacts to paleontological resources under both build alternatives. Project-related activities including construction of retaining walls, landform grading, trenching, and possibly large-diameter drilling could adversely affect paleontological resources, if present, by disturbing sediments with High Paleontological Potential within the project limits. Additionally, excavation of fossils during construction could expose these resources to degradation or destruction through natural processes such as erosion and weathering, or through inadvertent human damage or vandalism. The potential impacts are higher under Alternative 2 than under Alternative 1, due to the former's larger footprint and greater disturbed soil area.

The Cumulative Impact Analysis found that of the 22 other past, present and reasonably foreseeable future projects in the Resource Study Area, five of these could potentially result in adverse impacts to paleontological resources. The analysis made the finding that the proposed project would be expected to contribute to an adverse cumulative impact to paleontological resources in the designated Resource Study Area.

Avoidance, Minimization, and/or Mitigation Measures

Biological Resources

Jurisdictional Wetlands, Other Waters, and Riparian Habitat

The project would use design features, standard measures, and best management practices to reduce potential impacts to jurisdictional wetlands, other waters, and riparian habitat. In addition, Avoidance, Minimization, and Mitigation Measures (including compensatory mitigation under CEQA) would be implemented to further reduce long-term impacts to jurisdictional features (see Section 2.3.2 for more information and listing of proposed measures).

The Cumulative Impact Analysis recommends that agencies with regulatory authority over jurisdictional wetlands, other waters, and riparian habitat should support efforts to restore and enhance these resources within the project Resource Study Area for this habitat type.

California Red-Legged Frog

The project would use design features, standard measures, and best management practices to reduce potential impacts to the California red-legged frog. In addition, Avoidance, Minimization, and Mitigation Measures (including compensatory mitigation under CEQA) would be implemented to further reduce long-term impacts to this species (see Section 2.3.5 for more information and listing of proposed measures).

The Cumulative Impact Analysis recommends that agencies with regulatory authority over the California red-legged frog, including the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife, should support efforts to restore and enhance jurisdictional wetlands, other waters, and riparian habitat within the Resource Study Area for this habitat type, as these activities would be expected to improve habitat for the California red-legged frog.

California Tiger Salamander

The project would use design features, standard measures, and best management practices to reduce potential impacts to the California tiger salamander. In addition, Avoidance, Minimization, and Mitigation Measures (including compensatory mitigation under CEQA) would be implemented to further reduce long-term impacts to this species (see Section 2.3.5 for more information and listing of proposed measures).

The Cumulative Impact Analysis recommends that agencies with regulatory authority over the California tiger salamander, including the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife, should support efforts to restore and enhance jurisdictional wetlands, other waters, and riparian habitat within the Resource Study Area for this habitat type, as these activities would be expected to improve habitat for the California tiger salamander.

South-Central California Coast Steelhead

The project would use design features, standard measures, and best management practices to reduce potential impacts to South-Central California Coast steelhead. In addition, Avoidance, Minimization, and Mitigation Measures (including compensatory mitigation) would be implemented to further reduce long-term impacts to this species (see Section 2.3.5 for more information and listing of proposed measures).

The National Marine Fisheries Service has regulatory authority over South-Central California Coast steelhead. The Cumulative Impact Analysis recommends that this agency pursue development and implementation of more robust recovery plans, fishing regulations, and habitat restoration and enhancement efforts to protect and restore South-Central California Coast steelhead. Also, the National Marine Fisheries Service

may consider improving education and outreach efforts to promote conservation, as well as improving upon monitoring and research tactics to better inform conservation efforts.

Sensitive Natural Communities and Plant Species

Coast Live Oak Woodland and Coast Live Oak Trees: The project would use design features, standard measures, and best management practices to reduce potential impacts to Coast Live Oak Woodland and coast live oak trees. Also, Avoidance, Minimization, and Mitigation Measures (including compensatory mitigation under CEQA) would be implemented to further reduce long-term impacts to these resources (see Section 2.3.1 for more information and listing of proposed measures).

The Cumulative Impact Analysis notes that the California Department of Fish and Wildlife, the County of Monterey, and city planning departments have regulatory authority over coast live oak woodland within the Resource Study Area. The analysis recommends that these agencies work toward mitigating overall cumulative impacts to coast live oak woodland and trees by prioritizing preservation and planting of coast live oaks via building permits, development approvals, and project permitting, as well as by encouraging larger-scale, sustainable ecosystem mitigation efforts.

Monterey Pine Forest and Monterey Pine Trees: The project would use design features, standard measures, and best management practices to reduce potential impacts to Monterey Pine Forest and Monterey pine trees. Also, Avoidance, Minimization, and Mitigation Measures (including compensatory mitigation under CEQA) would be implemented to further reduce long-term impacts to these resources (see Section 2.3.1 for more information and listing of proposed measures).

The Cumulative Impact Analysis notes that the California Department of Fish and Wildlife, the County of Monterey, and city planning departments have regulatory authority over Monterey Pine Forest and Monterey pine trees within the Resource Study Area. Recommendations for agencies to work toward mitigating overall cumulative impacts to these resources include prioritizing preservation and planting of Monterey pines via building permits, development approvals, and project permitting.

Yadon's Piperia

The project would use design features, standard measures, and best management practices to reduce potential impacts to Yadon's piperia. Also, Avoidance, Minimization, and Mitigation Measures (including compensatory mitigation under CEQA) would be implemented to further reduce long-term impacts to these resources (see Section 2.3.5 for more information and listing of proposed measures).

The Cumulative Impact Analysis notes that the U.S. Fish and Wildlife Service has regulatory authority over Yadon's piperia, as it is a federally designated Endangered species. The analysis recommends that to mitigate overall cumulative impacts on this species, the U.S. Fish and Wildlife Service should continue efforts to address habitat restoration and protection, manage invasive species, and encourage responsible urban planning to minimize habitat loss. The agency should also continue to monitor and research the species and collaborate with other agencies and stakeholders to better

inform conservation efforts. Finally, continued enforcement of mitigation measures and regular assessments of conservation efforts are crucial for effective protection of Yadon's piperia.

Visual/Aesthetic Resources

While design elements, standard specifications, and Avoidance, Minimization, and Mitigation Measures (including compensatory mitigation under CEQA) in the proposed project would partially alleviate the degradation of scenic views, the overall result of project implementation would be an increase in urban character and reduction of visual quality along the State Route 68 corridor and within the designated Resource Study Area. The Cumulative Impact Analysis report concludes that based on presently available information the contribution of the proposed project to the cumulative visual impact may be, and would likely be, considerable.

Numerous measures are proposed to decrease urbanizing aesthetic effects that would result from the project (please see Section 2.1.10). These include preserving existing vegetation and revegetating disturbed areas with native tree and plant species, grading to blend cut and fill slopes with the natural topography, darkening or coloring drainage components to reduce their visibility, painting visible electrical and traffic boxes to reduce reflectivity, and more. Overhead utility lines would be placed underground and light fixtures would be shielded to provide safe, but not excessive, illumination.

The Cumulative Impact Analysis report provides recommendations for the relevant regulatory agencies (Monterey County, local city planning departments, and the California Department of Transportation) to mitigate overall cumulative impacts to visual and aesthetic resources in the Resource Study Area. These include prioritizing tree preservation and replacement planting, applying aesthetic treatments to hardscape elements, and enacting policies to protect, preserve, and enhance the character of visual resources.

Paleontological Resources

The proposed project would use design features, standard measures, and best management practices to reduce potential impacts to paleontological resources. In addition, Avoidance, Minimization, and Mitigation measures would be implemented to further reduce long-term impacts to these resources. For instance, qualified paleontological monitors would oversee ground-disturbing activities in high-paleontological-potential areas, and procedures for fossil recovery, preparation, identification, and curation would be specified. Please refer to Section 2.2.4 for additional information.

Despite the finding in the Cumulative Impact Analysis report that the proposed project would contribute to an existing, adverse cumulative impact, the report's conclusion is that the potential impacts would be cumulatively considerable within the context of other current and reasonably foreseeable future projects in the Resource Study Area. This is because, as stated in the project Paleontological Identification Report/Paleontological Evaluation Report, paleontological resources on the Central Coast are not currently experiencing a cumulative effect in this regard. Exposures of paleontologically sensitive

strata in this region include large swaths of rural and mountainous terrain that are unlikely to be disturbed by human activities and would only be minimally affected by natural processes, and the relatively small percentage of paleontologically sensitive strata in the area that may be disturbed by current or future development would be offset by mitigation strategies required for regulatory compliance.

Because the project would not require coordination or permits from resource agencies as relates to paleontological resources, the Cumulative Impact Analysis report does not contain any recommendations for regulatory authorities.

Chapter 3 California Environmental Quality Act Evaluation

3.1 Determining Significance Under CEQA

The proposed project is a joint project by Caltrans and the Federal Highway Administration and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The Federal Highway Administration's responsibility for environmental review, consultation, and any other actions required by applicable federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 U.S. Code Section 327 (23 USC 327) and the Memorandum of Understanding dated May 27, 2022, and executed by the Federal Highway Administration and Caltrans. Caltrans is the lead agency under CEQA and NEPA.

One of the main differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an Environmental Impact Statement (EIS), or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgement of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require Caltrans to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an Environmental Impact Report (EIR) must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

3.2 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant with Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in

connection with a project will indicate that there are no impacts to a particular resource. A No Impact answer reflects this determination. The words “significant” and “significance” used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 to provide you with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

3.2.1 Aesthetics

CEQA Significance Determinations for Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista?

Significant and Unavoidable Impact—Scenic vistas in the vicinity of State Route 68 include views of the hills, agriculture and open space, and gentle topography with natural vegetation patterns. The elements in the intersection modifications proposed with both of the project Build Alternatives would cause a moderate reduction in the remaining availability of access to views of the surrounding open spaces and naturally vegetated hillsides. Because the existing visual resources in the project area are of high quality, and the community places a high value on these visual resources, the moderate reduction in views would be a substantial visual impact. Avoidance, Minimization, and Mitigation Measures prescribed in Section 2.1.10. including but not limited to landscape vegetation, and darkening, staining and/or texturing of concrete barriers, guardrail, retaining walls, and other design elements where feasible, would improve visual access to scenic resources. However, the overall visual impact would remain significant and adverse.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Significant and Unavoidable Impact—State Route 68 is an Officially Designated State Scenic Highway from post mile L4.3 (which is within one-half mile east of the interchange of State Route 1/State Route 68) to post mile R17.8 (near Reservation Road and the Salinas River). West of the project limits, State Route 68 is designated an Eligible Scenic State Highway from post mile 0.0 (the westerly end of State Route 68 near the Pacific Ocean in the city of Monterey) to L4.26 near State Route 1. Scenic resources associated

with the viewing experience throughout the project area include expansive views, oak dotted hillsides, open space landscapes, and native vegetation patterns.

The project Build Alternatives would both require removal of trees and other vegetation at various locations in and around the project intersections to construct either roundabouts or expanded signalized intersections and affiliated elements such as the pedestrian-bicycle shared pathways, splitter islands, replace drainage systems along the highway and other features. Alternative 2 Signals and Lane Channelization would require more vegetation removal than Alternative 1 Roundabouts, but both alternatives would result in significant adverse effects to scenic resources as seen from the state scenic highway. No historic buildings would be directly impacted by the Build Alternatives because preliminary designs avoided the property that contains the historic Tarpy's Roadhouse/Ryan House/Rancho Saucito resources.

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

Significant and Unavoidable Impact—The existing visual character of the project area and vicinity is based mostly on its rural and undeveloped landscapes, generally well-vegetated roadsides, and varying topography (gentle rolling hills to flatter). The project would change the visual character through widening of the highway prism, increasing signage and signals or roundabouts, barriers, guardrail, newly disturbed cut slopes and other landform alteration profiles, construction of additional retaining walls, and creation of a more open spatial character. In addition, construction of the Build Alternatives would both require removal of vegetation and trees in the project intersection areas, which would further contribute to the change in visual character.

The project would add new landscaping after construction along with aesthetic treatments on some of the hardscape features, such as retaining walls, concrete barriers, staining or darkening of metallic elements, and other aesthetic applications to be determined in the final design phase, which would reduce the level of adverse impacts to visual character to some extent. However, given the high viewer sensitivity, the inherent visual change associated with an increase in visual scale and additional hardscape elements in the project corridor at multiple intersections would result in a noticeable and substantial degradation of visual character along the State Route 68 corridor.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant—Nighttime lighting conditions vary through the project corridor, from somewhat heavily lit areas of commercial development to rural areas with little night lighting. Overall, nighttime lighting and glare levels in the project vicinity are typical for that of rural areas. Most existing light and glare within the project limits from west of Josselyn Canyon Road to just east of San Benancio Road are generated by commercial

developments, such as at State Route 218 (Canyon Del Rey Boulevard)/State Route 68 and around Corral de Tierra Road at State Route 68, and from signalized intersections. Vehicle headlamps, lighting at cross-streets to State Route 68, and building lighting also contribute to the existing nighttime light setting.

Both Build Alternatives would include on average one additional high-efficiency LED (light emitting diode) luminaire at most if not all of the nine project intersections to combine with the existing luminaires (with replacement LEDs as necessary) to provide the required amount of illumination at night. Both Build Alternatives would include cobra-style lighting at the intersections. Alternative 1 would create less light source levels than Alternative 2 since the roundabouts design would remove the existing signal lamps; Alternative 2 with the expanded intersection lanes would increase the signal lamps at the project intersections.

The existing lighting at the project intersections would not be an unexpected visual element even in a rural setting. A measure to minimize potential lighting impacts would be implemented with either Build Alternative, including methods to shield the light angles to reduce effects on nighttime views. The lighting proposed by either Build Alternative would result in additional light and glare, but this visual change would not be substantial.

3.2.2 Agriculture and Forest Resources

CEQA Significance Determinations for Agriculture and Forest Resources

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 the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

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?

No Impact—There is no farmland within the project's Area of Potential Impact.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact—The project would not affect any land that is agriculturally zoned or covered by a Williamson Act contract.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code

Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

Less Than Significant Impact—There is no land within the project limits that is zoned timberland, or timberland zoned Timber Production, as defined in the referenced government code sections, so there would be no conflict with existing zoning or rezoning related to those land uses.

The project limits contain land that could be considered "forest land" under Public Resources Code Section 12220(g), where "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."

The forest land within the project's Area of Potential Impact consists of small and/or narrow treed areas in various locations adjacent to State Route 68, a busy highway. These treed areas experience high levels of traffic-generated noise and air pollution daily and are therefore unlikely to provide high-quality forest resources "under natural conditions" as listed under Public Resources Code Section 12220(g), particularly in the context of the more extensive forest and woodland areas that occur away from the highway throughout the greater State Route 68 corridor area. Therefore, the project would not be expected to conflict with existing zoning for, or cause rezoning of, forest land that exists "under natural conditions" in the Area of Potential Impact.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Less Than Significant with Mitigation Incorporated—As discussed in Section 2.3.1, within the project limits, up to 4,000 trees may be impacted (removed or otherwise adversely affected) under Alternative 1, and up to 5,500 trees may be impacted under Alternative 2. These totals would include approximately 1,100 to 1,200 coast live oaks and 300 to 400 Monterey pines under Alternative 1, and approximately 2,600 to 2,700 coast live oaks and 800 to 900 Monterey pines under Alternative 2. The balance would consist of other tree species.

In total, the project could result in up to 22.5 acres of temporary impacts and up to 5.5 acres of permanent impacts to forest land (coast live oak woodland/forest and Monterey pine forest/woodland) under Alternative 2 (see Table 2.3.1.5). Impact acreages would be smaller under Alternative 1, with approximately 8.6 acres of temporary impacts and 1.72 acres of permanent impacts to forest land. Seventy to 80 percent of these impacts would be considered temporary (where replanting/habitat restoration would be implemented), and the remainder would be permanent (for example, areas of new impervious surface). Depending on final project design, the temporary impact areas may require less tree removal than stated above.

The Avoidance, Minimization, and Mitigation Measures listed in Section 2.3.1 would reduce project-related impacts to forest land. The project would be designed and

constructed to avoid as many coast live oaks and Monterey pines as possible. Wherever feasible, trees would be trimmed or pruned instead of removed. Post-construction, temporary impact areas would be restored with an assemblage of locally appropriate native plant species. This would include the replanting of coast live oaks and Monterey pines at a 1-to-1 ratio (acreage) for temporary impacts and a 3-to-1 ratio (acreage) for permanent impacts. This mitigation would be implemented onsite if possible; otherwise, Caltrans would coordinate with a local land conservancy or restoration group to conduct the plantings offsite.

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?

No Impact—The project limits do not contain any farmland. No other project-related changes in the existing environment that could result in conversion of forest land to different uses are anticipated.

3.2.3 Air Quality

CEQA Significance Determinations for Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact—The project sits in the North Central Coast Air Basin, and is within the jurisdiction of the Monterey Bay Air Resources District and the California Air Resources Board. The project is not a capacity-increasing transportation project. It would have no impact on traffic volumes and would generate a less than significant amount of air pollutants during construction. Therefore, the project would not conflict with the Monterey Bay Air Resources District's state air quality attainment goals as stated in the State Implementation Plan (the 2012-2015 Air Quality Management Plan). See Section 2.2.6 of this document for more information.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact—The North Central Coast Air Basin is in attainment for all criteria pollutants under National Ambient Air Quality Standards but is in non-attainment status for suspended particulate matter less than 10 microns in diameter (PM10) under California Ambient Air Quality Standards. However, the project would not increase operational emissions of PM10 or any other air pollutant, and is expected to produce less than significant amounts of all air pollutants during the construction phase.

Caltrans Standard Specifications would be implemented to avoid or minimize all air pollutant emissions to the extent feasible.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact—Under either Build Alternative, the project would consist of improvements to traffic flow at congested intersections and would not increase traffic volume on State Route 68. As a result, the project would not cause any long-term increase in sensitive receptor exposure to traffic-generated air pollutants. While project construction would result in a temporary increase in air pollutant emissions, as noted above Caltrans Standard Specifications would be used to avoid or minimize these emissions.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact—As noted above, the project would not lead to any long-term increase in traffic-generated air pollutants, and construction-related emissions would be avoided and/or minimized to the extent feasible through the implementation of Caltrans Standard Specifications. Also, several (if not most) of the project intersections are in areas that do not contain substantial numbers of people in the immediate vicinity, further reducing the chances of project-related emissions adversely affecting residents, commuters, or visitors.

3.2.4 Biological Resources

CEQA Significance Determinations for Biological Resources

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated—Sections 2.3.3, 2.3.4, and 2.3.5 of the Draft Environmental Impact Report/Environmental Assessment discuss potential project impacts to the following special-status or threatened/endangered plant and animal species:

- Section 2.3.3, special-status plant species (non-listed): Special-status manzanita species, Congdon's tarplant, Lewis' clarkia, Monterey pine.
- Section 2.3.4, special-status animal species (non-listed): Special-status and other nesting birds, monarch butterfly, Crotch bumble bee, roosting bats, Monterey dusky-footed woodrat and American badger, Northern California legless lizard, western pond turtle, and two-striped garter snake.

- Section 2.3.5, State- or federally-listed threatened or endangered species: Yadon's piperia, California red-legged frog, California tiger salamander, South-Central California Coast steelhead, tricolored blackbird.

Under each Build Alternative, design features, best management practices, standard measures, and Avoidance, Minimization, and Mitigation Measures would be implemented to reduce project-related impacts to these species to the extent feasible. Examples of these actions and measures include, but are not limited to:

- Acquisition of all required permits and agreements from regulatory agencies prior to initiation of construction
- Avoidance of construction in sensitive areas and/or during sensitive times of the year (e.g., nesting season)
- Trimming/pruning vegetation instead of removal, where feasible
- Pre-construction surveys for special-status species
- Worker awareness training
- Establishment and fencing-off of Environmentally Sensitive Areas to avoid equipment-related or foot traffic-related damage
- Post-construction replanting/habitat restoration using locally appropriate/locally sourced native plant species, including replacement of removed coast live oak and Monterey pine trees (compensatory mitigation under CEQA) at a 1-to-1 (acreage) ratio for temporary impacts and a 3-to-1 (acreage) ratio for permanent impacts
- Translocation of Yadon's piperia seeds/bulbs from temporary construction impact areas into nearby, suitable non-affected areas using topsoil and duff collected from the impacted areas
- Oversight of construction activities by a U.S. Fish and Wildlife Service-approved and National Marine Fisheries Service-approved biologist(s); only this biologist(s) would be authorized to capture, handle, and relocate threatened/endangered species, if needed, prior to or during construction
- Removal of invasive plant and animal species, as feasible, from project work areas by the approved biologist(s)
- Installation of temporary exclusionary measures to keep special-status/threatened or endangered animal species out of construction areas

This is only a partial list of actions and measures that would be applied to protect special-status/threatened or endangered plant and animal species during implementation of the project. See Sections 2.3.3, 2.3.4, and 2.3.5 of the Draft Environmental Impact Report/Environmental Assessment for more discussion regarding this topic, and see Table 1-5 in Section 1.4.1 for a listing of standard measures and best management practices intended to reduce project-related impacts.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated—Sections 2.3.1, Natural Communities, and 2.3.2, Wetlands and Other Waters, of the Draft Environmental Impact Report/Environmental Assessment discuss potential project impacts to riparian habitat and other sensitive natural communities in the project vicinity.

Under each Build Alternative, design features, best management practices, standard measures, and Avoidance, Minimization, and Mitigation Measures would be implemented to reduce project-related impacts to these natural communities/habitats to the extent feasible. Examples of these actions and measures include, but are not limited to:

- Avoidance of construction in sensitive areas and/or during sensitive times of the year (e.g., nesting season)
- Trimming/pruning vegetation instead of removal, where feasible
- Limiting clearing and grubbing in temporary impact areas to the smallest footprint possible, to allow for the best chances of native vegetation root preservation and resprouting post-construction
- Establishment and fencing-off of Environmentally Sensitive Areas to avoid equipment-related or foot traffic-related damage
- Preparation of a Mitigation and Monitoring Plan to offset impacts to natural vegetation and protected habitats, including aquatic resources
- Post-construction replanting/habitat restoration using locally appropriate/locally sourced native plant species, including replacement of removed coast live oak and Monterey pine trees (compensatory mitigation under CEQA) at a 1-to-1 (acreage) ratio for temporary impacts and a 3-to-1 (acreage) ratio for permanent impacts.

This is only a partial list of actions and measures that would be applied for natural communities and habitats during implementation of the project. See Sections 2.3.1 and 2.3.2 of the Draft Environmental Impact Report/Environmental Assessment for more discussion regarding this topic, and see Table 1-5 in Section 1.4.1 for a listing of standard measures and best management practices intended to reduce project-related impacts.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant with Mitigation Incorporated—Section 2.3.2 of the Draft Environmental Impact Report/Environmental Assessment, Wetlands and Other Waters, discusses potential project impacts to state and federally protected wetlands and other waters in the project vicinity.

Under either Build Alternative, the project would have the potential to adversely affect jurisdictional features in the watersheds of Del Monte Lake, Canyon Del Rey Creek, and El Toro Creek, including in-stream and adjacent wetlands, ephemeral and intermittent streams, streambanks and riparian zones, and other features. Temporary impacts would be associated mostly with clearing and grading for cut or fill slopes and temporary construction access; permanent impacts would occur in locations where habitat would be displaced for project features, such as roadway or retaining walls. Estimated acreages of permanent and temporary impacts to jurisdictional wetlands, other waters, and riparian habitat are provided in Table 2.3.1.5 (see Section 2.3.1).

As stated in Section 2.3.2, during the Plans, Specifications, and Estimates phase of the project, Caltrans would submit permit applications to the U.S. Fish and Wildlife Service, the California Department of Fish and Wildlife, the U.S. Army Corps of Engineers, and the Regional Water Quality Control Board (see Section 4.2) to address required protections for wetlands and jurisdictional waters of the U.S., listed species and their habitats, and water quality. Project construction would not be allowed to proceed until all required permits were obtained.

The Build Alternatives have been designed to reduce potential impacts to wetlands and other waters to the extent feasible through the use of standardized project measures that are used on most, if not all, Caltrans projects (see Table 1-5 in Section 1.4.1). In addition, the Avoidance, Minimization, and Mitigation Measures listed in Section 2.3.2 would also be implemented to reduce wetland-related project impacts to the extent feasible. This includes compensatory mitigation (under CEQA) at a 1-to-1 ratio (acreage) for temporary impacts and a 3-to-1 ratio (acreage) for permanent impacts to wetland, stream, streambank, and riparian aquatic resources. Compensatory mitigation would be completed onsite as feasible; offsite mitigation through an existing mitigation bank or in coordination with a local land conservancy or restoration group may also be required.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact—Section 2.3.1 of the Draft Environmental Impact Report/Environmental Assessment discusses potential project-related impacts to wildlife movement and wildlife corridors (habitat connectivity). The project Natural Environment Study did not identify any impacts relating to native wildlife nursery sites.

The project has been designed in part to improve public safety and protect wildlife by reducing wildlife-vehicle collisions on State Route 68. The Highway 68 Scenic Plan Study Area, which includes the project area, has been identified as a critical wildlife linkage connecting the coast of Monterey to the Sierra de Salinas Range. However, the highway acts as a significant barrier to wildlife travel and sees ongoing, high rates of wildlife-vehicle collisions as wild animals attempt to cross the highway from south to north or vice versa. Aside from killing wildlife, these collisions jeopardize public safety and result in high costs to the involved drivers and responding public agencies.

A Transportation Agency of Monterey County (TAMC)-sponsored Wildlife Connectivity Analysis study (Transportation Agency of Monterey County 2017) attempted to quantify roadkill events (see Table 2.3.1.3) and identified specific locations along State Route 68 as “roadkill hotspots” (areas with particularly high rates of wildlife-vehicle collisions). Based on recommendations made in the Wildlife Connectivity Analysis study, the project incorporates wildlife crossing improvements that include the enlargement of five existing culverts that pass under State Route 68 as well as installation of fencing to guide animals away from the roadway and into the enlarged culverts.

The Wildlife Connectivity Analysis study did not evaluate movement of aquatic or semi-aquatic species, but the proposed culvert improvements may facilitate passage for amphibian and reptile species. Fish passage is not considered applicable to the streams draining directly to Monterey Bay due to low flow and substantial barriers lower in the system. Potential temporary (construction-phase) impacts to South-Central California Coast steelhead and its habitat in El Toro Creek would be reduced by measures to maintain creek flow during construction (see Section 2.3.5, Threatened and Endangered Species).

While it is possible that the project could result in temporary impacts to wildlife movement, wildlife corridors, or fish passage, it is expected that design features, standard measures, and Avoidance, Minimization, and Mitigation Measures would reduce these effects to a less than significant level. No permanent adverse impacts to wildlife movement, wildlife corridors, or fish passage are anticipated to result from project implementation. Long-term positive effects are expected for terrestrial wildlife transiting the area.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact—The project would not conflict with any local policies or ordinances protecting biological resources. Caltrans would cooperate with the California Department of Fish and Wildlife and local jurisdictions to minimize effects on oak woodlands that are protected under the California Oak Woodlands Protection Act (Senate Concurrent Resolution No 17), as well as by the County and City of Monterey (e.g., Monterey County Zoning Ordinance 21.64.260 for the protection of oak and madrone trees). Temporary and permanent impacts to coast live oak and Monterey pine woodland and forest areas within the project limits would be addressed through compensatory mitigation under CEQA (replanting) both onsite and offsite (see Section 2.3.1). Caltrans would not be required to obtain any permits for oak tree removal on this project, but would endeavor to be consistent with local laws and ordinances regarding oak protection and preservation to the extent possible.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact—Various state, regional, and local conservation planning areas, as well as the Conservation Elements of the County of Monterey and City of Monterey General Plans, cover the project's Biological Study Area (see Section 2.3.1). The project is consistent with most of the policies in these plans. Caltrans would be required to obtain an access permit from the Bureau of Land Management for work planned on a small portion of property in Fort Ord National Monument, but the project is consistent with the applicable Bureau of Land Management Resource Management Plan (2007) and does not conflict with the Fort Ord Multi-Species Habitat Conservation Plan (2020).

3.2.5 Cultural Resources

CEQA Significance Determinations for Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Less Than Significant Impact—Alternative 2 was redesigned to avoid a known historical resource property that is eligible for listing on the National Register of Historic Places. Neither Build Alternative would adversely affect the one historic-era property within the architectural study area eligible for the National Register.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less Than Significant with Mitigation Incorporated—Prehistoric sites exist within the project Area of Potential Effects, and the eastern portion of the project limits has moderate to high potential for buried sites. Archaeological site testing was conducted but could not be completed due to sensitive biological resources in the area. Two sites were previously determined eligible for listing on the National Register of Historic Places as part of studies for other projects along State Route 68. Untested portions could potentially be impacted by either of the two Build Alternatives. Caltrans prepared a Programmatic Agreement and Cultural Resources Management Plan, which present a phased approach for testing to determine the project's effects on the potentially sensitive archaeological sites. Adverse effects if determined would be mitigated by implementation of the procedures and treatment plan contained in the Cultural Resources Management Plan so as not to change the significance, once determined after testing is completed, of archaeological resources that may be impacted by the project. See Mitigation Measures Cultural Resources 1 and Cultural Resources 2 in Section 2.1.11.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant with Mitigation Incorporated—Human remains and related items of Native American origin if discovered during implementation of the terms of the Programmatic Agreement referenced above in question (b) will be treated in

accordance with State Health and Safety Codes and Public Resources Code Section 5097.98(a) through (d). Refer to Section 2.1.11 and Measure Cultural Resources 2.

3.2.6 Energy

CEQA Significance Determinations for Energy

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

No Impact—Both Build Alternatives would improve the flow of traffic through the corridor, allowing travelers to maintain optimal speeds for fuel efficiency resulting in some level of reduced consumption. Reduction of fuel consumption is anticipated to be greater in Alternative 1, due to the continuous traffic flow allowed by roundabouts. For both alternatives, operational energy use is anticipated to remain the same (Alternative 2) or be slightly increased (Alternative 1), which would be offset by reduced fuel consumption. During the project construction phase, Caltrans Standard Specifications would be implemented to reduce unnecessary energy use and maximize efficiency to the extent feasible. See Section 2.2.8 for more information.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact—The project is one of many projects planned and included in the Association of Monterey Bay Area Governments' 2018 Metropolitan Transportation Plan/Sustainable Communities Strategy and in Monterey County's 2018 Regional Transportation Plan with the aim of reducing congestion and greenhouse gas emissions. The project would not conflict with these or any other applicable plans regarding renewable energy or energy efficiency.

3.2.7 Geology and Soils and Paleontological Resources

CEQA Significance Determinations for Geology and Soils

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

Less Than Significant Impact—The project limits do not contain any fault identified on the most recent State of California Alquist-Priolo Earthquake Fault Zoning Map. In

addition, Monterey County's Geographic Information Systems (GIS) Mapping and Data website does not show any known historical earthquakes in, or within 4 miles of, the project area between 1931 and 2001 (County of Monterey, 2021). Nevertheless, the U.S. Geological Survey believes that the Chupines Fault, which crosses the project corridor in three separate traces, has been active at some point during the past 15,000 years. Surface fault rupture is considered possible in the project area.

ii) Strong seismic ground shaking?

Less Than Significant Impact—A preliminary assessment of earthquake ground shaking was present for the each of the nine project intersections in the Caltrans Revised District Preliminary Geotechnical Report for Highway 68 Corridor Improvement, dated August 8, 2021. The assessment estimated that maximum ground shaking magnitudes of 6.7 to 6.8 on the Moment magnitude scale could occur in the project area. The shaking generated by this amount of energy could be perceived as Very Strong (VII) to Destructive (VIII) on the Modified Mercalli Intensity Scale.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact—Monterey County's Geographic Information Systems website shows that much of the State Route 68 corridor within the project area has high susceptibility to liquefaction (County of Monterey, 2021). As of this writing, additional information is needed to better assess liquefaction potential. A future investigation would include the collection and analysis of soil samples for liquefaction potential at each project intersection, with the results presented in the Preliminary Geotechnical Design Report.

iv) Landslides?

Less Than Significant Impact—Landslides can be induced by seismic activity. During an earthquake, strong ground surface shaking and vibration caused by seismic wave transmission can cause loss of soil strength and ground failure, leading to landslides on sloping land. Landslides can also be induced by heavy precipitation (especially over long periods), stream erosion, changes in groundwater, disturbance by human activities, or any combination of these factors.

Representative slope angles in the project area range from 1 to 53 percent. Landslide potential throughout the project area is low to moderate, except for a 1.6-mile stretch of State Route 68 from York Road to 0.12 mile west of Pasadera Drive, which is adjacent to steep hill slopes along the south side of the roadway.

The final design of the project would be based on the results of geotechnical studies conducted throughout the project area and would follow current State of California seismic engineering standards to ensure maximum strength and safety of all constructed features under both static and dynamic (earthquake-caused ground shaking) conditions, as well as associated hazards such as seismic-related ground failure (e.g., rupture, landslide, liquefaction). The use of Caltrans Standard Specifications and Best Management Practices would also help ensure that the project

would not cause, or suffer from, adverse effects relating to geology and soils. See Section 2.2.3 for more information on this topic.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact—Soil data was collected and reviewed from the U.S. Department of Agriculture web soil survey portal (2021). Approximately 76 percent of soils in the assessed area are described as moderately susceptible to detachment and produce moderate runoff.

Standard Specifications and Best Management Practices would be implemented during construction at project work locations for control of erosion and sedimentation from the construction work areas, including through the requirement for a Storm Water Pollution Prevention Plan. Although some soil erosion is anticipated during construction, the effects are expected to be less than significant. See Section 2.2.2 for more information on Avoidance, Minimization, and Mitigation Measures pertaining to soil erosion control.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact—A preliminary evaluation of subsurface conditions, based on examination of geologic mapping for the project area, was provided in the Caltrans Revised District Preliminary Geotechnical Report for Highway 68 Corridor Improvement, dated August 8, 2021. Detailed geotechnical investigations of the subsurface materials, based on one to two dozen borings of up to 75 feet deep (depending on the Build Alternative), are to be conducted at a later phase of the project.

Slope compaction specifications would be applied to project designs for slopes and embankment areas in liquefaction- and landslide-prone areas of the project limits so as not to cause potential instability of the soils onsite or offsite. In addition, the project would not increase groundwater levels in the work areas and would therefore not increase the liquefaction potential of soils in project construction areas.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact—Soils found within the project limits, as mapped by the U.S. Department of Agriculture, are non-expansive. Less than 1 percent of the soils within the project limits are mapped as peat, which have a potential to expand with changes in moisture. However, peat more commonly becomes marshy with increases in moisture. Detailed geotechnical investigations, including evaluation of soil physical characteristics like shrink-swell capacity, are to be conducted at a later phase of the project.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact—The project is a traffic improvement project and does not involve the installation, maintenance, or use of septic tanks or alternative wastewater disposal systems.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant with Mitigation Incorporated—Within the project area, there is a mix of high and low sensitivity geologic units. In some areas, ground-disturbing activities for construction of retaining walls, culvert replacement, drainage swale installation, and utility undergrounding may encounter deposits of high sensitivity for paleontological resources. In areas with low sensitivity deposits at the surface, it is possible that those deposits could thinly overlay high sensitivity deposits that could be damaged by ground-disturbing activities. A Paleontological Monitoring Plan would be prepared, and paleontological monitors would be used during construction to mitigate potential impacts. See Section 2.2.4 for specific details about preparation and implementation of a Paleontological Mitigation Plan as specified in Mitigation Measures PALEO-1 and PALEO-2.

3.2.8 Greenhouse Gas Emissions

CEQA Significance Determinations for Greenhouse Gas Emissions

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact—Because the project would not increase operational roadway capacity, it would not be expected to result in any new or additional greenhouse gas emissions upon completion of construction. Activities during the project construction phase would result in a temporary increase in greenhouse gas emissions in the area, but Caltrans Standard Specifications would be implemented to reduce emissions to the extent feasible. See Section 3.3 of this document for more detail.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact—Applicable local and regional plans, policies, and/or regulations adopted for the purpose of reducing the emissions of greenhouse gases are summarized in Table 3.3.2.1 (Section 3.3.2) of this document. The project would not conflict with any of these.

3.2.9 Hazards and Hazardous Materials

CEQA Significance Determinations for Hazards and Hazardous Materials

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact—The project would involve the transport, use, and probable disposal of hazardous materials. Some hazardous materials may be used during project construction, and there is a potential for the project to disturb existing hazardous materials, including hydrocarbon-contaminated soils from leaking underground storage tanks, aerially deposited lead-contaminated soils, lead-containing paint and asbestos-containing materials, yellow thermoplastic traffic striping paint, and treated wood waste.

Prior to the beginning of construction, site investigations would be conducted to determine the exact nature of potential hazardous materials at the project intersections. Based on the results, Caltrans Standard and (if needed) Non-Standard Specifications would be implemented to reduce the possibility of public, worker, or environmental exposure from the routine transport, use, or disposal of hazardous materials. For instance, a Stormwater Pollution Prevention Plan would be prepared including Best Management Practices for the safe management of hazardous materials. See Table 1-5 in Section 1.4.1 for a listing of Standard Measures and Best Management Practices intended to reduce project-related environmental impacts, including those related to hazards and hazardous materials.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact—As stated above in a), additional site investigations would be conducted at the project intersections prior to the onset of construction to determine the exact nature of any potential hazardous materials present. All construction activities would be subject to Caltrans Standard and (if needed) Non-Standard Specifications to minimize the risk of public, worker, or environmental exposure to hazardous materials.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact—Construction would occur within one-quarter mile of the San Benancio Middle School and York School. Due to the age of the highway, it is possible that concentrations of aerially deposited lead would be found in the soil in these areas. It is also possible that work on the El Toro Creek Bridge on State Route 68 would expose asbestos-containing materials. The soil and bridges would be tested prior to construction for these materials. If found in excess of regulatory limits, the materials would be handled according to all applicable regulations to ensure they are not released into the environment and are properly disposed of. Caltrans Standard Specifications include measures for handling these substances on all projects.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less Than Significant Impact—According to the project's Hazardous Waste Initial Site Assessment report, dated September 26, 2023, two former leaking underground storage tank locations (GeoTracker ID numbers T10000002861 and T10000003114) exist within 1,000 feet of the project site at the intersection of State Route 68 and Corral de Tierra Road. The Initial Site Assessment found that although these sites have been remediated and the cases are closed, because the fuel dispensers were also leaking, these sites may have the potential to impact the project due to the residual presence of petroleum hydrocarbon plumes in shallow soils (5 feet or less).

The project has been designed to avoid disturbance of the residual contaminant plumes underlying these properties, and the Initial Site Assessment concluded that the project can proceed with very little risk of impacts due to unanticipated hazardous waste or other contamination related issues. The Initial Site Assessment recommends that a Non-Standard Special Provision (NSSP) be included in the Standard Special Provisions to cover handling, testing, and disposal of petroleum hydrocarbon-impacted soil and groundwater in the event unanticipated petroleum hydrocarbon impacts are encountered during construction.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact—The project proposes to modify existing intersections along State Route 68. The project would not alter the existing conditions in such a way that would result in new or increased safety hazard or excessive noise. The project would not impact airport operations.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact—Once completed, the project would improve highway operations within the project limits and thereby improve emergency access and evacuation. During construction, travel lanes could be restricted, but emergency access would be accommodated at all times.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact—The project does not alter existing conditions in such a way that would increase exposure of people or structures to wildfire.

3.2.10 Hydrology and Water Quality

CEQA Significance Determinations for Hydrology and Water Quality

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact—The project would not result in substantial degradation of water quality under either Build Alternative in either the short term or the long term. Best Management Practices, including implementation of a Stormwater Pollution Prevention Plan, would be incorporated into the project to reduce discharge of pollutants both during construction and permanently, as required under Caltrans' National Pollutant Discharge Elimination System permit with the State Water Resources Control Board. See Section 2.2.2 for details on measures to protect water quality.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact—As noted in the project Water Quality Technical Memo dated July 27, 2023, the project area includes areas defined by a high groundwater elevation. Multiple earthwork and excavation operations would potentially encounter groundwater during construction activities. If dewatering is deemed necessary during the construction phase, any such activities would comply with the applicable Caltrans Standard Specifications and Best Management Practices.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site;

Less Than Significant Impact—The project would not substantially alter the existing drainage pattern of the area. Project construction would result in an estimated 24.95 acres of disturbed soil area (DSA) under Alternative 1 and 59.54 acres under Alternative 2. As described in Section 2.2.2, the project would incorporate Best Management Practices, including temporary soil stabilization and sediment control measures to limit erosion and siltation.

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—The project would add 1.58 acres of new impervious surface under Alternative 1 and 11.95 acres under Alternative 2, but these are not expected to substantially increase surface runoff leading to flooding because of the implementation of the Best Management Practices described in Section 2.2.2.

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

Less Than Significant Impact—With project implementation, runoff is not expected to be substantially greater in amount, or more polluted, than runoff from the nine project intersections in their current condition. During the construction phase, Treatment Best Management Practices would be installed with the requirement to treat 100 percent of the water quality volume (WQV) generated by the project's new and replaced impervious surfaces. If the selected alternative cannot treat 100 percent of the required water quality volume, Alternative Compliance would be required.

iv) Impede or redirect flood flows?

Less Than Significant Impact with Mitigation—The Location Hydraulic Study for the project, dated December 21, 2020, and the Location Hydraulic Study Addendum dated September 28, 2023, determined that for both Build Alternatives there would be no significant impacts to natural and beneficial floodplain values and no support of probable incompatible floodplain development such as commercial development or urban growth.

Some of the proposed project locations are within the 100-year flood zone, including locations at Canyon del Rey Boulevard/State Route 218, Ragsdale Drive, and the State Route 68 bridge over El Toro Creek. Other project locations are near the 100-year flood zone.

Under Alternative 1, the preliminary design for the roundabouts would avoid encroachment into Regulatory Floodways and the 1 percent annual chance flood discharge would be conveyed without increasing base flood elevations. Also, Alternative 1 would not cause longitudinal encroachment of floodplains, and no significant risks to floodplains associated with the project.

Under Alternative 2, four new bridge piers would be added to the two existing piers in the Regulatory Floodway at the State Route 68 El Toro Creek Bridge to support the planned widening of the bridge, which would be necessary to accommodate two lanes of travel in each direction on State Route 68, and a tapered striped median. This design would also potentially result in longitudinal encroachment into the adjacent floodplain. El Toro Creek at the location of the State Route 68 bridge crossing is identified as a Regulatory Floodway Zone AE, with floodplain areas adjacent to the floodway. Therefore, Alternative 2 would have a potential adverse impact on the Regulatory Floodway of El Toro Creek from the additional bridge columns.

If Alternative 2 is chosen as the preferred alternative, the design of the State Route 68 El Toro Creek bridge improvements would be revised and refined after confirmation from the Federal Emergency Management Agency of the existing State Route 68 El Toro Creek bridge base flood elevation and hydraulic model. The existing bridge hydraulic design components and flood capacity would be analyzed for potential

accommodation of the additional bridge columns. Alternative 2 would be designed to maintain the base flood elevation within the Regulated Floodway in accordance with federal regulations and associated Caltrans design criteria, to the extent feasible. If the findings of final design review and investigations determine that the Alternative 2 bridge design would raise or otherwise change the base flood elevation and there are no feasible avoidance alternatives to achieve the project improvements, Caltrans would file a Conditional Letter of Map Revision with the federal government, the process for which would add substantial time and costs to the project.

Mitigation Measure HYD-1 (see Section 2.2.1) specifies the design revisions and coordination process as described above if Alternative 2 is selected as the preferred alternative. Either build alternative would incorporate applicable Standard Specifications, design features, and practices to address potential impacts related to Regulated Floodways and natural and beneficial floodplain values.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant Impact—Most of the project's Area of Potential Impact is within Federal Emergency Management Agency Flood Zone X, outside the 500-year floodplain, and is not considered a flood hazard area, though small portions are within or near the base floodplain (the 100-year flood zone; see Section 2.2.1). Regardless, the project is not expected to cause the involved intersections to be at greater risk of inundation than under current conditions, and is not anticipated to introduce new sources of floodwater-transported pollutants.

The project limits do not include any tsunami or seiche zones.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact—The project would incorporate numerous design features, specifications, and practices to protect surface water and groundwater resources in the project area. Project activities are not expected to disrupt or redirect groundwater flow or introduce any elements that would cause impairment of water quality and related beneficial uses. Nor would the proposed activities use any groundwater for water supply during construction or for mitigation landscape maintenance; the project is therefore not expected to affect recharge of local groundwater units. No project-related conflict with or obstruction of any water quality control plan or sustainable groundwater management plan is anticipated.

3.2.11 Land Use and Planning

CEQA Significance Determinations for Land Use and Planning

Would the project:

a) Physically divide an established community?

No Impact—The project makes modifications to existing intersections along an existing highway and would not encroach upon or divide any residences or businesses.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact—The project would not conflict with the majority of land use plans, policies, or regulations that apply to the project area as discussed in Section 2.1.2. However, the project would not be consistent with policies and plans intended to preserve vegetation and other scenic elements of the highway corridor. Although Caltrans is not subject to adherence to local plans, policies, and ordinances, design of the project would endeavor to be as consistent as possible with applicable plans and policies. Regardless, avoidance, minimization, and/or mitigation measures would be required and implemented for visual resources (see Section 2.1.10) to comply with project study area impacts that call for the retention of vegetative character and scenic vistas. The project would also incorporate avoidance, minimization, and/or mitigation measures, including compensatory mitigation under CEQA, for impacts to trees and other vegetation (see Sections 2.3.1 and 2.3.3) and wetlands (see Section 2.3.2).

3.2.12 Mineral Resources

CEQA Significance Determinations for Mineral Resources

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact—The project area is not a source of any known mineral resource.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact—There is no mineral resource recovery site near the project limits.

3.2.13 Noise

CEQA Significance Determinations for Noise

Would the project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact—The project Noise Study Report prepared by Caltrans, dated June 2023, found that no significant noise impacts to any of the 19 identified sensitive receptors would result from implementation of Alternative 1.

For Alternative 2, the Noise Study Report found that the project could result in exceedance of noise thresholds (noise increases of 12 or more decibels [dBA], or increases exceeding the Noise Abatement Criteria threshold of 67 decibels) at one of the 19 sensitive receptors: the Living Hope Church of the Nazarene (Receptor R-1) at 1375 Josselyn Canyon Road, Monterey. This finding was based on the fact that, with implementation of Alternative 2, traffic would be shifted closer to the recreational/parking area than under current conditions.

Specifically, the Noise Study Report found that implementation of Alternative 2 could increase noise levels at the church's outdoor recreational area (basketball court)/parking area by up to 1 decibel (1 dBA). That is, the existing 67-decibel noise level at that location could potentially increase to 68 decibels. A noise level increase of less than 3 decibels (3 dBA) is considered to be imperceptible.

Construction of an 8- to 12-foot sound barrier would reduce Alternative 2-associated traffic noise to acceptable levels at the basketball court/parking area, but the Caltrans Noise Abatement Decision Report (July 2023) prepared in response to this situation found that such a barrier would not be feasible because it would exceed the cost allowance for this type of structure. In addition, the planned future widening of eastbound State Route 68 at that location for the addition of an auxiliary through lane, as well as planned realignment of a roadside drainage ditch in the immediate area, would potentially require removal of the basketball court/parking area regardless.

Given the imperceptible nature of the project-related noise increase at the church recreational area/parking area, the infeasible cost of barrier installation, and planned future improvements at that location, this impact is characterized as less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact—Project construction under both Build Alternatives could result in groundborne vibration or noise from the use of heavy equipment such as bulldozers, rollers, and heavy trucks. However, the construction activities are not expected to generate these effects in amounts or durations substantial enough to adversely affect any nearby residents or other sensitive receptors.

The only historic-era resource that could potentially be jeopardized by project-related groundborne vibration is Tarpy's Roadhouse, near the State Route 68/State Route 218 intersection at 2999 Monterey-Salinas Highway. However, a groundborne vibration assessment conducted by Caltrans determined that no project construction equipment would be working close enough to the building for the ground to exceed a vibration level of 0.25-inch per second, the threshold at which historic buildings may experience damage from this type of vibration.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 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?

Less Than Significant Impact—Five of the project intersections (State Route 68/Josselyn Canyon Road, State Route 68/Olmsted Road, State Route 68/State Route 218, State Route 68/Ragsdale Drive, and State Route 68/York Road) are within 2 miles of the Monterey Regional Airport. However, the construction activities at these locations are not expected to generate excessive noise levels that would affect residents or employees in the area.

3.2.14 Population and Housing

CEQA Significance Determinations for Population and Housing

Would the project:

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)?

No Impact—The project would reduce intersection delays resulting from anticipated future population growth in the region, but there are no project components that would induce growth.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact—The project would not impact existing housing or displace any people.

3.2.15 Public Services

CEQA Significance Determinations for Public Services

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which 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?

No Impact—The project would not induce the need for any new or altered fire protection services.

Police protection?

No Impact—The project would not induce the need for any new or altered police protection services.

Schools?

No Impact—The project would not induce the need for any new or altered school services.

Parks?

No Impact—The project would not induce the need for any new or altered park services.

Other public facilities?

No Impact—The project would not induce the need for any new or altered other public services.

3.2.16 Recreation

CEQA Significance Determinations for Recreation

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact—As a highway transportation operations improvement project that would not increase the highway capacity, it would not cause growth or generate additional population in the area that would otherwise increase uses in local and regional parks and other recreational properties.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact—The project does not include recreational facilities or require new or expanded recreational facilities.

3.2.17 Transportation

CEQA Significance Determinations for Transportation

Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No Impact—The project would reduce intersection delays, which will improve circulation and include updated bicycle and pedestrian facilities at the project intersections. It is consistent with applicable regional and local plans and programs.

b) Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No Impact—The project began the draft environmental document preparation phase prior to the Caltrans deadline for the requirement to analyze traffic impacts using vehicle miles traveled metric in place of level of service method. The original traffic analysis used the level of service metric, and subsequently an Addendum to the Traffic Operations Analysis Report was prepared that uses modeling to assess delay metrics.

Although the project would not increase capacity of the corridor overall, an analysis was conducted to assess travel inducement of the project, as discussed in Sections 2.1.9 and 3.2.22 (Volume 2 of the Draft Environmental Impact Report/Environmental Assessment includes the report SR 68 Corridor Improvements Project – Estimation of Induced Traffic Demand, September 2020). The induced travel assessment concluded that Alternative 1 would not add lane miles within the project limits and therefore would not induce travel demand or increased vehicle miles traveled. Alternative 2 would generate additional vehicle miles traveled because of the additional short segments of lanes at the nine intersections within the project limits. However, the vehicle miles traveled estimates for Alternative 2 would be below the threshold used in the analysis for increased daily vehicle miles traveled within the region. Therefore, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3 (b).

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact—The project is designed to include required standards for highway safety. The roundabouts alternative (Alternative 1) has design features inherent to roundabouts that present fewer potential vehicle-to-vehicle, and vehicle-to-pedestrian conflict points, compared to signalized intersections. Alternative 2, the expanded signalized intersections, would have more potential conflict points that the No-Build Alternative (existing condition) and Alternative 1 roundabouts. In addition, the roundabout designs would have geometry that facilitates slowed speed prior to entry to the intersections. Alternative 2 would have additional exclusive turn lanes, auxiliary lanes approaching and departing the intersections, crosswalks, sidewalks and bicycle areas compared to the existing intersections.

d) Result in inadequate emergency access?

Less Than Significant Impact—Once completed, the project would improve highway operations within the project limits and thereby improve emergency access. Intersection modifications in both alternatives would be designed to accommodate emergency and other large vehicles. As discussed in Section 2.1.8, emergency access would be accommodated at all times during construction. Access for fire/paramedic and other emergency service vehicles through the project limits would be enabled through controlled work zones by the project's construction contractor.

As a result of reductions to current intersection delays and improved travel time reliability through the corridor after project improvements are constructed and in operation, improved access for emergency services is anticipated to occur under both Build Alternatives. Alternative 1 would include a roundabout design that provides

sufficient lane width to allow for other vehicles to move aside for emergency vehicles passing through the intersection. Curbs in the roundabouts would be designed to be traversable by emergency vehicles. Alternative 2 would include signal prioritization features, which would alter the signal to provide priority access for emergency vehicles through signalized intersections. During the Plans, Specifications, and Estimates (project final Design) phase of the project, design of the intersections would be further refined to best accommodate emergency vehicles. The Build Alternatives would not permanently alter planned routes for emergency responses or evacuations. Therefore, no long-term impacts to emergency services are expected from the project.

3.2.18 Tribal Cultural Resources

CEQA Significance Determinations for Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

Less Than Significant with Mitigation Incorporated—For either Build Alternative, if any unanticipated prehistoric cultural resources are discovered during project construction, all earth-moving activity around the immediate discovery area would be diverted until a qualified archaeologist can assess the nature and significance of the find. If human remains are discovered, the County coroner should be contacted. If the coroner thinks that the remains are Native American, the procedures prescribed in Measure Cultural-4 shall be followed; refer to Section 2.1.11.

As discussed in Section 3.2.5 (b), there are known prehistoric sites in the project Area of Potential Effects, and the eastern portion of the project limits has moderate to high sensitivity. Archaeological site testing was conducted but could not be completed due to sensitive biological resources in the area. Two sites were previously determined eligible for listing on the National Register of Historic Places as part of studies for other projects along State Route 68. Untested portions could potentially be impacted by either of the two Build Alternatives, therefore the Programmatic Agreement and Cultural Resources Management Plan present a phased approach for testing to determine the project's effects on the potentially sensitive archaeological sites. Adverse effects if determined would be mitigated by implementation of the procedures and treatment plan contained in the Cultural Resources Management Plan so as not to change the significance, once determined after testing is completed, of archaeological resources that may be impacted by the project. Refer to Mitigation Measures Cultural Resources 1 and Cultural Resources 2 in Section 2.1.11.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant With Mitigation Incorporated—Refer to response to question 3.2.18 (a).

3.2.19 Utilities and Service Systems

CEQA Significance Determinations for Utilities and Service Systems

Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact—No new or expanded wastewater treatment, storm drains or other utility lines would be required because the project would redesign the project intersections for improved operations and traffic flow. The project would not cause population growth that would increase demand for utilities and services in the project area. As discussed in Section 2.1.8, existing utility lines, storm drains and other utility service equipment that would be in conflict with either of the Build Alternative features would be relocated accordingly. Existing overhead utilities will be undergrounded as part of the project and as required by California Public Utilities Commission regulation. Caltrans would coordinate with utility operators to ensure that all utilities within the roadway right-of-way would be relocated before and during construction as standard procedures.

b) 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—Any water required for construction work would be brought to the project site as needed by the project's construction contractor. Installation of landscaping would require watering until it is fully established. This would be done either through water trucks or a utility agreement with the local water provider. As a transportation facility improvement project, the project would require no long-term water demand after landscape planting establishment.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact—The project would not affect demand on wastewater treatment facilities. Construction of the Build Alternatives would generate a minimal amount of wastewater.

The main source of wastewater would be associated with sanitary waste generated by construction workers. Portable waste facilities would be provided for use by all workers, and sanitary waste generated from the use of these facilities would be disposed of by an approved contractor at an approved disposal site. No long-term generation of wastewater would occur since the proposed improvements are for roadway infrastructure.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact—The project is a transportation facility improvement and would not generate population growth or other increases in use of the highway that would generate solid waste in excess of applicable standards. Construction activities would generate solid waste, but the amount would not be in excess of local landfill capacity or be inconsistent with solid waste reduction goals of local agencies.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact—Solid waste generated by construction activities would be in compliance with all statutes and regulations related to solid waste as required in the construction contract.

3.2.20 Wildfire

CEQA Significance Determinations for Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact—Once completed, the project would improve highway operations within the project limits and thereby improve emergency access and evacuation. During construction, travel lanes could be restricted, but emergency access would be accommodated at all times.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact—The project does not add occupants or exacerbate wildfire risks.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact—No additional infrastructure is being installed that would increase fire risk. Undergrounding of electrical utilities may reduce wildfire risk.

d) 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?

No Impact—As described in Section 3.3.5, the project site along the State Route 68 corridor crosses a mix of High and Very High Fire Hazard Severity Zones within both Local Responsibility Area and State Responsibility Area locations. Wildfire can contribute to flooding and landslide hazards by burning off the protective land cover (vegetation) and reducing the ability of soil to absorb rainfall, resulting in runoff of soils and debris that clog roadway culverts and bridges during rains.

However, neither Build Alternative is expected to increase people or structures to a heightened risk of flooding or landslides due to post-fire slope instability or runoff/drainage changes. The final design of the preferred alternative (once chosen) would ensure that changes to regulatory floodways would be avoided and any changes to floodplains would be minimal (see Section 2.2.1). Caltrans would continue to perform regular culvert maintenance to allow for safe passage of stormwater runoff. In addition, slopes in the project are mostly gentle and landslide potential is primarily low to moderate (see Section 2.2.3). For these reasons, no impact is anticipated.

3.2.21 Mandatory Findings of Significance

CEQA Significance Determinations for Mandatory Findings of Significance

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Significant and Unavoidable Impact—Aesthetics/Visual Resources

Less Than Significant with Mitigation Incorporated, Less Than Significant Impact, or No Impact—All other resource areas analyzed in this environmental document.

Substantially degrade the quality of the environment?

The project has the potential to result in a Significant and Unavoidable impact to one resource area, Aesthetics/Visual Resources. The project Visual Impact Assessment found that, under either Build Alternative, the removal of existing trees/vegetation and the addition of new road surfaces, high retaining walls, and other associated transportation infrastructure to the Scenic State Route 68 corridor in the project area would result in a Significant and Unavoidable impact to Aesthetics/Visual Resources.

The project does not have the potential to substantially degrade the quality of the environment in any other resource area discussed in this Draft Environmental Impact Report/Environmental Assessment. For all other resource areas that would experience potentially significant environmental impacts related to the project, these impacts would be reduced to a level of Less than Significant with the implementation of Avoidance, Minimization, and Mitigation Measures.

Substantially reduce the habitat of a fish or wildlife species?

Wildlife Habitat: Preliminary estimates are that construction activities for this project could result in up to 24.95 acres of disturbed soil area (temporary disturbance) and 1.58 acres of net new impervious surface area (permanent disturbance) under Alternative 1, and up to 59.54 acres of disturbed soil area (temporary disturbance) and 11.95 acres of net new impervious surface area (permanent disturbance) under Alternative 2 (see Section 2.2.2). As a result, the project has the potential to reduce wildlife habitat.

However, it is unlikely that project activities would substantially reduce wildlife habitat because the project Area of Potential Impact/Biological Study Area sits alongside and near the shoulders of a busy, noisy highway. According to the Natural Environment Study for the project, these areas are considered to consist mainly of degraded, low-quality wildlife habitat, while higher-quality habitat is widely available outside of the project limits.

In addition, as discussed throughout Chapters 2 and 3 of this document, the implementation of Avoidance, Minimization, and Mitigation Measures during construction would reduce any potential project-related impacts to wildlife habitat to a Less than Significant level.

Furthermore, the project includes the planned installation of five enlarged culverts specifically designed to reduce wildlife-vehicle collisions on State Route 68, which it is hoped will facilitate wildlife dispersal to new habitat while alleviating the current high rates of roadkill in the area.

Fish Habitat: Under Build Alternative 2, the project may have the potential to temporarily (during construction) impact habitat for south-central California coast steelhead, if present, in the intermittently flowing El Toro Creek at and downstream from the eastern end of the project area.

Under this project alternative, four new bridge piers (support columns) would be added to the two existing piers at the State Route 68 El Toro Creek bridge to support the planned widening of the bridge (see Section 2.2.1). If Alternative 2 is chosen as the preferred alternative, the design of the State Route 68 El Toro Creek bridge improvements would be revised and refined after confirmation from the Federal Emergency Management Agency of the existing State Route 68 El Toro Creek bridge base flood elevation and hydraulic model. The existing bridge hydraulic design components and flood capacity would be analyzed for potential accommodation of the additional bridge columns. Alternative 2 would be designed to maintain the base flood

elevation within the Regulated Floodway in accordance with federal regulations and associated Caltrans design criteria, to the extent feasible.

Any potential temporary (construction-phase) impacts to south-central California coast steelhead and its habitat in El Toro Creek would be reduced by project design features, standard measures, and Avoidance, Minimization, and Mitigation Measures, including measures to maintain creek flow during construction. Permanent project-related impacts to south-central California coast steelhead and its habitat in El Toro Creek are not anticipated. Please see Section 2.3.5, Threatened and Endangered Species, for additional information.

Cause a fish or wildlife population to drop below self-sustaining levels?

The project does not have the potential to cause a fish or wildlife population to drop below self-sustaining levels. All of the species discussed in Sections 2.3.3, 2.3.4, and 2.3.5, as well as species not discussed, that could potentially be affected by project activities would be protected from significant project-related impacts by design features, standard measures, Best Management Practices, and Avoidance, Minimization, and Mitigation Measures, including habitat restoration and monitoring. Also, the project is expected to increase overall wildlife survival in the area through the installation of five undercrossings intended to reduce wildlife-vehicle collisions (and therefore wildlife deaths) along State Route 68 by providing safe means for animals to cross the highway corridor.

Threaten to eliminate a plant or animal community?

The project does not have the potential to threaten to eliminate a plant or animal community. As identified in the Natural Environment Study, natural communities of concern in the project area include Coast Live Oak Woodland, Monterey Pine Forest, and several other communities that contain special-status plants, such as White-root Beds, Red Willow Riparian Forest and Woodland, and Purple Needlegrass Grassland (see Section 2.3.1). While these communities would experience temporary and permanent project-related impacts, the impacts would be addressed through the implementation of Avoidance, Minimization, and Mitigation Measures. Impacts to Coast Live Oak Woodland and Monterey Pine Forest would require compensatory mitigation under CEQA at a 1-to-1 ratio (acreage) for temporary impacts, and a 3-to-1 ratio (acreage) for permanent impacts. Mitigation is expected to be completed onsite in the Caltrans right-of-way within the project area but, if sufficient area is not available onsite, offsite mitigation would be conducted in coordination with a local land conservancy or restoration group.

Temporary impacts to White-root Beds and Purple Needlegrass Grassland communities would be addressed through restoration using locally appropriate, native plant species. Impacts to Red Willow Riparian Forest and Woodland would be offset through compensatory mitigation under CEQA for riparian impacts, as described in Section 2.3.2.

Substantially reduce the number or restrict the range of a rare or endangered plant or animal?

The project's Area of Potential Impact/Biological Study Area does not contain any species that is so limited in distribution or number that project implementation would substantially reduce its numbers or restrict its range. As an example, although Yadon's piperia is found only in northern Monterey County, it occurs in three separate populations within that area: the general vicinity of the proposed project (including designated critical habitat at Jacks Peak), the Prunedale Hills, and an isolated population in Big Sur.

All of the sensitive species discussed in Sections 2.3.3, 2.3.4, and 2.3.5 that could potentially be affected by project activities would be protected by design features, standard measures, Best Management Practices, and Avoidance, Minimization, and Mitigation Measures, including habitat restoration and monitoring. Also, the project is expected to increase overall wildlife survival in the area through the installation of five undercrossings intended to reduce wildlife-vehicle collisions (and therefore wildlife deaths) along State Route 68 by providing safe means for animals to cross the highway corridor.

Eliminate important examples of the major periods of California history or prehistory?

Several technical studies pertaining to cultural resources in the project area were consulted in the preparation of this Draft Environmental Impact Report/Environmental Assessment (see Section 2.1.11). The project does not have the potential to eliminate important Californian historic or prehistoric resources, nor would the project cause any significant impacts to these resources after mitigation.

Historic Resources: Twenty historic-era properties within the project Architectural Study Area were evaluated or reevaluated for cultural significance. The only significant historic resource identified from this process was Tarpy's Roadhouse at 2999 Monterey Salinas Highway (State Route 68) in Monterey. The project has been designed to avoid any temporary or permanent impacts to this property.

Archaeological Resources: A one-half-mile radius records search for archaeological resources in the vicinity of the project turned up 36 resources, including seven prehistoric or multi-component (both prehistoric and historic resources) sites that are in or bisect the project study area. Querying the U.S. Natural Resources Conservation Service's Soil Survey Geographic Database further revealed that the eastern portion of the project area is considered to have a moderate to high potential for buried archaeological sites. Therefore, because both Build Alternatives have the potential for deep ground disturbance (over 3 feet of depth) during construction, buried archaeological remains could be encountered by earth disturbance activities.

As discussed in Section 2.1.11, Avoidance, Minimization, and Mitigation Measures would reduce the chance of significant project-related impacts to archaeological resources. These include adhering to the requirements of the Programmatic Agreement

and Cultural Resources Management Plan, and following all regulations pertaining to the discovery and treatment of human remains and to the discovery of unanticipated cultural effects.

Paleontological Resources: The project's Paleontological Identification Report/ Paleontological Evaluation Report (PIP/PER) states that several fossil-bearing rock formations occur in the project area, so the potential exists for construction earthworks such as grading and excavating to expose or damage paleontological resources (see Section 2.2.4). Recommended Avoidance, Minimization, and Mitigation Measures include preparation and implementation of a Paleontological Mitigation Plan.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Significant and Unavoidable Impact—Aesthetics/Visual Resources.

Less Than Significant with Mitigation Incorporated, Less Than Significant Impact, or No Impact—All other resource areas analyzed in this environmental document.

The project Cumulative Impact Analysis found that the project would contribute to an existing adverse cumulative impact in nine resource areas:

- Jurisdictional Wetlands, Other Waters, and Riparian Habitat
- California Red-Legged Frog
- California Tiger Salamander
- South-Central California Coast Steelhead DPS
- Coast Live Oak Woodland and Coast Live Oak Trees
- Monterey Pine Forest and Monterey Pine Trees
- Yadon's Piperia
- Paleontological Resources
- Visual/Aesthetic Resources

The Cumulative Impact Analysis concluded that impacts to the first eight of these would not be cumulatively considerable. Project design features, standard measures, Best Management Practices, and Avoidance, Minimization, and Mitigation Measures would reduce significant project-related impacts for these eight resource areas to a level of Less Than Significant.

However, the Cumulative Impact Analysis found that the project would make a considerable contribution to cumulative impacts to Aesthetics/Visual Resources. Both Build Alternatives would result in a significant visual alteration of the project area. The project intersections are within a Monterey County-designated Scenic Highway Corridor,

mainly in an attractive rural/semi-rural landscape that has experienced some degree of development, drainage modifications, and loss of native vegetation over the past century and longer. If implemented, the project would involve the addition of project elements including roadway expansion, extensive retaining walls, removal of trees and vegetation, heightened signage, fencing, and increased roadside fixtures such as guardrails and barriers. The project would contribute to an overall increase of the built character within this corridor and a resulting diminishment of the natural beauty along State Route 68 that is highly valued by residents and visitors alike. While design elements proposed for the project would partially alleviate these effects, they would not reduce this impact to a Less than Significant level under CEQA. As a result, the Cumulative Impact Analysis concluded that "*Although the outlined mitigation measures would alleviate some visual impacts, the contribution of the proposed project to the cumulative visual impact may be, and will likely be, considerable.*"

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Significant and Unavoidable Impact—Aesthetics/Visual Resources.

Less Than Significant with Mitigation Incorporated, Less Than Significant Impact, or No Impact—All other resource areas analyzed in this environmental document.

The project does not have environmental effects that would cause substantial adverse effects on human beings aside from the predicted Significant and Unavoidable impact to Aesthetics/Visual Resources discussed above.

3.2.22 Senate Bill 743/Induced Demand Analysis

Affected Environment

This section is based on the analysis of induced traffic demand included in the technical memorandum prepared by Caltrans: State Route 68 Corridor Improvements Project – Estimation of Induced Traffic Demand (September 25, 2020). The memorandum addresses the potential for induced traffic demand and/or increases in vehicle miles traveled (VMT) that could be associated with the proposed project improvements at the nine intersections within the project limits. The affected environment for both Build Alternatives—Alternative 1, Roundabouts, and Alternative 2, Signalized Intersections with Expanded Lane Channelization—is described in Chapter 1, Section 1.4, and in Section 2.1.9, Traffic and Transportation/Pedestrian and Bicycle Facilities.

Environmental Consequences

The State of California's Office of Planning and Research released the Technical Advisory on Evaluating Transportation Impacts in CEQA (Office of Planning and Research Advisory) in December 2018. The advisory states that many transportation projects can change travel patterns, and those that would cause additional vehicle travel must quantify the amount of additional vehicle travel, also referred to as "induced vehicle travel," to assess specific impacts that would result. Induced vehicle travel is

measured in vehicle miles traveled, the amount of travel for all vehicles in a geographic region over a given period, either daily or a one-year period.

Transportation improvement projects that create additional lane miles and expand roadway capacity must analyze induced vehicle travel measured in vehicle miles traveled, according to the Office of Planning and Research Advisory. The advisory also lists types of projects not considered to be capacity-increasing, and which are therefore exempt from vehicle miles traveled analysis requirements. Both Build Alternatives of the current project (roundabouts and reconfiguration of existing traffic control devices) are included in the types of improvements exempt from vehicle miles traveled analysis, in that those improvements are not likely to lead to a substantial or measurable increase in vehicle travel.

While the project is not a capacity-increasing project, Alternative 2 does add short lane segments at each of the nine intersections as part of the proposed signalized intersection lane channelization modifications. The proposed additional turning lanes, and elongation of turning and/or auxiliary lanes under Alternative 2 would add an estimated combined total of 2.2 miles of additional lane miles through the 9-mile project limits. Under Alternative 2, an additional through lane would be built between some of the more closely spaced intersections. Although the two Build Alternatives are exempt by their project types, an analysis of potential for induced travel demand and additional vehicle miles traveled was conducted for the additional combined lane miles under Alternative 2; Alternative 1 was analyzed as well for comparative consistency, though no through lanes are proposed between intersections with the roundabout designs.

The estimation of induced vehicle miles traveled followed the Office of Planning and Research Advisory's four-step analysis process summarized as follows. Further specifics in the analysis calculations can be referenced in the Induced Demand memorandum:

1) Determine the total lane miles over an area that fully captures travel behavior changes resulting from the project.

2) Determine the percent change in total lane miles that will result from the project.

3) Determine the total existing vehicle miles traveled over that same area.

4) Multiply the percent increase in lane miles by the existing vehicle miles traveled, and then multiply that by the elasticity factor from the induced travel literature.

The elasticity factor indicates the percentage of increase in vehicle miles traveled based on the percentage of change in lane miles resulting from a project. An elasticity factor of 0.75 was used for the analysis of the two Build Alternatives, based on a University of California, Davis Induced Travel Calculator that uses that factor for Class 2 (expressways) and Class 3 (principal arterials) roadway facilities, which are the types of facilities in Monterey County.

The analysis concluded the following for each of the Build Alternatives, based on the method in the Office of Planning and Research Advisory, approximate lane miles of the regional transportation network in the Association of Monterey Bay Area Governments Region of 1,240 miles, the demand elasticity factor of 0.75, and existing vehicle miles traveled in the Association of Monterey Bay Area Governments region of 14,451,056 total daily vehicle miles traveled. The analysis provided the following induced demand estimates for the Build Alternatives:

- Alternative 1 - Roundabouts: no additional daily vehicle miles traveled resulting from the project (no increase in lane miles).
- Alternative 2 - Expanded Signalized Intersections: 19,337 additional daily vehicle miles traveled resulting from the project (increase in 2.2 total lane miles).

The vehicle miles traveled analysis then estimated a project-level threshold of significance for vehicle miles traveled increases that would achieve legally mandated greenhouse gas emissions reduction targets for the region. The total daily increase in vehicle miles traveled in the Association of Monterey Bay Area Governments region permissible from the base year 2015 and 2040 that would meet the California Air Resources Board 2017 Scoping Plan target was 2,080,015 daily vehicle miles traveled. To determine project-specific vehicle miles traveled significance thresholds, based on the percentage of the project area lane miles to regional lane miles and allocation of allowable daily vehicle miles traveled for the project was calculated to be 29,664, factoring in the total regional lane miles (1,240), the project area lane miles (17.8) (lane lines within the project limits), and the percentage of the regional lane miles within the project limits (1.44 percent).

The vehicle miles traveled allocation for the proposed project following the Office of Planning and Research Advisory methodology resulted in allowable additional daily vehicle miles traveled for the project of 29,664 vehicle miles traveled (percentage of regional lane miles from Association of Monterey Bay Area Governments Traffic Model multiplied by allowable regional daily vehicle miles traveled of 2,080,015). The additional combined 2.2 lane miles under Alternative 2 (a 0.134 percent increase in daily vehicle miles traveled in the Association of Monterey Bay Area Governments region) would potentially result in about additional 19,337 vehicle miles traveled per day. This amount is within the threshold of 29,664 vehicle miles traveled allowable per the analysis as noted above.

Alternative 1 would not add lane miles within the project limits and therefore would not induce travel demand or increased vehicle miles traveled. Based on the analysis, Alternative 2 would potentially generate additional vehicle miles traveled because of the additional short segments of lanes within the project limits at the nine intersections. However, the estimates would be below a project threshold of significance for increased daily vehicle miles traveled within the region. In addition, Caltrans Transportation Analysis under CEQA Guidance states that a small increase in vehicle miles traveled associated with the types of transportation improvements on the list of exempt types of projects in the Office of Planning and Research Advisory would likely not be determined significant. While Alternative 2 would add short lengths of lane segments and turn lanes

that, when considered in total, would have the potential to result in some additional vehicle miles traveled, the potential increase is a 0.134 percent increase within the regional total. This supports a determination that Alternative 2 is consistent with Caltrans Transportation Analysis under CEQA screened list of non-capacity increasing projects that would not result in a substantial increase in vehicle travel, and the Office of Planning and Research's list of exempt project types, and is therefore not considered to result in a significant increase in vehicle miles traveled.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are required.

3.2.23 Wildfire

Regulatory Setting

Senate Bill 1241 required the Office of Planning and Research, the Natural Resources Agency, and the California Department of Forestry and Fire Protection (CalFire) to develop amendments to the "CEQA Checklist" for the inclusion of questions related to fire hazard impacts for projects located on lands classified as very high fire hazard severity zones. The 2018 updates to the CEQA Guidelines expanded this to include projects "near" these very high fire hazard severity zones.

Affected Environment

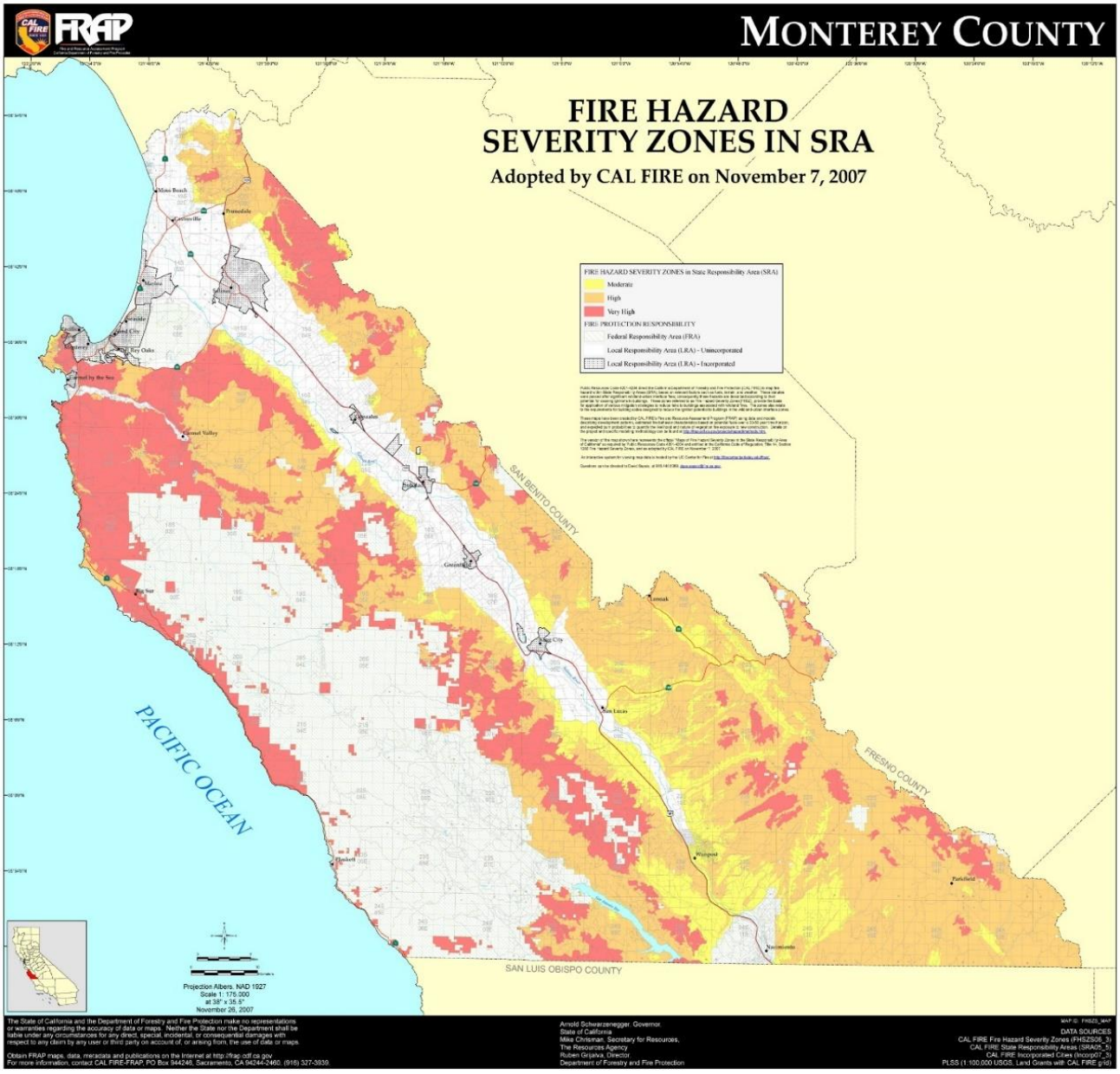
While all of California is prone to some degree of wildfire hazard, some areas have increased fire hazard because of local topography, vegetation, and potential weather conditions. CalFire is required by law to map areas of significant fire hazards, which are delineated in fire hazard severity zones (Public Resources Code 4201-4204 and Government Code 51175-89). The fire hazard severity zones are designated for both areas of local and state responsibility and identify areas with moderate, high, and very high fire hazard severity.

The State Route 68 project area consists of a range of ecosystems, including annual (non-native) grassland, oak woodland, riparian corridors, and Monterey pine forest, which are at risk from wildfire. Existing development varies across the corridor with suburban neighborhoods tucked into the Monterey pine forest at the western end of the project, shifting to low-density rural residential along the corridor east of State Route 218. CalFire's Fire Hazards Severity Zone maps for Monterey County show that the fire hazard severity along most of the State Route 68 corridor is classified as high or very high fire hazard both in in the local responsibility areas and the state responsibility areas. Refer to Figure 3.2.23.1.

In addition, future climate forecasts suggest that California wildfires will worsen. In Caltrans District 5, and across the state, higher temperatures and changing precipitation are expected to affect both the intensity and scale of wildfires (see Section 3.3.5). Wildfires can also contribute to flooding and landslide hazards because they burn off the protective land cover and reduce the ability of soil to absorb rainfall. This loss of cover can result in runoff of soils and debris that clog roadway culverts and bridges during

rains. The Caltrans District 5 Vulnerability Assessment (2019) states that as early as 2025 most of the State Highway System will lie in areas of medium to very high wildfire concern and by 2055 most of the State Highway System will lie in areas of very high wildfire concern. In Monterey County, the miles of state highways in medium to high wildfire concern areas will increase from 154 miles in 2025 to 178 miles in 2055.

Figure 3.2.23.1 Fire Hazard Severity Zones in State Responsibility Areas for Monterey County



Environmental Consequences

Alternative 1

Research data on roundabout performance during emergency evacuations is limited. However, limited research data and assessments of evacuations indicate that roundabouts do not impede emergency evacuation and may facilitate safer evacuation. There is no research supporting the various published opinion statements that roundabouts impede emergency evacuations.

Taking into consideration the available research data, the roundabouts would not impede emergency evacuation efforts over signalized intersections. The operation of roundabouts is considered more reliable because roundabouts do not require functioning signal lights, sensors, or electronic timing to function and will continue to operate as designed during a power outage.

Studies have shown that modern roundabout design allows for fire engines and other large equipment to travel (at slower speeds) unimpeded through properly sized and engineered roundabouts. Some “training” of the public on how to properly move through a roundabout to make way for emergency vehicles may be necessary.

Alternative 2

In Alternative 2, intersections will continue to operate as they currently do for emergency response and evacuations.

No-Build Alternative

In the No-Build Alternative, no modifications will be made to the intersections, and they will continue to operate as they currently do for emergency response and evacuations.

Avoidance, Minimization, and/or Mitigation Measures

Alternative 1

As part of project outreach, coordination will be made with local fire agencies to provide information on educational resources that can be shared with the public occurred. Such information can be made available at emergency response fairs held locally. Design considerations were made to ensure accommodation of large vehicles through the roundabouts, including mountable aprons and curbs in the central island intended for use by large vehicles and wider entry and exit lanes for efficient movement into and out of the roundabout.

Alternative 2

No anticipated consequences are identified for Alternative 2, so no avoidance or minimization measures are proposed.

3.3 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth’s climate system. The Intergovernmental Panel on

Climate Change, established by the United Nations and World Meteorological Organization in 1988, is devoted to greenhouse gas emissions reduction and climate change research and policy. Climate change in the past has generally occurred gradually over millennia or more suddenly in response to cataclysmic natural disruptions. The research of the Intergovernmental Panel on Climate Change and other scientists over recent decades, however, has unequivocally attributed an accelerated rate of climatological changes over the past 150 years to greenhouse gas emissions generated from the production and use of fossil fuels.

Human activities generate greenhouse gases consisting mostly of carbon dioxide, methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, and various hydrofluorocarbons. Carbon dioxide is the most abundant greenhouse gas; while it is a naturally occurring and necessary component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated carbon dioxide that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of greenhouse gas emissions, mostly carbon dioxide.

The impacts of climate change are already being observed in the form of sea level rise, drought, more intense heat, extended and severe fire seasons, and historic flooding from changing storm patterns. Both mitigation and adaptation strategies are necessary to address these impacts. The most important mitigation strategy is to reduce greenhouse gas emissions. In the context of climate change (as distinct from CEQA and NEPA), "mitigation" involves actions to reduce greenhouse gas emissions or to enhance the "sinks" that store them (such as forests and soils) to lessen adverse impacts. "Adaptation" is planning for and responding to impacts to reduce vulnerability to harm, such as by adjusting transportation design standards to withstand more intense storms, heat, and higher sea levels. This analysis will include a discussion of both in the context of this transportation project.

3.3.1 Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce greenhouse gas emissions from transportation sources.

Federal

To date, no national standards have been established for nationwide mobile-source greenhouse gas reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and greenhouse gas emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 U.S. Code Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable

transportation infrastructure and those who depend on it. The Federal Highway Administration, therefore, supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (Federal Highway Administration, 2022). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability" (Federal Highway Administration, no date.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

The federal government has taken steps to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 U.S. Code Section 6201) as amended by the Energy Independence and Security Act of 2007; and Corporate Average Fuel Economy Standards. This act established fuel economy standards for on-road motor vehicles sold in the U.S. The U.S. Department of Transportation's National Highway Traffic and Safety Administration sets and enforces the Corporate Average Fuel Economy standards based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Environmental Protection Agency calculates average fuel economy levels for manufacturers and also sets related greenhouse gas emissions standards under the Clean Air Act. Raising Corporate Average Fuel Economy standards leads automakers to create a more fuel-efficient fleet, which improves our nation's energy security, saves consumers money at the pump, and reduces greenhouse gas emissions (U.S. DOT 2014).

The U.S. Environmental Protection Agency published a final rulemaking on December 30, 2021, that raised federal greenhouse gas emissions standards for passenger cars and light trucks for model years 2023 through 2026, increasing in stringency each year. The updated greenhouse gas emissions standards will avoid more than 3 billion tons of greenhouse gas emissions through 2050. In April 2022, the National Highway Traffic Safety Administration announced corresponding new fuel economy standards for model years 2024 through 2026, which will reduce fuel use by more than 200 billion gallons through 2050 compared to the old standards and reduce fuel costs for drivers (U.S. Environmental Protection Agency 2022a; National Highway Traffic Safety Administration 2022).

State

California has been innovative and proactive in addressing greenhouse gas emissions and climate change by passing multiple Senate and Assembly bills and executive orders including, but not limited to, the following:

Executive Order S-3-05 (June 1, 2005): The goal of this order is to reduce California's greenhouse gas emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill 32 in 2006 and Senate Bill 32 in 2016.

Assembly Bill 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: Assembly Bill 32 codified the 2020 greenhouse gas emissions reduction goals outlined in Executive Order S-3-05, while further mandating that the California Air Resources Board create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The legislature also intended that the statewide greenhouse gas emissions limit continue in existence and be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020 (Health and Safety Code Section 38551(b)). The law requires the California Air Resources Board to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective greenhouse gas reductions.

Executive Order S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard for California. Under this order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. The California Air Resources Board readopted the low carbon fuel standard regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor's 2030 and 2050 greenhouse gas reduction goals.

Senate Bill 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires the California Air Resources Board to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization for each region must then develop a "Sustainable Communities Strategy" that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

Senate Bill 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under Assembly Bill 32.

Executive Order B-16-12 (March 2012): This order requires State entities under the direction of the Governor, including the California Air Resources Board, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

Executive Order B-30-15 (April 2015): This order establishes an interim statewide greenhouse gas emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of greenhouse gas emissions to implement measures, pursuant to statutory authority, to achieve reductions of greenhouse gas emissions to meet the 2030 and 2050 greenhouse gas emissions reductions targets. It also directs the California Air Resources Board to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent. Greenhouse gases differ in how much heat each trap in the atmosphere, called global warming potential. Carbon dioxide is the most important greenhouse gas, so amounts of other gases are expressed relative to carbon dioxide, using a metric called "carbon dioxide equivalent."

The global warming potential of carbon dioxide is assigned a value of 1, and the global warming potential of other gases is assessed as multiples of carbon dioxide. Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every three years and to ensure that its provisions are fully implemented.

Senate Bill 32, Chapter 249, 2016: This bill codifies the greenhouse gas reduction targets established in Executive Order B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

Senate Bill 1386, Chapter 545, 2016: This bill declared "it to be the policy of the state that the protection and management of natural and working lands … is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

Senate Bill 743**,** Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles traveled, to promote the state's goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

Senate Bill 150**,** Chapter 150, 2017, Regional Transportation Plans: This bill requires the California Air Resources Board to prepare a report that assesses progress made by each metropolitan planning organization in meeting its established regional greenhouse gas emission reduction targets.

Executive Order B-55-18 (September 2018): This order sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing greenhouse gas emissions.

Assembly Bill 1279, Chapter 337, 2022, The California Climate Crisis Act: This bill mandates carbon neutrality by 2045 and establishes an emissions reduction target of 85 percent below 1990 levels as part of that goal. This bill solidifies a goal included in Executive Order B-55-18. It requires the California Air Resources Board to work with relevant state agencies to ensure that updates to the scoping plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies in California, as specified.

3.3.2 Environmental Setting

The project sits along 8.9 miles of the scenic State Route 68 corridor in Monterey County, between the cities of Monterey and Salinas. The western end of the project area is in the City of Monterey, about 1.5 miles southeast of Monterey Bay; the eastern

end is in unincorporated Monterey County, just west of the Toro Park community. The project is outside of the state-designated Coastal Zone.

Land uses in the project area include residential, commercial, industrial, airport, conservation open space, and public lands. The State Route 68 corridor carries 25,000 to 30,000 vehicles per day and is of regional importance due to its facilitation of travel for commuters, freight and agricultural goods, and visitors (tourism) (Transportation Agency for Monterey County 2017). The corridor is also prized for its scenic beauty, and the surrounding, largely natural landscapes—notably, Fort Ord National Monument—support significant wildlife habitat.

As part of the Monterey Bay region, the project corridor is characterized by dry summers, rainy winters, prevailing northwesterly winds, and mild year-round temperatures. During summer, a high-pressure cell centered over the northeastern Pacific Ocean results in stable meteorological conditions in the region, while during winter the Pacific high-pressure cell weakens, resulting in increased precipitation and storm activity. Average annual precipitation in the area is approximately 19 inches (National Oceanic and Atmospheric Administration, no date).

The project area is within the North Central Coast Air Basin. Air quality is generally good in the basin, which is in attainment for all federal ambient air quality standards but is currently in nonattainment for airborne particulates less than 10 microns in diameter (PM10) under state standards.

A variety of native plant communities is present in the area, with coast live oak woodland/forest, arroyo willow thickets, and Monterey pine forest/woodland being the most common. The landscape also includes developed, landscaped, and ruderal/disturbed areas. Potential natural hazards in the area include wildfire, flooding, and geologic hazards including both seismic hazards and non-seismically induced earth movement.

In most of the project area, the State Route 68 corridor stays in the drainages of Canyon del Rey Creek, which flows west to the Pacific Ocean, and east-flowing El Toro Creek, which is a tributary to the Salinas River. The highway corridor also intersects and/or parallels several other tributary drainages. The highway corridor is nestled between higher land to both the north and south. On the north, the terrain consists of eroded ridges that rise to about 950 feet above mean sea level near Fort Ord National Monument. To the south, a west-east ridge between State Route 68 and the parallel Carmel River Valley ascends first gradually, and then sharply, as the road heads east toward Laureles Grade, Corral de Tierra Road, and San Benancio Road.

The State Route 68 corridor is vulnerable to natural hazards, including wildfire, flooding, and landslides. The project site includes High and Very High Fire Hazard Severity Zones within both Local Responsibility Area and State Responsibility Area locations (California Department of Forestry and Fire Protection 2007). The California State Geoportal database identifies two historic wildfires in the immediate vicinity of the project site: the 90-acre Laureles Fire (2015), started by a vehicle, and the 632-acre Los

Laureles Fire (1970), cause unknown (California Department of Forestry and Fire Protection 2019).

The project area is also crossed by three mapped segments of the Chupines earthquake fault, none of which are currently known to be active. The nearest known active fault is the San Andreas, about 30 miles east of the project site.

In the project area, State Route 68 is a two-lane conventional highway with 12-foot lanes, 8-foot outside shoulders, and a speed limit of 55 miles per hour. The route is heavily used during morning and evening peak hours and currently experiences heavy congestion leading to travel delays, mainly at signalized intersections. Target Level of Service for all nine project intersections is Level of Service C during weekday peak hour (morning and evening) operations; however, eight of the intersections have at least one leg below Level of Service C, and three intersections have an average Level of Service below C.

The nearest feasible alternative driving route between Monterey and Salinas involves taking State Route 1 and several other roads (Del Monte Boulevard, Reservation Road, Blanco Road, West Alisal Street), making this a less efficient option compared to State Route 68 in an uncongested condition.

As of July 2023, scheduled public transit service along the State Route 68 corridor exists only along approximately the westernmost 3 miles of the project area (going no farther east than York Road), due to delays at intersections that negatively affect reliable travel time along the corridor. Although the Transportation Agency for Monterey County's State Route 68 Scenic Highway Plan found that bicycle and pedestrian activity is present at many of the project intersections, a lack of sufficient bike and pedestrian facilities—along with a high number of conflict points at intersections—lead to increased delay for both bicyclists and vehicles at intersections (Transportation Agency for Monterey County 2017).

Greenhouse gas emissions analysis conducted for the *Final State Route 68 Scenic Highway Plan* found that under baseline conditions the State Route 68 corridor (including stretches outside the project limits) generates 30 tons of greenhouse gas emissions daily during morning/evening peak periods. Greenhouse gas reduction policies and strategies in the project area are addressed in various regional and local planning documents, including the Monterey County General Plan *Conservation and Open Space Element* (amended December 2020), the City of Monterey *Climate Action Plan* (2016), the Transportation Agency for Monterey County's 2022 *Regional Transportation Plan*, and the Association of Monterey Bay Area Governments' (AMBAG) *2045 Metropolitan Transportation Plan/Sustainable Communities Strategy* (MTP/SCS), which contains the Regional Transportation Plan.

Greenhouse Gas Inventories

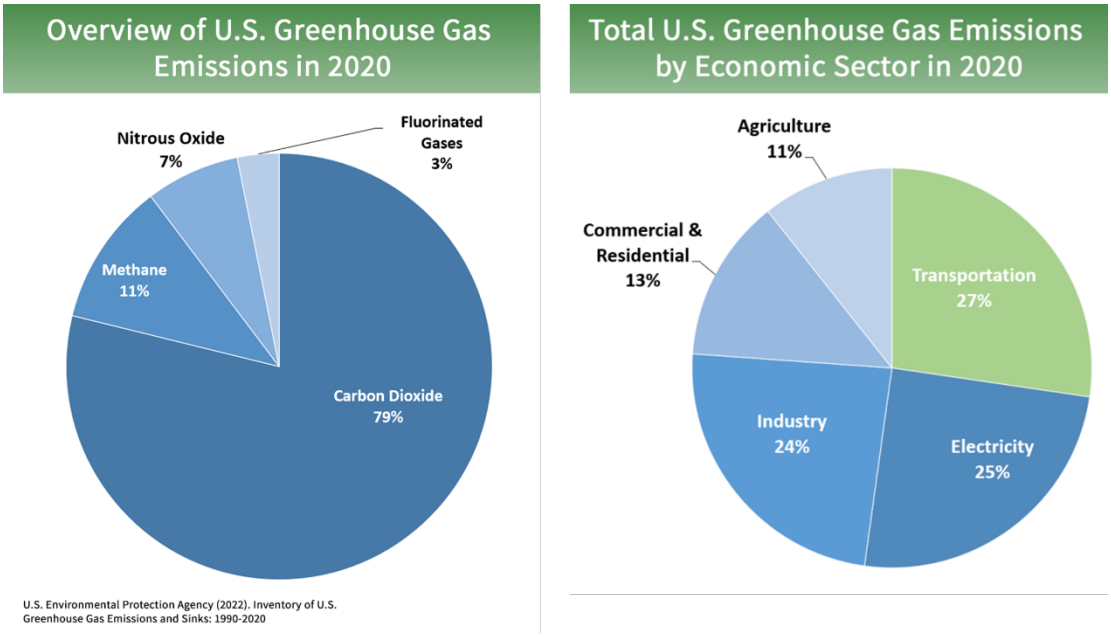
A greenhouse gas emissions inventory estimates the amount of greenhouse gases discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual greenhouse gas emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be

needed to attain emission reduction goals. The U.S. Environmental Protection Agency is responsible for documenting greenhouse gas emissions nationwide, and the California Air Resources Board does so for the state, as required by Health and Safety Code Section 39607.4. Cities and other local jurisdictions may also conduct local greenhouse gas inventories to inform their greenhouse gas reduction or climate action plans.

National Greenhouse Gas Inventory

The annual greenhouse gas inventory submitted by the U.S. Environmental Protection Agency to the United Nations provides a comprehensive accounting of all human-produced sources of greenhouse gases in the U.S. Total greenhouse gas emissions from all sectors in 2020 were 5,222 million metric tons, factoring in deductions for carbon sequestration in the land sector. Of these, 79 percent were carbon dioxide, 11 percent were methane, and 7 percent were nitrous oxide; the balance consisted of fluorinated gases. Total greenhouse gases in 2020 decreased by 21 percent from 2005 levels and 11 percent from 2019. The change from 2019 resulted primarily from less demand in the transportation sector during the COVID-19 pandemic. The transportation sector was responsible for 27 percent of total U.S. greenhouse gas emissions in 2020, more than any other sector (see Figure 3.3.2.1), and for 36 percent of all carbon dioxide emissions from fossil fuel combustion. Transportation carbon dioxide emissions for 2020 decreased by 13 percent from 2019 to 2020 but were 7 percent higher than transportation carbon dioxide emissions in 1990 (see Figure 3.3.2.1) (U.S. Environmental Protection Agency 2022b).

Figure 3.3.2.1 U.S. 2022 Greenhouse Gas Emissions (Source: U.S. Environmental Protection Agency 2022b)



State Greenhouse Gas Inventory

The California Air Resources Board collects greenhouse gas emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its greenhouse gas reduction goals. The 2022 edition of the greenhouse gas emissions inventory reported emissions trends from 2000 to 2020. Total California greenhouse gas emissions in 2020 were 369.2 million metric tons of carbon dioxide equivalent, a reduction of 35.3 million metric tons of carbon dioxide equivalent from 2019 and 61.8 million metric tons of carbon dioxide equivalent below the 2020 statewide limit of 431 million metric tons of carbon dioxide equivalent. Much of the decrease from 2019 to 2020, however, is likely due to the effects of the COVID-19 pandemic on the transportation sector, during which vehicle miles traveled declined under stay-at-home orders and reductions in goods movement. Nevertheless, transportation remained the largest source of greenhouse gas emissions, accounting for 37 percent of statewide emissions (see Figure 3.3.2.2). (Including upstream emissions from oil extraction, petroleum refining, and oil pipelines in California, transportation was responsible for about 47 percent of statewide emissions in 2020; however, those emissions are accounted for in the industrial sector.) California's gross domestic product and greenhouse gas intensity (greenhouse gas emissions per unit of gross domestic product) both declined from 2019 to 2020 (see Figure 3.3.2.3). It is expected that total greenhouse gas emissions will increase as the economy recovers over the next few years (California Air Resources Board 2022a).

Figure 3.3.2.2 California 2022 Greenhouse Gas Emissions by Scoping Plan Category (Source: California Air Resources Board 2022a)

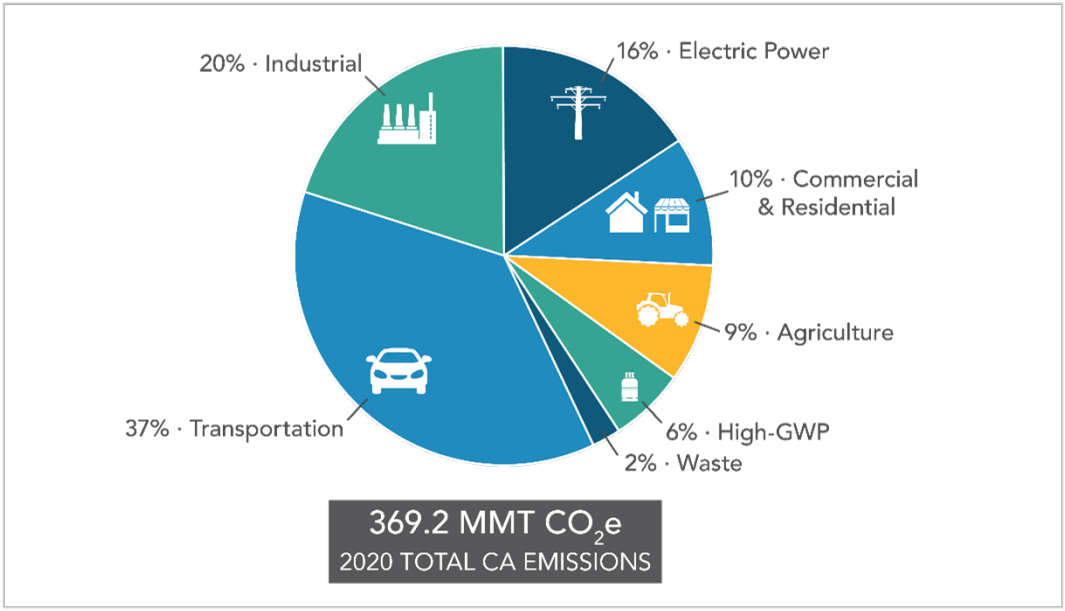
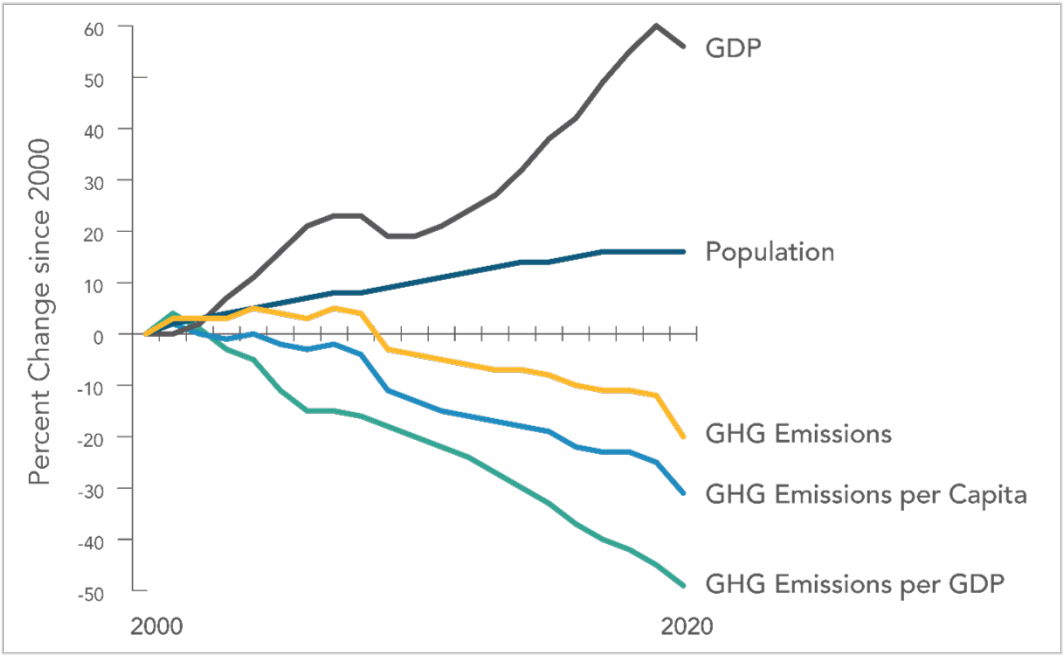


Figure 3.3.2.3 Change in California Gross Domestic Product, Population, and Greenhouse Gas Emissions Since 2000 (Source: California Air Resources Board 2022a)



Assembly Bill 32 required the California Air Resources Board to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing greenhouse gas emissions to 1990 levels by 2020, and to update it every five years. The California Air Resources Board adopted the first scoping plan in 2008. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in Executive Order B-30-15 and Senate Bill 32. The draft 2022 Scoping Plan Update additionally lays out a path to achieving carbon neutrality by 2045 (California Air Resources Board 2022b).

Regional Plans

The California Air Resources Board sets regional greenhouse gas reduction targets for California's 18 Metropolitan Planning Organizations to achieve through planning future projects that will cumulatively achieve those goals and reporting how they will be met in the Regional Transportation Plan/Sustainable Communities Strategy. Targets are set at a percent reduction of passenger vehicle greenhouse gas emissions per person from 2005 levels.

The project is in the jurisdiction of the Transportation Agency for Monterey County, which is designated by the State of California as the Regional Transportation Agency for the county. The project is consistent with the Transportation Agency of Monterey County's mission to develop and maintain a multimodal transportation system that enhances mobility, safety, access, environmental quality, and economic activities in Monterey County.

The Transportation Agency for Monterey County's 2022 Monterey County Regional Transportation Plan (RTP) supports this mission by incorporating State of California sustainability and climate action planning goals to reduce greenhouse gas emissions and vehicle miles traveled (VMT). The plan identifies State Route 68 as one of two major regional commute routes between Salinas and Monterey that are conventional two-lane roadways heavily congested during peak travel times (Transportation Agency of Monterey County, 2022 Monterey County Regional Transportation Plan).

The State Route 68 corridor is also included in the Association of Monterey Bay Area Governments (AMBAG) 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). The Association of Monterey Bay Area Governments is the joint power, multi-planning agency for the counties of Monterey, San Benito, and Santa Cruz, and is the federal Metropolitan Planning Organization for the region (Association of Monterey Bay Area Governments 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy, June 2022).

The Transportation Agency for Monterey County and the Association of Monterey Bay Area Governments work together to update the Regional Transportation Plan every four years, and have also coordinated to develop a Policy Element, a Finance Element, and a list of regional transportation investments that achieve greenhouse gas emissions reduction targets and support the 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy (Transportation Agency of Monterey County, 2022 Monterey County Regional Transportation Plan). The Association of Monterey Bay Area Governments' greenhouse gas reduction target for the region is 6 percent by 2035 (California Air Resources Board, 2022c).

Monterey County does not currently have a standalone climate action plan, but the Monterey County General Plan's Conservation and Open Space Element calls for a variety of greenhouse gas emissions reduction actions. See Table 3.3.2.1, which lists greenhouse gas reduction plans in the local and regional vicinity of the proposed project, for further information.

Table 3.3.2.1. Regional and Local Greenhouse Gas Reduction Plans

Plan Title	Greenhouse Gas Reduction Policies or Strategies
Association of Monterey Bay Area Governments (AMBAG). *Moving Forward Monterey Bay 2045: Metropolitan Transportation Plan/Sustainable Communities Strategy* (adopted June 2022)	This plan seeks to reduce greenhouse gas emissions by: • Developing an integrated, multimodal, equitable transportation system • Expanding the public transit network • Adding strategic capacity and technology enhancements to existing highways • Identifying a list of projects that will add and enhance walking and biking facilities • Adding improved Transportation Systems Management measures Improving Transportation Demand Management

Plan Title	Greenhouse Gas Reduction Policies or Strategies
City of Monterey. *Climate Action Plan* (March 2016)	The City of Monterey's *Climate Action Plan* lists 18 programs, campaigns, and measures to reduce greenhouse gas emissions in six areas: residential, commercial, transportation, solid waste, city government, and water and wastewater. Recommendations include promoting energy conservation and efficiency; continuing with the green business program; promoting electric vehicle charging, recycling, and composting; and adding hybrid vehicles to the City fleet, among others.
County of Monterey. *General Plan – Conservation and Open Space Element* (amended as of December 15, 2020)	The County's *Conservation and Open Space Element*, Policy OS-10.11, calls for the creation of a County climate action plan that would include the following activities: • Establish a current inventory of GHG emissions in the County of Monterey including but not limited to residential, commercial, industrial, and agricultural emissions; • Review progress made between 2010 and 2020 to reduce GHG emissions; • Forecast GHG emissions for 2030 for County operations; • Forecast GHG emissions for areas within the jurisdictional control of the County for "business as usual" conditions; • Identify strategies to reduce and sequester GHG emissions and set performance indicators for each strategy; • Quantify the reductions in GHG emissions from the identified strategies and evaluate the social and health impacts that may result from their implementation; • Quantify carbon sequestration in agricultural soils and crops; • Establish requirements for monitoring and reporting of indicators; • Establish a schedule of actions for implementation; • Identify funding sources for implementation; and • Identify a reduction goal for 2045
Transportation Agency for Monterey County. *2022 Monterey County Regional Transportation Plan* (adopted June 2022)	The Regional Transportation Plan includes Policy Objective 3.1, Reduce greenhouse gas emissions consistent with regional targets.
Transportation Agency of Monterey County. *Active Transportation Plan for Monterey County* (adopted June 2018)	The primary goal of this plan is to increase the proportion of trips accomplished by biking and walking throughout Monterey County. Other goals include improving safety, connectivity, and equity; increasing public outreach; and improving bike/ pedestrian facilities. The plan contains numerous objectives and programs (strategies or actions) to achieve these goals.

3.3.3 Project Analysis

Greenhouse gas emissions from transportation projects can be divided into those produced during operation of the State Highway System (operational emissions) and those produced during construction. The main greenhouse gases produced by the transportation sector are carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons. Carbon dioxide emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of methane and nitrous oxide. A small amount of hydrofluorocarbon emissions related to refrigeration is also included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Public Resources Code, Section 21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself.” (Cleveland National Forest Foundation versus San Diego Association of Governments (2017) 3 California 5th 497, 512). In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

Operational Emissions

The purpose of the project is to improve traffic flow, reduce collisions between vehicles, reduce collisions between vehicles and wildlife, and improve access for bicyclists and pedestrians at nine congested intersections along State Route 68 in Monterey County.

The heavy congestion currently experienced at these intersections during peak travel hours likely results in elevated greenhouse gas emissions, as the speeding and rapid acceleration/braking that typically characterizes stop-and-go traffic can decrease fuel economy by anywhere from 10 percent to 40 percent (U.S. Department of Energy (U.S. DOE), Energy Saver: Fuel Economy (source: U.S. Department of Energy, no date). The optimum speed for fuel efficiency is 50 to 55 miles per hour.

The project would not increase the number of travel lanes on State Route 68, and therefore would not increase roadway capacity or amount of vehicle miles traveled. This type of project generally causes minimal or no increase in operational greenhouse gas emissions. In fact, by restoring traffic speeds to a level closer to the posted 55 mile per hour speed limit in the highway corridor, the project improvements would likely improve overall fuel economy while reducing greenhouse gas emissions.

The project would also help support greenhouse gas reduction goals through the installation of two publicly available Zero Emissions Vehicle (ZEV) charging station

systems as a design feature. These Level 2, solar-powered charging systems would be installed in the existing Monterey County Park and Ride lot at the State Route 68/Laureles Grade intersection and would provide charging capability for two electric vehicles at the same time. In summary, no increase in operational greenhouse gas emissions is expected from implementation of the project.

Construction Emissions

Construction greenhouse gas emissions would result from material processing and transportation, onsite construction equipment, and traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. The use of long-life pavement, improved traffic management plans, and changes in materials can also help offset emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities.

An Air Quality and Greenhouse Gas Technical Memo, dated July 28, 2023, was prepared for the project. Memo preparation was informed by the Caltrans document "Interim Guidance: Determining CEQA significance for GHG Emissions," dated May 31, 2018.

The Caltrans Construction Emissions Tool (CAL-CET) was used to calculate construction-related greenhouse gas emissions for the project, using the model's default settings for a Mainline Improvement project. The CAL-CET estimates for carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and hydrofluorocarbons (HFC) for each alternative are presented in Tables 3.3.3.1 and 3.3.3.2, using an estimated duration of project construction activities of 2,180 working days for Alternative 1 and 2,695 working days for Alternative 2. The emissions estimates are based on assumptions made during the environmental planning phase of the project and are considered "ballpark" energy use projections.

Table 3.3.3.1. Construction Phase Greenhouse Gas Emission Estimates, Alternative 1

Metric	CO2	CH4	N2O	HFC
Daily Average (pounds per day)	4,713	0.108	0.217	0.149
Maximum Daily Average (pounds per day)	9,137	0.247	0.382	0.320
Annual Average (tons per year)	514	0.012	0.024	0.016

Source: Air Quality and Greenhouse Gas Technical Memo (California Department of Transportation, July 28, 2023)

Table 3.3.3.2. Construction Phase Greenhouse Gas Emission Estimates, Alternative 2

Metric	CO2	CH4	N2O	HFC
Daily Average (pounds per day)	4,172	0.096	0.190	0.119
Maximum Daily Average (pounds per day)	8,111	0.220	0.327	0.229
Annual Average (tons per year)	468	0.011	0.021	0.013

Source: Air Quality and Greenhouse Gas Technical Memo (California Department of Transportation, July 28, 2023)

As shown in Table 3.3.3.1, Alternative 1 was projected to produce 514 tons per year of carbon dioxide (CO2) emissions during the construction phase. In combination with other project-generated greenhouse gases, this results in an estimated total release of 4,862 tons of CO2 equivalent emissions over the 2,180-day duration of project construction.

Alternative 2 was projected to result in 468 tons per year of CO2 emitted during construction (Table 3.3.3.2). In combination with other project-generated greenhouse gases, this would result in an estimated project total of 5,430 tons of CO2 equivalent emissions over the 2,695-day duration of project construction.

All construction contracts include Caltrans Standard Specifications related to air quality. Section 7-1.02A and 7-1.02C, Emissions Reduction, requires contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all California Air Resources Board emission reduction regulations. Section 14-9.02, Air Pollution Control, requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce greenhouse gas emissions.

Fuel Consumption

The CAL-CET model also calculates construction-phase fuel consumption. The results of these calculations may be reported in a project's climate change environmental documentation (for example, an environmental impact report), because the amounts and types of fuel consumed directly influence the amount of exhaust released and types of pollutants produced.

Fuel consumption for the construction phase of this project was calculated using CAL-CET and reported in the Air Quality, Greenhouse Gas, and Noise Updated Technical Memo (July 28, 2023). For Alternative 1, maximum daily average fuel consumption for diesel fuel and gasoline was calculated as being 337 gallons and 103 gallons, respectively. Using the estimated Alternative 1 project duration of 2,180 working days, these figures equate to total estimated fuel consumption of up to 734,660 gallons of diesel and 66,400 gallons of gasoline for this project alternative.

For Alternative 2 (2,695 estimated working days), maximum daily average fuel consumption was calculated as being 300 gallons and 88 gallons for diesel and gasoline, respectively. These figures lead to estimates of total project fuel consumption of up to 808,500 gallons of diesel and 237,160 gallons of gasoline under this alternative. See Section 2.2.8 for CAL-CET fuel consumption tables for each Build Alternative.

CEQA Conclusion

The project is intended to reduce travel delays, vehicle collisions, and collisions between wildlife and vehicles, as well as improve access for bicyclists and pedestrians, by improving traffic operations at nine intersections within the State Route 68 corridor. While the project would result in a temporary, unavoidable increase in greenhouse gas emissions during construction, these would be limited by implementation of the measures listed below under "Project-Level Greenhouse Gas Reduction Strategies." These measures would reduce emissions of airborne pollutants, including greenhouse gases, to the maximum extent feasible.

The project is unlikely to result in any increase in operational greenhouse gas emissions because neither of the Build Alternatives would increase the number of travel lanes on State Route 68 or otherwise increase the highway's vehicle capacity. Therefore, no project-related increase in vehicle miles traveled (and thus vehicle-generated greenhouse gas emissions) is expected to occur as a result of the project.

The project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, including those addressing multimodal transportation (transit, roadway, bicycle and pedestrian facilities). The project would support various emissions reduction policies and strategies in the applicable county, regional, and state plans (see Table 3.3.2.1) through the use of the Project-Level Greenhouse Gas Reduction Strategies listed below. Because the project would not result in a net increase of greenhouse gas emissions that would conflict with the goals of Assembly Bill 32 or result in a detrimental impact on the environment, the impact would be less than significant.

In summary, Caltrans is firmly committed to implementing measures to help reduce greenhouse gas emissions. These measures are outlined in the following section.

3.3.4 Greenhouse Gas Reduction Strategies

Statewide Efforts

In response to Assembly Bill 32, California is implementing measures to achieve emission reductions of greenhouse gases that cause climate change. Climate change programs in California are effectively reducing greenhouse gas emissions from all sectors of the economy. These programs include regulations, market programs, and incentives that will transform transportation, industry, fuels, and other sectors, to take California into a sustainable, low-carbon, and cleaner future while maintaining a robust economy (California Air Resources Board 2022d).

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 greenhouse gas emissions targets. The Governor's Office of Planning and Research identified five sustainability pillars in a 2015 report: (1) increasing the share of renewable energy in the state's energy mix to at least 50 percent by 2030; (2) reducing petroleum use by up to 50 percent by 2030; (3) increasing the energy efficiency of existing buildings by 50 percent by 2030; (4) reducing emissions of short-lived climate pollutants; and (5) stewarding natural resources, including forests, working lands, and wetlands, to ensure that they store carbon, are resilient, and enhance other environmental benefits (Office of Planning and Research 2015). The Office of Planning and Research later added strategies related to achieving statewide carbon neutrality by 2045 in accordance with Executive Order B-55-18 and Assembly Bill 1279 (Office of Planning and Research 2022).

The transportation sector is integral to the people and economy of California. To achieve greenhouse gas emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement.

Greenhouse gas emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled. Reducing today's petroleum use in cars and trucks by 50 percent is a key state goal for reducing greenhouse gas emissions by 2030 (California Environmental Protection Agency 2015).

In addition, Senate Bill 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above-ground and below-ground matter.

Subsequently, Governor Gavin Newsom issued Executive Order N-82-20 to combat the crises in climate change and biodiversity. It instructs state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate the natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged, and vulnerable communities. To support this order, the California Natural Resources Agency (2022a) released *Natural and Working Lands Climate Smart Strategy,* with a focus on nature-based solutions.

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the California Air Resources Board works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in Assembly Bill 32. Executive Order B-30-15, issued in April 2015, and Senate Bill 32 (2016), set an interim target to cut greenhouse gas emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

Climate Action Plan for Transportation Infrastructure

The California Action Plan for Transportation Infrastructure builds on executive orders signed by Governor Newsom in 2019 and 2020 targeted at reducing greenhouse gas emissions in transportation, which account for more than 40 percent of all polluting emissions, to reach the state's climate goals. Under the California Action Plan for Transportation Infrastructure, where feasible and within existing funding program structures, the state will invest discretionary transportation funds in sustainable infrastructure projects that align with its climate, health, and social equity goals (California State Transportation Agency 2021).

California Transportation Plan

The California Transportation Plan is a statewide, long-range transportation plan to meet our future mobility needs and reduce greenhouse gas emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The California Transportation Plan 2050 presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide greenhouse gas emissions reduction targets and increase resilience to climate change. It demonstrates how greenhouse gas emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Caltrans 2021a).

Caltrans Strategic Plan

The *Caltrans 2020-2024 Strategic Plan* includes goals of stewardship, climate action, and equity. Climate action strategies include developing and implementing a Caltrans Climate Action Plan; a robust program of climate action education, training, and outreach; partnership and collaboration; a vehicle miles traveled monitoring and reduction program; and engaging with the most vulnerable communities in developing and implementing Caltrans climate action activities (Caltrans 2021b).

Caltrans Policy Directives and Other Initiatives

Caltrans Director's Policy 30 Climate Change (June 22, 2012) established a department policy to ensure coordinated efforts to incorporate climate change into departmental decisions and activities. Caltrans Greenhouse Gas Emissions and Mitigation Report (Caltrans 2020) provides a comprehensive overview of Caltrans' emissions. The report documents and evaluates current Caltrans procedures and activities that track and reduce greenhouse gas emissions and identifies additional opportunities for further reducing greenhouse gas emissions from department-controlled emission sources in support of departmental and state goals.

Project-Level Greenhouse Gas Reduction Strategies

The following measures would be implemented during the construction phase of the project to reduce greenhouse gas emissions and potential climate change impacts from the project.

GHG-1: Reduce construction waste and maximize the use of recycled materials, including but not limited to stockpiling pavement grindings for future use, salvaging rebar from demolished concrete, replaced drainage pipes, and processing waste to create usable fill material.

GHG-2: Operate construction equipment with improved fuel efficiency by:

- Properly tuning and maintaining equipment
- Limiting idling to five minutes for delivery and dump trucks and other diesel-powered equipment
- Using the right-sized equipment for the job
- Use of alternative fuels such as renewable diesel as feasible
- Produce hot mix asphalt with warm mix technology

GHG-3: Implement construction planning to reduce the number of equipment mobilizations needed.

GHG-4: Reduce duration and length of lane closures to minimize traffic disturbances.

GHG-5: Reduce water consumption during construction and prioritize the use of recycled water for construction needs.

GHG-6: Conduct construction environmental training to provide construction personnel with information regarding methods to reduce greenhouse gas emissions related to construction.

GHG-7: Select pavement materials that lower the rolling resistance of highway surfaces as much as possible while still maintaining design and safety standards.

GHG-8: Maintain bicycle, pedestrian, and transit access throughout construction.

3.3.5 Adaptation

Reducing greenhouse gas emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider

these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and Federal Highway Administration NEPA regulations, policies, and guidance.

The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways."

The U.S. Department of Transportation Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of the U.S. Department of Transportation in order to ensure that taxpayer resources are invested wisely and that transportation infrastructure, services, and operations remain effective in current and future climate conditions" (U.S. DOT 2011). The U.S. Department of Transportation Climate Action Plan of August 2021 followed up with a statement of policy to "accelerate reductions in greenhouse gas emissions from the transportation sector and make our transportation infrastructure more climate change resilient now and in the future," following this set of guiding principles (U.S. DOT 2021):

- Use best-available science
- Prioritize the most vulnerable
- Preserve ecosystems
- Build community relationships
- Engage globally

The U.S. Department of Transportation developed its climate action plan pursuant to the federal Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021). Executive Order 14008 recognized the threats of climate change to national security and ordered federal government agencies to prioritize actions on climate adaptation and resilience in their programs and investments (White House 2021).

Federal Highway Administration Order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events,* December 15, 2014) established Federal Highway Administration policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. The Federal Highway Administration has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2022).

State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. A number of state policies and tools have been developed to guide adaptation efforts.

California's Fourth Climate Change Assessment (Fourth Assessment) (2018) is the state's effort to "translate the state of climate science into useful information for action." It provides information that will help decision-makers across sectors and at state, regional, and local scales protect and build the resilience of the state's people, infrastructure, natural systems, working lands, and waters. The state's approach recognizes that the consequences of climate change occur at the intersections of people, nature, and infrastructure. The Fourth Assessment reports that if no measures are taken to reduce greenhouse gas emissions by 2021 or sooner, the state is projected to experience a 2.7- to 8.8-degree Fahrenheit increase in average annual maximum daily temperatures, with impacts on agriculture, energy demand, natural systems, and public health; a two-thirds decline in water supply from snowpack and water shortages that will impact agricultural production; a 77 percent increase in average area burned by wildfire, with consequences for forest health and communities; and large-scale erosion of up to 67 percent of Southern California beaches and inundation of billions of dollars' worth of residential and commercial buildings due to sea level rise (State of California 2018).

Sea level rise is a particular concern for transportation infrastructure in the coastal zone. Major urban airports will be at risk of flooding from sea level rise combined with storm surge as early as 2040; San Francisco International Airport is already at risk. Miles of coastal highways vulnerable to flooding in a 100-year storm event will triple to 370 by 2100, and 3,750 miles will be exposed to temporary flooding. The Fourth Assessment's findings highlight the need for proactive action to address these current and future impacts of climate change.

In 2008, then-governor Arnold Schwarzenegger recognized the need when he issued Executive Order S-13-08, which focused on sea level rise. Technical reports on the latest sea level rise science were first published in 2010 and updated in 2013 and 2017. The 2017 projections of sea level rise and a new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018. This executive order also gave rise to the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan), which addressed the full range of climate change impacts and recommended adaptation strategies. The Safeguarding California Plan was updated in 2018 and again in 2021 as the *California Climate Adaptation Strategy*, incorporating key elements of the latest sector-specific plans such as the *Natural and Working Lands Climate Smart Strategy*, *Wildfire and Forest Resilience Action Plan*, *Water Resilience Portfolio,* and the Climate Action Plan for Transportation Infrastructure (described above). Priorities in the 2021 California Climate Adaptation Strategy include acting in partnership with California Native American Tribes, strengthening protections for climate-vulnerable communities that lack capacity and resources, nature-based climate solutions, use of best available climate science,

and partnering and collaboration to best leverage resources (California Natural Resources Agency 2022b).

Executive Order B-30-15: This order was signed in April 2015 and requires state agencies to factor climate change into all planning and investment decisions. This order recognizes that the effects of climate change, in addition to sea level rise, also threaten California's infrastructure. At the direction of Executive Order B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017 to encourage a uniform and systematic approach.

Assembly Bill 2800 (Quirk 2016): This bill created the multidisciplinary Climate-Safe Infrastructure Working Group to help actors throughout the state address the findings of California's Fourth Climate Change Assessment. It released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California,* in 2018. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts (Climate Change Infrastructure Working Group 2018).

Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

Caltrans completed climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects of precipitation, temperature, wildfire, storm surge, and sea level rise. The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments guide analysis of at-risk assets and the development of Adaptation Priority Reports as a method to make capital programming decisions to address identified risks.

Project Adaptation Analysis

The Governor's Office of Planning and Research prepared *Planning and Investing for a Resilient California* (OPR 2017), a guidebook for state agencies performing climate risk analyses to determine how to integrate climate considerations into planning or investment decisions. Assessing the scale, scope, and context of climate disruption for the project means considering the timeframe/lifetime, adaptive capacity, and risk tolerance of the project areas. Ensuring that the climate change analysis adequately addresses a project's impacts and vulnerability reduces the risk of project delays.

The first step in the process is to identify how climate change could affect a project or plan by identifying impacts of concern and assessing the scale, scope, and context of climate disruption. Next, a climate risk analysis can be conducted by selecting climate change scenarios for analysis and selecting an analytical approach. Following that, a climate-informed decision can be made by evaluating the alternatives and design and applying resilient decision principles. Finally, the agency can track and monitor progress

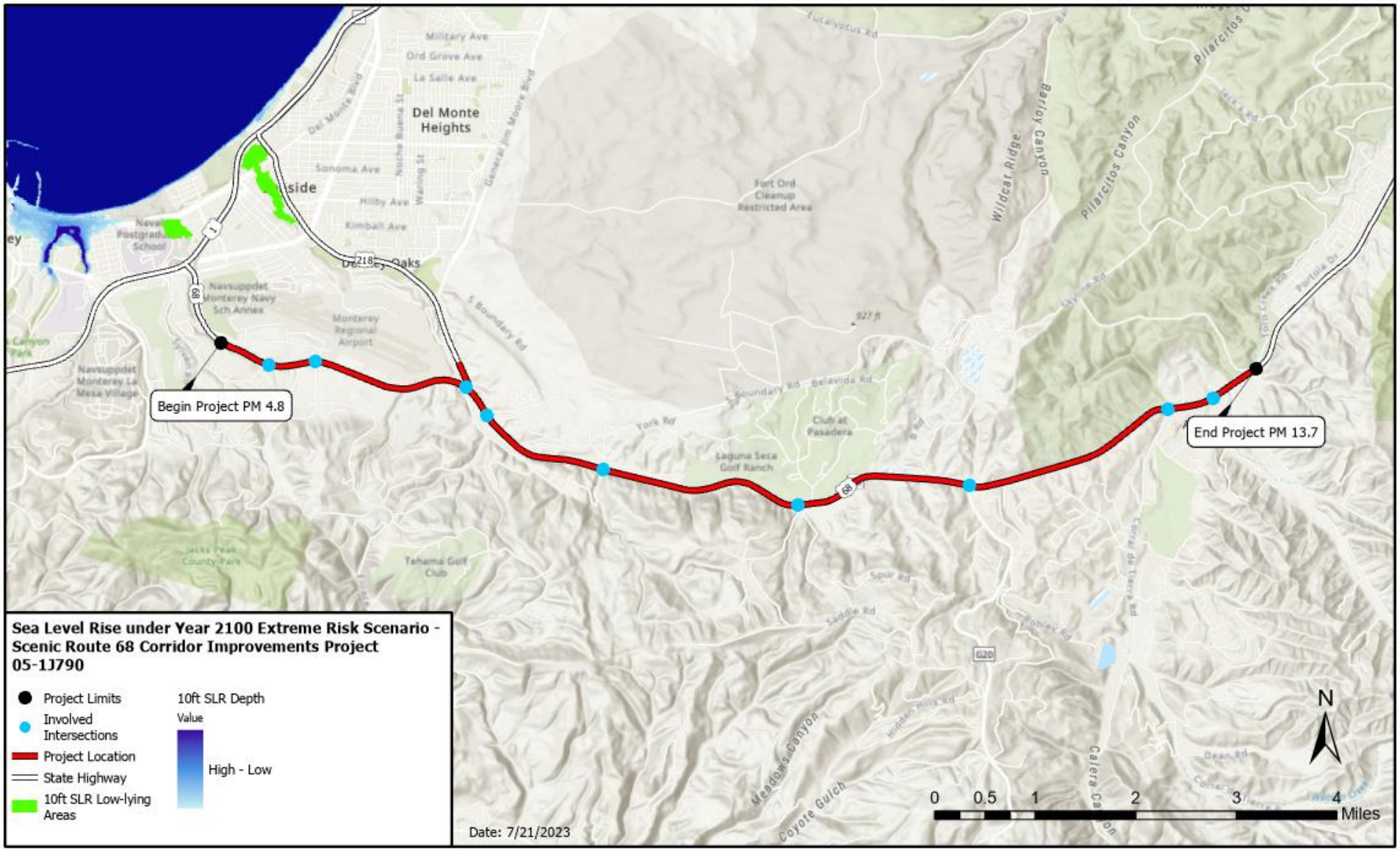
by evaluating determined metrics, adjusting as needed. The adaptation analysis evaluates the first two steps to inform a decision for the project.

In the following sections, the extreme impacts of climate change-based sea level rise, flooding, wildfire, and temperature on the proposed State Route 68 Corridor Improvements project are addressed. Although climate-change risk analysis inherently involves uncertainties as to the timing and intensity of potential risks, the present analysis uses the best available science. The improvements in proposed project are expected to last for decades, so the impacts of extreme events are considered to ensure that planning and investment decisions reflect the current and future climate conditions.

Sea Level Rise

The proposed project is outside the Coastal Zone and not in an area subject to sea level rise (National Oceanic and Atmospheric Administration 2022; Figure 3.3.5.1). Accordingly, direct impacts to transportation facilities within the project area due to projected sea level rise are not expected.

Figure 3.3.5.1. Predicted Coastal Inundation with 10 Feet of Sea Level Rise, Year 2100



Precipitation and Flooding

Climate change modeling shows that the southwestern United States is likely to experience less total precipitation in the coming decades, but that the potential for heavier individual rainstorms may increase. Heavy rains can affect highways by causing flooding, landslides, washouts, or structural damage. These effects can be exacerbated in the aftermath of wildfire on hillslopes such as those above many portions of the State Route 68 corridor improvements project site.

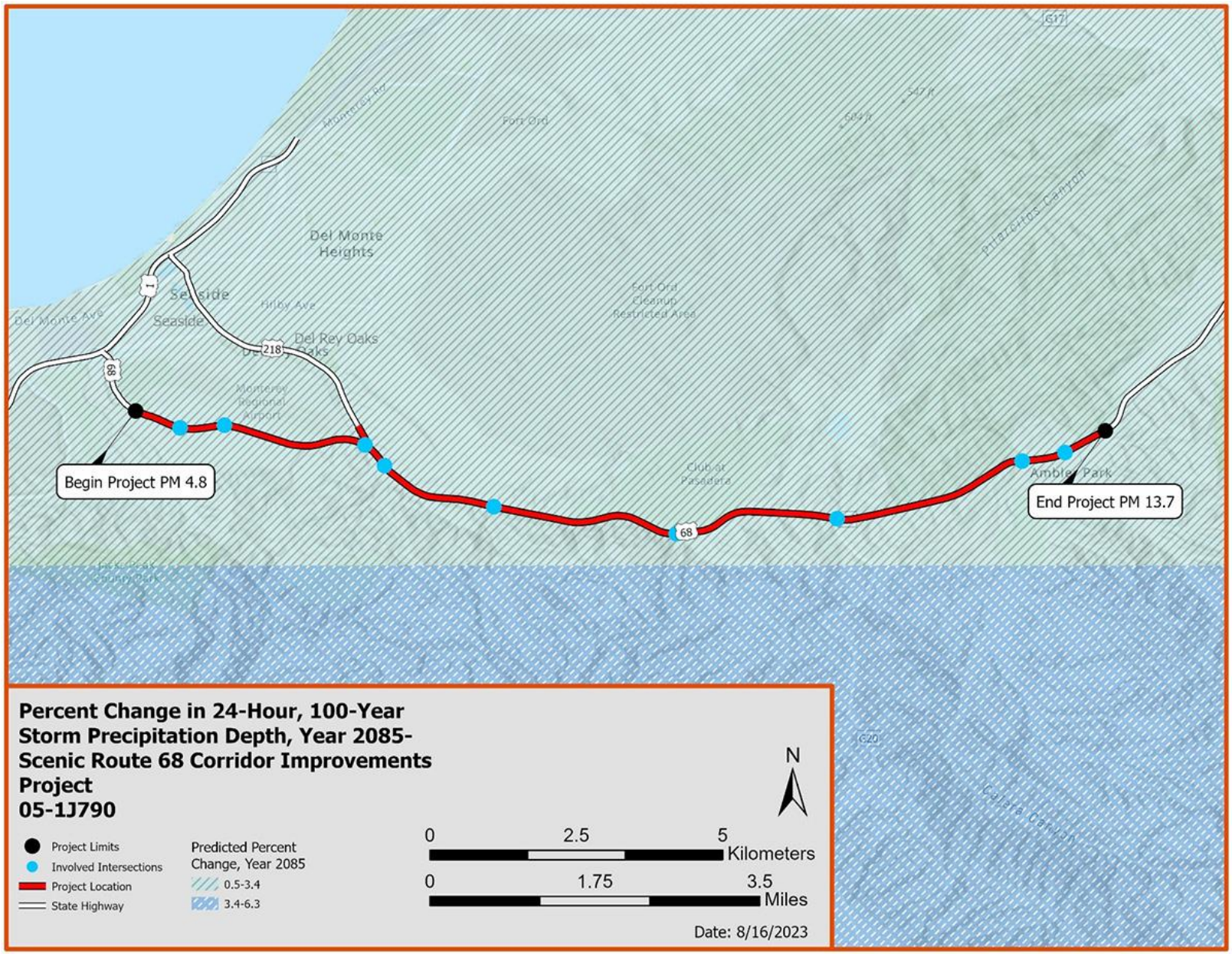
A review of State of California natural resources Geographic Information Systems (GIS) databases and the Caltrans Climate Change Vulnerability Assessment - District 5 Technical Report (Caltrans 2019) indicates that in the immediate project area, the 24-hour precipitation depth for a 100-year storm event is anticipated to increase by 0.5 to 3.4 percent (approximately 0.1 to 0.65 inch) over historical conditions by 2085, if high greenhouse gas emissions continue to the end of the century (the “RCP 8.5” scenario) (Figure 3.3.5.2). Further, the estimated precipitation depth increase is up to 6.3 percent (approximately 1.2 inches) on the high ground to the south of the State Route 68 corridor, which drains north toward the highway. This increased precipitation would result in greater seasonal stream flow, and possibly increased potential for flooding, in project area drainages such as Canyon del Rey Creek and El Toro Creek.

However, construction of the project is not expected to increase the vulnerability of any roadway or other infrastructure along State Route 68 to undesirable effects from increased precipitation or flooding because the project would maintain existing grade/existing elevation in all nearby floodplain areas, would not make any changes to regulatory floodways, and would not significantly alter the El Toro Creek channel at the site of the State Route 68 El Toro Creek Bridge widening. Widening of the State Route 68 El Toro Creek Bridge is proposed under Build Alternative 2 only.

In addition, the project would not support probable incompatible floodplain development such as commercial development or urban growth and would not significantly increase impervious surface in the affected watersheds.

For these reasons, climate change-related increases in precipitation and flooding are not expected to be a concern with the project.

Figure 3.3.5.2. Predicted Percent Change in 24-Hour, 100-Year Storm Precipitation Depth, Year 2085



Wildfire

The project area is susceptible to wildfire due to areas of thick native vegetation including oak woodlands, pine forest, and chaparral. Fire hazard in this type of setting is increased during hot and dry weather. Wildfire can directly damage asphalt roads by causing damage such as cracking and melting.

Fire can also accelerate erosion by removing the landscape's vegetation cover, burning roots that hold soil in place, and in some cases, causing native plants to release hydrophobic (water-repelling) chemicals into the soil. These conditions greatly increase the potential for destructive flooding, rockfall, and earth movement on steep slopes during periods of heavy precipitation that occur months to years after fire.

The hotter, drier weather conditions and increase in periodic heavy storms that are predicted by climate change models to occur more frequently in California in coming decades are expected to continue exacerbating both wildfire and post-fire flooding/landslide hazards.

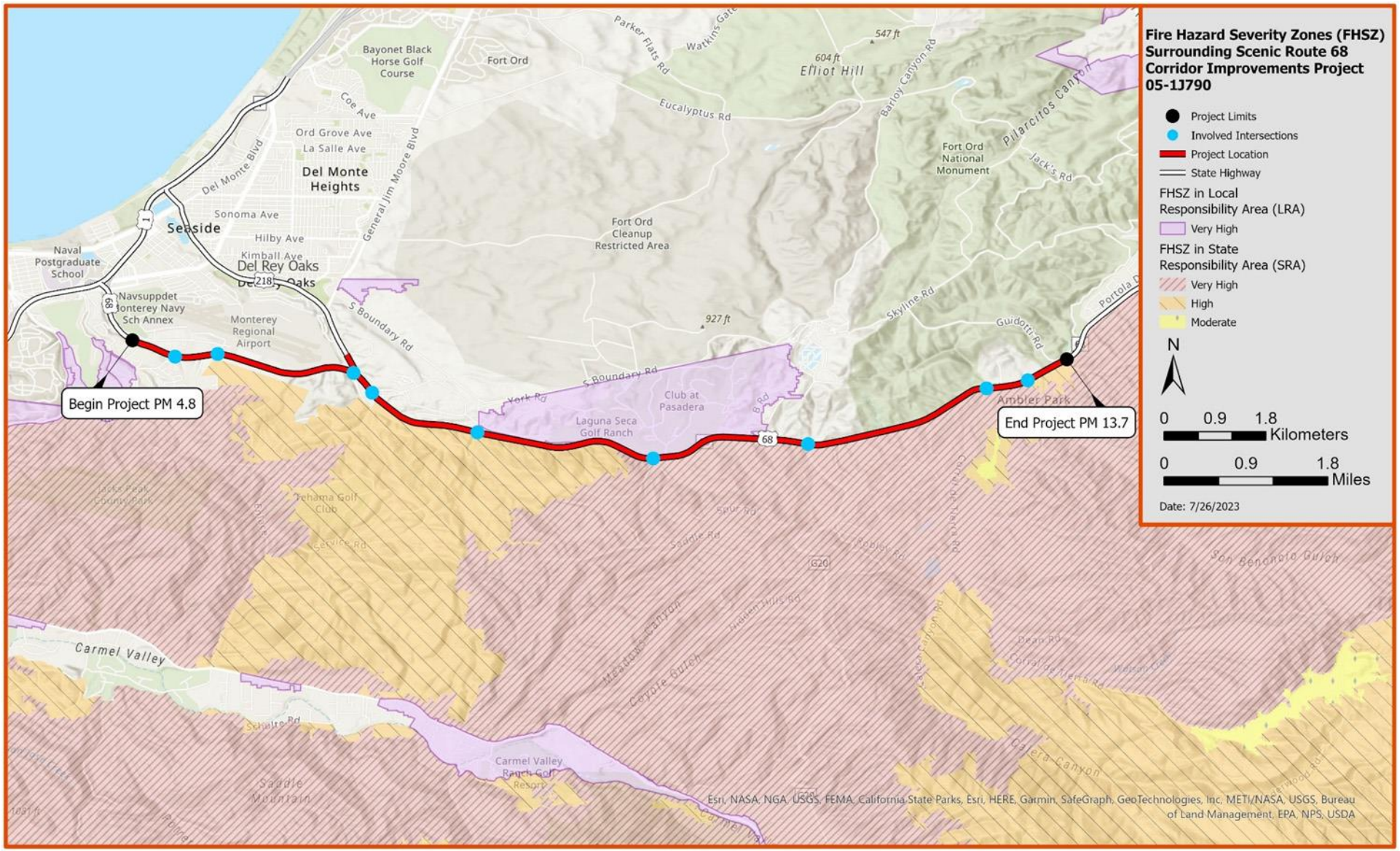
According to the CalFire Fire Hazard Severity Zone online mapping website (California Department of Forestry and Fire Protection 2007), the project site along the State Route 68 corridor crosses a mix of High and Very High Fire Hazard Severity Zones within both Local Responsibility Area and State Responsibility Area locations (see Figure 3.3.5.3). Other areas along State Route 68 within the project area are unclassified by CalFire for Fire Hazard Severity Zone.

In addition, the Caltrans District 5 climate change vulnerability online mapping tool identifies State Route 68 as a roadway that has High to Very High exposure to wildfire under the year 2085 RCP 8.5 emissions scenario. The Very High category is found from the project's western end to a point about one-quarter mile west of York Road. The remainder of the corridor within the project area falls under the High fire hazard classification.

During the project's construction phase, contractors would be required to comply with Caltrans' Standard Specification 7-1.02M(2), which mandates fire prevention procedures, including a fire prevention plan, to avoid accidental fire starts. The project would feature steel and concrete culverts to reduce the risk of infrastructure damage from wildfire. The box culverts installed for wildlife crossings would be made of reinforced concrete. In addition, the posts for the roadside guardrail assemblies would be steel, and the blocks connecting the rail to the posts would be made of a fire-resistant, recycled plastic material that is not consumed during a wildfire, allowing for the guardrail assembly to remain standing and providing traffic safety until it can be replaced if necessary post-fire.

See Sections 3.2.20 and 3.2.23 of this document for more information regarding wildfire.

Figure 3.3.5.3. CalFire - Fire Hazard Severity Zones 2023



Temperature

Changes in daily temperature can affect pavement quality and durability. The two temperature inputs to consider when selecting a pavement design are the average maximum temperature over seven consecutive days, and the absolute minimum air temperature. Per the Caltrans Highway Design Manual, the pavement design for new construction and reconstruction shall be no less than 40 years, or to about 2065 for this proposed project.

The District 5 climate vulnerability online mapping tool indicates that in the project area, average 7-day maximum temperature is predicted to increase by 8.3 to 8.5 degrees Fahrenheit by 2085 under the RCP 8.5 emissions scenario, while absolute minimum air temperature is expected to increase by 6.4 to 6.6 degrees Fahrenheit (Caltrans 2019). These increases are anticipated to fall within the acceptable temperature ranges for the "Central Coast" pavement type used in Monterey County. Therefore, the project is not anticipated to be affected by temperature changes that would require adaptive changes in pavement design or maintenance practices during the project's design life.

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Chapter 4 Comments and Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental review process. Coordination with the public helps project planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and Avoidance, Minimization, and Mitigation Measures and related environmental requirements. Agency and tribal consultation and public participation regarding this project have been accomplished through formal and informal methods, including public meetings, public notices, and interagency coordination meetings.

This chapter summarizes the results of Caltrans and the Transportation Agency for Monterey County's efforts to identify, address, and resolve project-related issues through early and continuing consultation. In addition to the specific meetings discussed below, Transportation Agency for Monterey County has held meetings with various stakeholders for the project, including but not limited to a meeting on February 24, 2020 with the Monterey County Regional Fire District at the Laureles Grade-Seca Place station, and Stakeholder Project Development Team meeting on December 10, 2020 via WebEx.

4.1 Project Scoping Process and Notice of Preparation

The State Route 68 Scenic Highway Plan was completed by the Transportation Agency for Monterey County in August 2017. The plan addressed the feasibility of affordable mid-term operational and capacity improvements in the State Route 68 corridor and potential for wildlife connectivity enhancements in response to known issues related to traffic congestion, safety, and reliability along the corridor. The plan considered three corridor concepts that were developed from extensive analysis of existing and future conditions, with input from the public through workshops, meetings, and on-line engagement.

Caltrans prepared a Project Study Report-Project Development Support (PSR-PDS) report which included a Preliminary Environmental Assessment Report completed in December 2018. Caltrans began preliminary design efforts in coordination with Transportation Agency for Monterey County and its design consultant GHD, after which a project description was developed in fall 2019 which excluded Torero Drive and included Ragsdale Drive in the project limits.

The Notice of Preparation (NOP) for the Draft Environmental Impact Report/Environmental Assessment was submitted to the California Office of Planning and Research, State Clearinghouse on September 13, 2019, the County Clerk Recorder, Monterey County on September 25, 2019, and the

California Transportation Commission on October 8, 2019. The Notice of Preparation describes the proposed project, the project location, and probable environmental effects. The Notice of Preparation was distributed to the responsible and trustee agencies for comment. The Notice of Preparation is in Appendix G.

A public Scoping Meeting was held on October 3, 2019, at the Monterey-Salinas Transit boardroom at 19 Upper Ragsdale, Monterey, California. The public and agency comment period for the Notice of Preparation was extended to November 8, 2019.

The scoping meeting was announced to the public via a formal public notice advertisement in *The Monterey Herald* two weeks prior to the meeting date; other methods of notification included press releases, news articles in the *Monterey Herald* on-line, email blast to a list of local and regional stakeholders, information on Caltrans' project information webpage, and a postcard mailing to responsible agencies, local and regional stakeholders, Native American groups, property owners and occupants within 300 feet of the project area. These notification methods were implemented during the latter half of September 2019.

The main purpose of the scoping meeting was to hear from the public on scoping of the environmental document (major issues of concern) and project alternatives, and to provide the public with information about the upcoming environmental document process, the project timeline, and future opportunities for public input. The second priority for the scoping meeting was to open channels of communication with the public regarding the proposed project.

The meeting was an open house meeting format to allow the public maximum time to provide comments. Display boards with project description information, schedule, and preliminary design concepts were placed around the room, and Transportation Agency for Monterey County and Caltrans staff were available to answer questions. Attendees had several options for providing comments and questions about the project, either on written comment cards, via email to Caltrans, or orally to an onsite court reporter.

Public input and comments received during the meeting and by mail after the meeting mainly included the following topics and issues:

- Highway widening instead of roundabouts
- Roundabouts and driver safety
- Property acquisitions
- Pedestrians and safe crossings at roundabouts
- Direct access to State Route 68 from side streets and driveways
- Corral de Tierra By-Pass preference over the proposed project

- Project timing and construction phasing
- Travel time and traffic congestion improvement
- Greenhouse gas reduction
- Support for roundabouts and design for best diameter
- Stormwater flooding during storms at the intersection of State Route 68 and Josselyn Canyon Road
- Side street access into roundabouts
- Roundabout safety with larger and emergency vehicles
- Scenic corridor protection
- Effectiveness of wildlife crossings
- Construction impacts on traffic
- Tribal consultation compliance with Assembly Bill 52
- Use of project funding for other infrastructure purposes
- Not in favor of roundabouts/questions about roundabout effectiveness
- Access to Seca Place
- Future land use plans for Saucito Land Company parcels
- Coordination with Monterey County Airport
- Air quality emissions with roundabouts
- Pasadera Homeowners Association concerns about project taking portions of their property; requested inclusion in landscape planning for a roundabout at Pasadera Drive-Boots Road intersection at State Route 68
- Residents of the San Benancio State Route 68 intersection area concerns regarding project design aesthetics, the amount of right-of-way that may be required for Alternative 2, and construction impacts to driveways

4.2 Consultation and Coordination with Public Agencies

Upon selection of a preferred alternative for the project, Caltrans will submit applications for permits to the U.S. Fish and Wildlife Service, the California Department of Fish and Wildlife, the U.S. Army Corps of Engineers, and the Regional Water Quality Control Board for project impacts related to wetlands and jurisdictional waters of the U.S., impacts to listed species and their habitats, and water quality certification under Section 401 of the Clean Water Act. Permit applications are submitted during the Plans, Specifications, and Estimates phase of the project after the environmental document phase is completed.

Caltrans' cultural resources staff initiated consultation with the California State Historic Preservation Officer in accordance with the January 1, 2014 First

Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer and Caltrans regarding compliance with Section 106 of the National Historic Preservation Act and the January 2019 Memorandum of Understanding between Caltrans and State Historic Preservation Officer regarding compliance with Public Resources Code 5024 and as the proposed project pertains to cultural resources in the project Area of Potential Effect.

Caltrans submitted a Historic Property Survey Report, Archaeological Survey Report, Archaeological Evaluation Report, and a Historic Resources Evaluation Report to the State Historic Preservation Officer in July 2023 for review and concurrence on Caltrans' findings regarding historic resources (built environment and archaeological sites) within the project Area of Potential Effect for cultural resources. Caltrans included a draft Programmatic Agreement and Cultural Resources Management Plan proposing a phased program approach for completion of testing of archaeological sites to determine the project's effects on potential sensitive archaeological resources and prescriptive treatment steps depending on the findings of testing results. Consultation with the State Historic Preservation Officer is ongoing.

Caltrans has coordinated with the U.S. Department of the Interior, Bureau of Land Management, the County of Monterey, City of Monterey and City of Del Rey Oaks in regard to potential effects on the properties under the jurisdiction of those agencies. Coordination is ongoing and will continue through the remaining phases of the project development process as necessary.

4.3 Consultation and Coordination with Native American Tribes and Representatives

The following is a summary of Caltrans' coordination and consultation with Native American tribes, entities, and individuals knowledgeable about cultural resources in the project area. A detailed description of the coordination efforts is provided in the Historic Property Survey Report (July 2023).

- June 28, 2019: Caltrans archaeologist Christina MacDonald sent the Native American Heritage Commission (NAHC) a request to search the Sacred Lands Files for cultural resources within the project area, and a list of Native American individuals familiar with the project area and may have information pertinent to the cultural resources studies. Gayle Totton of the Native American Heritage Commission replied on July 1, 2019 that the Sacred Lands Files search was negative for cultural resources in the project area, and provided a list of Native American tribes and individuals who may have knowledge of cultural resources in the project area.

- July 30, 2019 Caltrans archaeologist Christina MacDonald send out letters to the list of individuals and groups provided by the Native American Heritage Commission initiating consultation under Section 106 of the National Historic Preservation Act and the California Environmental Quality Act (CEQA), specifically Assembly Bill 52 (Public Resources Code 21080.3.1 and Chapter 532 Statutes of 2014). The letter described the proposed project and project limits, and a list of known cultural resources within the Caltrans state highway right-of-way within the project limits.
- Caltrans contacted the Esselen Tribe of Monterey via email October 23, 2019 to secure a member to participate in the archaeological field survey of the project study area. The archaeological survey was conducted October 1, to November 1, and November 20 and 21, 2019 by Caltrans' consultants, accompanied by Cari Herthel of the Esselen Tribe.
- A Native American Consultation Group was established for the project, and meetings were held starting in January 2020 to introduce the consultation group to the project and report the results of the field survey. The Draft Archaeological Study Report prepared by Caltrans was shared with the consultation group January 21, 2020 for input on the results. The Draft Extended Phase I/Phase II archaeological testing proposal was emailed to the Consultation Group on April 22, 2020. Native American representatives on the Consultation Group include: Valentin Lopez, Irenne Zwierlein, Patrick Orozco, Tony Cerda, Tom Little Bear Nason, Sue Morely, Ann Marie Sayers, Louise Miranda Ramirez, Christianne Arias, and Cari Herthel.
- Coordination continued between Caltrans archaeological staff and members of the Consultation Group regarding the cultural reports and site testing work. On September 8, 2022, Ms. MacDonald sent a copy of the Draft Programmatic Agreement and the Draft Cultural Resources Management Plan that outlines how Caltrans plans to address the area near Corral de Tierra Road where identification of cultural resources would not be completed due to biological resources sensitivity in the area, and how that will be treated going forward to carry out Section 106 consultation compliance and responsibilities. Caltrans received comments on these documents from the Tribal Administrator, Ms. Jana Nason, September 21, 2022.
- On March 3, 2023, Caltrans archaeologist Robert Johnson-Ramirez provided a project update via email to Ms. Jana Nason, Tribal Administrator. Consultation with the Consultation Group is ongoing.

4.4 Public Open House Meeting

A public open house meeting was held on July 19, 2023 to provide the public an update on the proposed project and the environmental review process underway. The meeting was held at the Laguna Seca Raceway meeting room from 4:30 p.m. to 7:30 p.m. The meeting was attended by an estimated 150

members of the public, about 93 of which signed in on a meeting sign-in sheet that recorded the names and contact information of the attendees.

The Transportation Agency for Monterey County notified the public about the open house meeting though various methods of communication, including website publication and an email blast of the meeting invitation postcard to community stakeholder organizations, public agencies, area residents and interested parties. The postcard invitation included information about the open house location and time, and a QR code for more information about the project. The postcard was presented in both English and Spanish.

Members of the public provided suggestions and comments during the open house, some of which included the following:

- Suggestions for improving roll-out of information to the public about the project such as using the platform Next Door, concerned about government agencies having access to neighborhood information
- Suggestion for installing roadway signage on State Route 68 alerting the public about engagement events for the project
- Concerns that people that use State Route 68 to commute but that do not live along the corridor may not be included in the notifications about the project and public meetings
- Design of the wildlife crossings and whether lighting would be included for those culverts
- Inquiries about project phasing, greenhouse gas reduction information, project schedule
- Concerns regarding access onto the highway from side streets and other specific intersection design questions about the roundabouts and expanded signal options under evaluation
- Questions about the traffic studies and delay savings analysis

Chapter 5 List of Preparers

The following Caltrans personnel contributed to the preparation of this document and/or its supporting technical studies:

Ruben Atilano, Professional Engineer, Transportation Engineer - Civil. Bachelor of Science, Civil Engineering, San Francisco State University; Master of Science, Civil Engineering, California Polytechnic State University, San Luis Obispo; 2 years in the fields of air quality and noise evaluation. Contribution: Air Quality Report, Noise Study Report, and Noise Abatement Decision Report oversight.

Phlora Barbash, Landscape Architect. Bachelor of Science, Landscape Architecture, University of California, Davis; 8 years of experience in the field of Landscape Architecture. Contribution: preparation of Visual Simulations, grading design refinements, and onsite revegetation approach.

Myles Barker, Editorial Specialist. Bachelor of Arts, Mass Communication and Journalism, California State University, Fresno; 7 years of writing and editing experience. Contribution: Technical Editor.

Dianna Beck, Associate Environmental Planner. B.S., Environmental Management and Protection, California Polytechnic State University, San Luis Obispo; 11 years of environmental planning experience. Contribution: GIS Mapping and exhibit preparation, peer reviewer.

Skyler Blackwell, Student Assistant - Degree in progress, Bachelor of Science, Environmental Management and Protection, California Polytechnic State University San Luis Obispo. Contribution: Public Mailing and Contact Lists.

Audrey Borders, Student Assistant – Degree in progress, Bachelor of Science, Biology, California Polytechnic State University, San Luis Obispo. Contribution: ADA-compliant GIS mapping.

Robert Carr, Associate Landscape Architect. B.S., Landscape Architecture, California Polytechnic State University, San Luis Obispo; 30 years of experience preparing Visual Impact Assessments. Contribution: Visual Impact Assessment.

Adam DiGiovine, Environmental Scientist, Environmental Planning. Bachelor of Science, Anthropology and Geography, California Polytechnic State University, San Luis Obispo; archeological field work, field surveying, and extensive work with geospatial data. Contribution: Cumulative Impact Report.

Shelly Donohue, P.G. Engineering Geologist. M.S., Earth and Environmental Sciences, Vanderbilt University; B.S., Biology, B.S. Earth Sciences, University of Washington; 13 years of experience in geology, paleontological resources management, and environmental science and planning. Contribution: Hazardous waste and paleontological evaluation and reporting.

David Ewing, Staff Services Manager I. B.A., Graphic Design, Minor in Business Administration, California State University, Fresno; more than 23 years of graphic design, transportation graphics, and public participation experience. Contribution: Project Overview Map and ADA consultation on graphics.

Matt Fowler, Senior Environmental Planner (Branch Chief), Environmental Analysis Branch. Bachelor of Arts, Geography/Methods of Geographic Analysis, San Diego State University, San Diego; 22 years of experience in the field of environmental planning. Contribution: oversight of the project Environmental Impact Report and Environmental Assessment preparation and procedures.

Geramaldi, Environmental Scientist (Generalist). B.S., Environmental Geography, California Polytechnic State University - Pomona; over 7 years of environmental analysis experience. Contribution: Community Impact Assessment.

Christopher Hamma, Caltrans District 5 Environmental Scientist/Coordinator. B.S., Forestry and Natural Resources Management; M.S., Forestry Sciences; Master of City and Regional Planning – California Polytechnic State University, San Luis Obispo; more than 4 years of experience in environmental planning, more than 5 years' experience in ecological research, more than 10 years' experience in document control. Contribution: Reviewing technical reports; researching, writing, editing, and proofing sections of the draft environmental document.

Meg Henry, Associate Environmental Planner. B.S., Environmental Horticultural Science, California Polytechnic State University, San Luis Obispo; 20 years of environmental planning experience. Contribution: Environmental Coordinator, Lead EIR/EA preparer (2019-2021), Lead analyst for First Cut Growth Induced Impacts Assessment.

Michael Hollier, Associate Environmental Planner. B.A., History, University of Louisiana, Lafayette; 17 years of experience in the fields of transportation, land use, and environmental planning. Contribution: writing portions of the draft environmental document.

Robert C. Johnson-Ramirez, Associate Environmental Planner, Archaeologist. B.S., Studio Art, Southern Oregon University, Ashland;

Pimu Catalina Island Archaeological Field School, California State University, Northridge; 9 years of Cultural Resource Management experience. Contribution: Co-Author Historic Property Survey Report.

Joel Kloth, Engineering Geologist. B.S., Geology, California Lutheran University; more than 30 years of experience in petroleum geology, geotechnical geology, and environmental engineering/geology-hazardous waste. Contribution: Hazardous Waste Studies and Paleontological Studies.

Krista Kiaha, Heritage Resources Coordinator, Senior Environmental Scientist (Branch Chief). Master of Science, Anthropology, Idaho State University; 25 years of experience in the field of cultural resource management. Contribution: senior oversight of Cultural Resources studies.

Nicole Kim, Associate Environmental Planner. Bachelor of Science, Environmental Science and Public Policy, Duke University; 4 years of air quality research and environmental planning experience. Contribution: Environmental Coordinator, EIR/EA lead (2021-2022); regional projects research and Cumulative Impacts Analysis.

Rajvi Koradia, Transportation Engineer (Civil). Master of Science, Civil and Environmental Engineering, San José State University; Bachelor of Science, Environmental Engineering, Lalbhai Dalpatbhai College of Engineering; 4 years of experience in the field of environmental engineering. Contribution: Air Quality, Noise and Water Quality studies.

Lindsay Kozub, Professionally Qualified Staff Principal Architectural Historian, Associate Environmental Planner (Architectural Historian). Master of Arts, History/Cultural Resource Management, Colorado State University; Bachelor of Arts, History, University of Montana; Bachelor of Science, Business, Montana State University; 12 years of experience in historical and architectural documentation, historic preservation, and cultural resource management. Contribution: project Historic Property Search Report, Historic Resources Evaluation Report.

Kristen Langager, Professional Landscape Architect CA 6427, Associate Landscape Architect. B.S., Landscape Architecture, California Polytechnic State University, San Luis Obispo; 16 years of experience in Landscape Architecture. Contribution: Visual Impact Assessment.

Daniel Leckie, Associate Environmental Planner (Architectural History). M.S., Historic Preservation, The University of Vermont (2014); B.A., American History and Sociology, State University of New York (SUNY) at Stony Brook (2010); over 7 years of experience in the fields of Architectural History and Historic Preservation Planning. Contribution:

Principal Architectural Historian, preparation of the Historic Resources Evaluation Report.

Isaac Leyva, Professional Geologist California 9842, Engineering Geologist. B.S., Geology; 34 years of experience in petroleum geology, environmental geology, geotechnical engineering. Contribution: Initial Site Assessment (Hazardous Waste studies).

Joseph Londono, GIS Analyst, Associate Transportation Planner. Bachelor of Arts, Geography and Urban Studies, Temple University; Master of City and Regional Planning, California Polytechnic State University, San Luis Obispo; 16 years GIS Project Support. Contribution: ADA-Compliant Design Layouts.

Christina MacDonald, Senior Environmental Planner (Archaeology). M.A., Cultural Resources Management, Sonoma State University; B.A., Anthropology, University of California, Los Angeles; over 22 years of experience in California prehistoric and historical archaeology. Contribution: Principal Investigator – Prehistoric and Historical Archaeology.

Natasha Malady, Student Intern. B.S., Environmental Management and Protection, California Polytechnic State University, San Luis Obispo; 1 year of environmental planning experience. Contribution: Data Research.

Lucas Marsalek, Associate Environmental Planner. B.S., Forestry and Natural Resource Management, California Polytechnic State University, San Luis Obispo; 11 years of environmental planning experience. Contribution: GIS Mapping, Permits to Enter Coordination.

Sunny McBride, Associate Environmental Planner. B.S., Biological Sciences, Utah State University; 11 years of experience in environmental analysis. Contribution: Co-analyst for First Cut Growth Induced Impacts Assessment, co-wrote Hydrology and Floodplain and Consistency with State, Regional, and Local Plans and Programs sections, and peer reviewer.

Karl Mikel, Professional Engineer, Qualified Stormwater Prevention Plan Developer, Senior Transportation Engineer (Branch Chief). Bachelor of Science, Environmental Engineering, California Polytechnic State University San Luis Obispo; Master of Science, Civil/Environmental Engineering, California Polytechnic State University San Luis Obispo; 20 years of experience in the field of environmental engineering. Contribution: oversight of project Air Quality Report, Noise Study Report, Noise Abatement Decision Report, Initial Site Assessment, Paleontological Identification Report, Paleontological Evaluation

Report, Paleontological Mitigation Plan, Paleontological Mitigation Plan, and Water Quality Assessment studies.

Jennifer Moonjian, Senior Environmental Scientist Supervisor, Biology. Masters and Bachelors of Biological Sciences from Cal Poly, San Luis Obispo. 19 Years of experience in Biological Resource Analysis. Contribution: Review and approval of Natural Environment Study.

Dario Moreno, Office Chief, Geographic Information Systems (GIS). Over 25 years of experience in Geographic Information Systems (GIS) in various sectors in asset management, environmental studies, and transportation planning. Contribution: Oversight of GIS mapping and figure preparation.

Jill O'Connor, Associate Environmental Planner. M.A. History, California Polytechnic State University, San Luis Obispo; B.S., Natural Resources Management, California Polytechnic State University, San Luis Obispo; over 30 years of environmental impact analysis and planning experience. Contribution: Lead EIR/EA preparer, Environmental Coordinator, Section 4(f) Evaluation preparer.

Margaret "Meg" Perry, Associate Environmental Planner (Natural Sciences). B.S., Soil Science, California Polytechnic State University, San Luis Obispo; 14 years of experience in California biology and habitat studies, emphasizing botany, wetland science, permitting, and environmental compliance. Contribution: Wetland delineation and wetlands analysis.

Pete Riegelhuth, National Pollutant Discharge Elimination System/Stormwater Coordinator, Landscape Associate. Bachelor of Landscape Architecture, California Polytechnic State University, San Luis Obispo; 4 years of experience as District Construction Stormwater Coordinator and 19 years as District 5 National Pollutant Discharge Elimination System/Design Stormwater Coordinator. Certified Professional in Erosion and Sediment Control, CPESC #5336. Contribution: Water Quality review.

Morgan Robertson, Biology Branch Chief, District 5. M.S., Wildlife Biology, University of Alaska, Fairbanks; B.S., Biology, University of California, Davis; more than 22 years of biology experience. Contribution: Biology field studies, wildlife crossing design and biological management.

Ed Schefter, Senior Transportation Surveyor. B.S., Surveying, California State University, Fresno; more than 22 years of GPS/GIS experience. Contribution: GIS mapping and exhibit preparation.

Angelina Taylor, Student Assistant – Senior at California Polytechnic State University San Luis Obispo, majoring in Environmental Management

and Protection, with a minor in Anthropology and Geography. Contribution: Preparation of GIS figures for the EIR/EA.

Mindy Trask, Associate Environmental Planner (Natural Sciences). M.R.P., Environmental and Regional Planning, Washington State University, Pullman; M.S., Rangeland Resources, Oregon State University, Corvallis; B.S., Ecology and Systematic Biology, California Polytechnic State University, San Luis Obispo; more than 23 years of environmental planning and biological sciences experience. Contribution: Biological field studies and analysis, coordination with resources agencies, wildlife crossing design, and preparation of biological resources documents.

Blaize Uva, Environmental Scientist (Archaeology). Bachelor of Science in Anthropology and Geography California Polytechnic State University, San Luis Obispo. 12 years in the field of cultural resource management and geographic information system analyst/cartography. Contribution: Historic Property Survey Report cultural resources reports and mapping of areas of potential effects.

Jason Wilkinson, Deputy District Director/Senior Environmental Planner. B.S., Natural Resource Management, Minor in Geographical Information System (GIS), California Polytechnic State University, San Luis Obispo; 16 years of environmental planning experience. Contribution: Environmental Procedures Oversight.

Matthew Willis, Environmental Scientist. B.S., Ecology and Systematic Biology, Minor in Geography, California Polytechnic State University, San Luis Obispo; 20 years of environmental impact assessment, environmental compliance, and biological resources experience. Contribution: Field studies and biological document (Natural Environment Study) preparation.

Chris Zotovich, Environmental Scientist, Biologist. Bachelor of Science, Environmental Science: Energy and Climate, (Cal Poly) Humboldt State University; 3 years in the fields of environmental science, biological analysis, GIS analysis. Contribution: Biological studies, biological surveys, environmental and biological impact mapping, GIS Impact analysis, and GIS mapping for figures in the environmental document and Natural Environment Study.

Chapter 6 Distribution List

The Draft Environmental Impact Report/Environmental Assessment and/or a Notice of Availability was distributed to the following federal, State, regional, and local agencies, elected officials, interested groups, organizations and individuals, and utilities and service providers in the project area. In addition, all property owners and residents/occupants located within 500 feet of the proposed project were provided with a Notice of Availability.

Federal Agencies

Bureau of Land Management, Fort Ord National Monument – Eric Morgan, National Monument Manager

Federal Aviation Administration - Chief, San Francisco Airports District Office

Federal Emergency Management Agency - Regional Director

Federal Highway Administration

Federal Transit Administration, Region IX

National Marine Fisheries Services, Sacramento Field Office

U.S. Army Corps of Engineers - Intergovernmental Reviewer

U.S. Department of Agriculture, Natural Resources Conservation Service - Area Conservationist

U.S. Department of Agriculture, Office of the Secretary

U.S. Department of Commerce. National Oceanic and Atmospheric Administration - Director, Office of Ecology and Conservation

U.S. Department of Energy - Director, Office of Environmental Management

U.S. Department of Housing and Urban Development - Environmental Clearance Officer

U.S. Department of the Interior, Office of Environmental Policy and Compliance - Intergovernmental Reviewer

U.S. Environmental Protection Agency, Region IX - Federal Activities Office, CMD-2

U.S. Fish and Wildlife Service - Intergovernmental Reviewer

State Agencies

California Air Resources Board - Land Use/CEQA/VMT Reductions

California Department of Conservation, Environmental Review

California Department of Fish and Wildlife, Region 4 - Carrie Swanberg, Senior Environmental Scientist

California Department of Forestry and Fire Protection - Current CEQA Coordinator

California Department of Housing and Community Development - Current CEQA Coordinator

California Department of Parks and Recreation, Monterey District - Current CEQA Coordinator

California Department of Toxic Substances Control - Current CEQA Coordinator

California Department of Water Resources - Intergovernmental Reviewer

California Energy Commission - Current CEQA Coordinator

California Governor's Office of Emergency Services - Current CEQA Coordinator

California Governor's Office of Planning and Research

California Highway Patrol

California Highway Patrol, Enforcement and Planning Division

California Native American Heritage Commission - NAHC Chairperson

California Office of Historic Preservation - State Historic Preservation Officer

California Public Utilities Commission - Current CEQA Coordinator

California State Lands Commission - Executive Officer

California State University, Monterey Bay - President

California State Water Resources Control Board - Eileen Sobeck, Executive Director

California Transportation Commission - Commission Chair

California Transportation Commission, Headquarters Division of Environmental Analysis

Caltrans District 5 - Scott Eades, District Director

Caltrans Scenic Highway Program Coordinator

Caltrans, Division of Environmental Analysis - NEPA Assignment Office – MS 27

Local Area Formation Commission of Monterey County - Executive Officer

Regional Agencies

Association of Monterey Bay Area Governments - Executive Director

Central Coast Regional Water Quality Control Board (Region 3)

Monterey Bay Air Resources District - Air Pollution Control Officer

Monterey Peninsula Regional Park District - General Manager

Monterey Regional Airport - Executive Director

Monterey-Salinas Transit - General Manager/CEO

County and City Agencies

City of Del Rey Oaks - City Manager

City of Del Rey Oaks Planning Commission - Planning Commission Chair

City of Monterey - City Manager

City of Monterey - Planning Manager

City of Monterey - Traffic Engineer

City of Monterey Fire Department - Chief

City of Monterey Planning Commission - Planning Commission Chair

City of Pacific Grove - City Manager

City of Salinas - City Manager

City of Salinas - Public Works Director

City of Salinas Bicycle Committee - Senior Planner

City of Salinas Planning Commission - Planning Commission Chair

City of Salinas Planning Division - Community Development Director

City of Sand City - City Manager

City of Sand City - City Planner

City of Seaside - City Manager

City of Seaside Fire Department - Chief

City of Seaside - Planning Commission Chair

County of Monterey, County Administrative Office - Chief Public Information Officer

County of Monterey, Office of Emergency Services - OES Manager

County of Monterey, Parks Department - Chief of Parks

County of Monterey, Planning Division - Chief of Planning

County of Monterey, Public Works Department - Chief of Public Works

County of Monterey, Regional Fire District - Deputy Fire Marshal

County of Monterey, Resource Management Agency - Director

Transportation Agency for Monterey County - Chair, Board of Directors

Elected Officials

City of Carmel-By-The-Sea - Mayor

City of Del Rey Oaks - Mayor

City of Gonzales - Mayor

City of Greenfield, City Council - Councilmember

City of King City - Mayor

City of Marina - Mayor

City of Monterey - Mayor

City of Monterey, City Council - Councilmember

City of Pacific Grove, City Council - Councilmember

City of Salinas, City Council - Councilmember

City of Sand City, City Council - Councilmember

City of Seaside - Mayor

City of Seaside, City Council - Councilmember

City of Soledad - City Representative

City of Watsonville - City Clerk

County of Monterey - Assessor-County Clerk-Recorder

County of Monterey, Board of Supervisors District 1 – The Honorable Luis Alejo

County of Monterey, Board of Supervisors District 2 – The Honorable Glenn Church

County of Monterey, Board of Supervisors District 3 – The Honorable Chris Lopez

County of Monterey, Board of Supervisors District 4 – The Honorable Wendy Root-Askew

County of Monterey, Board of Supervisors District 5 – The Honorable Mary Adams

County of Monterey, Sheriff's Department - Sheriff

The Honorable Dawn Addis, District Office of Assembly Member, 30th District

The Honorable Laphonza Butler, Member, U.S. Senate

The Honorable Shannon Grove, District Office of California State Senator, 12th District

The Honorable John Laird, District Office of California State Senator, 17th District

The Honorable Zoe Lofgren, District Office of U.S. Representative, 18th District

The Honorable Alex Padilla, Member, U.S. Senate

The Honorable Jimmy Panetta, District Office of U.S. Representative, 19th District

The Honorable Robert Rivas, District Office of Assembly Member, 29th District

Utility Providers

Alco Water Service

American Telephone and Telegraph Corporate Office, Facilities Planning

California American Water

California Water Service

Central Coast Community Energy

Monterey One Water

Pacific Gas and Electric Company

Interested Groups and Organizations

Ag Land Trust - Executive Director

Amah Mutsun Tribal Band - Chairperson

Amah Mutsun Tribal Band of Mission San Juan Bautista - Chairperson

American Institute of Architects, Monterey Bay - Executive Director

Bicycling Monterey

Big Sur Land Trust - President/Chief Executive Officer

California Native Plant Society, Monterey Bay Chapter - President

Cavalry Church Monterey - Event & Facilities Director

Central Coast Center for Independent Living - Executive Director

Communities Organized for Relational Power in Action (COPA) - Tim McManus

Community Foundation for Monterey County - President

Community Housing Improvement Systems and Planning Associations, Inc. (CHISPA) - Director

Corral de Tierra Country Club - Manager

Costanoan Ohlone Rumsen-Mutsun Tribe - Chairman

Costanoan Rumsen Carmel Tribe - Chairperson

Cypress Community Church - Director of Finance and Facilities

Domain Corporation, Ferrini Ranch

Ecology Action

Esselen Tribe of Monterey County - Chairman

The Farm - Owner

Fisherman Flats Neighborhood Association - President

Fort Ord Rec Trail and Greenway

Friends of the Fort Ord Warhorse

Gino's Pizza - Owners

Gourley Construction

Grower-Shipper Association of Central California - President

Highway 68 Coalition - Chair

Indian Canyon Mutsun Band of Costanoan - Chairperson

International Brotherhood of Electric Workers (IBEW)

Laguna Seca Golf Ranch - General Manager

Laguna Seca Raceway Foundation - Director

Laguna Seca Raceway Foundation - President

LandWatch Monterey County - Executive Director

LandWatch Monterey County – President and Board of Directors

League of Women Voters of Monterey County - Natural Resources Committee

League of Women Voters of Monterey County - President

McShane's Landscaping - Owner

Meals on Wheels of the Monterey Peninsula - Executive Director

Monterey Audubon Society - President

The Monterey Bay Aquarium - Executive Director

Monterey Bay Central Labor Council

Monterey Bay Economic Partnership - President

Monterey Bay Electric Vehicle Alliance

Monterey County Association of Realtors - Government Affairs Director

Monterey County Business Council - Executive Director

The Monterey County Democratic Club

Monterey County Democrats - Chair

Monterey County Farm Bureau - Executive Director

Monterey County Herald - President and Publisher

Monterey County Historical Society

Monterey County Hospitality Association, Government Affairs

Monterey County Vintners & Grower’s Association - Executive Director

Monterey County Weekly

Monterey Peninsula Chamber of Commerce - Membership Development Manager

Monterey Peninsula Hospitality Association

The Muller Company (Ryan Ranch Property Management) - Director of Property Management

The Nature Conservancy

Nicklaus Club - General Manager

North County Fire Protection District of Monterey County - Chief

North Monterey County League of United Latin American Citizens - President

Ohlone/Costanoan-Esselen Nation - Tribal Headwoman

Ohlone/Costanoan-Esselen Nation - Vice Chairperson

Operating Engineers 3 - District 90 Representative

The Salinas League of United Latin American Citizens (LULAC), Council #2055/Youth Council 2087 - President

Salinas United Business Association

Salinas Valley Chamber of Commerce - President/Chief Executive Officer

Salinas Valley Taxpayers Association

Service Employees' International Union, Local 521 - Chief Elected Officer

Sierra Club, Ventana Chapter

Society for the Prevention of Cruelty to Animals, Monterey County - Executive Director

Sotheby's International Realty - GRI Realtor

Sports Car Racing Association of the Monterey Peninsula - Government Affairs Director

Store Master Funding VII, LLC - Director

Sustainable Monterey - Co-Chair

Sustainable Seaside

Tarpy's Roadhouse - General Manager

Tehama - Events Coordinator

Toro Park Estates Home Owners' Association - Newsletter Editor

The Villas

Washington Union School District - Executive Administrative Asst.

WeatherTech Raceway Laguna Seca - Chief Executive Officer

Xolon-Salinan Tribe - Chairperson

York School - Communications & Marketing Director

Interested Individuals

Janet Abla

Teri Adam

Mary Adams

Dan Albert

Jeanette Alegar-Rocha

Kathy Anderson

Geoff Arnold

Eric Azriel

Susan Bacigalupi

Ginger Basset

John & Emily Bausch

Joy Black

Michael Black

Linda Borgman

Rene Boskoff

Wan & Mary Bowman

John Bramers

Tom Bramers

F.R. Braugh

Beth Brookhouser

Mike Brown

Halleck Butts

Rosemary B. Butts

Winston Butts

Ron Cantu

Elizabeth Caraker

Zoe Carter

Elisa Cavaliere

Gary Cho

Carl Christensen

Kim Cole

Richard Cornels

Barbara & Bill Creelman

Catherine Crockett

Lynda Cunningham

Gary Cursio

R D

Scott D

Kevin Dayton

Peter De Gregorio

Bruce Delgado

Michael Dove

Vicky Duke

Hetty Eddy

R.W. Eiukauf

Sue Erickson

Sharyn Evers

Todd Evers

Dave Fox

Charles Franklin

George Garibay

Margaret Garibay

Richard Gerber

Kathy Giger

Lorraine Gorezyca

Norm Groot

Heidi Guillermo

Marvin Guillermo

Ron Guzman

Tom H

Sarah Hardgrave

Ray Harrod, Jr.

Sheri Havswirth

Daryl Hawkins

Pricilla and Reg Henry

Joseph Hertlein

Joseph Heston

S Hooper

Jim Horde

Kendra Howell

Bill Huggins

Ursula Hurek

Octavio Hurtado

Madilyn Jacobsen

Dan Johanson

Rodger Johnson

Russ Johnson

Jolynn Johnsson

Kevin Johnston

David Kanyer

Lauren Keenan

Lynn Kennedy

Julie King

Laurie Kleinman

Phil Korchek

Shelley Kroopf

Monica Lal

Brian Le Neve

Jeff Lea

Robert Lea

Diane Leairson

Neil Ledford

Rebecca Lee

Grant Leonard

Dan Limesant

Barbara Lovero

Pam Marino

Bob Martin

Mike McCullough

Tim McGrane

Mick & Lisa McGuire

Nancy McInnis

Phyllis & Fred Mensor

Charles Meyer

Deidre Monroe

Carl Morello

Chris Morello

Mark Morgenthaler

Tom Motley

Nathan Muck

Stephen Myrick

Annicla Nardeuse

Nikki Nedeff

Wes Ng

Justine Nghiem

Sarah Nicole

Elaine Noll

O'Shea O'Mary

Terese Ortiz

Gabriella Oyana

Donald Payton

Elizabeth Pelley

Eric Petersen

K Pfeiffer

Eric Phelps

Jeff Philpott

Valerie Piekon

Carolyn Pybas

Gary Pybas

Henry & Amy Ramirez

Bill Reichmuth

Bill Reichrenilt

Cynthia Reindl

Bob Rieger

Denise & Brent Rieker

George Riley

Douglas Roberts

D Rojas

Carol Romo

Tanja Roos

Tom Rowley

Pamela & Dale Rush

Enrique S

David Sargenti

Rachel T. Saunders

Debra Schadeck

Teri Schadeck

Myron Seres

Bob Shanteau

John Shearer

Nora Shen

Wayne Shen

Kim Shirley

Pennington Shortes

Mike Singh

Sharon & Ansison Sinsetus

Sgt. Brandon Smith, Monterey County Sheriff's Dept.

Dwight Stump

RB Sweet

Sam Teel

Laureuse Thomas

Neal Thompson

John Tomlin

J Trenton

Tom Tuttle

Deb & Dave Vaudeuberg

Scott Violini

Frank Vogl

Mike Weaver

Lowell Webster

Judy Williamson

Bruce Winge

Temby Wishnak

Julie Work Beck

Andy & Mara Yuan

Appendix A Section 4(f) Evaluation

Section 4(f) De Minimis Determinations

This section of the document discusses *de minimis* impact determinations under Section 4(f). Section 6009(a) of SAFETEA-LU amended Section 4(f) legislation at 23 U.S. Code (USC) 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This amendment provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required, and the Section 4(f) evaluation process is complete. The Federal Highway Administration's final rule on Section 4(f) *de minimis* findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to the Department pursuant to 23 USC 326 and 327, including *de minimis* impact determinations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

In accordance with the Federal Highway Administration's Section 4(f) Policy Paper (July 12, 2012, pp 23-24), a park, recreational area, or wildlife or waterfowl refuge is defined for purposes of Section 4(f) analysis as when the land has been officially designated as such by a Federal, State, or local agency and officials with jurisdiction over the land determine that its primary purpose is a park, recreational area, or wildlife or waterfowl refuge. A property's primary purpose is its primary function and how it is intended to be managed. The Section 4(f) statute states that a property must be a significant public park, recreational area, or wildlife or waterfowl refuge to be considered in Section 4(f) evaluations; significance means that the property serves an important role in meeting the objectives for parks, recreational areas, and/or refuges of the public agency or community authority with jurisdiction over the property.

The following section discusses the publicly owned recreational resources adjacent to the project limits and the project's uses of those properties. The properties evaluated include Ryan Ranch Park, Fort Ord National Monument, and two properties under the jurisdiction of the County of Monterey. Table S4-1 lists the permanent right of way uses estimated for both build alternatives at publicly owned recreational properties adjacent to the State Route 68 project limits.

The public will be afforded the opportunity to review and comment on the Section 4(f) analysis as part of the public review of the Draft Environmental Impact Report/ Environmental Assessment for a period of 60 days.

Table S4-1 Permanent Section 4(f) Use Summary for Build Alternatives

Section 4(f) Resource	Alternative 1 Roundabouts Permanent Right of Way Use	Alternative 2 Signals Permanent Right of Way Use
Ryan Ranch Park City of Monterey Assessor's Parcel Number 259-031-003 (74.5 ac) Land Use: city park (recr)	**3.09 acres** (State Route 218 to Ragsdale Drive, north side of State Route 68) including 1.48 acres for roundabout features and 1.61 acres for slope easements at landform grading areas	**1.94 acres** (State Route 218 to Ragsdale Drive, north side of State Route 68) including 1.39 acres for intersection improvements and 0.55 acre for slope easements at landform grading areas
Fort Ord National Monument U.S. Department of the Interior, Bureau of Land Management Assessor's Parcel Number 031-011-014 (724.5 ac) Land Use: Habitat Management (County Fort Ord Master Plan, Map 6A)	**0.43 acre** (Corral de Tierra-Cypress Church Drive/State Route 68 intersection)	**1.97 acres** (Corral de Tierra-Cypress Church Drive/State Route 68 intersection)
County of Monterey Assessor's Parcel Number 031-131-002 (247.2 acres) Land Use: Habitat Management (Fort Ord Master Plan LU Map 6A)	**1.92 acres** (Laureles Grade Road/State Route 68 intersection)	**3.31 acres** (Laureles Grade Road/State Route 68 intersection)
County of Monterey Laguna Seca Recreation Area, Assessor's Parcel Number 173-011-025 (27.14 ac); Land Use: Public-Quasi-Public parcel includes "A Road" loop	**None** (Laureles Grade Road/State Route 68 intersection)	**0.96 acre** (Laureles Grade Road/State Route 68 intersection)

Ryan Ranch Park (City of Monterey)

The Ryan Ranch Park in the City of Monterey is located on a 75-acre parcel (Assessor's Parcel Map 259-031-003) along the north side of State Route 68 between the intersections of State Route 218/State Route 68 and Ragsdale Drive/State Route 68. The park contains an active recreational use, Ryan Ranch Disc Golf Course, which has 31 holes over the majority of the parcel. The course facilities include disc golf "tees" on permanent tee pads (dirt, grass, and/or rubber mats) and baskets (disc targets). Fairways and baskets are able to be relocated/rearranged to create various course layouts for different disc golf events and skill levels. Multiple optional course layouts are

provided on the Ryan Ranch Disc Golf course website https://udisc.com/courses/ryan-ranch-tsYS/.

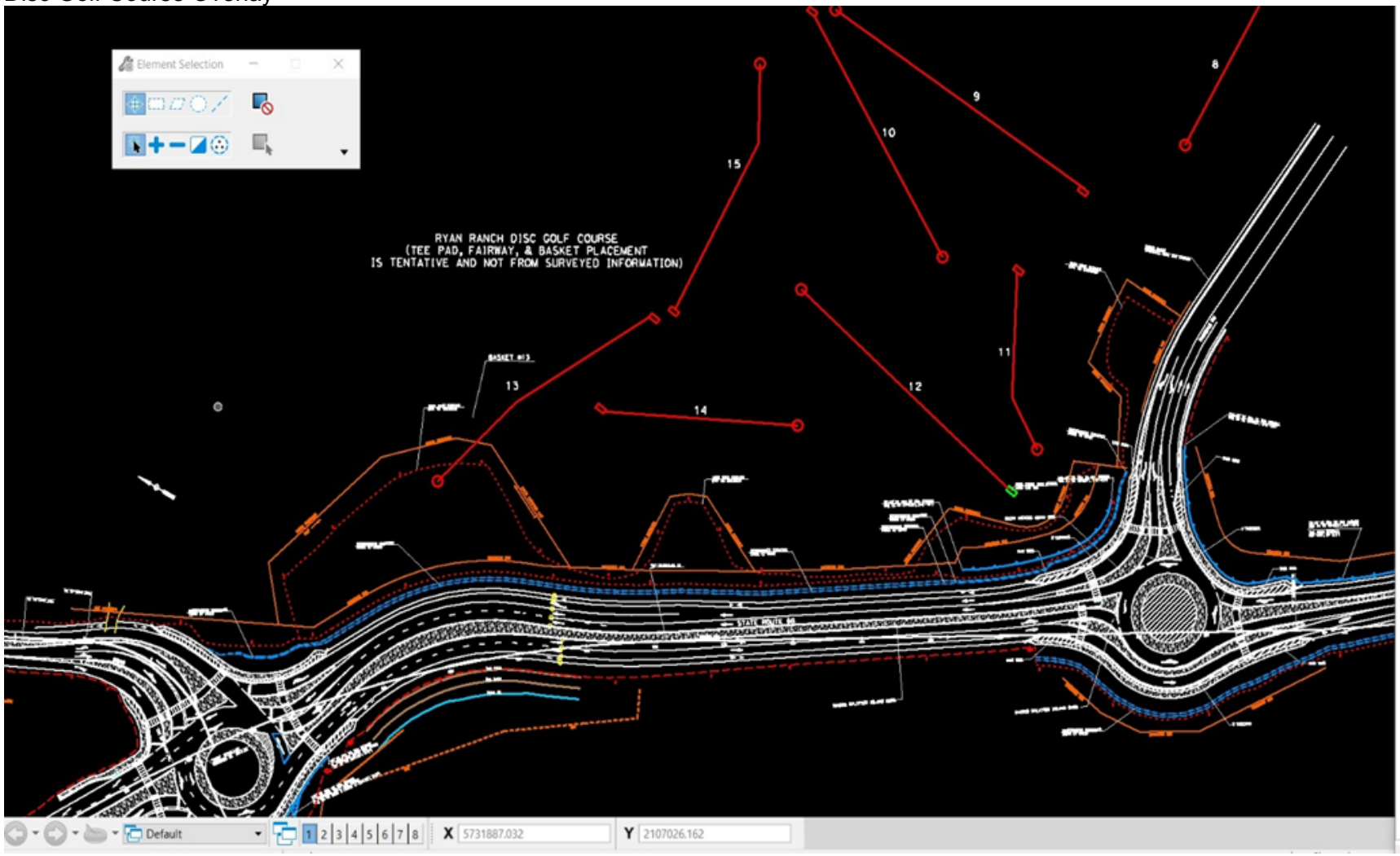
Permanent Use of Ryan Ranch Park Property

Alternative 1 Location 3, Roundabouts at the State Route 218/State Route 68 and Ragsdale Drive/State Route 68 intersections: Permanent Use at Ryan Ranch Park (APN 259-031-003). The proposed roundabouts at the intersections of State Route 218/State Route 68 and Ragsdale Drive/State Route 68 would have a combined permanent impact of about three acres that would be required for acquisition on the Ryan Ranch Park property and portions of the active use disc golf course (refer to Table S4-1). The additional right of way would be needed for construction of the roundabout features, drainage infrastructure, and retaining wall elements. About half of the three acres would be necessary for several landform grading areas (permanent slope easements) associated with and/or in lieu of retaining walls. The proposed landform grading area just east of State Route 218 which would be constructed in place of a 40-plus-foot tall retaining wall would impact the disc golf basket at fairway number 13 and a small portion of the course in that area, based on the "Bottom Course Layout" shown on the park's course website (https://udisc.com/courses/ryan-ranch-tsYS/map). Refer to Figure S4-1 which illustrates the approximate course layout over top of the proposed roundabout designs. The majority of the proposed landform grading area northeast of the State Route 218/State Route 68 intersection would impact the steeper slope area of the park property on the north side of the highway.

The disc golf course fairways, including the baskets are movable by design as noted previously (Professional Disc Golf Association Course Design information: https://pdga.com/course-development/). Disc golf tee pads are generally more fixed features of a course and, therefore, usually not relocated for course changes. Therefore, in order to minimize impacts to course facilities, the proposed roundabout at Ragsdale Drive/State Route 68 includes a retaining wall at the northwest quadrant of the intersection in order to avoid impacting the 12th Tee Pad on the course. No other course facilities, tee pads or other permanent fixtures of the course, would be affected by the Alternative 1 roundabouts at State Route 218/State Route 68 and Ragsdale Drive/State Route 68. The other slope easements for landform grading/slope easement areas would affect the steeper slope areas of the property adjacent to the north side of State Route 68 and along the west side of Ragsdale Drive, areas adjacent to the roadways and not the active recreational portions of the park.

Alternative 1 would acquire right of way from the end portion of the 13th course fairway that includes the basket and requires property along the park parcel steep slopes abutting State Route 68, State Route 218 and Ragsdale Drive. The acquisition of parkland and the need to relocate the disc basket and fairway would result in a "use" under Section 4(f). However, the relocation of the disc basket will be performed in a manner that will not disrupt the active play of disc golf and the fairway course will remain open to players. Coordination efforts will continue with park officials throughout the various project development phases.

Figure S4-1. Alternative 1 Roundabouts State Route 218/State Route 68 and Ragsdale Drive/State Route 68 and Ryan Ranch Park Disc Golf Course Overlay



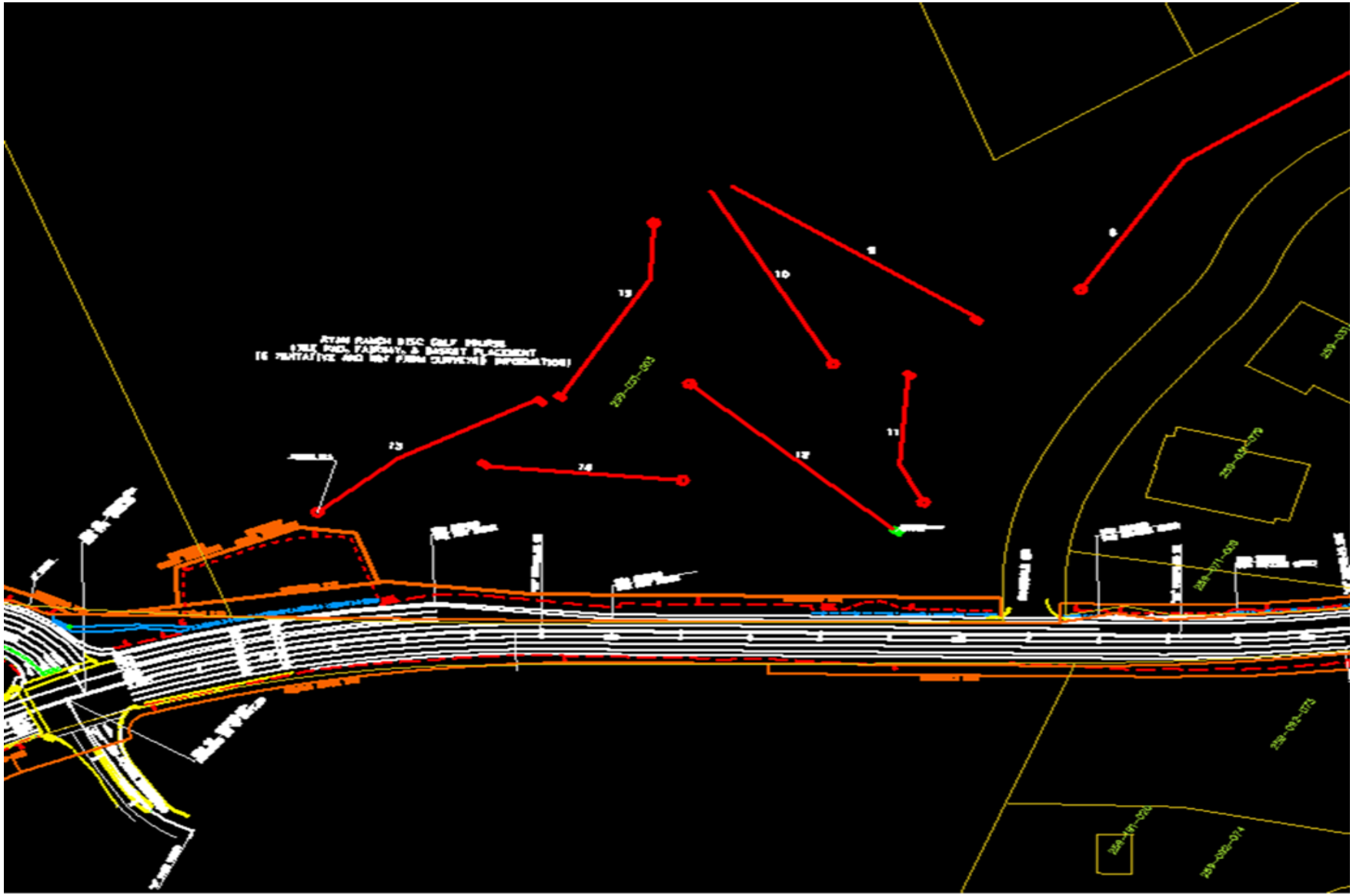
After incorporation of the avoidance measure (retaining wall northwest of Ragsdale Drive at State Route 68) and the environmental commitment to relocate the disc basket while continuously maintaining active play for disc golf, it is anticipated that none of the activities, features, or attributes would be adversely affected. The preliminary designs for the proposed State Route68/State Route 218 and State Route 68/Ragsdale Drive Alternative 1 intersection roundabouts were modified during the preliminary design process to minimize and avoid use of the park property features and attributes (disc golf course facilities) to the degree feasible. The proposed retaining walls at the northwest corner of the Ragsdale Drive/State Route 68 intersection and along the west side of Ragsdale Drive were designed in order to avoid direct impact on the 12th Tee Pad of the disc golf course.

Alternative 2, Location 2, State Route 218/State Route 68 and Ragsdale Drive/State Route 68 intersections, Permanent Use at Ryan Ranch Park and Disc Golf Course. The design for Alternative 2 at State Route 218/State Route 68 would also include a landform grading area northeast of the intersection in lieu of a retaining wall along the north side of State Route 68 and east side of State Route 68. The landform grading footprint would be slightly smaller than the landform grading area for the Alternative 1 roundabout design at the same location. In addition, the design for the roundabout would realign State Route 68 east leg of the State Route 218/State Route 68 intersection to bow toward the northeast to slow traffic entering the roundabout, which would shift the landform grading area onto more of the park property. The Alternative 2 east leg maintains the current alignment of the highway. The preliminary design plans for both alternatives are included in Appendix H of the Draft Environmental Impact Report/Environmental Assessment.

The required permanent right of way for the landform grading area for Alternative 2 would not impact the disc golf basket for fairway 13, based on the preliminary design plans. The exact locations of the disc golf fairways are approximate and would be confirmed after civil surveys during the final design phase of the project. As noted previously, disc golf course fairways and basket locations are movable for course variations. Alternative 2 would not require the other landform grading areas in the steeper slope areas of the park property adjacent to the north side of State Route 68 or along the west side of Ragsdale Drive that the roundabout designs would require. The tee pad for fairway number 12 would not be impacted. Therefore, the total permanent right of way acquisition at the park property for Alternative 2 for these two intersections would be just less than two acres in comparison to three acres for the Alternative 1 roundabout. Refer to Figure S4-2.

As such, Alternative 2 at the two intersections of State Route 218/State Route 68 and Ragsdale Drive/State Route 68 would not adversely affect the activities, attributes, or features of the park that provide protection under Section 4(f) as a public recreational resource.

Figure S4-2. Alternative 2 and Ryan Ranch Disc Golf Course, State Route 68/State Route218 to State Route 68/Ragsdale Drive



Fort Ord National Monument, Federal (U.S.A.) property (APN: 031-011-014), U.S. Department of the Interior, Bureau of Land Management

The Fort Ord National Monument property occupies the majority of the former Fort Ord Army facility along the north side of State Route 68 between Reservation Road near the city of Salinas and General Jim Moore Boulevard near the city of Seaside. The National Monument was established in April of 2012 through *Proclamation 8803 – Establishment of the Fort Ord National Monument*, which identifies the land's values for large contiguous open space (habitat types of oak woodland, chaparral, streamside corridors, grasslands, and seasonal pools), recreational uses (trail system for hiking, biking, and equestrian riding), scientific research, outdoor education, and historical and cultural significance. About one-half of the 14,651-acre National Monument property is managed by the Department of the Interior, Bureau of Land Management (7,205 acres) and the remaining half by the Department of the Army (7,446 acres). The portion managed by the Army is closed to public use and has munitions hazards from unexploded ordnance from the land's former military operation.

The portion of the National Monument managed by the Bureau of Land Management borders the north side of State Route 68 for about five miles from east of the Laureles Grade Road/State Route 68 intersection to Reservation Road. The Bureau of Land Management-managed area consists of large contiguous open space designated on the County of Monterey's Fort Ord Master Plan Land Use Map 6A as Habitat Management use contains numerous hiking trails (about 85 trail segments) as well as non-motorized unpaved and paved roads. The northern portion of the Monument contains several ponds and vernal pools. This is a Section 4(f) resource because the property has been designated in an official management plan as recreational and is open to the public during normal operational hours. The Bureau of Land Management manages the property to protect the unique objects and values of the Monument property, including rare and unique flora and fauna, recreation resources, the Juan Bautista de Anza National Historic Trail, and its military history and culture. Although the Monument property is managed to protect its rare and unique flora and faunal resources, it is not an officially designated wildlife or waterfowl refuge.

The cultural and historical values of the Monument property are linked to its history as a part of the area through which the Juan Bautista de Anza overland trail traversed partially along the now Scenic Route 68 alignment in 1775-76 during the Spanish settlement of California, and also for its being the home for the Fort Ord U.S. Army facility between 1917 and 1994 and the training of 1.5 million American troops for major military conflicts in the 20th century (source: Proclamation 8803 – Establishment of the Fort Ord National Monument, April 20, 2012, President of the United States, Barack Obama).

According to the Fort Ord National Monument Proclamation, the area's primary importance is for its undeveloped (open space and natural habitat) characteristics, and as such, the Monument does not meet the eligibility criteria as an historic resource for listing on the National Register of Historic Places (Caltrans District 5 Architectural Historian Dan Leckie, 11-22-2022 email). The Historic Resource Evaluation Report prepared for the proposed State Route 68 Corridor Improvement project, consistent with the guidance in Caltrans' Standard Environmental Reference, does not evaluate large properties without nearby improvements, associated built features, or landscape elements. In addition, the Fort Ord National Monument is not included in the National Park Service GIS database.

Even though the National Monument property is not a historic resource under Section 106 because it is determined to be not eligible for the National Register, the property is still considered a Section 4(f) resource as a public recreational property. According to the County of Monterey Fort Ord Master Plan, pg. FO-12, the Bureau of Land Management Recreational Area contains several districts, including the Open Space Habitat District with 15,000 acres managed by the Bureau of Land Management designated as Open Space/Recreation and Habitat Management, and the Laguna Seca Regional Park District, 591 acres designated Public Facilities/Institutional to be dedicated for use in expanding the Laguna Seca Regional Park.

Permanent Use of Fort Ord National Monument

Assessor's Parcel Number 031-011-014 (724.5 acre) on the Fort Ord National Monument is in the ownership of, and managed by the Department of the Interior, Bureau of Land Management. The proposed project build alternatives would require linear permanent use areas through right of way acquisition adjacent to the north side of State Route 68 and along the western edge of Cypress Church Drive (the north leg of Corral de Tierra Road) for the proposed intersection improvements. Alternative 1 (Roundabout) would require an amount of permanent property use of less than one-half acre on the property for a proposed retaining wall to minimize impacts to the adjacent slope and sensitive resources.

Alternative 2, the Signals and Lane Channelization design, would require a total of just under two (2) acres of the monument property for permanent use, primarily due to the proposed lengthy westbound auxiliary through travel lane and reduction taper, and widening of the west leg (State Route 68 west of Corral de Tierra Road) to accommodate the lane configurations and standard shoulder widths. Widening of the west leg would require an approximately 720-foot long retaining wall along the north side of State Route 68 to minimize the impacts to a riparian woodland/streambed that runs parallel to State Route 68. These design elements would necessitate some elongated encroachment on to the National Monument property compared to the roundabout design.

There are no active trails or other recreational uses in the peripheral areas of the National Monument property that would be used for permanent highway and cross-street improvements at the intersection of State Route 68/Corral de Tierra Road-Cypress Church Drive. The permanent acquisition areas would be on the edge of the property adjacent to State Route 68 highway and Cypress Church Drive roadways and their use would not impair the activities, features, or attributes of the recreational value of the National Monument property that is protected under Section 4(f).

Temporary Use of Fort Ord National Monument

Temporary occupancy of portions of the National Monument property would be necessary for either of the proposed build alternatives to construct project components such as retaining walls, sidewalks, bike ramps, and other components of the designs. Alternative 1 (the roundabout design) at State Route 68/Corral de Tierra-Cypress Church Drive is estimated to require 0.22 acre (less than one-quarter acre) of temporary use area (i.e., temporary construction easement), and Alternative 2 would require about less than one-tenth of an acre. This work does not meet all of the five criteria to apply for a temporary occupancy exception under the Section 4(f) regulation. Therefore, a *de minimis* determination is anticipated.

County of Monterey Assessor's Parcel Number 031-131-002 (247.2 acres), Land Use: Habitat Management (Fort Ord Master Plan LU Map 6A)

Monterey County parcel 031-131-002 is located within the Fort Ord National Monument, with the same land use designation of Habitat Management. This land use designation is described in the County's Fort Ord Master Plan (Chapter 9.E of the 2010 Monterey County General Plan) as intended for uses including ecological restoration, environmental educational activities and facilities, and passive recreational activities such as hiking, bike and horse riding, and picnicking. The Planning Area Map identifies the property as augmentation to the Laguna Seca Recreation Area, therefore, available for recreational uses. The Habitat Management land use designation does not meet the criteria under Section 4(f) as a wildlife or waterfowl refuge wherein the primary purpose and function is that of a refuge and is designated as such. The Fort Ord Installation-wide Multispecies Habitat Management Plan (L20.6, Section 4.52) notes this property as a local agency parcel with no habitat management requirements. This parcel has activities and features of open space with native vegetation trails for hiking, mountain biking and horse riding. The Base Reuse Plan designates this property as open space/recreation. This is a Section 4(f) resource because the property has been designated as recreational and is open to the public during normal operational hours.

Both of the build alternatives would permanently use portions of this parcel for the proposed improvements of the State Route 68/Laureles Grade Road intersection. Alternative 1, the roundabout at Laureles Grade Road/State Route 68 would require 1.92 acres of permanent right of way from this County

parcel for proposed drainage and retaining wall improvements. Alternative 2 at Laureles Grade Road/State Route 68 would require 3.3 acres of permanent use of this County property for intersection improvements, including the addition of an auxiliary lane and shoulder widening, and construction of a drainage ditch with forward and back slopes to contain runoff and enable the proposed wildlife crossing culvert to function.

The portions of this parcel adjacent to State Route 68 that would have permanent use for the proposed intersection improvements from both build alternatives are along the perimeter of the property and do not contain any recreational features, attributes or activities that would be adversely affected; therefore, it is anticipated that the project would not adversely affect the qualities, attributes, or features of the National Monument that provide protection under Section 4(f) as a public recreational resource.

County of Monterey Assessor's Parcel Number 173-011-025 (27.14 ac)
Land Use: Laguna Seca Recreation Area

County parcel 173-011-025 is adjacent to State Route 68 west of the Laureles Grade Road/State Route 68 intersection, and within the southern portion of the Laguna Seca Recreation Area. The parcel contains a portion of the "A Road" loop.

Alternative 1 would require no permanent use of this County parcel (refer to the Section below titled Resources Evaluated Relative to the Requirements of Section 4(f): No Use Determinations). Alternative 2 is estimated to require just under one acre of the southern periphery of the parcel along the north side of State Route 68. The permanent use of this parcel with Alternative 2 would be along the southern edge of the property adjacent to State Route 68 for the proposed intersection improvements, including an added westbound auxiliary lane on State Route 68 that would connect to a right turn lane onto B Road which provides access to the Laguna Seca recreational facilities. An existing drainage ditch on the north side of State Route 68 would be reconstructed to hydraulic design standards in order to contain highway runoff and to enable functionality of the proposed wildlife crossing culvert at Post Mile 11.16 west of Laureles Grade Road.

Portions of the existing alignments of B Road and A Road at the south end of this property adjacent to State Route 68 would potentially be impacted by the highway widening for Alternative 2 at Laureles Grade Road/State Route 68 intersection and segments of the highway on either side. B Road and A Road are on the Laguna Seca Recreation Area and provide access from State Route 68 to the recreational area facilities, therefore, they are features of the Section 4(f) resource. Affected portions of these access roads may require realignment or reconfiguration to restore connectivity to the recreational area facilities. During road realignment/reconstruction, a temporary detour would be implemented to maintain access to the recreational area facilities. A

Transportation Management Plan would be implemented for the project that would prescribe specific traffic management procedures at the project locations to enable continued access to properties during the project construction phases. Therefore, the use of this parcel would not adversely affect the qualities, attributes, or features of the Laguna Seca Recreation Area that provide protection under Section 4(f) as a public recreational resource. Refer to the Attachments section of this document for mapping of Alternative 2 proposed right of way onto this parcel.

Resources Evaluated Relative to the Requirements of Section 4(f): No Use Determinations

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 United States Code (USC) 303, declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites." This section of the document discusses parks, recreational facilities, wildlife refuges, and historic properties found within or next to the project area that do not trigger Section 4(f) protection because: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, or 4) the project does not permanently use the property and does not hinder the preservation of the property.

Juan Bautista de Anza National Historic Trail

The Juan Bautista de Anza National Historic Trail (de Anza Trail) is a 1,200-mile trail from Arizona to the San Francisco area of northern California. Portions of the trail are adjacent to Scenic Route 68 in the project area (Refer to the trail map in the Attachments section of this document). The trail marks and commemorates the route taken by Spanish Lieutenant Colonel de Anza and a group of about 240 colonists in the years 1775 and 1776 from Sonora, Mexico (New Spain) to settle Alta California and establish a mission and presidio at what is now San Francisco. The de Anza Trail was designated a National Historic Trail by the U.S. Congress in 1990 through an amendment to the National Trails System Act (16 U.S. Code 1241-51).

Although the entire trail route passes through areas that are determined to be National Register of Historic Places, or eligible for the National Register, the trail as a whole is not a National Register resource. Public Law 95-625 states that "no land or sites located along a designated National Historic Trail is subject to the provisions of Section 4(f) of the National Transportation Act unless such land or site is deemed to be of historical significance under the criteria for the National Register of Historic Places. Only lands or sites adjacent to historic trails that are on or eligible for the National Register of Historic Places are subject to Section 4(f)." As such, National Historic trails in and of themselves are exempt from analysis under Section 4(f), and, therefore, the de Anza Trail is not evaluated herein as a resource protected under Section (f) (sources: https://blm.gov/programs/tantional-conservation-

lands/national-scenic-and-historic-trails/Juan-Bautista-de-Anza#/, and https://www.environment.fhwa.dot.gov/env_topics/4f_tutorial/properties_historic.aspx and https://anzahistorictrail.org/county/monterey-ca/).

No Temporary Use of Ryan Ranch Park Property and Monterey County Parcels 031-131-002 and 173-011-025

Neither build alternative would require any temporary construction easements on the Ryan Ranch Park property between the State Route 218/State Route 68 and Ragsdale Drive/State Route 68 intersections. Therefore, neither design would have a temporary occupancy of the parkland because temporary construction easements are not needed from Ryan Ranch Park property. Neither build alternative would require temporary construction easements on County parcels 031-131-002, or Parcel 173-011-025 (part of the Laguna Seca Recreation Area lands.

No Permanent Use of County Parcel 173-011-025 by Alternative 1

Alternative 1, the roundabout alternative at the intersection of State Route 68 at Laureles Grade Road is not anticipated to use any portion of the County parcel 173-011-025, that provides entry to the Laguna Seca Recreation Area.

Historic Properties

Historic sites are defined in Code of Federal Regulations 774.17. For purposes of Section 4(f) a historic site is significant if it is on or eligible for the National Register of Historic Places (National Register), and the land does not have to be publicly owned or open to the public. Section 4(f) does not apply to archaeological resources that are important chiefly because of what can be learned through data recovery and have minimal value for preservation in place [(23 CFR 774.13(b)(1)].

Multiple cultural resources studies were conducted for the proposed project and are referenced in Section 2.1.10 of the Draft Environmental Impact Report/Environmental Assessment (Cultural Resources). Based on the historic-era studies conducted for the proposed project (Historic Resources Evaluation Report, Caltrans July 2023), Caltrans determined under Section 106 of the National Historic Preservation Act that the proposed project build alternatives would result in a “no adverse effect” on any listed or eligible historic-era resources in the Architectural Study Area of the project.

Within the Architectural Study Area established for the project studies there are 20 properties that required survey and evaluation for eligibility of listing on the National Register of Historic Places and the California Register of Historic Resources (California Register). The Historic Resources Evaluation Report concluded after evaluation that one of these resources, the Ryan House/Rancho Saucito/Tarpy’s Roadhouse complex met the criteria for eligibility in both registers, and therefore, was reevaluated as part of the

project study. None of the other historic-era resources evaluated for the study met the eligibility criteria for the National or California registers.

Tarpy's Roadhouse (APN: 259-021-002) property is part of the Ryan House-Rancho Saucito built environment complex with a prehistoric habitation site (CA-MNT-1438/H). The property is on the north side of State Route 68, west of the State Route 218/State Route 68 intersection at 2999 Monterey-Salinas Highway (State Route 68). The site includes a main building housing the currently operating Tarpy's Roadhouse restaurant and the Monterey Stone Wedding Chapel. This building was initially built as a residence around 1926 and has both single and two-story components, an Arts and Crafts style architecture with irregular footprint, multiple roof forms, red clay tiles and composition shingles, with masonry, brick, concrete and wood-frame construction elements. Also on the property are a two-story residential building, three modern detached sheds, a courtyard with pergolas, a bas-relief of the American Expeditionary Force of World War I, and a dining alcove. Flanking the gravel driveway extending from State Route 68 are circular stone posts, stone masonry retaining walls, landscaping, and sculptures. Those features are considered contributing elements of the property's historical significance and eligibility for the National Register.

During the preliminary design phase of the proposed project, the design for the Alternative 2 intersection expansion at State Route 218/State Route 68 was revised to shift the centerline of State Route 68 and westbound lanes slightly south to avoid encroachment onto this property. Specifically, the shift avoids impacting the circular stone posts and retaining walls at the southern edge of the property adjacent to the highway. There would be no additional right of way acquired and no temporary construction easement needed from the boundaries of this historic property for either Alternative 1 or Alternative 2. Therefore, neither of the project build alternatives would impact the Ryan House-Rancho Saucito (Tarpy's Roadhouse) property and the project would have no use of this resource.

The proposed determination in the Historic Resources Evaluation Report (July 2023) is that the proposed build alternatives would have no adverse effects on historic-era built-environment resources within the project Architectural Study Area. Upon selection of a Preferred Alternative, an Environmentally Sensitive Area (ESA) action plan will be prepared and attached to the Finding of Effect for historic resources.

Pre-historic (Archaeological) Resources

Two of the seven sites in the project study area are archaeological sites that were determined in prior studies (for other projects in the study area) to be eligible for listing on the National Register and the California Register. As part of the studies for this project, additional testing was conducted in previously untested portions of these two archaeological sites. In both areas the deposits that were sampled and tested were determined to not contribute to the

qualities for which the sites were previously determined eligible for listing on the National Register.

However, an area with elevated level of buried site sensitivity, that is, that has a higher potential for buried archaeological remains due to the presence of known prehistoric habitation sites in the area, was unable to be tested because of the presence of sensitive biological resources. As such, Section 106 effects are still undetermined for that portion of the Study Area until testing is completed. Therefore, a phased program approach is planned which would include further testing as part of a proposed Programmatic Agreement and Cultural Resources Management Plan prepared by Caltrans. The Cultural Resources Management Plan for the Scenic Route 68 Corridor Improvements (dated September 2022) presents a systematic approach to testing to determine the project's effects on potential sensitive archaeological resources, and prescriptive treatment steps pending the findings of completed testing. If any buried sites are found, they will be evaluated for national/state register eligibility and then analyzed to determine if the project would have any potential to adversely affect historic properties. This information will inform the Finding of Effects and the Programmatic Agreement would be executed prior to project approval. Section 4(f) does not apply to archaeological resources that are important chiefly because of what can be learned through data recovery and have minimal value for preservation in place.

Section 4(f) Designated Wildlife or Waterfowl Refuges

For purposes of Section 4(f) wildlife and waterfowl refuges are areas that are officially designated as such by Federal, State, or local agencies on any significant publicly owned property where the primary purpose of the land is as a refuge for the conservation, protection, and propagation of native species (Section 4(f) Policy Paper, FHWA, July 2012). There are no officially designated wildlife or waterfowl refuges in the project area.

Avoidance, Minimization, and Mitigation Measures

Throughout this preliminary design phase of the proposed project Caltrans has revised the intersection designs for both alternatives where feasible to minimize use of properties adjacent to the project limits and outside of the-state highway right of way, including the properties analyzed herein as protected under Section 4(f). The adjustments to the intersection design elements were made to avoid substantive effects on of the features, attributes, and activities of Section 4(f) properties.

The following environmental commitment will be implemented:

PR-1. Ryan Ranch Park and Disc Golf Course Activities During Construction. Relocation of a disc basket or modification of other course features during construction as a result of permanent partial right of way acquisition for the project will be performed in a manner that does not disrupt active play of disc

golf and the fairway course will remain open to players. Coordination efforts will continue with park officials throughout project development phases.

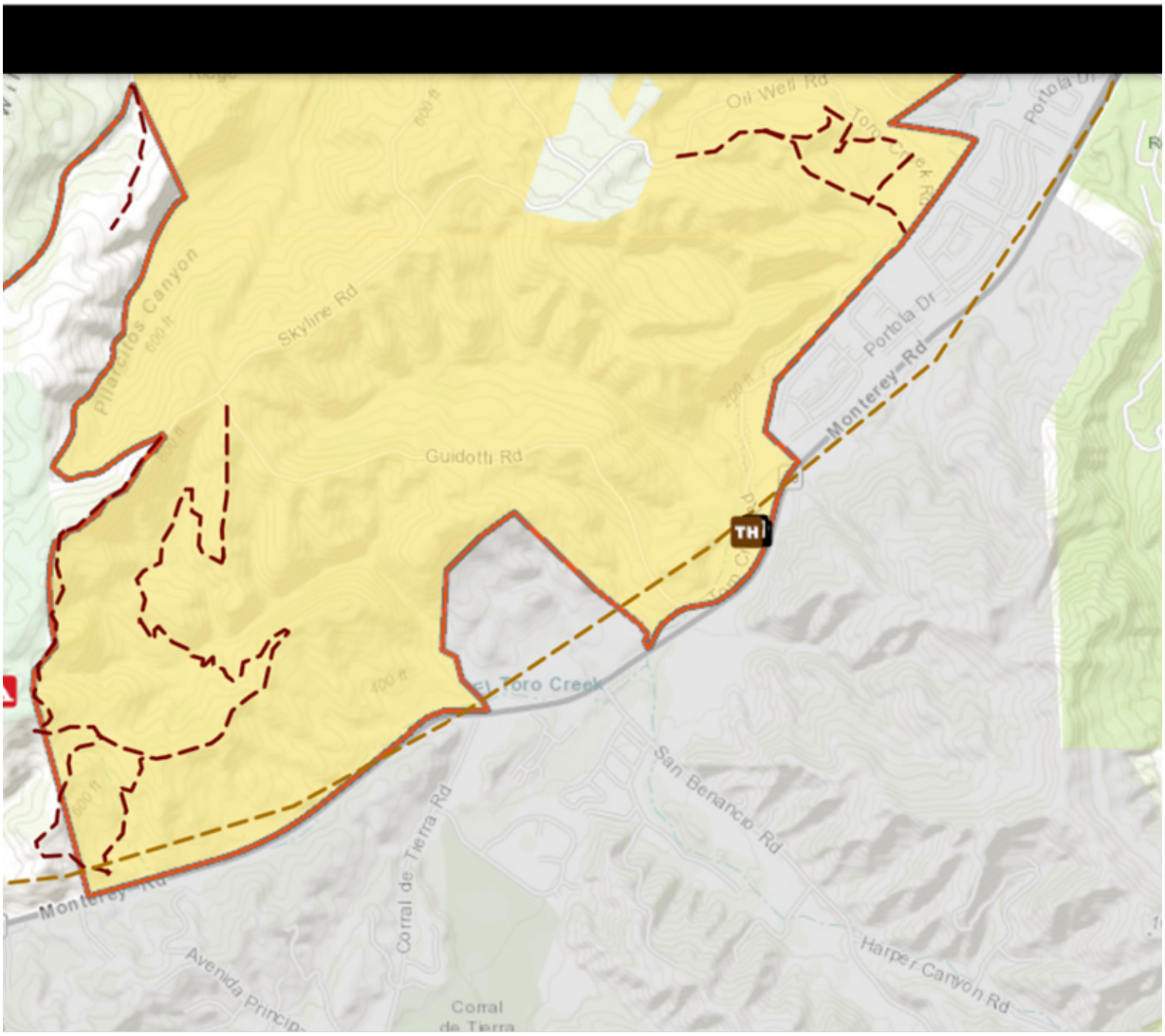
Section 6f of the Land and Water Conservation Act

The Land and Water Conservation Fund Act was established by Congress in 1964 to fulfill a bipartisan commitment to safeguard natural areas, water resources, and cultural heritage, and to provide recreation opportunities to all Americans. The Land and Water Conservation Fund program provides matching grants to states and local governments for the acquisition and development of public outdoor recreation areas and facilities. Section 6(f) of this act prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of the Department of Interior's National Park Service.

There are no known recreational areas or facilities within or adjacent to the project impact area that were funded through the Land and Water Conservation Fund grants program. The nearest facilities that received funding for improvements include the Toro Regional Park more than two miles east of the easterly limits of the project (San Benancio Road/State Route 68), the Laguna Seca Recreation Facility north of State Route 68, and Frog Pond community park in Del Rey Oaks about one mile north of the State Route218/State Route 68 intersection (Source: Land and Water Conservation Fund, Past Projects Map, https://lwcf.tplgis.org/mappast/). Therefore, the project would not convert, either temporarily or permanently, any outdoor recreational areas or facilities established through this government fund to non-recreational purposes.

Attachments

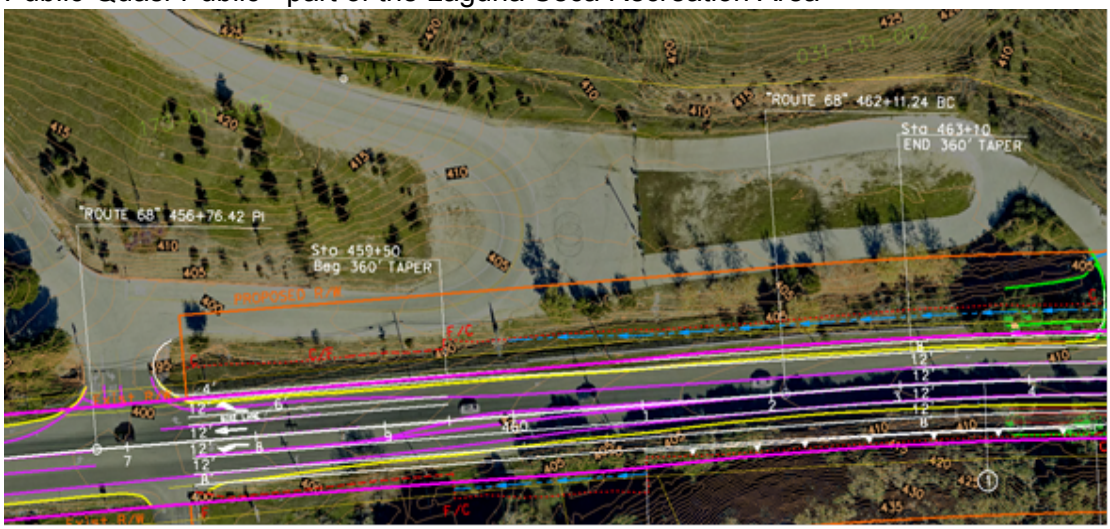
Reference Maps



Portion of BLM Trail map for Fort Ord National Monument depicting the Juan Bautista de Anza National Historic Trail along State Route 68 in vicinity of San Benancio Road and Corral de Tierra Road intersections

Source: Trail Map of Fort Ord National Monument, U.S. Department of the Interior/Bureau of Land Management (https://www.blm.gov/programs/national-conservation-lands/california/fort-ord-national-monument/), and Caltrans internal e-mail correspondence between Environmental Coordinator Meg Henry and Architectural Historian Lindsay Kozub, November 2019.

County of Monterey Assessor's Parcel Number 173-011-025 (27.14 ac) Land Use: Public-Quasi-Public - part of the Laguna Seca Recreation Area



B Road is the entrance road off of State Route 68 that goes north/northwest up to Laguna Seca Recreation Area which includes the WeatherTech raceway; A road is the connecting loop road to the right of B Road.



Google Earth Aerial Photographic Mapping of B Road and A Road Entrance to Laguna Seca Recreation Area. Laureles Grade Road intersection at State Route 68 is on the right in the image.

Appendix B Title VI Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

OFFICE OF THE DIRECTOR
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September 2022

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures "*No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.*"

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 639-6392 or visit the following web page: https://dot.ca.gov/programs/civil-rights/title-vi.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at Title.VI@dot.ca.gov.

TONY TAVARES
Director

"Provide a safe and reliable transportation network that serves all people and respects the environment"

Appendix C Summary of Relocation Benefits

California Department of Transportation Relocation Assistance Program

DECLARATION OF POLICY

"The purpose of this title is to establish a uniform policy for fair and equitable treatment of persons displaced as a result of federal and federally assisted programs in order that such persons shall not suffer disproportionate injuries as a result of programs designed for the benefit of the public as a whole."

The Fifth Amendment to the U.S. Constitution states, "No Person shall…be deprived of life, liberty, or property, without due process of law, nor shall private property be taken for public use without just compensation." The Uniform Act sets forth in statute the due process that must be followed in Real Property acquisitions involving federal funds. Supplementing the Uniform Act is the government-wide single rule for all agencies to follow, set forth in 49 Code of Federal Regulations (CFR) Part 24. Displaced individuals, families, businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and financial benefits, as discussed below.

FAIR HOUSING

The Fair Housing Law (Title VIII of the Civil Rights Act of 1968) sets forth the policy of the United States to provide, within constitutional limitations, for fair housing. This act, and as amended, makes discriminatory practices in the purchase and rental of most residential units illegal. Whenever possible, minority persons shall be given reasonable opportunities to relocate to any available housing regardless of neighborhood, as long as the replacement dwellings are decent, safe, and sanitary and are within their financial means. This policy, however, does not require the Department to provide a person a larger payment than is necessary to enable a person to relocate to a comparable replacement dwelling.

Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displacee in order to see that all payments and benefits are fully utilized and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments. At the time of the initiation of negotiations (usually the first written offer to purchase), owner-occupants are given a detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted soon after the initiation of negotiations and also are given a detailed explanation of the Caltrans Relocation Assistance Program. To avoid loss of possible benefits, no individual, family, business, farm, or nonprofit organization should commit to purchase or rent a replacement property without first contacting a Caltrans relocation advisor.

RELOCATION ASSISTANCE ADVISORY SERVICES

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, the Department will provide relocation advisory assistance to any person, business, farm, or nonprofit organization displaced as a result of the acquisition of real property for public use, so long as they are legally present in the United States. The Department will assist eligible displacees in obtaining comparable replacement housing by providing current and continuing information on the availability and prices of both houses for sale and rental units that are "decent, safe, and sanitary." Nonresidential displacees will receive information on comparable properties for lease or purchase (for business, farm, and nonprofit organization relocation services, see below).

Residential replacement dwellings will be in a location generally not less desirable than the displacement neighborhood at prices or rents within the financial ability of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displacees that are open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include the supplying of information concerning federal and state assisted housing programs and any other known services being offered by public and private agencies in the area.

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without first being given at least 90 days written notice. Residential occupants eligible for relocation payment(s) will not be required to move unless at least one comparable "decent, safe, and sanitary" replacement dwelling, available on the market, is offered to them by the Department.

RESIDENTIAL RELOCATION FINANCIAL BENEFITS

The Relocation Assistance Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for or incidental to the purchase or rental of a replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacement property. Any actual moving costs in excess of the 50 miles are the responsibility of the displacee. The Residential Relocation Assistance Program can be summarized as follows:

Moving Costs

Any displaced person, who lawfully occupied the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule. Lawful occupants who move into the displacement property after

the initiation of negotiations must wait until the Department obtains control of the property in order to be eligible for relocation payments.

Purchase Differential

In addition to moving and related expense payments, fully eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their property for 90 days or more prior to the date of the initiation of negotiations (usually the first written offer to purchase the property), may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate.

Rent Differential

Tenants and certain owner-occupants (based on length of ownership) who have occupied the property to be acquired by the Department prior to the date of the initiation of negotiations may qualify to receive a rent differential payment. This payment is made when the Department determines that the cost to rent a comparable "decent, safe, and sanitary" replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted under the Down Payment section below.

To receive any relocation benefits, the displaced person must buy or rent and occupy a "decent, safe and sanitary" replacement dwelling within one year from the date the Department takes legal possession of the property, or from the date the displacee vacates the displacement property, whichever is later.

Down Payment

The down payment option has been designed to aid owner-occupants of less than 90 days and tenants in legal occupancy prior to the Department's initiation of negotiations. The one-year eligibility period in which to purchase and occupy a "decent, safe and sanitary" replacement dwelling will apply.

Last Resort Housing

Federal regulations (49 CFR 24) contain the policy and procedure for implementing the Last Resort Housing Program on Federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard residential relocation as explained above. Last Resort Housing has been designed primarily to cover situations where a displacee cannot be relocated because

of lack of available comparable replacement housing, or when the anticipated replacement housing payments exceed the limits of the standard relocation procedure, because either the displacee lacks the financial ability or other valid circumstances.

After the initiation of negotiations, the Department will within a reasonable length of time, personally contact the displacees to gather important information, including the following:

- Number of people to be displaced.
- Specific arrangements needed to accommodate any family member(s) with special needs.
- Financial ability to relocate into comparable replacement dwelling which will adequately house all members of the family.
- Preferences in area of relocation.
- Location of employment or school.

NONRESIDENTIAL RELOCATION ASSISTANCE

The Nonresidential Relocation Assistance Program provides assistance to businesses, farms and nonprofit organizations in locating suitable replacement property, and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for a particular business's specific relocation needs. The types of payments available to eligible businesses, farms, and nonprofit organizations are: searching and moving expenses, and possibly reestablishment expenses; or a fixed in lieu payment instead of any moving, searching and reestablishment expenses. The payment types can be summarized as follows:

Moving Expenses

Moving expenses may include the following actual, reasonable costs:

- The moving of inventory, machinery, equipment and similar business-related property, including: dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting of personal property. Items identified as real property may not be moved under the Relocation Assistance Program. If the displacee buys an Item Pertaining to the Realty back at salvage value, the cost to move that item is borne by the displacee.
- Loss of tangible personal property provides payment for actual, direct loss of personal property that the owner is permitted not to move.
- Expenses related to searching for a new business site, up to $2,500, for reasonable expenses actually incurred.

Reestablishment Expenses

Reestablishment expenses related to the operation of the business at the new location, up to $25,000 for reasonable expenses actually incurred.

Fixed In Lieu Payment

A fixed payment in lieu of moving, searching, and reestablishment payments may be available to businesses that meet certain eligibility requirements. This payment is an amount equal to half the average annual net earnings for the last two taxable years prior to the relocation and may not be less than $1,000 nor more than $40,000.

ADDITIONAL INFORMATION

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or for the purpose of determining the extent of eligibility of a displacee for assistance under the Social Security Act, or any other law, except for any federal law providing local “Section 8” Housing Programs.

Any person, business, farm or nonprofit organization that has been refused a relocation payment by the Department relocation advisor or believes that the payment(s) offered by the agency are inadequate may appeal for a special hearing of the complaint. No legal assistance is required. Information about the appeal procedure is available from the relocation advisor.

California law allows for the payment for lost goodwill that arises from the displacement for a public project. A list of ineligible expenses can be obtained from the Department’s Division of Right of Way and Land Surveys. California’s law and the federal regulations covering relocation assistance provide that no payment shall be duplicated by other payments being made by the displacing agency

Appendix D Project Consistency with State, Regional and Local Plans and Policies

LAND USE – Consistency with Relevant State, Regional, and Local Plans

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
Monterey County General Plan 2010 – Agricultural Element	Monterey County	• **Goal AG-7, Policy AG-6.1**— Improvement of regional transportation systems to support the needs of the agricultural industry shall be encouraged and supported.	No comments	YES	YES
Monterey County General Plan 2010 – Circulation Element	Monterey County	• **Goal C-1, Policy C-1.1** – Acceptable level of service for county roads and intersections is D	The Intersection improvements for both alternatives will support the goal of obtaining a level of service D or better. However, Caltrans current policies and goals for measuring traffic operations apply different metrics than legacy level of service in accordance with the Climate Action Plan for Transportation Infrastructure (CAPTI) and the 2020-2024 Caltrans Strategic Plan which prioritize vehicle miles traveled and assessment of Daily Vehicle Hours of Delay and Daily person Hours of Delay.	YES	YES
Monterey County General Plan 2010 – Circulation Element	Monterey County	• **Goal C-3, Policy C-3.1** – Transportation modes shall be planned, and strategies developed to protect air quality, reduce noise, reduce consumption of fossil fuels, minimize acquisition of land for roadway construction	It is anticipated that Alternative 1 roundabouts will reduce hard starts at intersections, thus reducing noise and fuel consumption resulting from such starts	YES	YES
Monterey County General Plan 2010 – Circulation Element	Monterey County	• **Goal C-3, Policy C-3.5** – Transportation alternatives such as bicycles, carpools, public transit…shall be encouraged and accommodated within and outside the public ROW	Both build alternatives would maintain the existing transit stops within the project limits on State Route 68. Currently Monterey-Salinas Transit does not run many buses on State Route 68 due to reduced demand and unpredictability in service delays. It is expected that once the State Route 68 improvements are completed, service times will be more reliable, and Monterey-Salinas Transit would consider increasing transit service for that route, pending demand.	Partially consistent; Not consistent with encouragement of transit use, which is not part of the project	Partially consistent; Not consistent with encouragement of transit use, which is not part of the project
Monterey County General Plan 2010 – Circulation Element	Monterey County	• **Goal C-4, Policy C-4.2** – All new road and interior circulation systems shall be designed, developed, and maintained according to adopted County standards or allowed through specific agreements and plans.	No comments	YES	YES
Monterey County General Plan 2010 – Circulation Element	Monterey County	• **Goal C-4, Policy C-4.9** –In cooperation with TAMC and Caltrans, the County shall monitor key County-maintained roadways, intersections, bikeways, and pedestrian facilities to observe and analyze the functioning of these roadways, as well as to identify capacity and safety concerns.	No comments	YES	YES

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
Monterey County General Plan 2010 – Circulation Element	Monterey County	• **Goal C-5, Policy C-5.3** – Guidelines shall be developed to assure development and land use are compatible using techniques including a) utilities underground, b) arch/landscape controls, d) encouragement of area native plants for landscaping	No comments	YES	YES
Monterey County General Plan 2010 – Circulation Element	Monterey County	• **Goal C-5, Policy C-5.6** – Special scenic treatment and design within the rights-of-way of officially designated State Scenic Highways and/or County Scenic Roads shall be implemented and may include highway directional signs, guardrails and fences, lighting and illumination, provision of scenic outlooks, road lanes, frontage roads, vegetation, grading, and highway structures	No comments	YES	YES
Monterey County General Plan 2010 – Circulation Element	Monterey County	• **Goal C-9, Policy C-9.2**—Construction or expansion of roadways within major transportation corridors shall consider improved bike routes.	No comments	YES	YES
Monterey County General Plan 2010 – Conservation and Open Space Element	Monterey County	• **Goal OS-1, Policy OS-1.2** – Development in designated visually sensitive areas shall be subordinate to the natural features of the area. (See Figure 14 of the GP for locations of designated visually sensitive and highly sensitive areas and critical viewsheds).	Both alternatives would include retaining walls at most of the project intersections, some of which would be tall and lengthy. Other project features would also cause substantive visual changes such as additional turn lanes, concrete barriers and generally enlarged intersection footprints. Avoidance, minimization, and mitigation measures prescribed accordingly.	NO	NO
Monterey County General Plan 2010 – Conservation and Open Space Element	Monterey County	• **Goal OS-5** - Conserve listed species, critical habitat, habitat and species in area plans; avoid, minimize, and mitigation significant impacts to biological resources	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES
Monterey County General Plan 2010 – Conservation and Open Space Element	Monterey County	• **Goal OS-5, Policy OS-5.4** – Development shall avoid, minimize and mitigation impacts to listed species and critical habitat to the extent feasible… if development may affect listed species, consultation with U.S. Fish and Wildlife Service, California Department of Fish and Wildlife may be required and impacts may be mitigated by expanding the resource elsewhere on-site or within close proximity off-site.	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES
Monterey County General Plan 2010 – Conservation and Open Space Element	Monterey County	• **Goal OS-5, Policy OS-5.6** – native and native compatible species shall be used in fulfilling landscaping requirements	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES
Monterey County General Plan 2010 – Conservation and Open Space Element	Monterey County	• **Goal OS-5, Policy OS-5.9**— Tree removal that requires a permit shall be established by Area Plans.	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
Monterey County General Plan 2010 – Conservation and Open Space Element	Monterey County	• **Goal OS-5, Policy OS-5.12**— The California Department of Fish and Wildlife shall be consulted, and appropriate measures shall be taken to protect Areas of Special Biological Significance (ASBS).	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES
Monterey County General Plan 2010 – Conservation and Open Space Element	Monterey County	• **Goal OS-5, Policy OS-5.16**— A biological study shall be required for any development project requiring a discretionary permit and having the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of an endangered, rare, or threatened species. An ordinance establishing minimum standards for a biological study and biological surveys shall be enacted. A biological study shall include a field reconnaissance performed at the appropriate time of year. Based on the results of the biological study, biological surveys may be necessary to identify, describe, and delineate the habitats or species that are potentially impacted. Feasible measures to reduce significant impacts to a less than significant level shall be adopted as conditions of approval.	No comments	YES	YES
Monterey County General Plan 2010 – Conservation and Open Space Element	Monterey County	• **Goal OS-5, Policy OS-5.25**— Occupied nests of statutorily protected migratory birds and raptors shall not be disturbed during the breeding season (generally February 1 to September 15). The county shall A) Consult, or require the developer to consult, with a qualified biologist prior to any site preparation or construction work in order to: 1) Determine whether work is proposed during nesting season for migratory birds or raptors, 2) Determine whether site vegetation is suitable to nesting migratory birds or raptors, 3) Identify any regulatory requirements for setbacks or other avoidance measures for migratory birds and raptors which could nest on the site, and 4) Establish project-specific requirements for setbacks, lock-out periods, or other methods of avoidance of disruption of nesting birds.	No comments	YES	YES

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
		b) Require the development to follow the recommendations of the biologist. This measure may be implemented in one of two ways: 1) Preconstruction surveys may be conducted to identify active nests and, if found, adequate buffers shall be provided to avoid active nest disruption until after the young have fledged; or 2) Vegetation removal may be conducted during the non-breeding season (generally September 16 to January 31); however, removal of vegetation along waterways shall require approval of all appropriate local, state, and federal agencies			
Monterey County General Plan 2010 – Conservation and Open Space Element	Monterey County	• **Goal OS-6** – Encourage the conservation and identification of the county's archaeological resources, Policies OS-6.1 to OS-6.3	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES
Monterey County General Plan 2010 – Conservation and Open Space Element	Monterey County	• **Goal OS-7** - Encourage the conservation and identification of the county's Paleontological resources, Policies OS-7.1 and OS-7.3	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES
Monterey County General Plan 2010 – Conservation and Open Space Element	Monterey County	• **Goal OS-8** - Encourage the conservation and identification of the county's native Californian cultural sites, scared places, and burial sites, Policies OS-8.1 to OS-8.3	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES
Monterey County General Plan 2010 – Conservation and Open Space Element	Monterey County	• **Goal OS-9, Policy OS-9.6**— Development shall incorporate features that reduce energy used for transportation, including pedestrian and bicycle pathways, access to transit, and roadway design as appropriate.	Both build alternatives would maintain the existing transit stops within the project limits on State Route 68. Currently Monterey-Salinas Transit does not run many buses on State Route 68 due to reduced demand and unpredictability in service delays. It is expected that once the State Route 68 improvements are completed, service times will be more reliable, and Monterey-Salinas Transit would consider increasing transit service for that route, pending demand.	Partially consistent; Not consistent with access to transit, which is not part of the project	Partially consistent; Not consistent with access to transit, which is not part of the project
Monterey County General Plan 2010 – Conservation and Open Space Element	Monterey County	• **Goal OS-10, Policy OS-10.7—** The Monterey Bay Unified Air Pollution Control District's air pollution control strategies, air quality monitoring, and enforcement activities shall be supported.	No comments	YES	YES
Monterey County General Plan 2010 – Conservation and Open Space Element	Monterey County	• **Goal OS-10, Policy OS-10.10**— In the design of future development within Community Areas and Rural Centers, the following sustainable land use strategies shall be considered to	Both build alternatives would maintain the existing transit stops within the project limits on State Route 68. Currently Monterey-Salinas Transit does not run many buses on State Route	Partially consistent; Not consistent with promotion of Transit Oriented Development,	Partially consistent; Not consistent with promotion of Transit Oriented Development,

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
		reduce energy consumption, minimize greenhouse gas emissions, and fosters healthier environments for people: • Promote Transit Oriented Development (TOD) to increase mobility and reduce auto dependency	68 due to reduced demand and unpredictability in service delays. It is expected that once the State Route 68 improvements are completed, service times will be more reliable, and Monterey-Salinas Transit would consider increasing transit service for that route, pending demand.	which is not part of the project	which is not part of the project
Monterey County General Plan 2010 – Land Use Element	Monterey County	• **Goal LU-1, Policy LU-1.13**— All exterior lighting shall be unobtrusive and constructed or located so that only the intended area is illuminated, long range visibility is reduced of the lighting source, and off-site glare is fully controlled. Criteria to guide the review and approval of exterior lighting shall be developed by the county in the form of enforceable design guidelines, which shall include but not be limited to guidelines for the direction of light, such as shields, where lighting is allowed.	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES
Monterey County General Plan 2010 – Greater Monterey Peninsula Area Plan	Monterey County	• **Area Plan Supplemental Policies. Section 1.0 Land Use:** **GMP-1.1** – identifies properties around State Route 68 as visually sensitive: The County shall overlay properties north and south of Highway 68 and west of Laureles Grade with a Visually Sensitive District ("VS") and/or other appropriate zoning designation to regulate the location, height, and design of structures within this unique scenic corridor.	The project is located within the Greater Monterey Peninsula, Fort Ord, and Toro Planning Areas. Visual Avoidance, Minimization, and Mitigation Measures would be implemented as necessary.	YES	YES
Monterey County General Plan 2010 – Greater Monterey Peninsula Area Plan	Monterey County	• **Section 1.0 Land Use, GMP-1.4** – Development proposals shall include compatible open space uses located between other developed areas in order to maintain a rural atmosphere and to protect scenic resources.	No comments	Not applicable to project	Not applicable to project
Monterey County General Plan 2010 – Greater Monterey Peninsula Area Plan	Monterey County	• **Area Plan Supplemental Policies. Section 2.0 Circulation:** **GMP-2.1** – identifies improvements to intersections, adding passing lanes, and public transit/bike safety measures along State Route 68 to be given priority for funding	No comments	YES	YES
Monterey County General Plan 2010 – Greater Monterey Peninsula Area Plan	Monterey County	• **Section 2.0 Circulation, GMP-2.2** – Employers should stagger employee work hours in order to ease peak hour traffic congestion on Highway 68 and in other areas.	No comments	Not applicable to project	Not applicable to project

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
Monterey County General Plan 2010 – Greater Monterey Peninsula Area Plan	Monterey County	• **Area Plan Supplemental Policies**. **Section 2.0 Circulation:** **GMP-2.4** – prohibits new direct access to State Route 68 from single family residences to minimize traffic safety hazards (unless no other feasible alternative)	No comments	YES	YES
Monterey County General Plan 2010 – Greater Monterey Peninsula Area Plan	Monterey County	• **Area Plan Supplemental Policies. Section 2.0 Circulation:** **GMP-2.9** – requires construction or expansion of highways and arterials to provide bike paths.	No comments	YES	YES
Monterey County General Plan 2010 – Greater Monterey Peninsula Area Plan	Monterey County	• **Area Plan Supplemental Policies. Section 3.0 Open Space/Conservation:** **GMP-3.3(d)** – New development prohibited on areas mapped as visually "highly sensitive". Where exceptions are appropriate to maximize goals/obj/policies of GP, development shall be sited in a manner that minimizes visible effects of proposed…roads… and utilize landscape screening…	No comments	YES	YES
Monterey County General Plan 2010 – Greater Monterey Peninsula Area Plan	Monterey County	• **Area Plan Supplemental Policies. Section 3.0 Open Space/Conservation:** **GMP-3.3** – The Greater Monterey Peninsula Scenic Highway Corridors and Visual Sensitivity Map (Figure 14) shall be used to designate visually "sensitive" and "highly sensitive" areas generally visible from designated Scenic Highways. The following policies shall apply to areas that have one of these designations: **GMP-3.3(a)** – All areas designated as "sensitive" or "highly sensitive" shall be interpreted within the meaning of this policy and are to be protected. **GMP-3.3(e)** – New development to be located in areas mapped as "sensitive" or "highly sensitive" and which would be visible from a designated scenic route shall maintain the visual character of the area. In order to adequately mitigate the visual impacts of development in such areas, the following shall be required: **GMP-3.3(e)(1)** – Development shall be rendered compatible with the visual character of the area using appropriate siting, design, materials, and landscaping;	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
		GMP-3.3(e)(3) – the impact of any earth movement associated with the development shall be mitigated in such a manner that permanent scarring is not created; **GMP-3.3(e)(5)** – Landscape screening/restoration shall consist of locally native plant and tree species consistent with surrounding vegetation; **GMP-3.3(e)(6)** – Architectural review of projects shall be required to ensure visual compatibility of the development with the surrounding area			
Monterey County General Plan 2010 – Greater Monterey Peninsula Area Plan	Monterey County	• Area Plan Supplemental Policies. Section 3.0 Open Space/Conservation: **GMP-3.6** – 100-ft setback required for wetlands. Alterations in setback area require restoration and enhancement plan **GMP-3.7** – County shall encourage other local agencies to take appropriate measures for the protection of wetlands under their jurisdiction	GMP-3.6 – a 100-ft setback from wetlands may not be possible at all project intersections - TBD in project design phase. If 100-ft setback is not possible at all locations, a restoration and enhancement plan would be prepared. Address with avoidance and minimization where possible. Mitigate where necessary.	NO	NO
Monterey County General Plan 2010 – Toro Area Plan	Monterey County	• **Section 1.0 Land Use, T-1.1**— Development proposals on Corral de tierra Road from "Four Corners" (Corral de Tierra, Calera Canyon, and Robley Road intersection) to Corral de Cielo shall complete safety improvements concurrently with development.	No comments	Not applicable to project	Not applicable to project
Monterey County General Plan 2010 – Toro Area Plan	Monterey County	• **Section 2.0 Circulation, T-2.2**— Davis and Reservation Roads shall be encouraged as alternate routes between the Monterey Peninsula and Salinas to alleviate traffic on Highway 68.	No comments	YES	YES
Monterey County General Plan 2010 – Toro Area Plan	Monterey County	• **Area Plan Supplemental Policies. Section 2.0 Circulation:** **T-2.3** -Continue to work with the state, local agencies, and citizen groups to alleviate congestion while maintaining the scenic beauty of State Route 68. With the goal of eventually constructing a four-lane divided highway, the county shall support the following measures: a) coordination with Caltrans and TAMC for the construction of a four-lane facility between the Toro interchange and State Route 218 and b) construction of bus stops, pull-outs and shelters where needed	Caltrans is not proposing the complete four-lane widening of State Route 68 at this time and that concept is also not included in the 2017 State Route 68 Scenic Highway Plan, the Association of Monterey Bay Area Government's 2040 Metropolitan Transportation Plan, or TAMC's Regional Transportation Plan. The roundabout alternative is still consistent with the policy for alleviating congestion and Alternative 2 may include limited widening approaching and departing from project intersections.	Partially consistent; Not consistent with 4-lane widening which is no longer included on regional transportation plans	Partially consistent; Not consistent with 4-lane widening which is no longer included on area regional transportation plans

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Monterey County General Plan 2010 – Toro Area Plan	Monterey County	• **Area Plan Supplemental Policies. Section 2.0 Circulation:** **T-2.4** – Improvement of State Route 68 intersections, construction of alternate passing lanes, public transit roadway improvements, and improved bicycle safety measures should be undertaken at the earliest time that funding becomes available.	No additional transit facilities are proposed with the project.	Partially consistent; Not consistent with public transit roadway improvements, which are not part of the project	Partially consistent; Not consistent with public transit roadway improvements, which are not part of the project
Monterey County General Plan 2010 – Toro Area Plan	Monterey County	• **Section 2.0 Circulation, T-2.5**— Fair-share financial contributions from each new development in the Toro Planning Area shall be required to expedite funding and construction of Highway 68 improvements.	No comments	Not applicable to project	Not applicable to project
Monterey County General Plan 2010 – Toro Area Plan	Monterey County	• **Section 2.0 Circulation, T-2.7**— To minimize traffic safety hazards, creation of new direct access points should be prohibited from single-family residences onto Highway 68 and discouraged onto Laureles Grade, River Road, Corral de Tierra Road, and San Benancio Road.	No comments	YES	YES
Monterey County General Plan 2010 – Toro Area Plan	Monterey County	• **Section 3.0 Conservation/Open Space, T-3.1**— Within areas designated as "visually sensitive" on the Toro Scenic Highway Corridors and Visual Sensitivity Map (Figure 16), landscaping or new development may be permitted if the development is located and designed (building design, exterior lighting, and siting) in such a manner that will enhance the scenic value of the area. Architectural design consistent with the rural nature of the plan area shall be encouraged.	No comments	YES	YES
Monterey County General Plan 2010 – Toro Area Plan	Monterey County	• **Section 3.0 Conservation/Open Space, T-3.2**— Land use, architectural, and landscaping controls shall be applied, and sensitive site design encouraged, to preserve Toro's visually sensitive areas and scenic entrances: a) River Road/Highway 68 intersection; and b) Laureles Grade scenic vista overlooking the Planning Area	No comments	YES	YES
Monterey County General Plan 2010 – Toro Area Plan	Monterey County	• **Section 3.0 Conservation/Open Space, T-3.3**— Portions of the County and State designated scenic routes shall be designated as critical viewshed as shown on the Toro Scenic Highway corridors and Visual Sensitivity Map. Except for driveways, pedestrian walkways, and paths, a 100-foot building setback shall be required on all lots adjacent to these routes to provide open space and landscape buffers. This setback may be reduced for existing lots of record that have no developable area outside the setback and to accommodate additions to existing structures that become non-conforming due to this	No comments	Not applicable to project	Not applicable to project

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		policy. New development shall dedicate open space easements over setback areas established by this policy.			
Monterey County General Plan 2010 – Toro Area Plan	Monterey County	• **Section 3.0 Conservation/Open Space, T-3.4**— Placement of existing utility lines underground shall be encouraged, particularly along Laureles Grade Road, Corral de Tierra, San Benancio, River Road, and Highway 68.	Utility lines would be undergrounded at intersections where construction is taking place in accordance with California Public Utilities Code 320.	YES	YES
Monterey County General Plan 2010 – Toro Area Plan	Monterey County	• **Section 3.0 Conservation/Open Space, T-3.5**— Exterior/outdoor lighting shall be located, designed, and enforced to minimize light sources and preserve the quality of darkness. Street lighting shall be as unobtrusive as practicable and shall be consistent in intensity throughout the Toro area.	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES
Monterey County General Plan 2010 – Toro Area Plan	Monterey County	• **Policy 7.2.3** – The preservation of oak trees in Toro shall be promoted by discouraging removal of healthy trees with diameters in excess of 8 inches.	Oak trees would be removed with either build alternative. Address with Avoidance, Minimization, and Mitigation Measures for oak woodland and tree replanting where necessary.	NO	NO
Monterey County General Plan 2010 – Fort Ord Master Plan	Monterey County	• **Circulation Element** - Manage congestion and de-emphasize the need for vehicle travel to and within the former Fort Ord, and to develop transportation systems that support the planned use of development patterns.	No comments	YES	YES
Monterey County General Plan 2010 – Fort Ord Master Plan	Monterey County	• **Biological Resources Policy B-3**— The County shall preserve, enhance, restore, and protect vernal ponds, riparian corridors, and other wetland areas. • **Program B-3.4**—The County shall coordinate with the California Department of Transportation (Caltrans) in the design of State Route 68 to assess the feasibility of avoiding the riparian forest within the alignment. Where riparian forest removal is unavoidable, the County shall request Caltrans to compensate at a 2:1 ratio of newly created habitat to lost habitat or at a 4:1 acreage ratio of enhanced habitat to lost habitat. Compensation and restoration could occur in other areas of Toro Creek. • **Biological Resources Policy C-3**— Lighting of outdoor areas shall be minimized and carefully controlled to maintain habitat quality for wildlife in undeveloped natural lands. Street lighting shall be as unobtrusive as practicable and shall be consistent in intensity throughout development areas adjacent to undeveloped natural lands.	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
Monterey County General Plan 2010 – Fort Ord Master Plan	Monterey County	• **Air Quality Policy A-1**—The County shall participate in regional planning efforts to improve air quality. • **Program A-1.2**—The County shall coordinate with the TAMC to carry out the Congestion Management Plan.	No comments	YES	YES
Monterey County Oak Woodlands Protection Planning http://oakwoodlands.org/about/monterey-county/	Monterey County	Monterey County has committed to oak tree preservation by adopting a tree ordinance and forest preservation policies (**Chapter 16.60 of the Monterey County Code and Section 21.64.260 of the Monterey County Zoning Ordinance**). The County has already set aside approximately 1,572 acres as Habitat for ecosystem-level preservation and restoration of the approximately 3,709 acres of former Fort Ord that come under its land use authority. Approximately 2,103 acres are set aside for development of housing, industry and office parks. Monterey County worked with FORA to develop policies and programs to meet the Base Reuse Plan vision for former Fort Ord development areas so that it retains the natural beauty and historical character. The policies and programs that pertain to oaks for Monterey County are: **Biological Resources Policy B-2**: • **Program B-2.1**: For lands within the jurisdictional limits of the County that are components of the designated oak woodland conservation area, the County shall ensure that those areas are managed to maintain or enhance habitat values existing at the time of base closure so that suitable habitat is available for the range of sensitive species known or expected to use those oak woodland environments. Management measures shall include, but not be limited to maintenance of large, contiguous block of oak woodland habitat, access control, erosion control and non-native species eradication. Specific management measures should be coordinated through the CRMP. • **Program B-2.2**: For lands within the jurisdictional limits of the County that are components of the designated oak woodland conservation area, the County shall monitor, or cause to be monitored, those areas in conformance with the habitat management compliance monitoring protocol specified in the HMP Implementing/Management Agreement and shall submit annual monitoring reports to the CRMP.	Address oak tree preservation with avoidance and minimization where possible. Mitigate where it is necessary to remove trees.	YES	YES
Monterey County Oak Woodlands Protection Planning	Monterey County	B) **Biological Resources Policy C-2**: The County shall preserve and enhance the oak woodland elements in the natural and built environments.	Address oak tree preservation with avoidance and minimization where possible. Mitigate where it is necessary to remove trees.	YES	YES

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http://oakwoodlands.org/about/monterey-county/		• Program C-2.1: The County shall cluster development wherever possible so that contiguous stands of oak trees can be maintained in the non-developed natural land areas. • Program C-2.2: The County shall apply restrictions for the preservation of oak and other protected trees in accordance with Chapter 16.60 of the Title 16 of the Monterey County Code (Ordinance 3420). • Program C-2.3: The County shall require the use of oaks and other native plant species for project landscaping. To that end, the County shall collect and propagate acorns and other plant material from the former Fort Ord oak woodlands to be used for restoration areas or as landscape plants. However, this program does not exclude the use of non-native plant species. • **Program C-2.4:** The County shall provide the following standards for plantings that may occur under oak trees; 1) plantings may occur within the dripline of mature trees, but only at a distance of five feet from the trunk and 2) plantings under and around oaks should be selected from the list of approved species compiled by the California Oak Foundation (see *Compatible Plants Under and Around Oaks*). • **Program C-2.5**: The County shall require that paving within the dripline of preserved oak trees be avoided wherever possible. To minimize paving impacts, the surfaces around tree trunks shall be mulched, paving materials shall be used that are permeable to water, aeration vents shall be installed in impervious pavement, and root zone excavation shall be avoided.			
Monterey County Oak Woodlands Protection Planning http://oakwoodlands.org/about/monterey-county/	Monterey County	• **Recreation Policy C-1:** Monterey County shall establish an oak tree protection program to ensure conservation of existing coastal live oak woodlands in large corridors within a comprehensive open space system.	Address oak tree preservation with avoidance and minimization where possible. Mitigate where it is necessary to remove trees.	YES	YES
Monterey County Code of Ordinances https://library.municode.com/ca/monterey_ county/codes/code_of_ordinances/		• **16.08.300 Design standards—Excavations.** • Design standards for excavations shall be as follows: • A. Slope. Cut slopes shall be no steeper than two horizontal to one vertical. Steeper slopes may be allowed if the Building Official determines they will be stable or if a civil engineer or geologist certifies that the site has been investigated and that	No comments	YES	YES

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		the proposed deviation will be and remain structurally stable. The top of cut slopes may be required to be rounded off so as to blend in with the natural terrain. • B. Drainage and Terraces. Drainage and terraces shall be provided as required by Section 117. • C. Vegetation Removal: • 1. If vegetation removal takes place prior to a grading operation and the actual grading does not begin within thirty (30) days from the date of removal, then that area shall be planted under the provisions of Section 16.08.340 to control erosion. • 2. No vegetation removal or grading will be allowed which will result in siltation or watercourses or uncontrollable erosion.			
Monterey County Code of Ordinances https://library.municode.com/ca/monterey_ county/codes/code_of_ordinances		• **16.08.300 - Design standards—Excavations**. • Design standards for fills shall be as follows: A. General. Unless otherwise recommended in the approved soil engineering report, fills shall conform to the provisions of this Section. B. Slopes—Fill Location. Fill slopes shall not be constructed on natural slopes steeper than two to one unless a civil engineer or geologist devises a method of placement which will assure the fill will remain in place. Slough shall not be placed on any slope where it is likely that it will enter a drainage course. Fill slopes shall toe out no closer than twelve (12) feet horizontally to the top of existing or planned cut slopes (see Figures 3 included following this Chapter.) C. Preparation of Ground for Fill. The ground surface shall be prepared to receive fill by the removal of topsoil and other unsuitable materials as determined by the soil engineer and, where the slopes are five to one or steeper, by keying into sound bedrock or other competent material. D. Preparation of Ground. The ground surface shall be prepared to receive fill by removing vegetation, noncomplying fill, topsoil and other unsuitable materials scarifying to provide a bond with the new fill, and, where slopes are steeper than five to one, and the height is greater than five feet, by benching into sound bedrock or other competent material as determined by the soils engineer. The bench under the toe of a fill on a slope steeper than five to one shall be at least twelve (12) feet wide. The area beyond the toe of fill shall be sloped for sheet overflow or a paved drain shall be provided. Where fill is to be placed over a cut, the bench	No comments	YES	YES

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
		under the toe of fill shall be at least ten (10) feet wide but the cut must be made before placing fill and approved by the soils engineer and engineering geologist as a suitable foundation for fill. Unsuitable soil is soil which, in the opinion of the Building Official or the civil engineer or the soils engineer or the geologist, is not competent to support other soil or fill, to support structures or to satisfactorily perform the other functions for which the soil is intended. E. Fill Material Permitted. No organic material shall be permitted in fills except as topsoil used for surface plant growth only and which does not exceed four inches in depth. The Building Official may permit placement of imported rock over twelve (12) inches in its maximum dimension only when a civil engineer, soils engineer, or engineering geologist properly devises a method of placement, supervises its placement under continuous inspection, and provides assurance of fill stability. F. Fill Slopes. No compacted fill shall be made which creates an exposed surface steeper in slope than two horizontal to one vertical. The Building Official may require that the fill be constructed with an exposed surface flatter than one and one-half horizontal to one vertical if he or she finds this necessary for stability and safety. G. Compaction of Fills. All fills shall be compacted to a minimum of ninety (90) percent of maximum density as determined by the Uniform Building Code, Standard No. 70-1. Compaction tests may be required on any fill. As a minimum requirement, filed density verification must be submitted for any fill greater than twelve (12) inches in depth where such fill may support the foundation of a structure. H. Drainage and Terraces. Drainage and terraces shall be provided in the area above fill slopes and the surfaces of terraces shall be graded and paved as required by Section 16.08.330. I. Levees. Design plans shall be approved by a Registered Civil Engineer and be based on standards established by the Department of the Army, Corps of Engineers, as published in that agency's Engineer Manual EM1110-2-1913.			

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Monterey County Code of Ordinances https://library.municode.com/ca/monterey_ county/codes/code_of_ordinances		• **16.08.320 - Cut and fill slope setbacks.** • The tops and toes of cut and fill slopes shall be set back from property boundaries as far as necessary for safety of the adjacent properties and to prevent damage resulting from water run-off or erosion of the slopes. Retaining walls may be used to reduce the required setbacks when approved by the Building Official. • The tops and toes of cut and fill slopes shall be set back from structures as far as is necessary for adequate foundation support and to prevent damage to slopes. • Unless otherwise recommended in the approved soil engineering or engineering geology report and shown on the approved grading plan, setbacks shall be no less than shown in Table B included following this Chapter.	No comments	YES	YES
City of Monterey General Plan Amended 2016 – Circulation Element	City of Monterey	• **Goal c, Policy c.3.3**—Develop roadway safety improvement projects that result in self-enforcing conditions and require a minimum amount of signage in order to reduce driver confusion	No comments	YES	YES
City of Monterey General Plan Amended 2016 – Circulation Element	City of Monterey	• **Goal c, Policy c.3.4**—Create and maintain a roadway system that is safe, unobtrusive, and easy to use for all modes of transportation.	No comments	YES	YES
City of Monterey General Plan Amended 2016 – Circulation Element	City of Monterey	• **Goal c, Policy c.4.1**— Consider the needs of buses, bicyclists, and pedestrians when planning road improvements.	No comments	YES	YES
City of Monterey General Plan Amended 2016 – Circulation Element	City of Monterey	• **Goal c, Policy c.5.4**—Maintain the major entrances to the city as scenic, landscaped corridors.	No comments	YES	YES
City of Monterey General Plan Amended 2016 – Circulation Element	City of Monterey	• **Program c.13.2** – Support Monterey Salinas Highway 68 widening to four lanes along entire length.	Caltrans is not proposing the complete four-lane widening of State Route 68 at this time and that concept is also not included in the 2017 State Route 68 Scenic Highway Plan, the Association of Monterey Bay Area Government's 2040 Metropolitan Transportation Plan, or TAMC's Regional Transportation Plan. The roundabout alternative is still consistent with the policy for alleviating congestion and Alternative 2 may include limited widening approaching and departing from project intersections.	NO	NO

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City of Monterey General Plan Amended 2016 – Circulation Element	City of Monterey	• **Policy c.15** – Continue to coordinate with Caltrans and TAMC to identify improvements and funding for improvements to… Highway 68…deemed important to the function of the regional transportation network so that the LOS standards for such facilities are met	No comments	YES	YES
City of Monterey General Plan Amended 2016 – Noise Element	City of Monterey	• **Goal a, Policy a.1**—Re-evaluate City traffic flow systems periodically to determine whether traffic flows can be adjusted through synchronized signalization or other means to minimize traffic stops.	No comments	Not applicable to project	Not applicable to project
City of Monterey General Plan Amended 2016 – Urban Design Element	City of Monterey	• **Goal c., Policy c.1**—Maintain the canyons and their native vegetation throughout their lengths.	Avoidance and minimize where possible. Mitigate where it is necessary to remove trees.	YES	YES
City of Monterey General Plan Amended 2016 – Urban Design Element	City of Monterey	• **Goal h** – Protect and enhance scenic entrances **Policy h.1** – Significant natural features within scenic corridors should be preserved and enhanced to the maximum extent possible in the design and construction of scenic entrances. These natural features include ridgelines, hilltops, rock outcroppings, stream and creek beds, scenic vistas, wildlife habitats, Monterey pine and oak groves, and other significant natural vegetation.	Avoidance and minimize where possible. Mitigate where it is necessary to remove trees.	YES	YES
City of Monterey General Plan Amended 2016 – Urban Design Element	City of Monterey	• **Goal h** – Protect and enhance scenic entrances **Policy h.2** – Highway construction grading should not take place outside the roadway right-of-way	Additional right of way from multiple adjacent properties (partial property acquisitions) would be required to construct the improvements for both build alternatives	NO	NO
City of Monterey General Plan Amended 2016 – Urban Design Element	City of Monterey	• **Goal h** – Protect and enhance scenic entrances **Policy h.4**—Roadway lighting and signing should be minimized, of low-profiles design, and designed to enhance the scenic character of the corridor	For all scenic highway goals and policies both build alternatives would implement applicable Avoidance, Minimization, and Mitigation Measures to reduce project impacts on trees and other vegetation.	YES	YES
City of Monterey General Plan Amended 2016 – Urban Design Element	City of Monterey	• **Goal h** – Protect and enhance scenic entrances **Policy h.14**—Work with Caltrans to maintain or reinforce native landscaping, with appropriate planting	No comments	YES	YES
City of Monterey – Highway 68 Area Plan 1984	City of Monterey	• **Scenic Character** **Policy 2**: Large continuous expanses of native vegetation and trees should be conserved as the most suitable habitat for maintaining abundant and diverse wildlife	No comments	YES	YES

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
City of Monterey – Highway 68 Area Plan 1984	City of Monterey	• **Scenic Character** **Policy 3:** Trees shall be preserved wherever possible and where appropriate, trees of indigenous nature will be added	No comments	YES	YES
City of Monterey – Highway 68 Area Plan 1984	City of Monterey	• **Traffic and Transportation** **Policy 1**: Planning should address the ultimate freeway construction on Highway 68 and the expansion of Highway 218	The proposed project does not propose construction of a full freeway on State Route 68 or expansion of State Route 218 for increased highway capacities.	Not applicable to project	Not applicable to project
City of Monterey – Highway 68 Area Plan 1984	City of Monterey	• **Traffic and Transportation** **Policy 2**: Facilities, including routes and stops, for public transportation shall be provided to serve the Highway 68 area	The project would maintain the existing transit stops along the project limits of State Route 68 and would not include any additional transit facilities.	NO	NO
City of Monterey – Highway 68 Area Plan 1984	City of Monterey	• **Traffic and Transportation** **Policy 4:** Development shall provide pedestrian pathways to minimize safety hazards to pedestrians from vehicular traffic, especially in areas where higher densities are planned	No comments	YES	YES
City of Monterey – Highway 68 Area Plan 1984	City of Monterey	• **Traffic and Transportation** **Policy 5:** Bikeways should be planned to ease to the transportation needs of Highway 68 area residents	No comments	YES	YES
City of Monterey – Highway 68 Area Plan 1984	City of Monterey	• **Tarpey Flats - Goal B:** To preserve the scenic character of Tarpey Flats **Policy 6:** The knoll and its trees (as depicted on the Tarpey Flats Map page 20a) shall be retained in its natural state	No comments	YES	YES
City of Monterey – Highway 68 Area Plan 1984	City of Monterey	• **Tarpey Flats - Goal C:** To maintain the Highway 68 and Olmsted **Policy 1**: A greenbelt shall be established from the property line fronting Highway 68 as shown on the Tarpey Flats Map	No comments	YES	YES
City of Monterey – Highway 68 Area Plan 1984	City of Monterey	• **Tarpey Flats - Goal C**: To maintain the Highway 68 and Olmsted scenic corridors **Policy 2:** Greenbelts shall be established from the property line fronting both sides of Olmsted Road a shown on the Tarpey Flats Map	No comments	YES	YES

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City of Monterey – Highway 68 Area Plan 1984	City of Monterey	• **Monterra - Goal D**: To maintain the Highway 68 and Olmsted Road as scenic corridors **Policy 1:** Viewsheds seem from Highway 68 toward all sections of Monterra shall be preserved	No comments	YES	YES
City of Monterey – Highway 68 Area Plan 1984	City of Monterey	• **Monterra - Goal D**: To maintain the Highway 68 and Olmsted Road as scenic corridors **Policy 6**: A greenbelt shall be established from the property line fronting Highway 68 as shown on the Monterra Map, page 22a	No comments	YES	YES
City of Monterey – Highway 68 Area Plan 1984	City of Monterey	• **Tarpey Flats Area of Monterra – Goal B:** To maintain the Highway 68 and Olmsted scenic corridors **Policy 1**: Greenbelt shall be established from the property lines fronting both sides of Olmsted Road a shown on the Tarpey Flats Area of the Monterra Map	No comments	YES	YES
City of Monterey – Highway 68 Area Plan 1984	City of Monterey	• **Laguna Seca - Goal D**: To maintain the Highway 68 scenic corridor **Policy 3:** A greenbelt shall be established from the property line fronting Highway 68 as shown on the Laguna Seca Map, page 24a	No comments	YES	YES
City of Del Rey Oaks General Plan 1997 – Circulation Element	City of Del Rey Oaks	• **Policy C-8 –** The City does not support any realignment of State Route 68 which will significantly impact the intersection of Canyon Del Rey and State Route 68 and result in land use and fiscal impacts on the City due to loss of commercial property at the east entrance to the community	The preliminary roundabout footprint is mostly within the existing ROW and does affect the commercial development on the NW corner of State Route 68/218.	YES	YES
City of Del Rey Oaks General Plan 1997 – Circulation Element	City of Del Rey Oaks	• **Policy C-9**—The city supports the Monterey County Congestion Management Program and voluntary Trip Reduction Ordinance adopted by the Transportation Agency for Monterey County.	No comments	YES	YES
City of Del Rey Oaks General Plan 1997 – Circulation Element	City of Del Rey Oaks	• **Policy C-10a** – The City will coordinate and assist with TAMC and AMBAG in providing funding for an efficient regional transportation network. • **Policy C-10b** – Support and participate in regional and state planning efforts and funding programs to provide an efficient regional transportation network. • **Policy C-10c**—Land use and circulation plans shall be integrated to create an environment that supports a multimodal	No comments	YES	YES

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
		transportation system. Development shall be directed to areas with a confluence of transportation facilities (auto, bus, bicycle, pedestrian, etc.)			
City of Del Rey Oaks General Plan 1997 – Circulation Element	City of Del Rey Oaks	• **Policy C-12** – Any improvement, repavement or signalization on the three designated City bike routes shall include Type II bike lanes on both sides of the affected segments of those routes.	No comments	YES	YES
City of Del Rey Oaks General Plan 1997 – Circulation Element	City of Del Rey Oaks	• **Policy C/OS-3** – Wildlife habitat and corridors shall be preserved	The proposed wildlife crossing improvements will support wildlife travel. Address habitat protection with avoidance and minimization where possible. Mitigate where necessary.	YES	YES
City of Del Rey Oaks General Plan 1997 – Circulation Element	City of Del Rey Oaks	• **Policy C/OS-4** – Significant stands of riparian vegetation shall be subject to only minimal cutting and removal and then only when proved unavoidable	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES
City of Del Rey Oaks General Plan 1997 – Circulation Element	City of Del Rey Oaks	• **Policy C/OS-5f** – The City shall encourage the preservation of small pockets of habitat and populations of special status species within and around developed areas, in accordance with the recommendations of the HMP and Fort Ord Reuse Area Plan. This shall be accomplished by requiring project applicants to conduct surveys to verify sensitive species and/or habitats • **Policy C/OS-5g** – The City shall provide for the protection and mitigation of impacts to wetland areas	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES
City of Del Rey Oaks General Plan 1997 – Circulation Element	City of Del Rey Oaks	• **Policy C/OS 15** – If development of a site uncovers cultural resources, the recommendations of Appendix K, of the Guidelines for Implementation of CEQA shall be followed for identification, documentation and preservation of the resource	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES
City of Del Rey Oaks General Plan 1997 – Circulation Element	City of Del Rey Oaks	• **Policy L-7** – Undergrounding of utilities and other forms of enhancement shall be pursued as practicable on public and private property	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES
City of Del Rey Oaks General Plan 1997 – Circulation Element	City of Del Rey Oaks	• **Policy L-9** – Native vegetation along Canyon Del Rey should be preserved and entrances to the City enhanced by landscaping	Address with avoidance and minimization where possible. Mitigate where necessary.	YES	YES

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
Fort Ord Reuse Plan 1996 - Conservation Element Biological Resources	Fort Ord Reuse Authority	• **Policy B-3**—The County of Monterey shall preserve, enhance, restore, and protect vernal ponds, riparian corridors, and other wetland areas. Program B-3.4: The County shall coordinate with the State Department of Transportation in the design of State Route 68 to assess the feasibility of avoiding the riparian forest within the alignment. Where riparian forest removal is unavoidable, the County shall request Caltrans to compensate at a 2:1 ratio of newly created habitat to lost habitat or a 4: 1 acreage ratio of enhanced habitat to lost habitat. Compensation and restoration could occur on other areas of Toro Creek.	Address with mitigation and avoidance where possible	YES	YES
Fort Ord Reuse Plan 1996 - Circulation Element	Fort Ord Reuse Authority	• **Circulation Element Objective B**—Provide direct and efficient linkages from former Fort Ord lands to the regional transportation system. - Streets and Roads Policy B-1—FORA and each jurisdiction with lands at former Fort Ord shall design all major arterials within former Fort Ord to have direct connections to the regional network (or to another major arterial that has a direct connection to the regional network) consistent with the Reuse Plan circulation framework. - Program B-1.1 Each jurisdiction shall coordinate with FOR A to design and provide an efficient system of arterials consistent with Figures 4.2-2 (in the 2015 scenario) and Figure 4.2-3 (in the buildout scenario) in order to connect to the regional transportation network.	No comments	Indirectly YES	Indirectly YES
Fort Ord Reuse Plan 1996 - Circulation Element	Fort Ord Reuse Authority	• **Circulation Element Objective C**—Provide a safe and efficient street system at the former Fort Ord. - Streets and Roads Policy C-2—Each jurisdiction shall provide improvements to the roadway network to address high accident locations. - Program C-2.1—Each jurisdiction shall collect accident data, identify and assess potential remedies at high accident locations and implement improvements to lower the identified high accident rates. (Again, this probably just applies to roads within Fort Ord/ Fort Ord streets?)	No comments	YES	YES
Fort Ord Reuse Plan 1996 - Land Use and Transportation Element	Fort Ord Reuse Authority	• **Land Use and Transportation Element, Objective A**: A transportation system that supports the planned land use development patterns.	No comments	Indirectly YES	Indirectly YES

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
		- Land Use and Transportation Policy A.12—The transportation system to serve former Fort Ord lands shall be designed to reflect the needs of surrounding land uses, proposed densities of development, and shall include streets, pedestrian access, bikeways, and landscaping as appropriate. - Program A.2-1—Each jurisdiction with lands at former Fort Ord shall develop transportation standards for implementation of the transportation system, including but not implemented to, rights-of-way widths, roadway capacity needs, design speeds, safety requirements, etc. Pedestrian and bicycle access shall be considered for all incorporation in all roadway designs.			
Fort Ord Reuse Plan 1996 - Recreation and Open Space Element	Fort Ord Reuse Authority	• **Recreation and Open Space Element, Objective B**—Protect scenic views, and preserve and enhance visual quality. - Recreation Policy B-2—The City of Marina shall establish landscape gateways into the former Fort Ord along major transportation corridors with the intent of establishing a regional landscape character. - Recreation Policy B-2—The City of Seaside shall establish landscape gateways into the former Fort Ord along major transportation corridors with the intent of establishing a regional landscape character.	While Rec Policy B-2 is not specific to State Route 68, the overall Objective B would apply	YES	YES
Fort Ord Reuse Plan 1996 - Conservation Element	Fort Ord Reuse Authority	• **Conservation Element Air Quality Objective A:** Protect and improve air quality - Air quality Policy A-1—Each jurisdiction shall participate in regional planning efforts to improve air quality. - Program A-1.2—Each jurisdiction shall coordinate with the TAMC to carry out the Congestion Management Plan.	No comments	YES	YES
2018 Monterey County Regional Transportation Plan	Transportation Agency for Monterey County	• **Transportation investment:** Corridor 3: Salinas-Monterey Corridor— Improvement C - State Route 68 Safety and Traffic Flow: this project will construct safety, congestion relief, and wildlife connectivity projects along State Route 68 between Blanco Road in Salinas and State route 1 in Monterey.	No comments	YES	YES

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
2018 Monterey County Regional Transportation Plan	Transportation Agency for Monterey County	• **Appendix C** – Regional Transportation Plan Project List: extension of 4-lane segment on State Route 68 from existing 4-lane to Corral De Tierra (#MON-CT011-CT)	Caltrans is not proposing the complete four-lane widening of State Route 68 at this time and that concept is also not included in the 2017 State Route 68 Scenic Highway Plan, the Association of Monterey Bay Area Government's 2040 Metropolitan Transportation Plan, or TAMC's Regional Transportation Plan. The roundabout alternative is still consistent with the policy for alleviating congestion and Alternative 2 may include limited widening approaching and departing from project intersections	NO	NO
2018 Monterey County Regional Transportation Plan	Transportation Agency for Monterey County	• **Appendix C** – Regional Transportation Plan Project List: lists construction of safety, congestion relief, and wildlife connectivity project along State Route 68 from Blanco Road to Highway 1	No comments	YES	YES
2018 Monterey County Regional Transportation Plan	Transportation Agency for Monterey County	• **Local Streets and Roads- Roundabouts—**Complementary to the complete streets policy approach… consideration and implementation of roundabouts at intersections is an important strategy for achieving the goals of the 2018 Monterey County Regional Transportation Plan. Roundabouts at intersections allows for free movement of vehicles at intersections, which reduces vehicle emissions. Roundabout intersections are proven to be safer than signalized intersections given low design speeds, simplified turn movements and the reduced number of conflicts through intersections. Roundabouts also incorporate pedestrian and bicycle friendly accommodations that make these types of intersections safer and easier to navigate for all users. - Roundabouts are increasingly supported by state and federal policy and technical guidance. Specifically, Intersection Control Evaluation is a framework adopted by Caltrans that includes consideration of roundabouts for intersection improvements. The Transportation Agency recommends that member jurisdictions utilize the Intersection Control Evaluation guidance available through Caltrans whenever considering intersection improvements. - Several projects in the plan will use the intersection control evaluation to determine whether roundabouts are a cost-effective strategy, most notably the State Route 68 Scenic Corridor project.	No comments	YES	YES

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
Monterey Bay 2040: Metropolitan Transportation Plan/Sustainable Communities Strategy - June 2018	Association of Monterey Bay Area Governments	• **2.4040 MTP/SCS** Transportation Projects, Highway Operations, Maintenance, and Rehabilitation—Congestion relief improvements to State Route 68 from Blanco Road to State Route 1 in Monterey County (Page 64)	No comments	YES	YES
Monterey Bay 2040: Metropolitan Transportation Plan/Sustainable Communities Strategy - June 2018	Association of Monterey Bay Area Governments	• **Monterey County**- The following roadway segments within Monterey County have been officially designated as **"State Scenic Highways"** under the California Scenic Highway System (Page 90): - State Route (State Route) 1 from San Luis Obispo County to State Route 68 - State Route 68 from State Route 1 in Monterey to the Salinas River	Caltrans has completed a Visual Impact Assessment for the project.	YES	YES
Monterey Bay 2040: Metropolitan Transportation Plan/Sustainable Communities Strategy - June 2018	Association of Monterey Bay Area Governments	• **Appendix C – Regional Transportation Plan Project List** - Project: State Route 68- Commuter Improvements - Project Description: extension of 4-lane segment on State Route 68 from existing 4-lane to Corral De Tierra - AMBAG ID# MON-CT011-CT	Caltrans is not proposing the complete four-lane widening of State Route 68 at this time and that concept is also not included in the 2017 State Route 68 Scenic Highway Plan, the Association of Monterey Bay Area Government's 2040 Metropolitan Transportation Plan, or TAMC's Regional Transportation Plan. The roundabout alternative is still consistent with the policy for alleviating congestion and Alternative 2 may include limited widening approaching and departing from project intersections	NO	NO
Monterey Bay 2040: Metropolitan Transportation Plan/Sustainable Communities Strategy - June 2018	Association of Monterey Bay Area Governments	• **Appendix C – Regional Transportation Plan Project List** - Project: State Route 68-Safety and Traffic Flow-Salinas to Monterey - Project description: construction of safety, congestion relief, and wildlife connectivity project along State Route 68 from Blanco Road to Highway 1 - AMBAG ID# MON-CTXXX-CT	No comments	YES	YES
Monterey Bay 2040: Metropolitan Transportation Plan/Sustainable Communities Strategy ENVIRONMENTAL IMPACT REPORT - June 2018	Association of Monterey Bay Area Governments	• **Chapter 4 Table 5** lists 2040 MTP/SCS that may result in visual impacts. **MON-CT011-CT** is included on this list.	For MON-CT011-CT, EIR notes potential impact as AES-1: "Proposed project envisioned by 2040 MTP/SCS may affect public views of scenic vistas and along designated scenic corridors, including state scenic highways. This would be a significant and unavoidable impact."	YES	YES

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
State Route 68 Scenic Highway Plan Final	Transportation Agency for Monterey County	• **Page 146: Table 48- Preferred Intersection Control Type: Benefit-Cost**: - INT-01 Josselyn Canyon Road- Roundabout Preferred - INT-02 Olmsted Road- Roundabout Preferred - INT-03 State Route 218- Roundabout Preferred - INT-05 York Road – Roundabout Preferred - INT-06 Pasadera Drive- Roundabout Preferred - INT-07 Laureles Grade Road- Roundabout Preferred - INT-08 Corral De Tierra Road- Roundabout Preferred - INT-09 San Benancio Drive- Roundabout Preferred - INT-10 Torero Drive- Roundabout Preferred - INT-11 Blanco Road- Roundabout Preferred	Intersections 10 and 11 were previously removed from the project: Intersection 10, Torero Drive at SR 68 was removed from the project by TAMC during a meeting in May 2018; this decision is documented in the project traffic study (Traffic Operations Analysis Report, Sept 2020). Intersection 11, Blanco Road, was removed from the project during the pre-Project Initiation Document (PID) meeting with TAMC on August 16, 2017, during which the project team agreed not to include Blanco Road intersection because the proposed concepts in the Scenic Highway Plan showed no improvement at that location.	YES	NO
Monterey Airport Land Use Compatibility Plan	Monterey Regional Airport	• Monterey Regional Airport is accessed from State Route 68 by way of Olmsted Road. A portion of State Route 68 is within MRA's **"airport influence area" (AIA).** - **Chapter 4, Section 4.2.3.4** indicates that land uses which may cause wildlife hazards are incompatible in the AIA, including uses that attract wildlife. An exception to that policy are wetlands or other environmental mitigation projects required under NEPA.	The project includes improvements to wildlife crossings of the State Route 68 to reduce conflicts with vehicles and wildlife.	YES	YES
Scenic Highway Guidelines	Caltrans	• The development of scenic highways will not only add to the pleasure of the residents of this State but will also play an important role in encouraging the growth of the recreation and tourism industries upon which the economy of many areas of this State depend.	No comments	YES	YES
Scenic Highway Guidelines	Caltrans	• The department shall cause appropriate signs to be placed and maintained along the portions of the state scenic highway system which the department has designated as official state scenic highways that indicate that the highways are official state scenic highways.	No comments	YES	YES
Scenic Highway Guidelines	Caltrans	• The Legislature hereby declares that it is the policy of this State to achieve, whenever feasible and not inconsistent with sound environmental planning, the undergrounding of all future electric and communication distribution facilities which are proposed to be erected in proximity to any highway designated a state scenic highway pursuant to Article 2.5 (commencing with	No comments	YES	YES

PLAN NAME	AGENCY	STATE ROUTE 68 OR RELEVANT TRANSPORTATION REFERENCES	COMMENTS	ALTERNATIVE 1 CONSISTENT WITH PLAN/POLICY?	ALTERNATIVE 2 CONSISTENT WITH PLAN/POLICY?
		Section 260) of Chapter 2 of Division 1 of the Streets and Highways Code and which would be visible from such scenic highways if erected above ground.			
Scenic Highway Guidelines	Caltrans	• No project which may result in damage to scenic resources, including, but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway designated as an official state scenic highway, pursuant to Article 2.5 (commencing with Section 260) of Chapter 2 of Division 1 of the Streets and Highways Code, shall be exempted from this division pursuant to subdivision (a). This subdivision does not apply to improvements as mitigation for a project for which a negative declaration has been approved or an environmental impact report has been certified.	No comments	YES	YES
Scenic Highway Guidelines	Caltrans	• The standards for official scenic highways shall also require that local governmental agencies have taken such action as may be necessary to protect the scenic appearance of the scenic corridor, the band of land generally adjacent to the highway right-of-way, including, but not limited to, (1) regulation of land use and intensity (density) of development; (2) detailed land and site planning; (3) control of outdoor advertising; (4) careful attention to and control of earthmoving and landscaping; and (5) the design and appearance of structures and equipment.	No comments	Not applicable to project	Not applicable to project
Transportation Concept Report State Route 68, District 5, October 2015	Caltrans	• Recommended Strategies: Segment 1 (PMR3.95/19.97) - Discussion notes that widening along State Route 68 is planned from Corral de Tierra Road (PM 12.9) to existing 4-lane at PM 15.1	Caltrans is not proposing the complete four-lane widening of State Route 68 at this time and that concept is also not included in the 2017 State Route 68 Scenic Highway Plan, the Association of Monterey Bay Area Government's 2040 Metropolitan Transportation Plan, or TAMC's Regional Transportation Plan. The roundabout alternative is still consistent with the policy for alleviating congestion and Alternative 2 may include limited widening approaching and departing from project intersections.	NO	NO
State Transportation Improvement Program	Caltrans	• Regional Transportation Improvement Program funds	Scenic Route 68 Corridor Improvements (proposed project) is funded through Regional Transportation Improvement Program 20.10.075.600 funds through local county Measure X and included in the 2024 State Transportation Improvement Program.	YES	YES

Appendix E Avoidance, Minimization and/or Mitigation Summary

The following summarizes the measures that could be included in the project to avoid or minimize impacts to environmental resources that may result from the project. Resource areas that are expected to experience significant impacts under CEQA include Aesthetics, Agriculture and Forest Resources, Biological Resources, Cultural Resources, Geology and Soils and Paleontological Resources, Hydrology and Water Quality, and Tribal Cultural Resources. Measures to mitigate significant or potentially significant impacts under CEQA are identified. Impacts to other resources have been determined to be less than significant under CEQA. The potential impacts and specific measures are discussed in more detail in Chapter 2.

2.1.3, Parks and Recreational Facilities

Avoidance and Minimization Measures

PR-1. Ryan Ranch Park and Disc Golf Course Activities During Construction. Relocation of a disc basket or modification of other course features during construction as a result of permanent partial right of way acquisition for the project would be performed in a manner that does not disrupt active play of disc golf, and the fairway course will remain open to players. Coordination efforts will continue with park officials throughout project development phases.

2.1.6, Relocations and Real Property Acquisition

Avoidance and Minimization Measures

RRPA-1. Right of Way Acquisitions and Relocations. The preliminary designs of both Build Alternatives have been sited to minimize impacts to the extent feasible to private and public properties at each intersection. Upon selection of the preferred alternative, final design of that alternative would further refine the right-of-way needs for the intersection improvements, and any partial property acquisitions. For those properties where acquisition cannot be avoided, all property acquisition activities would be conducted in accordance with the regulatory requirements of the Real Property Acquisition Policies Act of 1970, as amended. The parcel owners would be fully informed of their rights, and objective and fair property appraisals would be conducted. Offers would be prepared based on appraised fair market values. Should any property owners request that their property be purchased in its entirety to relocate their business or property occupancy, Caltrans Right of Way agents would coordinate with the property owner(s) in accordance with Caltrans' Relocation Assistance Program. Appendix C explains the program and provides a summary of relocation benefits, as this procedure is a regulatory requirement.

All driveways that would be affected by the project would be reconstructed to conform to the new roadway profile, and all mailboxes that would require temporary removal for construction would be replaced upon completion of construction activities in those locations. The proposed edge of pavement would conform to all asphalt concrete driveways.

2.1.10, Visual/Aesthetics

Avoidance and Minimization Measures

VIS-1. Preserve Vegetation. Prescriptive clearing and grubbing techniques will be used to preserve as much existing vegetation and trees as possible during construction.

VIS-2. Revegetation of Disturbed Areas. All areas disturbed by project construction shall be revegetated including but not limited to temporary access roads, staging areas, and other areas with native plant species appropriate for each location.

VIS-3. Metal Components. All metal components related to visible down drains and inlets, including but not limited to corrugated metal pipe, flared end sections, connectors, anchorage systems, cable barriers, etc., shall be darkened or colored to blend with the surroundings and to reduce reflectivity. The specific color shall be determined by Caltrans District 5 Landscape Architecture.

VIS-4. Electrical and Traffic Boxes. All visible electrical and traffic-related boxes shall be painted or stained to blend with the surroundings and reduce reflectivity. The specific color shall be determined by Caltrans District 5 Landscape Architecture.

VIS-5. Guardrail. The posts and beams of all new or replaced guardrail shall be colored and/or darkened to blend with the surroundings and to reduce reflectivity. The specific color shall be determined by Caltrans District 5 Landscape Architecture.

VIS-6. Stormwater Prevention Measures. All permanent stormwater prevention measures shall be designed to visually fit with the ornamental or natural landscaped roadsides. Swales, ditches, and basins shall appear as natural as possible. Built structures shall be architecturally treated, colored, or hidden from view with planting as recommended by Caltrans District 5 Landscape Architecture.

VIS-7. Concrete Components. All concrete components related to headwalls, drain inlet aprons, flared end sections, other concrete elements shall be colored to blend with the surroundings and to reduce reflectivity. The specific color shall be determined by Caltrans District 5 Landscape Architecture.

VIS-8. Concrete Medians and Roadside Barriers. All proposed concrete medians and roadside barriers shall include aesthetic treatment such as coloring and/or texturing appropriate for the setting. The aesthetic treatment shall be determined by Caltrans District 5 Landscape Architecture with input from the County of Monterey and local communities.

VIS-9. Roundabout Aesthetic Treatment. Aesthetic treatment shall be applied to all hardscape elements. Sidewalks shall include color if determined appropriate for the surrounding context. Treatments shall compliment the natural and scenic visual setting. If feasible, the center island of the roundabouts shall be landscaped to reduce the urbanizing character and be consistent with local policies and guidelines. The specific types of aesthetic treatments and planting shall be determined by Caltrans District 5 Landscape Architecture with input from the County of Monterey and local communities.

VIS-10. Detectable Warning Surfaces. Detectable warning surfaces shall be a color congruent with local aesthetics as determined by Caltrans District 5 Landscape Architecture.

VIS-11. Rock Slope Protection.

a) All rock slope protection shall be placed in natural appearing shapes rather than geometric patterns to the greatest extent possible to reduce engineered appearance.

b) Following placement of rock slope protection, the rock shall be colored to blend with the surroundings and to reduce reflectivity. The specific color shall be determined by Caltrans District 5 Landscape Architecture.

VIS-12. Zero Emission Charging Stations. The Zero Emissions Charging Stations shall be sited in a location that is least visible from State Route 68. Any associated aesthetics shall be determined and approved by Caltrans District 5 Landscape Architecture

VIS-13. Roadway Signage. The signage plan for the project shall consolidate signs as appropriate, avoid redundancy in signage, and locate traffic control cabinets out of sight as reasonably possible.

VIS-14. Lighting. Highway Lighting fixtures, including but not limited to, decorative pedestrian-scale fixtures shall be appropriately shielded, cut-off types to direct lighting downward. Project lighting design shall not exceed the minimum required for operations and safety, consistent with Caltrans and County of Monterey lighting guidelines and standards as well as aesthetic standards. The lighting plan shall be approved by Caltrans District 5 Landscape Architecture.

Compensatory Mitigation Measures under CEQA

VIS-15. Landscape Planting. New and replacement planting shall be included to the greatest extent possible to reduce the urbanizing effects of increasing paving, retaining walls, and other built features of the project, and for aesthetic attributes. The following shall be approved by Caltrans District 5 Landscape Architecture:

a. New planting shall be a combination of trees, shrubs, and ground covers as appropriate

b. New planting shall be native of horticulturally appropriate non-native species.

c. Trees and shrubs shall be planted from the largest container size horticulturally appropriate in order to shorten the amount of time required until they provide substantial visual benefit.

d. New planting shall not be placed such that it would block views of the hills.

e. All plantings shall be maintained until established.

VIS-16. Slope Grading. All excavation slopes shall include slope-rounding and landform grading as appropriate to reduce their engineered appearance and to visually blend with the natural topography of the region.

VIS-17. Retaining Walls.

The following measures related to retaining walls shall be implemented during the Plans, Specifications, and Estimates phase of the proposed project:

a) In areas where retaining walls are proposed landform grading shall be considered where feasible as a replacement for walls or to reduce the size of the walls.

b) Where large retaining walls are proposed and landform grading is not possible as a replacement, the design shall include measures such as benching or tiering to enable opportunities for integral planting.

c) All retaining walls including associated safety shape shall include aesthetic treatment such as texture and color appropriate for the location. Any associated concrete gutters and cable barriers shall be integrally colored and/or stained. The aesthetic treatment shall be determined by Caltrans District 5 Landscape Architecture with input from the County of Monterey and local communities.

d) Planting shall be included with all retaining walls to the greatest extent feasible.

2.1.11, Cultural Resources

Mitigation Measures under CEQA

CR-1. Programmatic Agreement and Cultural Resources Management Plan. The project would adhere to the requirements specified in the Programmatic Agreement between the California Department of Transportation and the California State Historic Preservation Officer Regarding the Scenic Route 68 Corridor Improvements Project, Monterey County (dated August 8, 2023) and the Cultural Resources Management Plan for the Scenic Route 68 Corridor Improvements (dated September 2022).

Within 30 days of Caltrans District 5 and the City determining that all fieldwork required under Stipulation II has been completed, District 5 shall provide a brief letter report to the Programmatic Agreement parties and any additional interested parties. The letter report will summarize the field efforts and construction monitoring and any preliminary finds that resulted from them.

If Caltrans determines that historic properties were affected by the undertaking in accordance with the procedures specified in the Cultural Resources Management Plan, Caltrans will ensure the preparation and distribution of a Final Monitoring Report in accordance with the process specified in the Programmatic Agreement.

If Caltrans determines the project had an adverse effect on historic properties, Caltrans shall consult with the Programmatic Agreement parties on implementation of a mitigation program. This consultation will occur in accordance with the processes for Mitigation of Adverse Effects included in the Cultural Resources Management Plan. If the project results in no adverse effects to historic properties, there will be no obligation to develop alternative mitigation options.

CR-2. Treatment of Native American Remains if Discovered. Human remains and related items of Native American origin discovered during the implementation of the terms of the Programmatic Agreement and the proposed project will be treated in accordance with State Health and Safety Codes and Public Resources Code Section 5097.98(a) through (d). All activities within the vicinity of the discovery will be stopped and the Caltrans Archaeologist will be notified immediately and consulted on how to proceed. A written report shall be prepared within 48 hours of notification of the Caltrans Archaeologist. A reburial plan will be developed in consultation with the Most Likely Descendent and implemented prior to construction as a condition of treatment in the event human remains are encountered.

CR-3. Discovery of Unanticipated Cultural Effects. If during construction activities Caltrans determines that either the undertaking would affect a previously unidentified property that may be eligible for the National Register of Historic Places or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in

accordance with Stipulation XV.B of the Section 106 Programmatic Agreement. Caltrans at its discretion may, pursuant to 36 Code of Federal Regulations Section 800.13(c), assume any discovered property to be eligible for inclusion in the National Register of Historic Places.

CR-4. Discovery of Native American Remains. If any unanticipated pre-historic cultural resources are discovered during project construction, all earth-moving activity around the immediate discovery area would be diverted until a qualified archaeologist can assess the nature and significance of the find. If human remains are discovered, California Health and Safety Code Section 7050.5 states that further disturbances and activities should stop in any area or nearby area suspected to overlie remains, and the County coroner should be contacted. If the coroner thinks that the remains are Native American, the coroner shall notify the Native American Heritage Commission representative, who, pursuant to Public Resources Code Section 5097.98, would then notify the Most Likely Descendent. At this time the person who discovered the remains would contact Terry Joslin, Caltrans' District 5 Native American Coordinator, to coordinate with the Most Likely Descendent on the respectful treatment and disposition of the remains. Further provisions in Public Resources Code 5097.98 are to be followed as applicable.

2.2.1, Hydrology and Floodplain

Mitigation Measures under CEQA

HYD-1. Alternative 2: Expanded Signalized Intersections. If Alternative 2 is selected as the Preferred Alternative during the Plans, Specifications, and Estimates phase of the project, Caltrans would coordinate with the Federal Emergency Management Agency to confirm the base flood elevation of El Toro Creek at the State Route 68 bridge crossing. Additional hydraulic design review and revisions would be conducted as necessary for bridge alterations related to the San Benancio Road/State Route 68 intersection improvements, to maintain the existing base flood elevation in accordance with Caltrans' and federal design criteria. If the findings of final design review and investigations determine that the Alternative 2 bridge design would raise or otherwise change the base flood elevation and there are no feasible avoidance alternatives to achieve the project improvements, Caltrans would file a Conditional Letter of Map Revision with the federal government.

2.2.4, Paleontology

Avoidance and Minimization Measures

PALEO-1. Preparation of Paleontological Mitigation Plan. A Paleontological Mitigation Plan shall be prepared during the design phase of the project and implemented during project construction. The Paleontological Mitigation Plan shall include provisions for paleontological monitoring during excavations that may disturb deposits of high paleontological potential, and procedures for fossil recovery, fossil preparation and identification, and fossil curation.

PALEO-2. Implementation of Paleontological Mitigation Plan. Qualified paleontological monitor(s), under the direction of a Principal Paleontologist, shall be present during ground disturbing activities in areas of high paleontological potential, as outlined in the paleontological mitigation plan. Monitors have the authority to temporarily halt or divert earthwork in the event of a fossil discovery. If scientifically significant fossils are discovered, they shall be recovered from the field, prepared in a fossil preparation laboratory, identified to the lowest taxonomic level, and curated into a recognized paleontological specimen repository with adequate storage and a permanent curator. A Paleontological Mitigation Report outlining the results of the paleontological mitigation program shall be prepared and submitted to Caltrans.

2.3, Biological Resources

2.3.1, Avoidance and Minimization Measures for Natural Communities

Coast Live Oak Woodland and Forest

BIO-1. Coast Live Oak Woodland and Forest: Avoidance. Design and construct the project to avoid as many oak trees as possible.

BIO-2. Coast Live Oak Woodland and Forest: Alternatives to Tree Removal. When feasible, oak trees will be trimmed or pruned rather than removed.

BIO-3. Coast Live Oak Woodland and Forest: Habitat Restoration. Oak woodland habitats that are temporarily impacted will be restored with a diversity of native plant species that occur in oak woodlands in the region.

Monterey Pine Forest and Woodland

BIO-4. Monterey Pine Forest and Woodland: Avoidance. Design and construct the project to avoid as many Monterey pine trees as possible.

BIO-5. Monterey Pine Forest and Woodland: Alternatives to Tree Removal. When feasible, Monterey pines will be trimmed or pruned rather than removed.

BIO-6. Monterey Pine Forest and Woodland: Replanting. Monterey pines will be planted in suitable habitat areas, using locally sourced material from the Monterey population if feasible.

BIO-7. Monterey Pine Forest and Woodland: Habitat Restoration. Monterey Pine Forest habitats that are temporarily impacted will be restored with native plant species that occur in Monterey Pine Forest habitats in the region.

Other Natural Communities

BIO-8. Other Natural Communities: Habitat Restoration. Purple Needlegrass Grassland and White-root Beds communities that are temporarily impacted will be restored with native plant species that occur in respective communities in the region.

BIO-9. Other Natural Communities: Minimization of Clearing and Grubbing. Where feasible, clearing and grubbing will be limited to the smallest footprint possible in temporary impacted areas so that roots of these species can persist and potentially resprout once construction is complete.

Compensatory Mitigation Measures under CEQA for Impacts to Natural Communities

Coast Live Oak Woodland and Forest; Monterey Pine Forest and Woodland

BIO-10. Compensatory Mitigation: Coast Live Oak Woodland and Monterey Pine Forest Natural Communities. Compensatory mitigation is proposed at a 1-to-1 ratio (acreage) for temporary impacts and a 3-to-1 ratio (acreage) for permanent impacts to Coast Live Oak Woodland and Forest, and Monterey Pine Forest and Woodland. Mitigation for both temporary and permanent impacts to each of these natural communities is expected to be completed on-site, within or adjacent to existing habitat of the same type on Caltrans right-of-way within the project area, as well as off-site if sufficient area is not available on-site. Off-site mitigation would be conducted in coordination with a local land conservancy or restoration group.

Please refer to Section 3.2.2 for additional discussion regarding mitigation for impacts to coast live oak woodland and Monterey pine forest.

Red Willow Riparian Woodland and Forest

BIO-11. Compensatory Mitigation: Other Natural Communities. Compensatory mitigation for riparian impacts described in the following paragraph (Jurisdictional Wetlands and Other Waters) would offset project impacts to Red Willow Riparian Woodland and Forest Habitat.

2.3.2, Avoidance and Minimization Measures for Jurisdictional Wetlands and Other Waters

BIO-12. Jurisdictional Wetlands and Other Waters: Environmentally Sensitive Areas. Prior to ground-disturbing activities, Environmentally Sensitive Area boundary markers or fencing will be installed around jurisdictional resources, habitat for special-status animals designated to be protected, and the dripline of trees to be protected within the project limits. Caltrans-defined Environmentally Sensitive Areas will be noted on design plans and delineated in the field prior to the start of construction activities.

BIO-13. Jurisdictional Wetlands and Other Waters: Hazardous Material Spill Cleanup. During construction, all project-related hazardous materials spills within the project site will be cleaned up immediately. Readily accessible spill prevention and cleanup materials will be kept on site at all times by the contractor during construction.

BIO-14. Jurisdictional Wetlands and Other Waters: Pollution and Erosion Control. During construction, pollution and erosion control measures will be implemented. Fencing, fiber rolls, or barriers will be installed as needed between the project construction features and any stream, waterbody, or riparian habitat. Discharge of wet concrete, concrete dust, sediment, construction debris or other pollutants into any stream or waterbody would be prevented.

BIO-15. Jurisdictional Wetlands and Other Waters: Invasive Plant and Pathogen Removal/Avoidance. During construction, the project will avoid spreading invasive species and pathogens by requiring that weeds designated for removal will be removed prior to disturbing surface soils and disposed of the same day they are removed. All nursery stock and imported soil will be certified free of weeds, *Phytophthora* (fungus-like plant damaging microorganisms), and other plant diseases. Construction equipment will be confirmed clean and free of soil containing seeds and and/or invasive plant material prior to entering the construction site to avoid/minimize the spread of invasive species within the construction area.

BIO-16. Jurisdictional Wetlands and Other Waters: Landscape Restoration. After construction has been completed, natural contours and vegetation will be restored as closely as possible to their original condition, following landscaping plans and the Mitigation and Monitoring Plan.

Compensatory Mitigation Measures under CEQA for Impacts to Jurisdictional Wetlands and Other Waters

BIO-17. Compensatory Mitigation: Jurisdictional Wetlands and Other Waters. The goal of compensatory mitigation in this section is to prevent a net loss of wetlands or other aquatic resource acreage, functions, and values. Several types of compensatory mitigation are available to offset impacts to wetlands, other waters, and riparian habitat including creation, rehabilitation, and enhancement. Compensatory mitigation is proposed at a 1-to-1 ratio (acreage) for temporary impacts and a 3-to-1 ratio (acreage) for permanent impacts to wetland, stream, streambank, and riparian aquatic resources.

Mitigation for temporary impacts, and possibly for permanent impacts, is expected to be completed on-site within suitable habitat areas on Caltrans right-of-way. Additional mitigation for permanent impacts may also need to be completed off-site at an existing mitigation bank or in coordination with a local land conservancy or restoration group.

2.3.3, Avoidance and Minimization Measures for Special-Status Plants

Special-Status Manzanitas

BIO-18. Special-Status Manzanitas: Avoidance. Design and construct the project to avoid as many special-status manzanitas as possible.

BIO-19. Special-Status Manzanitas: Alternatives to Removal. When feasible, special-status manzanitas will be trimmed or pruned rather than removed, preserving the root system as much as possible.

BIO-20. Special-Status Manzanitas: Preconstruction Surveys. A qualified biologist will perform additional botanical surveys between two and three years prior to construction to update species presence, area of occupied suitable habitat, and restoration and Environmentally Sensitive Area boundaries. The limits of Environmentally Sensitive Areas will be established to avoid crushing sensitive roots.

BIO-21. Special-Status Manzanita: Replanting and Habitat Restoration. Using locally sourced material if feasible, special-status manzanitas will be planted in suitable habitat areas along with other native species appropriate for those habitats.

Congdon's Tarplant

BIO-22. Congdon’s Tarplant: Preconstruction Surveys and Seed Collection. A qualified biologist will perform additional botanical surveys between two and three years prior to construction to update species presence, area of occupied suitable habitat, and restoration and Environmentally Sensitive Area boundaries. Additionally, seeds from individuals within the impact areas will be collected for replacement planting/restoration at the end of construction.

BIO-23. Congdon’s Tarplant: Soil and Duff Salvage. Caltrans will develop plans and specifications to minimize impacts to Congdon's tarplant by salvaging the top three inches of soil and duff from permanent and temporary impact areas and replacing it to the same general location or suitable landscape settings (within 500 feet).

BIO-24. Congdon’s Tarplant: Habitat Restoration. Annual grassland habitats that are temporarily impacted and within range of Congdon's tarplant will be restored with native grass and forb species.

Lewis' Clarkia

BIO-25. Lewis' Clarkia: Soil and Duff Salvage. Caltrans will develop plans and specifications to minimize impacts to Lewis' clarkia by salvaging the top three inches of soil and duff from permanent and temporary impact areas and replacing it to the same general location and suitable habitat conditions (within 500 feet).

BIO-26. Lewis' Clarkia: Seed Collection. Depending on timing of potential impacts, mature seed may be collected from impacted plants and redistributed in suitable habitat areas in the right-of-way.

Monterey Pine

Applicable general Avoidance, Minimization, and Mitigation measures included for Monterey Pine Forest would be implemented to reduce potential impacts to Monterey pine trees from the proposed project under either build alternative.

2.3.4, Avoidance and Minimization Measures for Special-Status Animals

Special-Status and Other Nesting Birds

BIO-27. Special-Status and Other Nesting Birds: Construction Scheduling and Buffer Areas. Schedule vegetation removal between September 1 and February 14, outside of the typical bird nesting season. If construction activities are proposed to occur within 100 ft of potential habitat during the nesting season (February 15 to August 31), a nesting bird survey will be conducted by a qualified biologist no more than three days prior to construction. If an active nest is found, the Caltrans biologist will determine an appropriate buffer based on the habits and needs of the species. The buffer area will be avoided until a qualified biologist has determined that juveniles have fledged and are no longer dependent on the nest.

BIO-28. Special-Status and Other Nesting Birds: Observance of Legal Protections. Active bird nests shall not be disturbed and eggs or young birds covered by the Migratory Bird Treaty Act and California Fish and Game Code Section 3503 shall not be killed, destroyed, injured, or harassed at any time.

BIO-29. Special-Status and Other Nesting Birds: Exclusionary Methods. During construction before typical nesting season, active exclusionary methods will be implemented to prevent birds from occupying nests in the construction zone. Removal of inactive nests will be monitored by a qualified biologist.

Monarch Butterfly

BIO-30. Monarch Butterfly: Habitat Restoration. Grassland and scrub habitats that are temporarily impacted during construction will be replaced onsite using a seed mixture containing native grass species and locally present, native flowering species with a one-year plant establishment period.

Crotch Bumble Bee

BIO-31. Crotch Bumble Bee: Preconstruction Surveys and Agency Coordination. During the design phase, focused bumble bee surveys will be conducted to determine if Crotch bumble bee occurs in the project area. If Crotch bumble bee is identified in the project area, Caltrans will coordinate

with the California Department of Fish and Wildlife and, if necessary, a 2081 Incidental Take Permit will be acquired.

BIO-32. Crotch Bumble Bee: Surveys for Nesting Bees. Surveys will occur prior to ground disturbance for nesting bumble bees. No work will occur within 50 feet of an active Crotch bumble bee nest unless approved by the California Department of Fish and Wildlife.

BIO-33. Crotch Bumble Bee: Worker Awareness Training. A Worker Environmental Awareness Training will be provided for all construction personnel prior to the start of any ground-disturbance or vegetation removal to discuss Crotch bumble bee identification, ecology, habitat, and avoidance and minimization measures.

BIO-34. Crotch Bumble Bee: Flowering Plant Inspection. Blooming flowering plants that are scoped for removal would be inspected by a qualified biologist immediately prior to work to ensure that no bumble bees are on or near the plant. If a bumble bee is identified on or adjacent to vegetation that is to be removed, work in that area would not proceed until the bumble bee leaves the area of its own accord.

BIO-35. Crotch Bumble Bee: Environmentally Sensitive Areas. Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing shall be installed, as appropriate, around Crotch bumble bee feeding and nesting habitat to be avoided. Environmentally Sensitive Areas shall be noted on design plans and delineated in the field prior to the start of construction activities.

BIO-36. Crotch Bumble Bee: Replacement of Impacted Habitat. Areas of suitable Crotch bumble bee habitat that are temporarily impacted during construction will be replaced onsite at a minimum ratio of 1-to-1.

Roosting Bats

BIO-37. Roosting Bats: Construction Scheduling, Roost Surveys, Exclusionary Methods, and Buffer Areas. Tree removal shall be scheduled to occur from September 2 to January 31, outside of the typical bat maternity roosting season, if possible, to avoid potential impacts to roosting bats. If tree removal or other construction activities are proposed to occur within 100 ft of potential habitat during the bat maternity roosting season (February 1 to September 1), a bat roost survey shall be conducted by a biologist determined qualified by Caltrans within 14 days prior to construction. The biologist(s) conducting the preconstruction surveys will also identify the nature of the bat utilization (i.e., no roosting, night roost, day roost, maternity roost) and determine if passive bat exclusion will be necessary and feasible. If an active day roost is found, a qualified Caltrans biologist shall determine an appropriate buffer based on the habits and needs of the species. The buffer

area shall be avoided until a qualified biologist has determined that roosting activity has ceased, or exclusionary methods have successfully evicted roosting bats.

BIO-38. Roosting Bats: Preconstruction Surveys of Culverts. Prior to culvert construction activities for the proposed wildlife crossing improvements, a preconstruction survey for roosting bats shall be conducted by a biologist determined to be qualified by Caltrans within 14 days prior to construction. The biologist(s) conducting the preconstruction surveys will identify the nature of the bat utilization (i.e., no roosting, night roost, day roost, maternity roost) and determine if passive bat exclusion will be necessary and feasible. The qualified biologist will provide oversight on exclusion methods and installation and will determine whether exclusionary methods have successfully evicted roosting bats.

BIO-39. Roosting Bats: Avoidance of Active Maternity Roosts. If bats are found by a qualified biologist to be maternity roosting, active bat maternity roosts shall not be disturbed or destroyed until pups are volant (capable of flight).

BIO-40. Roosting Bats: Exclusion Zones. In areas where an occupied roost can be avoided, readily visible exclusion zones shall be established using Environmentally Sensitive Area fencing. The size/radius of the exclusion zone(s) shall be determined by a qualified biologist.

BIO-41. Roosting Bats: Habitat Incorporation into Wildlife Crossings. Where feasible, bat habitat may be incorporated into the large wildlife crossing culverts within the project area.

Monterey Dusky-Footed Woodrat and American Badger

Applicable Avoidance, Minimization, and Mitigation Measures included for jurisdictional areas, oak woodlands, California red-legged frog, and California tiger salamander would be implemented to reduce potential impacts to Monterey dusky-footed woodrat and American badger under either build alternative of the project.

Compensatory Mitigation under CEQA: Impacts to potential habitat for Monterey dusky-footed woodrat and American badger would be offset by site restoration within the project limits using native plant species or at offsite mitigation areas associated with compensatory mitigation for jurisdictional areas, oak woodlands, and Monterey Pine Forest. No additional compensatory mitigation is necessary or proposed.

Northern California Legless Lizard, Western Pond Turtle, and Two-Striped Garter Snake

Applicable Avoidance, Minimization, and Mitigation Measures included for jurisdictional areas, California red-legged frog, and California tiger

salamander would be implemented to reduce potential impacts to Northern California legless lizard, western pond turtle, and two-striped garter snake under either build alternative of the project.

Compensatory Mitigation under CEQA: Impacts to potential habitat for Northern California legless lizard, western pond turtle, and two-striped garter snake would be offset by site restoration within the project limits or at offsite mitigation areas associated with compensatory mitigation for jurisdictional areas. No additional compensatory mitigation is necessary or proposed.

2.3.5, Avoidance and Minimization Measures for Threatened and Endangered Species

Yadon's Piperia

Applicable general Avoidance, Minimization, and/or Mitigation measures included in this document for Monterey Pine Forest and Woodland would be implemented to reduce potential project-related impacts to Yadon's piperia.

The following measures would also be implemented to reduce impacts to this species under either build alternative, though particularly for Build Alternative 2, because several of these plants were found in the existing right-of-way boundary for State Route 68 under this alternative:

BIO-42. Yadon's Piperia: Agency Consultation. Prior to construction, Caltrans will consult with the US Fish and Wildlife Service regarding impacts to Yadon's piperia.

BIO-43. Yadon's Piperia: Preconstruction Surveys. A qualified biologist will perform additional botanical surveys between two and three years prior to construction to update occupied suitable habitat, to flag locations where bulbs may be collected (if necessary), and to support placement of Environmentally Sensitive Area boundaries. Additionally, the surveys will identify suitable restoration sites if Yadon's piperia is found within an area to be impacted and must be relocated. Field surveys will be conducted in the early season when leaves have emerged, but grass cover is low.

BIO-44. Yadon's Piperia: Soil and Duff Salvage; Seed Collection and Storage. If Yadon's piperia is found within the area to be impacted, seeds, bulbs, and topsoil containing its mycorrhizal associations will be collected by qualified individuals at the appropriate season from the project's impact areas and other collection sites approved by the US Fish and Wildlife Service one to two years prior to construction. Seed will be collected in the summer, processed, and stored according to seed storage best practices for up to two years before being planted. Bulbs and soil will be collected and translocated in the late fall when the plants are most dormant (anticipated to be October - December).

BIO-45. Yadon's Piperia: Plant Translocation. The plant materials will be translocated into designated and suitably protected sites within range of the Monterey population. The translocation sites will be prepared in advance by clearing invasive and competing vegetation. Site preparation and translocation work will be implemented by hand to avoid compacting the soil.

BIO-46. Yadon's Piperia: Translocation Site Monitoring. Following completion of the seed and bulb relocation efforts, a qualified biologist will monitor the translocation site for four consecutive years to quantify and document the number of individuals that emerge, the presence of non-native vegetation, and overall success of the translocation efforts.

BIO-47. Yadon's Piperia: Translocation Site Maintenance. Invasive and competing vegetation will be removed from the translocation site by hand during the monitoring program.

California Red-Legged Frog

Caltrans anticipates the proposed project would qualify for Federal Endangered Species Act incidental take coverage under the Programmatic Biological Opinion for Federal Highway Administration projects with potential impacts to California red-legged frog (US Fish and Wildlife Service No. 8-8-10-F-58), which includes the Avoidance, Minimization, and Mitigation measures below, in addition to measures pertaining to jurisdictional areas mentioned above (see Section 2.3.2) and which would be implemented for either project alternative.

BIO-48. California Red-Legged Frog: Biologist Qualifications and Capture/Relocation of Frogs. Only US Fish and Wildlife Service-approved biologists will participate in activities associated with the capture and handling of California red-legged frogs. Biologists authorized under the Programmatic Biological Opinion do not need to resubmit their qualifications for subsequent projects conducted pursuant to the Programmatic Biological Opinion, unless the US Fish and Wildlife Service has revoked their approval at any time during the life of the Programmatic Biological Opinion.

BIO-49. California Red-Legged Frog: Biologist Qualifications and Initiation of Construction. Ground disturbance will not begin until written approval is received from the US Fish and Wildlife Service that the biologist(s) is qualified to conduct the work. Caltrans will request approval of the biologist(s) from the US Fish and Wildlife Service.

BIO-50. California Red-Legged Frog: Preconstruction Surveys and Capture/Relocation. A US Fish and Wildlife Service-approved biologist will survey the proposed action area no more than 48 hours before the onset of work activities. If any life stage of the California red-legged frog is found and these individuals are likely to be killed or injured by work activities, the

approved biologist will be allowed sufficient time to move them from the site before work activities begin. The US Fish and Wildlife Service-approved biologist will relocate the California red-legged frogs the shortest distance possible to a location that contains suitable habitat and will not be affected by the activities associated with the proposed action. The relocation site should be in the same drainage to the extent practicable. Caltrans will coordinate with the US Fish and Wildlife Service on the relocation site prior to the capture of any California red-legged frogs.

BIO-51. California Red-Legged Frog: Worker Awareness Training. Before any activities begin on a proposed action, a US Fish and Wildlife Service-approved biologist will conduct a training session for all construction personnel. At a minimum, the training will include a description of the California red-legged frog and its habitat, the specific measures that are being implemented to conserve the California red-legged frog for the current proposed action, and the boundaries within which the proposed action may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

BIO-52. California Red-Legged Frog: Monitor Designation; Procedure in the Event of Unanticipated Adverse Effects to Frogs. A US Fish and Wildlife Service-approved biologist will be present at the work site until California red-legged frogs have been relocated out of harm's way, workers have been instructed, and disturbance of the habitat has been completed. After this time, Caltrans will designate a person to monitor onsite compliance with minimization measures. The US Fish and Wildlife Service-approved biologist will ensure that this monitor receives the training outlined in the previous measure, as well as training in the identification of California red-legged frogs. If the monitor or the US Fish and Wildlife Service-approved biologist recommends that work be stopped because California red-legged frogs would be affected in a manner not anticipated by Caltrans and US Fish and Wildlife Service during the review of the proposed action, they will notify the resident engineer (the engineer that is directly overseeing and in command of construction activities) immediately. The resident engineer will either resolve the situation by eliminating the adverse effect immediately or by requiring that actions that are causing these effects be halted. If work is stopped, Caltrans and US Fish and Wildlife Service will be notified as soon as is reasonably possible.

BIO-53. California Red-Legged Frog: Landscape Restoration. Habitat contours will be returned to their original configuration to the greatest extent that is feasible at the end of the proposed project. This measure will be implemented in all areas disturbed by activities associated with the proposed action, unless the US Fish and Wildlife Service and Caltrans determine that it is not feasible, or modification of original contours would benefit the California red-legged frog.

BIO-54. California Red-Legged Frog: Construction Footprint Limitation; Environmentally Sensitive Areas. The number of access routes, size of staging areas, and the total area of activity will be limited to the minimum necessary to achieve the proposed action. Environmentally Sensitive Areas will be established to confine access routes and construction areas to the minimum area necessary to complete construction and minimize the impact to California red-legged frog habitat; this goal includes locating access routes and construction areas outside of wetlands and riparian areas to the maximum extent practicable.

BIO-55. California Red-Legged Frog: Construction Scheduling. Caltrans will attempt to schedule work for times of the year when impacts to the California red-legged frog would be minimal. For example, work that would affect large pools that may support breeding would be avoided, to the maximum degree practicable, during the breeding season (November through May). Isolated pools that are important to maintain California red-legged frogs through the driest portions of the year would be avoided, to the maximum degree practicable, during the late summer and early fall. Habitat assessments, surveys, and technical assistance between Caltrans and US Fish and Wildlife Service during proposed action planning will be used to assist in scheduling work activities to avoid sensitive habitats during key times of year.

BIO-56. California Red-Legged Frog: Dewatering. If a work site is to be temporarily dewatered by pumping, intakes will be completely screened with wire mesh not larger than 0.2 inch to prevent California red-legged frogs from entering the pump system. Water will be released downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any diversions or barriers to flow will be removed in a manner that would allow flow to resume with the least disturbance to the substrate. Alteration of the streambed will be minimized to the maximum extent possible; any imported material will be removed from the streambed upon completion of the proposed action.

BIO-57. California Red-Legged Frog: Water Impounding. Unless approved by the US Fish and Wildlife Service, water will not be impounded in a manner that may attract California red-legged frogs.

BIO-58. California Red-Legged Frog: Invasive Wildlife Removal. A US Fish and Wildlife Service-approved biologist will permanently remove any individuals of invasive species, such as bullfrogs, crayfish, and centrarchid fishes, from the proposed project area to the maximum extent. The US Fish and Wildlife Service-approved biologist will be responsible for ensuring these activities are in compliance with the California Fish and Game Code.

BIO-59. California Red-Legged Frog: Calculation of Permanently Disturbed Area. If Caltrans demonstrates that disturbed areas have been

restored to conditions that allow them to function as habitat for the California red-legged frog, these areas will not be included in the amount of total habitat permanently disturbed.

BIO-60. California Red-Legged Frog: Prevention of Disease Transfer. To ensure that diseases are not conveyed between work sites by the US Fish and Wildlife Service-approved biologist, the fieldwork code of practice developed by the Declining Amphibian Task Force will be followed at all times.

BIO-61. California Red-Legged Frog: Habitat Restoration. The proposed action area will be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area, using locally collected plant materials to the extent practicable. Invasive plants will be controlled to the maximum extent practicable. This measure will be implemented in all areas disturbed by activities with the proposed action, unless the US Fish and Wildlife Service and Caltrans have determined that it is not feasible or practical.

BIO-62. California Red-Legged Frog: Herbicide Use Protocols. Caltrans will not use herbicides as the primary method to control invasive plants. However, if Caltrans determines the use of herbicides is the only feasible method for controlling invasive plants at a specific proposed action area, it will implement the following additional measures to protect California red-legged frog:

k. Caltrans will not use herbicides during the breeding season for California red-legged frog.

l. Caltrans will conduct surveys for California red-legged frog immediately prior to the start of herbicide use. If found, California red-legged frog will be relocated to suitable habitat far enough from the proposed action area so that no direct contact with herbicide would occur.

m. Black locust and other invasive plants will be cut and hauled out by hand and painted with glyphosate-based products, such as Aquamaster® or Rodeo®.

n. Licensed and experienced Caltrans staff or a licensed and experienced contractor will use a hand-held sprayer for foliar application of Aquamaster® or Rodeo® where large monoculture stands occur at an individual proposed action area.

o. All precautions will be taken to ensure that no herbicide is applied to native vegetation.

p. Herbicides will not be applied on or near open water surfaces (no closer than 60 feet from open water).

q. Foliar applications of herbicide will not occur when wind speeds are in excess of three miles per hour.

r. No herbicides will be applied within 24 hours of forecasted rain.

s. Application of herbicides will be done by qualified Caltrans staff or contractors to ensure that overspray is minimized, application is made in accordance with the label recommendations, and required and reasonable safety measures are implemented. A safe dye will be added to the mixture to visually denote treated sites. Application of herbicides will be consistent with the US Environmental Protection Agency's Office of Pesticide Programs Endangered Species Protection Program county bulletins.

t. All herbicides, fuels, lubricants, and equipment will be stored, poured, or refilled at least 60 feet from riparian habitat or water bodies in a location where a spill would not drain directly toward aquatic habitat. Caltrans will ensure that a plan is in place for a prompt and effective response to accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

BIO-63. California Red-Legged Frog: Project Completion Report. Upon completion of the proposed action, Caltrans will ensure that a Project Completion Report is completed and provided to the US Fish and Wildlife Service Ventura Field Office.

BIO-64. California Red-Legged Frog: Agency Permits/Agreements. Caltrans will obtain permits and agreements from US Fish and Wildlife Service and California Department of Fish and Wildlife, as applicable to project impacts.

BIO-65. California Red-Legged Frog: Shielding of Night Lighting. Project plans and specifications will ensure that temporary construction lighting and permanent night lighting are shielded from illuminating natural habitat outside of the work limits.

BIO-66. California Red-Legged Frog: Handling of Special-Status Animals. Only biologists approved by US Fish and Wildlife Service and California Department of Fish and Wildlife will participate in activities associated with the capture, handling, and monitoring of California tiger salamander and other special-status animals.

BIO-67. California Red-Legged Frog: Species Protection and Relocation Plan. Caltrans will prepare a species protection and relocation plan for

approval by US Fish and Wildlife Service and California Department of Fish and Wildlife to comply with applicable regulatory permits.

California Tiger Salamander

Some of the Avoidance, Minimization, and Mitigation measures included in this document for California red-legged frog would also help protect California tiger salamander from potential project-related impacts. Please refer to measures BIO-64 through BIO-67 noted earlier.

South-Central California Coast Steelhead

To minimize impacts to fish and other aquatic life, the proposed construction activities within El Toro Creek would occur during the non-rainy season when stream flows are at their lowest. Due to the low volume of summer flow (if any), a water diversion system may not be necessary. Therefore, steelhead may have continual access to the low stream channel during construction activities.

Implementation of the Avoidance, Minimization, and Mitigation measures pertaining to jurisdictional areas, California red-legged frog, and California tiger salamander mentioned above as well as the additional measures listed below would serve to reduce potential project-related adverse effects from Alternative 2 (there are no anticipated adverse effects from Alternative 1) to south-central California coast steelhead and their habitat:

BIO-68. South-Central California Coast Steelhead: Biologist Qualifications. Caltrans would retain a National Marine Fisheries Service-approved biologist(s) with expertise in anadromous salmonid biology, including handling, collecting, and relocating salmonids; salmonid/habitat relationships; and biological monitoring of salmonids. To ensure that all biologists working on the project are qualified to conduct fish collections in a manner which minimizes all potential risks to steelhead, Caltrans would submit the resumes of candidate biologists to National Marine Fisheries Service for review and approval prior to conducting the work. Electrofishing, if used, would be performed by a qualified biologist and conducted according to the National Marine Fisheries Service Guidelines for Electrofishing Waters Containing Salmonids Listed under the Endangered Species Act. The biological monitor(s) would monitor placement and removal of any required stream diversions/dewatering and only the approved biologist would capture stranded steelhead and other native fish species and relocate them to suitable habitat, as appropriate. The approved biologist(s) would note the number of steelhead observed in the affected area, the number of steelhead relocated, and the date and time of the collection and relocation. Caltrans or the biologist would notify National Marine Fisheries Service one week prior to capture activities in order to provide an opportunity for National Marine Fisheries Service staff to observe the activities.

BIO-69. South-Central California Coast Steelhead: Worker Awareness Training. Prior to construction, all personnel would participate in an environmental awareness training program conducted by a qualified biologist. The program shall include a description of steelhead, steelhead critical habitat, its legal/protected status, avoidance/minimization measures to be implemented during the project, and the implications of violating federal Endangered Species Act and permit conditions.

BIO-70. South-Central California Coast Steelhead: Dewatering. If pumps are needed to temporarily dewater the site, intakes would be screened according to the National Marine Fisheries Service's Pump Intake Screen Criteria for Water Drafting to prevent steelhead and other sensitive aquatic species from entering the pump system (typically wire mesh no larger than five-millimeter). The pumps would be checked daily, at a minimum, to ensure a dry work environment and minimize adverse effects to aquatic species and habitats.

BIO-71. South-Central California Coast Steelhead: Capture, Handling, and Relocation. Steelhead would be handled with extreme care and kept in water to the maximum extent possible during rescue activities. All captured fish would be kept in cool, shaded, aerated water protected from excessive noise, jostling, or overcrowding any time they are not in the stream, and fish would not be removed from this water except when released. To avoid predation, the biologists would have at least two containers and segregate young-of-year fish from larger age-classes and other potential aquatic predators. Captured steelhead would be relocated, as soon as possible, to a suitable instream location in which suitable habitat conditions are present to allow for adequate survival of transported fish and fish already present.

BIO-72. South-Central California Coast Steelhead: Notification of Dead/Injured Steelhead to the National Marine Fisheries Service. If any salmonids are found dead or injured, the biological monitor would contact National Marine Fisheries Service immediately. The purpose of the contact is to review the activities resulting in take, determine if additional protective measures are required, and to ensure appropriate collection and transfer of salmonid mortalities and tissue samples. All salmonid mortalities would be retained.

BIO-73. South-Central California Coast Steelhead: Site Visits by (or Approved by) the National Marine Fisheries Service. Caltrans would allow any National Marine Fisheries Service employee(s) or any other person(s) designated by National Marine Fisheries Service, to accompany field personnel to visit the project site during activities.

BIO-74. South-Central California Coast Steelhead: Exclusion of Fill Material from Waterways. Fill material for cofferdams/in-stream diversions would be fully confined with the use of plastic sheeting, sandbags, or with

other non-porous containment methods, such that sediment does not come in contact with stream flow or in direct contact with the natural streambed. All loose fill material for cofferdams or access ramps would be completely removed from the channel by October 31.

BIO-75. South-Central California Coast Steelhead: Creek Restoration; Written Report to the National Marine Fisheries Service. Once construction is completed, all project-introduced material (pipe, gravel, cofferdam, etc.) would be removed, leaving the creek as it was before construction. Excess materials would be disposed of at an appropriate disposal site. Caltrans must provide a written report to National Marine Fisheries Service by January 15 of the year following construction of the project. The report must contain, at a minimum, the following information:

d. Project Construction and Fish Relocation Report -- The report(s) must include the dates construction began and was completed; a discussion of design compliance including: vegetation installation, and post-construction longitudinal profile and cross sections; a discussion of any unanticipated effects or unanticipated levels of effects on salmonids, including a description of any and all measures taken to minimize those unanticipated effects and a statement as to whether or not the unanticipated effects had any effect on Endangered Species Act-listed fish; the number of salmonids killed or injured during the project action; and photographs taken before, during, and after the activity from photo reference points.

e. Fish Relocation -- The report must include a description of the location from which fish were removed and the release site including photographs; the date and time of the relocation effort; a description of the equipment and methods used to collect, hold, and transport salmonids; if an electrofisher was used for fish collection, a copy of the logbook must be included; the number of fish relocated by species; the number of fish injured or killed by species and a brief narrative of the circumstances surrounding Endangered Species Act-listed fish injuries or mortalities; and a description of any problems which may have arisen during the relocation activities and a statement as to whether or not the activities had any unforeseen effects.

f. Post-Construction Vegetation Monitoring and Reporting – Caltrans must develop and submit for National Marine Fisheries Service's review a plan to assess the success of revegetation of the site. A draft of the revegetation monitoring plan must be submitted to National Marine Fisheries Service for review and approval prior to the beginning of the in-stream work season. Reports documenting post-project conditions of vegetation installed at the site would be prepared and submitted annually for the first five years following project completion, unless the site is documented to be performing poorly, then monitoring

requirements would be extended. Reports would document vegetation health and survivorship and percent cover, natural recruitment of native vegetation (if any), and any maintenance or replanting needs. Photographs must be included. If poor establishment is documented, the report must include recommendations to address the source of the performance problems.

Tricolored Blackbird

Tricolored blackbird is not expected to be impacted by the proposed project. Therefore, no Avoidance, Minimization, and Mitigation measures are proposed for this species.

Compensatory Mitigation Measures under CEQA for Impacts to Threatened and Endangered Species

Yadon's Piperia

BIO-76. Compensatory Mitigation: Yadon's Piperia. Compensatory mitigation would be required as a result of direct and indirect impacts to this species. Impacts to Yadon's piperia would be fully mitigated in coordination with US Fish and Wildlife Service through a Biological Opinion document. Although Caltrans has proposed measures to offset direct impacts to Yadon's piperia, final mitigation measures would be developed during coordination with the US Fish and Wildlife Service. The proposed measures are similar to those that were included in the Biological Opinion for a project at the Monterey Regional Airport (US Fish and Wildlife Service 2019).

At this time, Caltrans proposes offsetting temporary and permanent impacts to Yadon's piperia occupied habitat at a ratio of 2-to-1 (acres impacted to acres mitigated) through the translocation efforts described above. Habitat preservation and/or enhancement may also be performed as needed to fulfill the mitigation ratio. Mitigation is expected to be completed off-site, at a location within range and suitable habitat conditions for the Monterey peninsula population of Yadon's piperia, in coordination with a local land conservancy or restoration group.

California Red-legged Frog

BIO-77. Compensatory Mitigation: California Red-Legged Frog. Impacts to potential habitat for California red-legged frog would be offset by site restoration within the project limits using native plant species, at off-site mitigation areas associated with compensatory mitigation for jurisdictional areas, or by purchasing mitigation credits from a US Fish and Wildlife Service-approved conservation bank such as Sparling Ranch Conservation Bank. Compensatory mitigation would replace potential breeding, non-breeding aquatic, and upland habitat, in-kind.

California Tiger Salamander

BIO-78. Compensatory Mitigation: California Tiger Salamander. Compensatory mitigation would be required as a result of indirect and direct impacts to California tiger salamander. Any impacts to this species would need to be fully mitigated in coordination with US Fish and Wildlife Service and California Department of Fish and Wildlife through the Biological Opinion and 2081 Incidental Take Permit processes, respectively. Upon completion of the project, Caltrans would restore temporarily impacted areas on-site with appropriate native vegetation.

Caltrans also anticipates permanently preserving suitable offsite habitat as compensation for the loss of California tiger salamander upland habitat. The amount of compensatory habitat is anticipated to be a minimum of 2-to-1 for permanent impacts and 1-to-1 for temporary impacts, but final compensatory mitigation would be determined in coordination with California Department of Fish and Wildlife and US Fish and Wildlife Service during the permitting process.

Caltrans anticipates that California tiger salamander mitigation credits would be purchased from the Sparling Ranch Conservation Bank. Additionally, the inclusion of wildlife crossing improvements into this project has the potential to decrease road mortality, as well as the indirect benefit of reducing habitat fragmentation.

2.3.6, Avoidance and Minimization Measures for Invasive Species

Avoidance and minimization measures would be implemented to avoid the spread of invasive plants and noxious weeds.

BIO-79. Invasive Plant Species Removal. As part of the project's landscaping, highly invasive and noxious weeds would be removed and replaced by California native plants suitable for the area (and locally collected, if possible).

BIO-80. Timing of Weed Removal. Weeds designated for removal would be removed prior to any soil disturbance.

BIO-81. Certification of Weed- and Disease-Free Materials. Nursery stock and imported soil would be certified weed- and disease-free.

BIO-82. Use of Clean Equipment. Construction equipment would be inspected and cleaned if necessary to ensure it is free of soil containing seeds and and/or invasive plant material prior to entering the construction sites.

BIO-83. Invasive Aquatic Wildlife Removal. Any invasive aquatic wildlife species observed within the project limits would be permanently removed by the project’s monitoring biologist(s), as feasible.

Please refer to Avoidance, Minimization, and Mitigation measures BIO-15 (Section 2.3.2) and measures BIO-45, BIO-46, BIO-47, BIO-58, BIO-61, and BIO-62 (Section 2.3.5), for additional details regarding measures to address invasive plant and animal species.

Appendix F List of Acronyms and Abbreviations

AMBAG—Association of Monterey Bay Area Governments

Caltrans—California Department of Transportation

CalFire—California Department of Forestry and Fire Protection

CEQA—California Environmental Quality Act

dBA—A-weighted decibels (noise level)

EIR—environmental impact report

FHWA—Federal Highway Administration

GHG—greenhouse gas

LOS—Level of Service

MPH—miles per hour

NEPA—National Environmental Policy Act

PM—post mile

SR—State Route

TAMC—Transportation Agency for Monterey County

TOAR—Traffic Operations Analysis Report

VMT—Vehicle Miles Traveled

Appendix G Notice of Preparation

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #2019090448

Project Title: Scenic Route 68 Corridor Improvements

Lead Agency: California Department of Transportation, District 5 — Contact Person: Jason Wilkinson
Mailing Address: 50 Higuera Street — Phone: (805) 542-4663
City: San Luis Obispo — Zip: 93401 — County: San Luis Obispo

Project Location: County: Monterey — City/Nearest Community: Monterey/Del Rey Oaks
Cross Streets: Various - from Josselyn Canyon Road to San Benancio Road (Postmile 4.8-13.7) — Zip Code: 93940
Longitude/Latitude (degrees, minutes and seconds): 36 ° 35 ′ 09 ″ N / 121 ° 51 ′ 45 ″ W Total Acres:
Assessor's Parcel No.: Section: Twp.: Range: Base:
Within 2 Miles: State Hwy #: SR 68/SR 218 — Waterways: various
Airports: Monterey Regional Airport — Railways: Schools: various

Document Type:

CEQA: ☒ NOP ☐ Draft EIR ☐ Early Cons ☐ Supplement/Subsequent EIR ☐ Neg Dec (Prior SCH No.) ☐ Mit Neg Dec Other:
NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI
Other: ☐ Joint Document ☐ Final Document ☐ Other:

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other: Transportation

Development Type:

☐ Residential: Units Acres
☐ Office: Sq.ft. Acres Employees
☐ Commercial: Sq.ft. Acres Employees
☐ Industrial: Sq.ft. Acres Employees
☐ Educational:
☐ Recreational:
☐ Water Facilities: Type MGD
☒ Transportation: Type Intersection operation improvements
☐ Mining: Mineral
☐ Power: Type MW
☐ Waste Treatment: Type MGD
☐ Hazardous Waste: Type
☐ Other:

Project Issues Discussed in Document:

☒ Aesthetic/Visual
☒ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☒ Biological Resources
☐ Coastal Zone
☐ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☒ Flood Plain/Flooding
☒ Forest Land/Fire Hazard
☒ Geologic/Seismic
☐ Minerals
☒ Noise
☐ Population/Housing Balance
☐ Public Services/Facilities
☒ Recreation/Parks
☐ Schools/Universities
☐ Septic Systems
☐ Sewer Capacity
☐ Soil Erosion/Compaction/Grading
☐ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☒ Vegetation
☒ Water Quality
☐ Water Supply/Groundwater
☒ Wetland/Riparian
☒ Growth Inducement
☒ Land Use
☒ Cumulative Effects
☐ Other:

Present Land Use/Zoning/General Plan Designation:

multiple

Project Description: *(please use a separate page if necessary)*

The California Department of Transportation in partnership with the Transportation Agency for Monterey County (TAMC) proposes to improve intersection operations along Scenic Route (SR) 68 between Josselyn Canyon Road and San Benancio Road (Postmile 4.8 to 13.7) and enhance wildlife connectivity in order to reduce travel delays, vehicle collisions, and collisions between wildlife and vehicles. A no build alternative and two build alternatives are proposed. The build alternatives propose roundabout or intersection operational improvements to multiple intersections along SR 68, including possible mainline operational improvements (Alt 2 only) and installation of large mammal wildlife crossings.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Revised 2010

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

X	Air Resources Board	X	Office of Historic Preservation
	Boating & Waterways, Department of		Office of Public School Construction
X	California Emergency Management Agency	X	Parks & Recreation, Department of
X	California Highway Patrol		Pesticide Regulation, Department of
	Caltrans District #	X	Public Utilities Commission
	Caltrans Division of Aeronautics	X	Regional WQCB #3
	Caltrans Planning	X	Resources Agency
	Central Valley Flood Protection Board		Resources Recycling and Recovery, Department of
	Coachella Valley Mtns. Conservancy		S.F. Bay Conservation & Development Comm.
	Coastal Commission		San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
	Colorado River Board		San Joaquin River Conservancy
	Conservation, Department of		Santa Monica Mtns. Conservancy
	Corrections, Department of		State Lands Commission
	Delta Protection Commission		SWRCB: Clean Water Grants
	Education, Department of	X	SWRCB: Water Quality
X	Energy Commission		SWRCB: Water Rights
X	Fish & Game Region #4		Tahoe Regional Planning Agency
	Food & Agriculture, Department of	X	Toxic Substances Control, Department of
X	Forestry and Fire Protection, Department of		Water Resources, Department of
	General Services, Department of		
	Health Services, Department of		Other:
X	Housing & Community Development		Other:
X	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date _____ Ending Date _____

Lead Agency (Complete if applicable):

Consulting Firm: _____
Address: _____
City/State/Zip: _____
Contact: _____
Phone: _____

Applicant: Caltrans District 5, Attn: Jason Wilkinson
Address: 50 Higuera Street
City/State/Zip: San Luis Obispo, CA 93401
Phone: (805) 542-4663

Signature of Lead Agency Representative: _____ **Date:** 9/24/19

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Revised 2010

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION
CALTRANS DISTRICT 5
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3329
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

September 24, 2019

California State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

RE: Revision request for NOP Submittal (SCH # 2019090448)

Enclosed, please find a revised copy of the completed NOC form for the Notice of Preparation for the Scenic Route 68 Corridor Improvements project (SCH# 2019090448).

Minor revisions have been made on the following fields of this form:

- Cross streets
- Project description

These revisions update the noted postmile limits for the project to 4.8-13.7 (previously listed as 4.8-14.3).

If you have any questions or concerns, please contact me at (805) 542-4663 or by e-mail sent to Jason.wilkinson@dot.ca.gov.

Sincerely,

Jason Wilkinson
Senior Environmental Planner

Enclosures
Revised NOC

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Appendix H Preliminary Design Plans for Build Alternatives

Preliminary design illustrations of the project intersections for both Build Alternative 1 and Build Alternative 2 may be downloaded from the following website: https://dot.ca.gov/caltrans-near-me/district-5. Printed format of the design illustrations may be requested by contacting Matt.c.fowler@dot.ca.gov, or by telephone at (805) 779-0793.

Appendix I Proposed Intersection Design Elements of the Build Alternatives

ALTERNATIVE 1 – Roundabouts Scope Descriptions

ALTERNATIVE 1 - LOCATION 1: ROUNDABOUT at Josselyn Canyon Road (Post Mile 5.22):

- Single lane Roundabout
- 3 leg intersection
- Josselyn Canyon Road, realigned to improve intersection with less than 75-degree angle to 90 degrees.
- Crosswalks located on all legs of the roundabout.
- An 8-foot-wide shared use path for pedestrians and bicycles on all legs of the roundabout between the bike ramps.
- Raised splitter island on all legs between through lanes.
- Relocation and reconstruction of private mailboxes, monuments, and fences as applicable.
- Retaining Wall (RW #1) length of 320 feet, height range of 4 feet to 22 feet, on the north side of SR 68 adjacent to shared use path and starting at bicycle ramp west of roundabout. At the top of the retaining wall, on the back side, there will be a concrete drainage ditch and landform grading slope of 2:1 until it catches original ground.
- Retaining Wall (RW #2) with concrete barrier, length of 192 feet, height range from 4 to 18 feet, adjacent to northbound Josselyn Canyon Road. At the top of the retaining wall, on the back side, there will be a concrete drainage ditch and landform grading slope of 2:1 until it catches original ground.
- Concrete Barrier (CB #1) length of 460 feet, Type 60 Mod, on north side of SR 68 adjacent to edge of pavement, starts at end of bicycle ramp east of roundabout and extends to the east.
- Modifications to drainage infrastructure, including construction of new culverts and/or extension of existing culverts and installation of drain inlets in the splitter islands and curb and gutter areas to propagate the runoff into ditches and minimize the spread of runoff onto travel lanes.
- Hammond Drive approximately 350 feet east of the roundabout would have right in/right out only access due to the raised splitter island on SR 68.
- Realignment of Josselyn Canyon Road would result in modification of driveway and permanent property acquisition from Living Hope Church of

Nazarene (APN 013-271-002), an area of approximately 0.41 acres on the southwest corner.

- Permanent property (right of way) acquisition from seven (7) Assessor Parcels has been identified. Up to 1.30 acres of permanent right of way is estimated to be necessary for the intersection modifications. Also, Slope/Subsurface Easement from 1 Assessor Parcel has been identified with as much as 0.18 acre.
- Roundabout center island would be hardscaped to minimize maintenance and associated temporary travel lane closures, and to facilitate worker safety. Landscaping the center islands may be considered during the design phase.
- Widening of SR 68 for the roundabout would result in several trees to be removed.
- Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be required to be undergrounded (subsurface) in accordance with Scenic Highway regulations as SR 68 is a designated Scenic Highway in the project limits. Existing underground lines including natural gas and water lines in conflict with project improvements would also require relocation. Relocated underground lines would be installed as close to the State Highway Right of Way as feasible. Potholing would be conducted in the Plans, Specifications, and Estimates (project final Design) phase of the project to confirm the specific locations of existing subsurface utilities in order to confirm relocation needs in conjunction with discussions with the utility owner(s).

The following utility line relocations are anticipated during construction at this intersection based on preliminary design:

Overhead utility lines:

- Approximately 934 linear feet of eastbound SR 68 PG&E electric overhead lines supported by 10 poles, and 300 linear feet of electric lines supported by two poles along Josselyn Canyon Road;
- Approximately 1,080 linear feet of westbound SR 68 AT&T overhead telecommunication lines supported by nine (9) poles, and approximately 506 linear feet of AT&T line along northbound Josselyn Road supported by 2 poles;
- Approximately 938 linear feet of overhead Comcast TV lines supported by six (6) poles located both in the eastbound and westbound directions of SR 68 and along Josselyn Canyon Road.

Underground Lines:

- Approximately 1,300 linear feet of subsurface gas lines ranging in size (2, 4, and 6-inch diameter pipelines) mostly adjacent to the eastbound SR 68 edge of pavement;
- Approximately 450 linear feet of 6- inch water line owned by the City of Monterey that runs parallel to eastbound SR 68 along with 180 linear feet of 12-inch water line that runs parallel to westbound SR 68. An approximately 250-foot long 6- and/or 12-inch water line is located along Josselyn Canyon Road (south leg of the intersection) and is proposed to be relocated to follow the proposed realigned road.

ALTERNATIVE 1 - LOCATION 2: ROUNDABOUT at Olmsted Airport Road (Post Mile 5.57):

- Single lane Roundabout
- 4 leg intersection
- Crosswalks located on all legs of the roundabout.
- An 8-foot shared use path for pedestrians and bicycles on all legs of the roundabout between the bike ramps.
- Raised splitter island on all legs between through lanes.
- Relocation/reconstruction of private mailboxes, monuments, and fences as applicable.
- Olmsted Rd (north leg of the intersection) includes an opening in the raised splitter island to allow for left turn (in and out) access for northbound traffic to the driveway to Comfort Inn Monterey Peninsula Airport.
- The drainage system in the northwest quadrant of the intersection that parallels westbound SR 68 and crosses the existing north leg of Olmsted Road would be relocated and/or modified to accommodate the roundabout footprint.
- Modifications to drainage infrastructure, including construction of new culverts and/or extension of existing culverts and installation of drain inlets in the splitter islands and curb and gutter areas to propagate the runoff into ditches and minimize the spread of runoff onto travel lanes.
- Permanent Right of Way acquisition from four (4) adjacent parcels has been identified. Up to 1.94 acres of permanent right of way is estimated to be necessary for the intersection modifications.
- Roundabout center island would be hardscaped to minimize maintenance and associated costs and temporary travel lane closures, and to facilitate worker safety. Landscaping the center islands may be considered during the final design phase.
- Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E

electric, Comcast Television) would be required to be undergrounded (subsurface) in accordance with Scenic Highway regulations as SR 68 is a designated Scenic Highway in the project limits. Existing underground lines including natural gas and water lines in conflict with project improvements would also require relocation. Relocated underground lines would be installed as close to the State Highway Right of Way as feasible, Potholing would be conducted in the Plans, Specifications, and Estimates (project final Design) phase of the project to confirm the specific locations of existing subsurface utilities in order to confirm relocation needs in conjunction with discussions with the utility owner(s).

The following utility line relocations are anticipated during construction at this intersection based on preliminary design:

Overhead utility lines:

- Approximately 1,238 linear feet of eastbound SR 68 PG&E electric overhead lines supported by 8 poles;
- Approximately 1,107 linear feet of westbound SR 68 AT&T overhead telecommunication lines supported by 10 poles, and approximately 1,186 linear feet of overhead telecommunication lines along northbound Olmsted Road supported by 2 poles;
- Approximately 1,792 linear feet of underground Comcast Television lines located both in the westbound direction along SR 68 and along Olmsted Road.

Underground Lines:

- Approximately 2,642 linear feet of high-pressure gas lines ranging in size (2, 4, and 6-inch diameter pipelines) located predominately adjacent to the eastbound SR 68 and southbound/northbound Olmsted Road edge of pavement; and
- Approximately 1,113 linear feet of water lines owned by the City of Monterey parallel to eastbound SR 68; and 738 linear feet of water line parallel to Olmsted Road.

ALTERNATIVE 1 - Location 3: ROUNDABOUTS at State Route 218 (Post Mile 6.65) and Ragsdale Road Post Mile (7.23):

Location 3: SR 218 (Canyon Del Rey Blvd)/Monterra Ranch Rd) (Post Mile 6.81):

- Double lane Roundabout in all directions except for single lane Northbound SR 218 (Monterra Road), Southbound SR 218 (Canyon Del Rey Blvd) and Westbound SR 68 which would have a dedicated right turn lane.
- 4 leg intersection
- Crosswalks located on all legs of the roundabout.

- An 8-foot shared use path for pedestrians and bicycles on all legs of the roundabout between the bike ramps.
- Raised splitter island on all legs between through lanes. Dedicated right turn lanes also have a raised splitter island between through lane and right turn lanes.
- Relocation/reconstruction of private mailboxes, monuments, and fences as applicable.
- SR 68 east of the roundabout would require realignment to accommodate chicanes (chicanes are features such as off-set curb extensions, bulb-outs, and raised planters incorporated into the roadway design) to slow traffic entering the roundabout).
- Realignment of SR 68 for chicanes would result in the removal of several trees.
- On the north side of SR 68, beginning shortly after the shared use path in the northeast quadrant of the roundabout and extending to the east a vertical landform grading cut slope of 74 feet is proposed at a 2 to1 ratio (horizontal to vertical) slope. Landform grading was chosen in place of a tall retaining wall that would otherwise be required at this location for the roundabout design. The cut slope would start beyond an open channel trapezoidal ditch with back and forward slopes of 4 to 1 ratio.
- Retaining Wall (RW # 1) length of 119 feet, height of 5 feet, is proposed in the southwest quadrant from crosswalk to crosswalk. The purpose of the wall is to limit impacts to cut slope due to realignment of SR 68.
- Retaining Wall (RW # 2) length of 105 feet, height of 5 feet, is proposed in the southeast quadrant approximately from crosswalk to crosswalk. Purpose of the wall is to limit impacts to cut slope due to realignment of SR 68.
- Modifications to drainage infrastructure, including construction of new culverts and/or extension of existing culverts and installation of drain inlets in the splitter islands and curb and gutter areas to propagate the runoff into ditches and minimize the spread of runoff onto travel lanes.
- Modification or reconstruction of drainage facilities to existing riparian woodland habitat and to a streambed that runs parallel to SR 68.
- Perpetuation of drainage ditches adjacent to southbound lanes of SR 218 (north leg of the intersection) that connect to the regulatory floodway along southbound SR 218.
- Relocation of City of Del Rey Oaks wall/monuments.
- Setback and reconstruction of a driveway to the City of Monterey sewer facility.
- Avoidance of the historic Harpy's Roadhouse property on the north side of SR 68 west of SR 218, specifically the stone pillars and rock retaining system on the property which are contributing elements to the property's

eligible status as an historic resource protected under Section 4(f) of the federal Department of Transportation Act (49 USC 303).

- Permanent Right of Way acquisition from 5 Assessor Parcels has been identified. As much as 1.67 acres of permanent right of way has been to be determined needed for the intersection modifications. Also, Temporary Construction Easement's (TCE) from 1 Assessor Parcel has been identified with as much as 0.80 acres. Also, Permanent Slope Easement's from 6 Assessor Parcel has been identified with as much as 2.15 acres.
- Roundabout center island would be hardscaped to minimize maintenance and associated maintenance costs and temporary travel lane closures, and to facilitate worker safety. Landscaping the center island may be considered during the final design phase.

Location 3: Ragsdale Drive (Post Mile 7.08):

- Single lane Roundabout with a dedicated bypass lane for Eastbound traffic. Southbound traffic has a fully dedicated right turn lane.
- 3 leg intersection
- Crosswalks located on all legs of the roundabout.
- An 8-foot-wide shared use path for pedestrians and bicycles on all legs of the roundabout between the bike ramps.
- Raised splitter island on all legs between through lanes, between dedicated right turn lane and through lane, and between bypass lane and through lane. The raised splitter on the west leg extends from the SR 218 intersection to the Ragsdale Road intersection with no gaps.
- Relocation/reconstruction of private mailboxes, monuments, and fences as applicable.
- Retaining Wall (RW #3) length of 254', height of 4'-20', is located in the northwest quadrant starting approximately 80' before bike ramp extending to the north to approximately 20' beyond the crosswalk. In front of the retaining wall is a trapezoidal ditch and at the top of the retaining wall, on the back side, there will be a concrete drainage ditch and landform grading slope of 2:1 until it catches original ground.
- Retaining Wall (RW #4) length of 370', height of 4'-22', is located in the northeast quadrant starting approximately 35' before the bike ramp on Ragsdale Rd to approximately 60' past the bike ramp on SR 68. At the top of the retaining wall, on the back side, there will be a concrete drainage ditch.
- Concrete Barrier (CB #1) length of 100', type 60 Mod, on north side of SR 68 adjacent to edge of pavement, starts at end of RW #4 and extends east to RW #5.

- Retaining Wall (RW #5) length of 400', height of 4'-15', is located on the north side of SR 68 starting at the end of CB #1 extending east. At the top of the retaining wall, on the back side, there will be a concrete drainage ditch.
- Modifications to drainage infrastructure, including construction of new culverts and/or extension of existing culverts and installation of drain inlets in the splitter islands and curb and gutter areas to propagate the runoff into ditches and minimize the spread of runoff onto travel lanes.
- Southerly gutter/ditch immediately parallel to Highway 68 would be modified to meet drainage capacity via the use of minimum forward and back slopes that would also comply with requirements for clear recovery areas. Clear Recovery zones are unobstructed traversable areas beyond the edge of the traveled way for recovery of errant vehicles. Clear zones can include road shoulder areas, bicycle lanes, auxiliary lanes, and other relatively flat areas adjacent to the highway free of obstruction hazards.
- Permanent Right of Way acquisition from 7 Assessor Parcels has been identified. As much as 3.13 acres of permanent right of way has been to be determined needed for the intersection modifications.
- Temporary Construction Easements from two Assessor Parcels would also be required of up to 0.10 acre.
- Roundabout center island would be hardscaped to minimize maintenance and associated maintenance costs and temporary travel lane closures, and to facilitate worker safety. Landscaping the center island may be considered during the final design phase.

Location 3 (SR 218 and Ragsdale Ranch Road intersections at SR 68) - Utilities:

- Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be required to be undergrounded (subsurface) in accordance with Scenic Highway regulations as SR 68 is a designated Scenic Highway in the project limits. Existing underground lines including natural gas and water lines in conflict with project improvements would also require relocation. Relocated underground lines would be installed as close to the State Highway Right of Way as feasible. Potholing would be conducted in the Plans, Specifications, and Estimates (project final Design) phase of the project to confirm the specific locations of existing subsurface utilities in order to confirm relocation needs in conjunction with discussions with the utility owner(s).

The following utility line relocations are anticipated during construction at this intersection based on preliminary design:

Overhead utility lines:

- Approximately 3,387 linear feet of PG&E electric overhead lines supported by 11 poles along eastbound SR 68, and 657 linear feet of electrical lines along SR 218 and Ragsdale Road;

Underground Lines:

- Approximately 1,465 linear feet of westbound and eastbound SR 68 AT&T underground telecommunication lines on both the eastbound and westbound sides of SR 68, and approximately 536 linear feet of telecom line along SR 218 (Canyon Del Rey Blvd/Monterra Road), and approximately 965linear feet along Ragsdale Road;
- Approximately 3,099 linear feet of natural gas lines ranging in size (2, 4, and 6-inch diameter pipelines) mostly adjacent to the eastbound SR 68 edge of pavement; Approximately 1,306 linear feet of gas lines mostly adjacent to the northbound SR 218 (Canyon Del Rey Blvd/Monterra Road) edge of pavement; and .
- Approximately 1,127 linear feet of water line operated by the California American Water Company that runs parallel to westbound SR 68, and 427 linear feet of water line that runs parallel to SR 218 (Canyon Del Rey Boulevard/Monterra Road), and
- Approximately 2,672 linear feet of sewer line owned by the city of Monterey mostly parallel to WB SR 68, and 270 linear feet of sewer line that runs parallel to northbound Ragsdale Road.

ALTERNATIVE 1 - Location 4: ROUNDABOUT at York Road (Post Mile 8.15):

- Single lane Roundabout, with a dedicated right turn lane for Southbound Traffic.
- 3 leg intersection
- Crosswalks located on all legs of the roundabout.
- An 8-foot-wide shared use path for pedestrians and bicycles on all legs of the roundabout between the bike ramps.
- Raised splitter island on all legs between through lanes, and between dedicated right turn lane and through lane.
- Relocation and/or reconstruction of private mailboxes, monuments, and fences as applicable.
- The roundabout widening would require several trees to be removed.
- Modifications to drainage infrastructure, including construction of new culverts and/or extension of existing culverts and installation of drain inlets in the splitter islands and curb and gutter areas to propagate the runoff into ditches and minimize the spread of runoff onto travel lanes.

- Permanent Right of Way acquisition from five (5) Assessor Parcels with an estimated total of 1.14 acres needed for the intersection modifications. Temporary Construction Easements (TEC) would be required from four (4) Assessor Parcels of up to 1.24 acres.
- Roundabout center island would be hardscaped to minimize maintenance and associated maintenance costs and temporary travel lane closures, and to facilitate worker safety. Landscaping the center island may be considered during the final design phase.
- Wildlife Crossing (Site 1): A natural drainage channel (ditch) that flows from south to north under SR 68 via an existing 4-foot x 6-foot Reinforced Concrete Box would be realigned to the west and would utilize a larger precast Reinforced Concrete Box (8-foot by 8-foot by about 83 feet at Post Mile 8.13) with bottom of box filled with native material that would serve as a wildlife crossing (Site 1). The realignment of the drainage ditch would require construction of two temporary access roads, one on the north and one on the south of SR 68.
- An existing Reinforced Concrete Box for the regulated floodway/creek located about 260 feet north of SR 68 and that crosses under York Road would be lengthened approximately 10 feet to the west and 8.5 feet to the east to accommodate the widening for the roundabout.
- Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be required to be undergrounded (subsurface) in accordance with Scenic Highway regulations as SR 68 is a designated Scenic Highway in the project limits. Existing underground lines including natural gas and water lines in conflict with project improvements would also require relocation. Relocated underground lines would be installed as close to the State Highway Right of Way as feasible. Potholing would be conducted in the Plans, Specifications, and Estimates (project final Design) phase of the project to confirm the specific locations of existing subsurface utilities in order to confirm relocation needs in conjunction with discussions with the utility owner(s).

The following utility line relocations are anticipated during construction at this intersection based on preliminary design:

Overhead Utility Lines:

- Approximately 793 linear feet of eastbound SR 68 PG&E electric overhead lines supported by 6 poles would be relocated subsurface.
- Approximately 380 linear feet of westbound SR 68 AT&T overhead telecommunication lines supported by 1 pole will need to be relocated subsurface.

- Approximately 216 linear feet of Comcast TV overhead lines along westbound SR 68 supported by 2 poles that would require relocation underground.

Underground Lines:

- Approximately 1,300 linear feet of natural gas distribution lines (6-inch diameter pipelines) located mostly adjacent to the eastbound SR 68 edge of pavement.
- Approximately 665 linear feet of PG&E electric underground lines crossing through or in the proximity of the intersection/roundabout.
- Approximately 380 linear feet of AT&T underground telecommunication lines parallel to York Road will need to be relocated.
- Approximately 355 linear feet of Comcast TV underground lines are located in the vicinity of the intersection/roundabout and would need to be relocated.

ALTERNATIVE 1 - Location 5: ROUNDABOUT at Pasadera Drive-Boots Road (Post Mile 9.78):

- Single lane Roundabout
- 4 leg intersection
- Crosswalks located on all legs of the roundabout.
- An 8-foot-wide shared use path for pedestrians and bicycles on all legs of the roundabout between the bike ramps.
- Raised splitter island on all legs between through lanes.
- Relocation and/or reconstruction of private mailboxes, monuments, and fences as applicable.
- The roundabout widening would require several trees to be removed.
- Modification or construction of new drainage systems in immediate vicinity of roundabout to convey runoff from the south side to the north side and into the regulated floodway/creek.
- Retaining Wall (RW #1): length of 88-feet and height of 4 to6 feet, to be located in the southwest quadrant starting approximately at the crosswalk and extending to the south. Purpose of the wall is to limit impacts to the slope and drainage facility.
- Permanent Right of Way acquisition from six (6) Assessor Parcels with a total of up to 1.01 acres of property acquisition for the intersection modifications.
- Temporary Construction Easements (TCE) would be necessary from three (3) Assessor Parcels for a total of up to 0.11 acre.

- Permanent Drainage Easements totaling up to 1.42 acres from eight (8) Assessor Parcels would be necessary for long term maintenance of the drainage system by the State.
- Roundabout center island would be hardscaped to minimize maintenance and associated maintenance costs and temporary travel lane closures, and to facilitate worker safety. Landscaping the center island may be considered during the final design phase.
- Wildlife Crossing (Site 2): Construction of a 12-foot by 11-foot by 88-foot reinforced concrete box at Post Mile 9.52, approximately 1,900 feet west of the intersection. The bottom of box would be filled with native soil material to serve as a Wildlife Crossing (Site 2). Wildlife fencing would also be included to direct wildlife to the Reinforced Concrete Box.
- Wildlife Crossing (Site 3): Construction of a 8-foot by 8-foot by 125 foot Reinforced Concrete Box at Post Mile 9.68, approximately 450 feet west of the intersection. The bottom of box would be filled with native material to serve as a Wildlife Crossing (Site 3). Wildlife fencing would also be included to direct wildlife to the Reinforced Concrete Box.
- Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be required to be undergrounded (subsurface) in accordance with Scenic Highway regulations as SR 68 is a designated Scenic Highway in the project limits. Existing underground lines including natural gas and water lines in conflict with project improvements would also require relocation. Relocated underground lines would be installed as close to the State Highway Right of Way as feasible. Potholing would be conducted in the Plans, Specifications, and Estimates (project final Design) phase of the project to confirm the specific locations of existing subsurface utilities in order to confirm relocation needs in conjunction with discussions with the utility owner(s).

The following utility line relocations are anticipated during construction at this intersection based on preliminary design:

Overhead Utility Lines:

- Approximately 1,343 linear feet of EB SR 68 PG&E electric overhead lines supported by 11 poles would need to be relocated to underground.
- Approximately 450 linear feet of Comcast TV overhead lines would need to the relocated to subsurface conditions.

Underground Lines:

- Approximately 523 linear feet of PG&E electric underground lines crossing through or in the proximity of the intersection/roundabout and NB Pasadera Rd would need to be relocated.

- Approximately 1,854 linear feet of natural gas distribution lines (2, 4, and 6-inch diameter pipelines) located mostly adjacent to the eastbound SR 68 and northbound Pasadera Road edge of pavement would be relocated.
- Approximately 1,170 linear feet of westbound SR 68 AT&T underground telecommunication lines and 450 feet of lines eastbound SR 68 would be relocated. Approximately 607 linear feet of telecommunication lines crossing SR 68 would also need to be relocated.
- Approximately 160 linear feet of Comcast TV underground lines are located in the vicinity of the intersection/roundabout and would need to be relocated.

ALTERNATIVE 1 - Location 6: ROUNDABOUT at Laureles Grade Road (Post Mile 11.22):

- Single lane Roundabout, with a dedicated right turn lane for northbound Traffic.
- 3 leg intersection
- Crosswalks located on all legs of the roundabout.
- An 8-foot -wide shared use path for pedestrians and bicycles on all legs of the roundabout between the bike ramps.
- Raised splitter island on all legs between through lanes, and between dedicated right turn lane and through lane.
- Relocation and/or reconstruction of private mailboxes, monuments, and fences as applicable.
- The roundabout widening would require several trees to be removed.
- Modifications to drainage infrastructure, including construction of new culverts and/or extension of existing culverts and installation of drain inlets in the splitter islands and curb and gutter areas to propagate the runoff into ditches and minimize the spread of runoff onto travel lanes. Drainage ditches along westbound SR 68 and southbound Laureles Grade Road would be realigned to propagate and convey runoff.
- Driveway access to Seca Plaza east of the Laureles Grade Road intersection would be modified to be a right-in access only, traffic leaving from Seca Plaza could turn left or right.
- Retaining Wall (RW #1) length of 114 feet, height of 4 feet to 8 feet, is located in the northeast quadrant starting approximately 150 feet east of the intersection and extending eastward. The purpose of this wall is to limit impacts to the slope and private road.
- Permanent Right of Way acquisition is estimated to be necessary from four (4) Assessor Parcels, with a combined total acquisition of up to 2.91 acres for the intersection modifications. Temporary Construction Easements

(TCE) from two (2) Assessor Parcels would be necessary has been identified with as much as 0.13 acre.

- Roundabout center island would be hardscaped to minimize maintenance and associated maintenance costs and temporary travel lane closures, and to facilitate worker safety. Landscaping the center island may be considered during the final design phase.
- Two Zero Emissions Vehicle charging station systems would be installed at the Park and Ride Lot operated by the County of Monterey on the east side of Laureles Grade Road. The charging stations would be a Level 2, solar-powered facility, and would provide charging capability for two vehicles to charge simultaneously. The existing lot has a total of 20 parking stalls, one of which is for handicapped parking. The lot is bisected by a residential driveway and the charging station systems would be placed in the portion of the lot south of the driveway. Up to three parking spaces would be removed to install the two charging station systems. The remainder of the southern portion of the lot would be restriped for 8 parking stalls (to current design standards). The southern portion of the lot currently has 13 parking stalls. The charging station systems and restriped stalls would reduce the spaces in the park and ride lot by 5 parking spaces, leaving a total of 15 parking stalls, including one handicapped. As proposed, the charging station equipment and lot modifications would be constructed and installed by Caltrans through an encroachment permit from the County of Monterey. The costs for the station would be sponsored by the Transportation Agency for Monterey County and the County would maintain the facilities. No right of way acquisitions would be required.
- Wildlife Crossing (Site 4) would consist of an 8-foot by 8-foot by 167-foot reinforced concrete box (RCB) at Post Mile 11.16, located approximately 250 feet west of the intersection. The bottom of box would be filled with native material to serve as a wildlife crossing.
- Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be required to be undergrounded (subsurface) in accordance with Scenic Highway regulations as SR 68 is a designated Scenic Highway in the project limits. Existing underground lines including natural gas and water lines in conflict with project improvements would also require relocation. Relocated underground lines would be installed as close to the State Highway Right of Way as feasible. Potholing would be conducted in the Plans, Specifications, and Estimates (project final Design) phase of the project to confirm the specific locations of existing subsurface utilities in order to confirm relocation needs in conjunction with discussions with the utility owner(s).

The following utility line relocations are anticipated during construction at this intersection based on preliminary design:

Overhead Utility Lines:

- Approximately 1,640 linear feet of eastbound SR 68 PG&E electric overhead lines supported by 8 poles would be relocated to subsurface.
- Approximately 1,590 linear feet of westbound SR 68 AT&T overhead telecommunication lines supported by 11 poles would be relocated subsurface.
- Approximately 520 linear feet of southbound Laureles Grade Rd AT&T overhead telecommunication lines supported by 4 poles would be relocated subsurface.

Underground Lines:

- Approximately 2,795 linear feet of gas lines (6-inch diameter pipelines) and located mostly adjacent to the eastbound SR 68 and southbound Laureles Grade Road edge of pavement would be relocated.
- Approximately 365 linear feet of southbound Laureles Grade Road AT&T underground telecommunication lines would need to be relocated.

ALTERNATIVE 1 - Location 7: ROUNDABOUTS at Corral De Tierra Road-Cypress Church Drive (Post Mile 12.81) and San Benancio Road Post Mile (13.47):

Location 7: Corral De Tierra Road (Post Mile 12.95):

- Single lane Roundabout
- 4 leg intersection
- Crosswalks located on all legs of the roundabout.
- An 8-foot-wide shared use path for pedestrians and bicycles on all legs of the roundabout between the bike ramps.
- Raised splitter island on all legs between Through lanes.
- Relocation and/or reconstruction of private mailboxes, monuments, and fences as applicable.
- Modifications to drainage infrastructure, including construction of new culverts and/or extension of existing culverts and installation of drain inlets in the splitter islands and curb and gutter areas to propagate the runoff into ditches and minimize the spread of runoff onto travel lanes.
- Retaining Wall (RW #1) length of 265 feet, height of 10 feet, is proposed to be located in the northwest quadrant starting at the proposed bike ramp and extending east. Purpose of the wall is to limit impacts to the slope and environmental resources.
- Driveway access to Corral Market and Deli and Highway 68 Flowers and Pet Food on SR 68 (West leg) would be modified, the eastern driveway would be

removed, and the western driveway would be right in/right out only access. Driveway access to the same facilities from Corral De Tierra Road (South leg of the intersection) would have full access. Any additional circulation improvements on the property would be the responsibility of private parties, which would be coordinated through Caltrans' Right of Way process during the Plans, Specifications, and Estimates phase of the project.

- The parcel on the immediate southeast corner would also have full access via the southern-most driveway from Corral De Tierra Road (south leg). Full closure of the two driveways to this parcel from SR 68 would be required when the parcel is further developed.
- Permanent Right of Way acquisition from nine (9) Assessor Parcels with a combined total of up to 1.41 acres would be needed for the intersection modifications
- Temporary Construction Easements (TCE) from seven (7) Assessor Parcels of up to 1.36 acres combined total.
- Roundabout center island would be hardscaped to minimize maintenance and associated maintenance costs and temporary travel lane closures, and to facilitate worker safety. Landscaping the center island may be considered during the final design phase.
- Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be required to be undergrounded (subsurface) in accordance with Scenic Highway regulations as SR 68 is a designated Scenic Highway in the project limits. Existing underground lines including natural gas and water lines in conflict with project improvements would also require relocation. Relocated underground lines would be installed as close to the State Highway Right of Way as feasible. Potholing would be conducted in the Plans, Specifications, and Estimates (project final Design) phase of the project to confirm the specific locations of existing subsurface utilities in order to confirm relocation needs in conjunction with discussions with the utility owner(s).

The following utility line relocations are anticipated during construction at this intersection based on preliminary design:

Overhead Utility Lines:

- Approximately 820 linear feet of eastbound SR 68 PG&E electric overhead lines supported by 3 poles would need to be relocated to subsurface conditions.

Underground Lines:

- Approximately 1,599 linear feet of natural gas distribution lines (6-inch diameter pipelines) located mostly adjacent to the eastbound SR 68 and

northbound/SB Corral De Tierra Road edge of pavement with crossings at the east Cyprus Church Private Access Road would be relocated.

- Approximately 1,720 linear feet of AT&T underground telecommunication lines along westbound SR 68 and northbound Corral De Tierra Road would need to be relocated.
- Approximately 840 linear feet of Comcast TV underground lines along westbound SR 68 and northbound Corral De Tierra Road underground lines would be relocated.

Location 7: San Benancio Road PM (13.33):

- Single lane Roundabout
- 3 leg intersection
- Crosswalks located on all legs of the roundabout.
- An 8-foot-wide shared use path for pedestrians and bicycles on all legs of the roundabout between the bike ramps
- Raised splitter island on all legs between through lanes.
- Relocation and/or reconstruction of private mailboxes, monuments, and fences as applicable.
- Modifications to drainage infrastructure, including construction of new culverts and/or extension of existing culverts and installation of drain inlets in the splitter islands and curb and gutter areas to propagate the runoff into ditches and minimize the spread of runoff onto travel lanes.
- The existing frontage road access at the north leg of the intersection would be moved to the east approximately 200 feet and would have left turn access from SR 68 onto San Benancio Road (East leg). Access from San Benancio Road onto SR 68 would be changed to allow right-out only for exiting traffic. Realignment of the frontage road would also be required resulting from the widening for the roundabout.
- A Retaining Wall (RW Number 2) would be located in the northwest quadrant starting approximately at the proposed bike ramp and extending east around the roundabout to approximately the northeast corner. RW Number 2 would have a length of 296 feet and height ranging from 4 feet to 14.5 feet. The portion of the retaining wall immediately between SR 68 and the frontage road would include a concrete barrier on top of the wall to protect SR 68 from frontage road traffic. Purpose of the wall is to limit impacts to the slope and the frontage road.
- The north end of the San Benancio Road (Toro Creek) Bridge (#44C0117) and northern approach slab would require widening to accommodate the roundabout and shared use path geometrics. The proposed approach slab and bridge widening would require new wing wall/retaining walls to protect the slopes of Toro Creek. The proposed bridge widening would also include

adding sidewalk within the current structure width from the southern end of the structure widening to the southern end of the bridge.

- Permanent Right of Way acquisition from two (2) Assessor Parcels with a combined total of up to 0.20 acre is estimated to be needed for the intersection modifications.
- A Temporary Construction Easement (TCE) from one Assessor Parcel of up to 0.07 acre.
- Roundabout center island would be hardscaped to minimize maintenance and associated maintenance costs and temporary travel lane closures, and to facilitate worker safety. Landscaping the center island may be considered during the final design phase.
- Wildlife Crossing (Site 5); Construction of a 7-foot by 7-foot by 99-foot Reinforced Concrete Box at Post Mile 13.18, approximately 650 feet west of the intersection. The bottom of box would be filled with native material to serve as a Wildlife Crossing. Wildlife fencing would also be included to direct wildlife to the Reinforced Concrete Box.
- Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be required to be undergrounded (subsurface) in accordance with Scenic Highway regulations as SR 68 is a designated Scenic Highway in the project limits. Existing underground lines including natural gas and water lines in conflict with project improvements would also require relocation. Relocated underground lines would be installed as close to the State Highway Right of Way as feasible Potholing would be conducted in the Plans, Specifications, and Estimates (project final Design) phase of the project to confirm the specific locations of existing subsurface utilities in order to confirm relocation needs in conjunction with discussions with the utility owner(s).

The following utility line relocations are anticipated during construction at this intersection based on preliminary design:

Overhead Utility Lines:

- Approximately 440 linear feet of Comcast TV overhead lines along westbound SR 68, and 1,260 feet of lines along eastbound SR 68 supported by two poles would require relocation to subsurface conditions.
- Approximately 209 linear feet of Comcast TV overhead lines cross SR 68 east of the intersection and would require relocation to subsurface conditions for the proposed roundabout.
- Approximately 1,260 linear feet of PG&E electric overhead lines supported by six (6) poles along eastbound SR 68 would be relocated to subsurface conditions.

Underground Lines:

- Approximately 2,600 linear feet of natural gas distribution lines (6-inch diameter pipelines) located mostly adjacent to the eastbound SR 68 edge of pavement would be relocated.
- Approximately 100 linear feet of AT&T underground telecommunication lines from the vicinity of the intersection/roundabout northwest to the frontage road would be relocated.

ALTERNATIVE 2 – SIGNALIZATION AND LANE CHANNELIZATION

ALTERNATIVE 2 - LOCATION 1: Signalization and Lane Improvements from west of Josselyn Canyon Road (Post Mile 4.8) to east of Olmsted Airport Road (Post Mile 5.9)

Proposed Josselyn Canyon Road/SR 68 3-legged Signalized Intersection Improvements

- Eastbound (EB) SR 68 would be widened to the south for the addition of 12 feet wide by 500 feet combination through/right turn lane at the EB SR 68/Josselyn Canyon Road approach leg, preceded by a 250-foot-long standard lane widening taper
- The EB SR 68 through lane would continue for approximately 2,000 feet east of Josselyn Canyon Road to the SR 68/Olmsted Road eastbound approach. Due to the close spacing of these intersections, the recommended through lane and standard lane taper lengths required could not be accommodated. Therefore, a continuous through lane would be constructed to Olmsted Road.
- Standard 8-foot wide EB SR 68 shoulders would be constructed throughout the improvements
- Westbound (WB) SR 68 on the departure side of the intersection to Josselyn Canyon Road would be widened to the north to add a 12-foot by 1,220-foot WB auxiliary through lane just west of Josselyn and would taper in 720 feet to conform to existing WB SR 68.
- For the WB SR 68/Josselyn approach leg the existing 200-foot left turn lane would be extended by 300 feet and striped accordingly. Due to the short distance between intersections and the numerous driveways, the 12-foot wide median to Olmsted would be extended and would function as a two-way left turn lane between the proposed dedicated left turn lanes at the Josselyn WB approach and the Olmsted EB approach. This two-way left turn lane would facilitate the southerly driveway access needs.
- Josselyn Canyon Road would be realigned to improve the angle of intersection to be greater than 75 degrees in order to improve the corner sight distance and the ability of motorists to judge the speed and distance of approaching traffic.

- NB Josselyn Canyon Road would be widened to accommodate a 125-foot-long dedicated left turn lane and right turn lane.
- The realignment and widening of Josselyn Canyon Road would require a 4-foot to 12-foot maximum height by 100-foot long retaining wall along the northbound direction to minimize impacts to the adjacent cut slope that is heavily vegetated with Monterey pine trees.
- The traffic signal system equipment would be replaced with adaptive signal control technology that adjusts the timing of the red, yellow, and green light cycle times to accommodate changing traffic patterns and improve traffic movement through the intersection.
- The roadway improvements would address the clear recovery requirement of 20 feet from edge of travelled way along the EB direction and the construction of 4:1 embankment slope.
- ADA-compliant curb ramps would be installed at all intersection crosswalks. Crosswalks would be restriped.
- Existing drainage culverts would be extended to daylight to the reconstructed ditches as applicable.

Proposed Olmsted Airport Road/SR 68 4-legged Signalized Intersection Improvements

- EB SR 68 would be widened on the south side for the addition of a 12-foot wide by 745- foot two-way left turn lane, to be located between the WB SR 68 Josselyn left turn lane approach and EB SR 68 Olmsted left turn lane approach and for the addition of a 12-foot wide by 2,000-foot long continuous through lane. The EB SR 68 outer through lane at the Olmsted approach would also serve as a right turn lane to SB Olmsted.
- The existing 300-foot-long EB SR 68 left turn lane would be extended by 275 feet.
- The existing 355-foot-long WB SR 68 left turn lane would be extended by 230 feet.
- A 990-foot-long WB SR 68 auxiliary through lane would be added and would be preceded by a 250-foot-long lane widening taper.
- The existing 175-foot-long WB SR 68 exclusive right turn lane would be extended by 360 feet and realigned to accommodate a dedicated 6-foot-wide bike lane. A minimum 4-foot-wide outside shoulder would be constructed adjacent to the dedicated right turn lane.
- Standard 8-foot-wide shoulders would be constructed on EB SR 68 throughout the improvements with 4-foot-wide shoulders adjacent to dedicated right turn lanes.

- The Olmsted Road south leg of the intersection would be modified to have a 295-foot-long dedicated left turn lane and a combination through/right turn lane in the northbound direction.
- The Olmsted Road north leg of the intersection would be modified to have a 330-foot-long dedicated left turn lane and a combination through/right turn lane in the southbound direction. The widening would require regrading of the Comfort Inn landscaped slope from SR 68 up to Garden Road. Slope regrading areas would be about 12 feet wide by 140 feet long south and 22 feet wide by 168 feet long north of the entrance driveway. Up to 12 mature trees would be removed.

The following items are also associated with the proposed Location 1 intersection modifications:

- Acquisition of permanent Right of Way from 39 identified Assessor Parcels. As much as 6.8 acres of permanent right of way and 0.06 acre of slope easement, and 0.05 acre of Temporary Construction Easement.
- WB State Route 68/Olmsted Road intersection modifications include Retaining Wall Number 1 that would vary in height from 4 feet to 10 feet and is 1,013 feet long, a 500-foot-long concrete barrier with foundation system to retain a 3-foot maximum cut slope and Retaining Wall Number 2 that would be 6 feet to 24 feet in height and 2,025 feet long.
- Existing southerly drainage ditch located parallel to Highway 68 would be realigned further south and have forward slopes of 4 to 1 (Horizontal to Vertical) and backslopes of 2 to 1.
- Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be required to be undergrounded (subsurface) in accordance with Scenic Highway regulations as SR 68 is a designated Scenic Highway in the project limits. Existing underground lines including natural gas and water lines in conflict with project improvements would also require relocation. Relocated underground lines would be installed as close to the State Highway Right of Way as feasible. Potholing would be conducted in the Plans, Specifications, and Estimates (project final Design) phase of the project to confirm the specific locations of existing subsurface utilities in order to confirm relocation needs in conjunction with discussions with the utility owner(s).

The following utility line relocations are anticipated during construction at this intersection based on preliminary design:

- Approximately 5,730 linear feet of EB SR 68 PG&E electric overhead lines supported by 35 poles along SR 68 and 310 linear feet along Olmsted Road would need to be relocated to subsurface conditions.

- Approximately 7,700 linear feet of gas lines ranging in size (2, 4, and 6-inch diameter pipelines) and located mostly adjacent to the EB SR 68 edge of pavement would need to be relocated.
- Approximately 5,415 linear feet of AT&T overhead telecommunication lines supported by 40 poles would need to be relocated subsurface. Approximately 1,130 linear feet of conduit located along the northbound direction at Olmsted Road south and north legs would need to be located through potholing during the Plans, Specifications, and Estimates (final Design) phase of the project to confirm horizontal and vertical locations and to confirm construction conflicts and compliance with utility policy.
- Comcast TV has approximately 860 linear feet of overhead lines supported by 8 poles that will require relocation to subsurface conditions. These overhead utilities are located both in the EB and WB directions of SR 68 and along Josselyn Canyon Road. Approximately 2,334 linear feet of Comcast Underground conduit would need to be located through potholing during the Plans, Specifications, and Estimates (final Design) phase of the project and relocated if in construction conflict or if noncompliant with department utility policies.
- The City of Monterey has approximately 4,645 linear feet of 6-inch water line that runs parallel to EB SR 68 along with 3 fire hydrants that would need to be relocated due to conflicts with proposed improvements. A 500-foot-long City of Monterey storm drain system is located along northbound Josselyn and is proposed to be relocated to follow the realigned Josselyn south leg.
- Private driveways, fences and private mailboxes would need to be setback/relocated to accommodate the SR 68 intersection widenings.
- Intersection signal and lighting system would be replaced and new electrical services for the proposed electrical work may require utility easements if PG&E facilities are located on privately owned property. Where possible, existing electric service enclosures would be used to avoid the need to acquire easements, to the fullest extent where possible.
- ADA-compliant curb ramps would be installed at all intersection crosswalks. Crosswalks would be restriped.
- At Olmsted Road, additional electroliers (streetlights) may be necessary with the widened intersection under this design alternative. New electroliers would have a maximum height of 40 feet which may require review by the Monterey Regional Airport for design requirements pursuant to avoidance of aviation obstruction.

ALTERNATIVE 2 - LOCATION 2: Signalization and Lane Improvements from west of SR218/Monterra Ranch Road (Post Mile 6.45) to east of Ragsdale Drive (Post Mile 7.3)

Proposed SR 218 (Canyon Del Rey Boulevard) – Monterra Ranch Road/SR 68 4-legged Signalized Intersection Improvements

During the cultural environmental studies initial findings determined that impacts to historical stone pillars and a rock retaining system located within the northerly property along and adjacent to two northwest driveways immediately west of the SR 218/SR 68 should be avoided, as any right of way acquisitions that includes these resources would result in an impact, or "use" of the resource under Section 4(f) of the federal Department of Transportation Act. In order to avoid these resources under Alternative 2, it was determined feasible to abandon the symmetrical widening of the intersection and instead to realign and widen SR 68 to the south to protect these cultural resources. The realignment also eliminates the need for two retaining walls along the north side that was proposed to minimize impacts to a cut slope and to the Monterey Airport internal frontage road, just west of the second driveway to the shopping center, and a second wall that was needed to minimize right of way acquisition area that would impact the parking area located between the two northwest driveways. The horizontal realignment of SR 68 occurs within the westerly limits and at conforms back to existing immediately east of SR218/Monterra Road intersection.

- On the SR 68/SR 218 west leg the existing 230-foot WB SR 68 auxiliary through lane would be extended to 1,310 feet in length, and would taper in 720 feet (using 60 MPH design speed) to conform to existing WB SR 68 existing roadbed; the existing 980-foot long left turn lane would be perpetuated for SR 68 EB access to the Stone Creek Village Shopping Center; the existing 145-foot long EB SR 68 combination auxiliary/right turn would be extended to 600 feet and be preceded by a 250 feet lane widening taper.
- A 1,250-foot long Retaining Wall Number 1 with a maximum height of 12 feet is proposed to minimize impacts to riparian woodland and the adjacent streambed.
- The SR 68/SR 218 east leg would maintain the two EB 68 continuous through lanes, would extend the existing 225-foot-long WB SR 68 dedicated left turn to 425 feet, would maintain the WB continuous through lanes, would extend the 6-foot-wide bicycle lane to 450 feet, extend the dedicated right turn to 450 feet, and add an additional 12-foot by 450-foot right turn lane. This WB direction widening would require a 4-foot-wide trapezoidal ditch with 4 to 1 (horizontal to vertical) forward and backslope followed by a 2 to 1 cut slope that extends approximately 63 feet in elevation to catch original ground.

- The EB SR 68 roadbed between SR 218 and Ragsdale would be resurfaced and nonstandard shoulder widths widened to the standard 8-foot width. Drainage ditches would be constructed to manage the roadway runoff and run-on from the adjacent contributing hillsides as applicable.
- Standard 8-foot-wide outside shoulders would be constructed throughout except at dedicated right turn lanes where shoulder widths would be reduced to 4 feet, and/or widened to 10 feet if located along retaining walls in cut slope conditions or if bus stops are present.
- The Monterra Road south leg would be modified by extending the existing 50 feet NB left turn lane by 125 feet. This would be accomplished by modifying and paving the planted median.
- The SR 218 north leg would be modified and widened to the east to accommodate a 235-foot-long dedicated SB right turn lane, a 6-foot-wide by 235- foot-long bicycle lane, a SB through lane, SB dual left turn lanes that are 400 feet and greater in length, and two NB through lanes of which the outside through lane converts to a dedicated right turn lane at Ryan Ranch Road. Widening SR 218 north leg to the east would minimize impacts to the regulated floodway on the west side of SR 218 and would require construction of two retaining walls that vary in height from 4 feet to 30 feet by 225 feet long for Retaining Wall Number 2, and 4 feet to 32 feet high by 353 feet long for Retaining Wall Number 3, respectively along the easterly cut slope.
- Adaptive signal control technology would be the traffic signalization system constructed that adjusts the timing of the red, yellow, and green light cycle times to accommodate changing traffic patterns and improve traffic movement through the intersection
- The roadway improvements would address the clear recovery requirement of 20 feet from edge of travelled way along the EB direction and construction of a 4 to1 embankment slope to maximum extent possible.
- Existing drainage culverts will be extended to daylight to the reconstructed ditches as applicable, and vegetated strips would be designed to treat runoff as applicable.

Proposed Ragsdale Drive/SR 68 3-legged Signalized Intersection Improvements

- The existing 400-foot-long EB SR 68 auxiliary through lane at the departure leg would be extended by 100 feet followed by a standard 720-foot lane reduction taper.
- The existing 500-foot-long EB SR 68 combination auxiliary through/right turn lane would be resurfaced and standard shoulder backing and cut and embankment slopes constructed to address clear recovery requirements.

- Standard 8-foot-wide EB/WB SR 68 shoulders would be constructed throughout the improvements, and 10-foot-wide shoulders proposed adjacent to retaining walls in cut conditions.
- At the WB SR 68 approach leg to Ragsdale Drive, the shoulder backing widening work would extend into a hillside and would require a short retaining structure to retain 3 feet and less of cut slope.

The following items are associated with Location 2 intersection modifications:

- Acquisition of permanent Right of Way from nine (9) identified Assessor Parcels, including up to 6.75 acres of permanent right of way, 0.65 acre of slope easement, and 0.07 acre of Temporary Construction Easement.
- Just west of SR 218 one retaining wall that varies in height from 4 feet to 16 feet by 250 feet long is required to minimize impacts to the existing vegetated cut slope.
- Just west of Ragsdale Drive and along WB SR 68, a 175-foot-long concrete barrier with foundation system to retain a 3-foot maximum cut slope is proposed to minimize impact to the adjacent vegetated cut slope.
- Existing southerly drainage ditch located parallel to Highway 68 would be realigned further south and have forward slopes of 4 to1 (horizontal to vertical) and back slopes of 2 to 1. Where no ditches exist, slopes would be constructed that meet clear recovery and underline slope criteria.
- ADA-compliant curb ramps would be installed at all intersection crosswalks. Crosswalks would be restriped.
- Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be required to be undergrounded (subsurface) in accordance with Scenic Highway regulations as SR 68 is a designated Scenic Highway in the project limits. Existing underground lines including natural gas and water lines in conflict with project improvements would also require relocation. Relocated underground lines would be installed as close to the State Highway Right of Way as feasible. Potholing would be conducted in the Plans, Specifications, and Estimates (project final Design) phase of the project to confirm the specific locations of existing subsurface utilities in order to confirm relocation needs in conjunction with discussions with the utility owner(s).

The following utility line relocations are anticipated during construction at this intersection based on preliminary design:

- Approximately 4,499 linear feet of PG&E EB electric overhead lines supported by 20 poles need to be relocated to subsurface and approximately 1,446 linear feet of subsurface conduit located along SR 68, SR 218 and Ragsdale Drive will need to be potholed and relocated to be out

of construction conflict and/or to meet existing utility minimum vertical depths and or location policy.

- Approximately 6,698 linear feet of gas lines ranging in size (2, 4, and 6-inch diameter pipelines) and located predominately adjacent to the EB SR 68 edge of pavement would need to be relocated.
- Approximately 2,328 linear feet of AT&T underground telecommunication conduit located along the WB SR 68, NB/SB SR 218, and NB Ragsdale Drive would require evaluation for potential construction conflicts to accommodate the widening work.
- Approximately 2,730 linear feet of subsurface Comcast TV conduit is located along WB SR 68 and NB 218. If in construction conflict or if noncompliant with department utility policies these utilities would need to be relocated.
- The City of Monterey has approximately 3,175 linear feet of 8-inch sewer line that runs parallel to WB SR 68 and NB/SB SR 218, may require relocation for safe access for inspections/maintenance repairs and to minimize highway operation disruptions.
- Private driveways, fences and monument walls would need to be setback and/or relocated to accommodate the SR 68 widening work.
- Intersection signal and lighting system would be replaced and new electrical services for the proposed electrical work may require utility easements if PG&E facilities are located on privately owned property. Existing electric service enclosures would be used to avoid the need to acquire easements to the fullest extent possible.
- Additional electroliers (streetlights) may be necessary with the widened intersection under this design alternative. New electroliers would have a maximum height of 40 feet which may require review by the Monterey Regional Airport for design requirements pursuant to avoidance of aviation obstruction.

ALTERNATIVE 2 - LOCATION 3: Signalization and Lane Improvements around York Road/SR 68 (Post Miles 7.8 to 8.45)

Proposed York Road/SR 68 3-legged Signalized Intersection Improvements

- The existing 415-foot-long EB 68 left turn lane would be extended by 125 feet.
- EB SR 68 would be widened to the south for the addition of 12 feet wide by 540 feet long auxiliary through lane at the EB SR 68/York Road approach which would be preceded by a 250-foot-long standard lane widening taper.
- The EB SR 68 auxiliary through lane would continue for approximately 740 feet past the SR 68/York Rd EB departure. A 720-foot-long lane reduction taper would follow to conform to existing EB SR 68.

- Standard 8-foot-wide outside shoulders would be constructed throughout the SR 68 widening improvements, with the exception of areas near retaining walls in cut conditions where the outside shoulder would be 10 feet wide and 4 feet wide adjacent to exclusive right turn lanes.
- WB SR 68 on the departure side to York Road would be widened to the north to add a 12-foot wide by 1,090-foot-long WB auxiliary through lane just west of York Road and would taper in 720 feet to conform to existing WB SR 68.
- At the WB SR 68/York Road approach leg, a 12-foot wide by 600-foot-long auxiliary through lane would be constructed and would be preceded by a 250-foot-long widening lane taper
- NB York Road would be widened to accommodate an 8-foot-wide sidewalk to Bl.e Larkspur Lane as requested by the Transportation Agency for Monterey County and Monterey City/County.
- SB York right turn lane would be extended by 155 feet.
- Adaptive signal control technology would be the traffic signalization system constructed that adjusts the timing of the red, yellow, and green light cycle times to accommodate changing traffic patterns and improve traffic movement through the intersection.
- The roadway improvements would address the clear recovery requirement of 20 feet from edge of travelled way and construction of 4:1 embankment slope.
- An 8-foot wide by 8 feet high Reinforced Concrete Box would be installed at Post Mile 8.13 on SR 68 to serve as a wildlife crossing (Number1) under the highway, and wildlife exclusionary fencing would be installed along the edge of the highway to guide wildlife to the undercrossing culvert and deter them from crossing the SR 68 travel lanes.
- The existing drainage facility under York Road would be extended to accommodate the longer SB right turn lane and to accommodate the 8-foot-wide NB sidewalk.

The following items are associated with Location 3 intersection modifications:

- Acquisition of up to 4.73 acres of permanent Right of Way from six (6) identified Assessor Parcels and about 1.18 acres of temporary construction easements for the intersection modifications.
- A retaining wall (Number 1) would be required immediately east of the York Road/SR 68 intersection modifications; the wall would vary in height from 4 feet to 26 feet by 620 feet long, followed by another EB retaining wall Number 2 that would vary in height from 4 feet to 10 feet by 500 feet long to minimize the impact to the adjacent vegetated cut slope.
- Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be required to be undergrounded

(subsurface) in accordance with Scenic Highway regulations as SR 68 is a designated Scenic Highway in the project limits. Existing underground lines including natural gas and water lines in conflict with project improvements would also require relocation. Relocated underground lines would be installed as close to the State Highway Right of Way as feasible. Potholing would be conducted in the Plans, Specifications, and Estimates (project final Design) phase of the project to confirm the specific locations of existing subsurface utilities in order to confirm relocation needs in conjunction with discussions with the utility owner(s).

The following utility line relocations are anticipated during construction at this intersection based on preliminary design:

- Approximately 2,530 linear feet of EB SR 68 PG&E overhead lines supported by 11 poles would need to be relocated. Approximately 558 feet of underground electrical conduit would need to be potholed to find the horizontal and vertical locations of the lines for determination of potential conflicts with proposed construction areas and/or compliance with utility policy.
- Approximately 2,532 linear feet of gas lines ranging in size (2, 4, and 6-inch diameter pipelines) and located mostly adjacent to the EB SR 68 edge of pavement would need to be relocated.
- Approximately 1,035 linear feet of AT&T overhead telecommunication lines supported by 8 poles would need to be relocated subsurface. Approximately 180 feet of telecommunication conduit located along EB SR 68, 150 feet along WB SR 68, and 200 feet along SB York Road would need to be located though potholing horizontally and vertically to confirm construction conflicts and relocation needs.
- Approximately 84 feet of underground Comcast TV conduit in both the EB and WB directions of SR 68 and 200 feet in the SB direction of York Road would need potholing to confirm specific locations and to determine relocation if in conflict with construction areas and/or to confirm compliance with department utility policies.
- A private driveway and private fences would be setback and/or relocated as needed to accommodate the SR 68 widening work.
- Intersection signal and lighting system would be replaced and new electrical services for the proposed electrical work may require utility easements if PG&E facilities are located on privately owned property. Existing electric service enclosures would be used to avoid the need to acquire easements, to the fullest extent where possible.
- ADA-compliant curb ramps would be installed at all intersection crosswalks. Crosswalks would be restriped.

ALTERNATIVE 2 LOCATION 4: Signalization and Lane Improvements around Pasadera Drive-Boots Rd/SR 68 (Post Miles 9.46 to 10.21)

Proposed Pasadera Drive-Boots Road/SR 68 4-legged Signalized Intersection Improvements

- The existing 330-foot-long EB 68 left turn lane would be extended by 95 feet.
- The existing exclusive EB SR 68 right turn lane would be converted to a combination 500-foot-long auxiliary through lane /right turn lane which would be preceded by a 250-foot-long standard lane widening taper
- The existing 590-foot-long EB SR 68 auxiliary through lane would be extended by 330 feet followed by a 720-foot long (using 60 MPH design speed) lane reduction taper to conform to existing EB SR 68.
- The WB left turn lane would be reduced from 450 feet to 425 feet.
- A 700-foot-long auxiliary through lane separated by a 6-foot-wide bike lane and a 425-foot-long dedicated right turn lane preceded by a 220-foot widening lane taper on the approach.
- The WB auxiliary through lane on the departure (west) side of SR 68 would be extended from 550 feet to 890 feet followed by a 720-foot-long lane reduction taper.
- Standard 8-foot-wide outside shoulders would be constructed throughout the SR 68 widening improvements, except for the outside shoulders which would be 10 feet at retaining wall locations in cut condition and would be 4 feet wide adjacent to exclusive right turn lanes.
- Wildlife crossing Number 2 is proposed at Post Mile 9.52 and would consist of a 12-foot wide by 11-foot-high precast Reinforced Concrete Box culvert filled with one-foot with native soil material. A 150-foot long by 75-foot-wide northerly drainage pond would be excavated approximately 18 feet below the existing ground elevation and a smaller southerly drainage pond would be excavated for this wildlife crossing. Wildlife exclusionary fence would also be installed along the EB and WB sides of SR 68 up to Pasadera Drive to deter wildlife from crossing SR 68 thereby reducing/eliminating collisions with the vehicular traffic and to guide wildlife toward the new culvert wildlife crossing.
- A WB SR 68 4 to 6 feet high by 175 feet long retaining wall in fill would be constructed just west of Pasadera Drive to reduce impacts to an adjacent wetland and riparian woodland.
- Wildlife crossing Number 3 is proposed at Post Mile 9.68 and would consist of an 8-foot wide by 8-foot-high precast Reinforced Concrete Box culvert. The northerly inlet of this RCB crossing would be approximately 20 feet below the original ground elevation and excavated out to allow for passage of the wildlife.

- Adaptive signal control technology would be the traffic signalization system constructed that adjusts the timing of the red, yellow and green light cycle times to accommodate changing traffic patterns and improve traffic movement through the intersection.
- The roadway improvements would address the clear recovery requirement of 20 feet from edge of travelled way and construction of a 4 to 1 ratio embankment slope.

The following items are associated with Location 4 intersection modifications:

- Acquisition of permanent and drainage Right of Way easements from twelve (12) identified Assessor Parcels, for a combined total of up to 3.72 acres and 1.22 acres of drainage easement area for Wildlife Crossing Number 2 drainage pond located on the Pasadera Golf and Country Club property.
- Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be required to be undergrounded (subsurface) in accordance with Scenic Highway regulations as SR 68 is a designated Scenic Highway in the project limits. Existing underground lines including natural gas and water lines in conflict with project improvements would also require relocation. Relocated underground lines would be installed as close to the State Highway Right of Way as feasible. Potholing would be conducted in the Plans, Specifications, and Estimates (project final Design) phase of the project to confirm the specific locations of existing subsurface utilities in order to confirm relocation needs in conjunction with discussions with the utility owner(s).

The following utility line relocations are anticipated during construction at this intersection based on preliminary design:

- Approximately 3,523 linear feet of EB SR 68 PG&E overhead lines supported by 21 poles would need to be relocated. Immediately west of the intersection an underground electric conduit runs transverse to SR 68 and would require potholing to determine horizontal and vertical location, construction conflicts and/or compliance with utility policy.
- Approximately 3,940 linear feet of natural gas distribution lines ranging in size (2, 4, and 6-inch diameter pipelines) and located mostly adjacent to the EB SR 68 edge of pavement would need to be relocated.
- Approximately 1,920 linear feet of AT&T overhead telecommunication lines supported by 12 poles in the WB direction would need to be relocated subsurface. Approximately 2,010 feet of telecommunication conduit located along WB SR 68, would need to be located horizontally and vertically to confirm construction conflicts and relocation needs.
- Approximately 740 feet of underground Comcast TV conduit in WB directions of SR 68 would need potholing to determine relocation if in construction conflict or to confirm compliance with department utility policies.

Approximately 960 feet of overhead TV cable lines supported on 5 poles in the WB direction would require relocation to subsurface conditions.

- Two private driveways on the east side and private fences would be setback and/or relocated to accommodate the SR 68 widening work.
- Intersection signal and lighting system would be replaced and new electrical services for the proposed electrical work may require utility easements if PG&E facilities are located on privately owned property. Existing electric service enclosures would be used to avoid the need to acquire easements, to the fullest extent where possible.
- ADA-compliant curb ramps would be installed at all intersection crosswalks. Crosswalks would be restriped.

ALTERNATIVE 2 LOCATION 5: Signalization and Lane Improvements around Laureles Grade Road/SR 68 (Post Miles 10.94 to 11.50)

Proposed Laureles Grade Road/SR 68 3-legged Signalized Intersection Improvements

- A 1,450-foot-long WB auxiliary through lane would be added that would then convert to an exclusive right turn lane into B Road. Signage would direct through traffic to merge left into the WB continuous through lane.
- The 20-foot-wide striped median would be reduced to 12 feet wide and taper down to no median within in 720 feet to the west of Laureles Grade Road.
- The SR 68 west leg intersection lane configuration would have a 500-foot long EB auxiliary through lane, a 6-foot wide by 500-foot-long bike lane and a 500-foot-long dedicated right turn lane.
- On the SR 68 east leg, the EB auxiliary through lane would continue for 798 feet followed by a 720-foot-long lane reduction taper to conform to existing EB SR 68.
- The WB dual left turn lanes would remain at 470 feet, and a 700-foot-long WB auxiliary through lane would be added preceded by a 250-foot-long lane widening taper.
- Standard 8-foot-wide outside shoulders would be constructed throughout the SR 68 widening improvements except for where adjacent to exclusive right turn lanes; in those locations the outside shoulder would be 4 feet wide.
- The Laureles Grade Road south leg of the intersection would be modified to extend the 175-foot-long SB auxiliary through lane to 290 feet followed by a 540-foot-long lane reduction taper. In order to avoid or minimize impacts to the existing park and ride lot it was determined to provide a 425-foot-long left turn lane, a 5-foot-wide bike lane and an exclusive right turn lane, rather than longer left turn and right turn lanes as recommended in the original traffic study. Modification to this leg would be accomplished by widening Laureles Grade Road on the west side (SB direction) to minimize the

impacts to the developed Monterey County Regional Fire District parcel as well as the park and ride lot.

- Two Zero Emissions Vehicle charging station systems would be installed at the Park and Ride Lot operated by the County of Monterey on the east side of Laureles Grade Road. The charging stations would be a Level 2, solar-powered facility, and would provide charging capability for two vehicles to charge simultaneously. The existing lot has a total of 20 parking stalls, one of which is for handicapped parking. The lot is bisected by a residential driveway and the charging station systems would be placed in the portion of the lot south of the driveway. Up to three parking spaces would be removed to install the two charging station systems. The remainder of the southern portion of the lot would be restriped for 8 parking stalls (to current design standards). The southern portion of the lot currently has 13 parking stalls. The charging station systems and restriped stalls would reduce the spaces in the park and ride lot by 5 parking spaces, leaving a total of 15 parking stalls, including one handicapped. As proposed, the charging station equipment and lot modifications would be constructed and installed by Caltrans through an encroachment permit from the County of Monterey. The costs for the station would be sponsored by the Transportation Agency for Monterey County and the County would maintain the facilities. No right of way acquisitions would be required.
- Wildlife crossing Number 4 is proposed at Post Mile 11.16 and would consist of an 8-foot wide by 8-foot-high precast Reinforced Concrete Box culvert filled with two feet of native soil material. A 1,800-foot-long northerly ditch with forward slopes of a 4 to1 ratio and back slopes of 2 to1 ratio and up to 12 feet deep would need to be constructed to contain the roadway runoff and to provide for functionality of the wildlife crossing. Wildlife exclusionary fence would also be installed along the EB and WB side of SR 68 to deter wildlife from crossing SR 68 thereby reducing/eliminating collisions with vehicular traffic.
- A retaining wall along EB SR 68, 6 to 7 feet high by 350 feet long, would be constructed in fill just west of Laureles Grade Road to reduce impacts to an adjacent wetland and minimize impacts to the slope.
- A retaining wall along EB SR 68, 4 to 14 feet high by 450 feet long, would be constructed in fill just east of Laureles Grade Road to minimize slope impacts.
- Adaptive signal control technology would be the traffic signalization system constructed that adjusts the timing of the red, yellow, and green light cycle times to accommodate changing traffic patterns and improve traffic movement through the intersection.

The following items are associated with Location 5 intersection modifications:

- Acquisition of permanent and drainage Right of Way easements from twelve (12) identified Assessor Parcels for a combined total of up to 7.52 acres of permanent right of way.

- Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be required to be undergrounded (subsurface) in accordance with Scenic Highway regulations as SR 68 is a designated Scenic Highway in the project limits. Existing underground lines including natural gas and water lines in conflict with project improvements would also require relocation. Relocated underground lines would be installed as close to the State Highway Right of Way as feasible. Potholing would be conducted in the Plans, Specifications, and Estimates (project final Design) phase of the project to confirm the specific locations of existing subsurface utilities in order to confirm relocation needs in conjunction with discussions with the utility owner(s).

The following utility line relocations are anticipated during construction at this intersection based on preliminary design:

- Approximately 3,460 linear feet of EB SR 68 PG&E overhead lines supported by 18 poles would need to be relocated.
- Approximately 3,460 linear feet of gas lines ranging in size (2, 4, and 6-inch diameter pipelines) and located mostly adjacent to the EB SR 68 edge of pavement would need to be relocated.
- Approximately 2,500 linear feet of AT&T overhead telecommunication lines supported by 20 poles in the WB direction, and 920 feet of lines along SB Laureles Grade Road would need to be relocated subsurface.
- Approximately 710 feet of telecommunication conduit located along EB and WB SR 68 would need to be located through potholing horizontally and vertically to confirm and potential conflicts with construction areas and relocation needs.
- All local roads and driveways connecting to SR 68 and private fences would be setback and/or relocated to accommodate the SR 68 widening work.
- Intersection signal and lighting system would be replaced and new electrical services for the proposed electrical work may require utility easements if PG&E facilities are located on privately owned property. Existing electric service enclosures would be used to avoid the need to acquire easements, to the fullest extent where possible.
- ADA-compliant curb ramps would be installed at all intersection crosswalks. Crosswalks would be restriped.

ALTERNATIVE 2 LOCATION 6: Signalization and Lane Improvements from west of Corral De Tierra Road-Cypress Church Drive to east of San Benancio Road (Post Miles 12.55 to 13.7)

Proposed Corral De Tierra Road-Cypress Church Drive/SR 68 4-legged Signalized Intersection Improvements

- In order to best accommodate the curved geometry at this intersection the following lane configurations are proposed: a 1,070-foot-long WB auxiliary through lane, followed by a 720-foot-long lane reduction taper, a 460-foot-long left turn lane, and an 850-foot-long EB combination auxiliary thru and right turn lane. The existing dedicated right turn lane would be removed due to low turning traffic volumes (existing and forecast volumes) and to minimize impacts to the existing adjacent gas station parcel operations. The two driveways immediately west of the CDT intersection on the south side of SR 68 would be restricted to right-in/right-out movements for purposes of traffic operations and safety.
- Standard 8-foot-wide outside shoulders would be constructed throughout the intersection and shoulders would be widened to 10 feet along retaining walls in cut slope conditions.
- Due to the immediate north and south driveways located just east of Corral De Tierra and the need to provide a continuous left turn lane the WB left turn lane would be extended to 310 feet and not 585 feet as recommended.
- The WB SR 68 departure widening would require the construction of Retaining Wall Number 2, a 12-foot high by 700-foot long retaining wall in fill condition to limit the impacts to the northerly riparian woodland and the streambed that runs parallel just west of Corral De Tierra Road.
- The EB SR 68 approach widening modifications would require the construction of a retaining wall Number 1 to the west of this intersection to limit the impacts to a 60 feet and higher cut slope. The retaining wall would be approximately 640 feet in length and have a varying height of 4 to 12 feet.
- The Corral De Tierra Road south leg of the intersection would be realigned to have a skew angle greater than the existing 65-degree angle connection to SR 68. The lane assignments would include a 405-foot-long dedicated NB left turn lane and a NB combination through/right turn lane with a single SB continuous through lane.
- The Cypress Church Drive north leg of the intersection would be realigned to match the Corral de Tierra Road vehicle travel lane configurations. The lane assignments would be modified to include a SB combination right/through lane, an exclusive 75-foot-long SB left turn lane, and a NB continuous through lane.

- Wildlife Crossing Number 5 is proposed at Post Mile 13.18 and would include a 7-foot high by 7-foot-wide precast reinforced concrete box filled with one foot of native soil material.
- Retaining Wall Number 3 on the north side and just east of the wildlife crossing Number 5 is proposed to limit impacts to a 30-foot-high cut slope. The wall would be approximately 230 feet long and vary in height from 4 to16 feet. Retaining wall Number 4 in cut condition is proposed approximately 145 feet east of wall Number 3. Wall Number 4 would be approximately 255 feet long and vary in height 4 feet to 16 feet to limit impacts to the heavily vegetated hillside. Retaining wall Number 5 is proposed in fill material on the southside and just west of San Benancio Road. Wall Number 5 is proposed to limit impacts to riparian woodland and Toro Creek streambed. The wall would be approximately 100 feet long by 14 feet high.
- Adaptive signal control technology would be the traffic signalization system constructed that adjusts the timing of the red, yellow, and green light cycle times to accommodate changing traffic patterns and improve traffic movement through the intersection
- The roadway improvements would address the clear recovery requirement of 20 feet from edge of travelled way along the EB direction and construction of 4 to1 ratio embankment slope to maximum extent possible.
- Existing drainage culverts would be extended to daylight to the reconstructed ditches as applicable, and vegetated strips would be designed to treat runoff as applicable.

Proposed San Benancio Road/SR 68 4-legged Signalized Intersection Improvements

- The SR 68 west leg of the intersection would include two continuous SR 68 WB through lanes, and a 425-foot-long left turn lane. Two continuous SR 68 EB through lanes would extend from Corral De Tierra Road to San Benancio Road EB approach, with a 425-foot long and 6-foot-wide bike lane and dedicated right turn lane.
- The SR 68 east leg consists of a 1,430-foot-long EB auxiliary through lane followed by a 720-foot-long lane reduction taper, a continuous EB through lane, a 535-foot-long WB left turn lane, a continuous WB through lane, and a 1,155-foot-long WB combination auxiliary through/right turn lane preceded by a 250-foot- long lane taper. The auxiliary lane would be extended to widen the bridge for two lanes in each direction of travel.
- The lane configurations on the San Benancio Road south leg of the intersection are proposed to be restriped such that the 250-foot-long NB combination left/through lane would become an exclusive left turn lane, and the exclusive right turn lane would become a NB combination through/right turn lane.

- The lane configurations on the San Benancio Road south leg of the intersection are proposed to be restriped such that the 250-foot-long NB combination left/through lane would become an exclusive left turn lane, and the exclusive right turn lane would become a NB combination through/right turn lane.
- Standard 8-foot-wide EB/WB shoulders along SR 68 would be constructed throughout the intersection improvements except for 10-foot-wide shoulders proposed adjacent to retaining walls in cut conditions.
- Retaining Wall Number 6 is proposed immediately to the east of the intersection to limit impacts to the northerly vegetated cut slope that extends 20 feet and higher. The wall would be approximately 250 feet long and vary in height from 4 feet to 10 feet.
- The existing SR 68 bridge over El Toro Creek would be widened to accommodate two lanes of travel in each direction along with a tapered striped median that forms the WB left turn lane at the SR 68 east leg. The existing bridge structure has two columns in the streambed. The widening would require the addition of four new columns for a total of six columns.
- Retaining Wall Number 7 is proposed along EB 68 just east of the intersection and would connect to the widened SR 68 Toro Creek bridge. The retaining wall would minimize impacts to the riparian woodland and Toro creek streambed. The wall would be approximately 460 feet long and vary in height from 4 feet to 12 feet. Wall Number 8 would limit impacts at the southeasterly end of the bridge to limit impacts to riparian woodland. The wall would be 225 feet long and vary in height from 4 feet to 14 feet.

The following items are also associated with Location 6 intersection modifications:

- Acquisition of permanent Right of Way from twenty (20) identified Assessor Parcels for 0.24 acre of temporary construction easement area.
- Drainage ditches between the Corral De Tierra/SR 68 intersection to wildlife crossing Number 5 on the northside and southside are proposed to handle roadway runoff. The ditches would have forward and back slopes of 4 to 1 ratio (horizontal to vertical).
- Utility lines in conflict with the proposed highway intersection improvements would be relocated. Existing overhead lines (AT&T telecommunication, PG&E electric, Comcast Television) would be required to be undergrounded (subsurface) in accordance with Scenic Highway regulations as SR 68 is a designated Scenic Highway in the project limits. Existing underground lines including natural gas and water lines in conflict with project improvements would also require relocation. Relocated underground lines would be installed as close to the State Highway Right of Way as feasible. Potholing would be conducted in the Plans, Specifications, and Estimates (project final Design) phase of the project to confirm the specific locations of existing subsurface

utilities in order to confirm relocation needs in conjunction with discussions with the utility owner(s).

The following utility line relocations are anticipated during construction at this intersection based on preliminary design:

- Approximately 6,025 linear feet of PG&E EB electric overhead lines supported by 27 poles would be relocated subsurface.
- Approximately 9,308 linear feet of natural gas distribution lines ranging in size (2, 4, and 6-inch diameter pipelines), both abandoned and active, are located predominately adjacent to the EB SR 68 edge of pavement; All active lines in conflict with project construction areas would need to be relocated.
- Approximately 756 linear feet of AT&T overhead telecommunication lines located in the northbound (WB direction) supported on five (5) poles would need to be relocated to subsurface conditions.
- Approximately 4,749 feet of underground telecommunication conduit located along the WB SR 68, NB Corral De Tierra Road, and NB San Benancio Road would require positive location through potholing and evaluation for potential construction conflicts to accommodate the widening work.
- Approximately 3,365 linear feet of Comcast TV cable television overhead lines supported on 19 poles would need to be relocated subsurface.
- Approximately 880 feet of Comcast TV underground conduit located along NB Corral De Tierra Road and along WB SR 68 would require positive location through potholing for determination of any conflicts with project construction areas, or as needed for compliance with department utility policies. If noncompliant these utilities would require relocation.
- A California Utility sewer line crosses SR 68 just east of Corral De Tierra Road and would need to be positively located to determine any conflicts with the widening work and for compliance with department policy.
- Private driveways and fences would be setback and/or relocated to accommodate the SR 68 widening work; and
- Intersection signal and lighting system will be replaced and new electrical services for the proposed electrical work may require utility easements if PG&E facilities are located on privately owned property. Existing electric service enclosures would be used to avoid the need to acquire easements, to the fullest extent where possible.
- ADA-compliant curb ramps would be installed at all intersection crosswalks. Crosswalks would be restriped.

Appendix J Proposed Right of Way Acquisitions

The following tables provide estimated right of way needs for the proposed improvements at the project intersections for both of the Build Alternatives. Permanent partial property acquisitions and temporary construction easements are estimated based on the preliminary design plans.

Alternative 1 - Estimated Right of Way Acquisitions at State Route 68/Josselyn Canyon Road to State Route 68/Olmsted Road

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet	Permanent Slope Easement in Acres/Square Feet
013-312-004 Northwest of Josselyn Canyon Road	Standard Insurance Company	0.42/18,438	None	None
013-312-006 Northeast of Josselyn Canyon Road	Tonkin, H James, Sheryll E	0.28/12,236	None	None
013-271-002 Southwest of Josselyn Canyon Road	Monterey Peninsula Church of the Nazarene	0.31/13,504	None	None
101-241-051 Southeast of Josselyn Canyon Road	Monterey Woods Owners Assoc Inc.	0.02/759	None	None
101-241-051 Southeast of Josselyn Canyon Road	Monterey Woods Owners Assoc Inc.	None	None	0.18/7,929
101-231-013 Southeast of Josselyn Canyon Road	Mast, Michael L, Tammy G	0.11/4,872	None	None
101-231-016 Southeast of Josselyn Canyon Road	Hettler, Danielle Lynn	0.06/2,848	None	None
013-322-007 North and West of Olmsted Road	Monterey by the Sea Hospitality	0.22/9,563	None	None

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet	Permanent Slope Easement in Acres/Square Feet
013-221-020 Northeast of Olmsted Road	Monterey Peninsula Airport	1.09/47,493	None	None
101-231-005 Southwest of Olmsted Road	City of Monterey and County of Monterey	0.21/9,181	None	None
259-011-064 Southwest of Olmsted Road	Tescher, Christopher TR	0.11/4,597	None	None
259-011-027 Southeast of Olmsted Road	Knight, Christopher S	0.32/13,745	None	None
Totals	11 Parcels	3.14/137,235	None	0.18/7,929

Alternative 2 – Estimated Right of Way Acquisitions (State Route 68 and Josselyn Canyon Road to State Route 68 and Olmsted Road)

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet	Permanent Slope Easement in Acres/Square Feet
013-312-007 Northwest of Josselyn Canyon Road	Garden Road Invest LLC	0.05/2,083.0	None	None
013-312-008 Northwest of Josselyn Canyon Road	Slama, Jannette, L Keith	0.16/7,036.9	None	None
013-312-009 Northwest of Josselyn Canyon Road	Professional Office Enterprises LLC	0.13/5,806.0	None	None
013-312-010 Northwest of Josselyn Canyon Road	Hauswirth, Robert A, Sharon A	0.11/4,905.1	None	None
013-312-015 Northwest of Josselyn Canyon Road	Sunrise Square LLC	0.28/12,043.1	None	None

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet	Permanent Slope Easement in Acres/Square Feet
013-312-004 Northwest of Josselyn Canyon Road	Standard Insurance Company	0.37/16,096.3	None	None
013-312-006 Northeast of Josselyn Canyon Road	Tonkin, H James, Sheryll E	0.36/15,657.30	None	None
013-351-004 Northeast of Josselyn Canyon Road	City of Monterey	0.28/12,099.3	None	None
101-201-030 Southwest of Josselyn Canyon Road	Wedlake, Joseph F, Brainerd, Roberta	0.05/2,221.3	None	None
101-201-004 Southwest of Josselyn Canyon Road	Tegerdal, Benny Arne, Rebecca	0.02/840.3	None	None
101-201-017 Southwest of Josselyn Canyon Road	Rust, Gary L, Susan T	0.04/1,533.7	None	None
101-201-032 Southwest of Josselyn Canyon Road	Miller, Caroline J, Ivan William	0.04/1,598.5	None	None
101-211-034 Southwest of Josselyn Canyon Road	Leung, Georgine C, Sewald, John V	0.05/2,177.0	None	None
101-211-009 Southwest of Josselyn Canyon Road	Sanborn, Branham J, Erica C	0.03/1,442.3	None	None
101-211-033 Southwest of Josselyn Canyon Road	Sanborn Branham J, Erica C	0.02/960.8	None	None
101-211-017 Southwest of Josselyn Canyon Road	De Lap, William F	0.02/695.7	None	None

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet	Permanent Slope Easement in Acres/Square Feet
101-211-018 Southwest of Josselyn Canyon Road	Wood, Rowena J	0.01/617.9	None	None
101-221-011 Southwest of Josselyn Canyon Road	Pebble Beach Company	0.00/184.8	None	None
101-221-014 Southwest of Josselyn Canyon Road	Nieto, Daryl James	0.05/2,130.8	None	None
101-221-001 Southwest of Josselyn Canyon Road	Nieto, Daryl James	0.11/4,721.8	None	None
013-271-002 Southwest of Josselyn Canyon Road	Monterey Peninsula Church of the Nazarene	0.82/3,775.5	None	None
101-241-051 Southeast of Josselyn Canyon Road	Monterey Woods Owners Assoc Inc.	0.08/3,585.7	None	0.06/2,510.6
101-231-013 Southeast of Josselyn Canyon Road	Mast, Michael L, Tammy G	0.16/7,102.1	None	None
101-231-016 Southeast of Josselyn Canyon Road	Hettler, Danielle Lynn	0.19/8,286.9	None	None
101-231-001 Southeast of Josselyn Canyon Road	Beck, Ryan Daniel, Madeline Renee	0.48/21,012.8	None	None
014-322-004 Northwest of Olmsted Road	Shoreline Community Church	0.16/6,738.0	None	None
013-322-006 Northwest of Olmsted Road	Reade Properties	None	0.03/1,168.47	None

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet	Permanent Slope Easement in Acres/Square Feet
013-322-007 Northwest of Olmsted Road	Monterey by the Sea Hospitality	0.23/10,072.4	0.02/783.40	None
013-221-020 Northeast of Olmsted Road	Monterey Peninsula Airport	1.13/49,382.1	None	None
013-222-008 Northeast of Olmsted Road	Monterey Peninsula Airport District	0.34/14,782.4	None	None
013-221-015 Northeast of Olmsted Road	Monterey Peninsula Airport District	0.25/10,971.1	None	None
101-231-002 Southwest of Olmsted Road	Short, Carlene R & Michael Cardel TRS	0.27/11,688.6	None	None
101-231-007 Southwest of Olmsted Road	MacDonald Deanna L TR	0.02/1,040.6	None	None
101-231-003 Southwest of Olmsted Road	State of California	0.22/9,547.8	None	None
101-231-006 Southwest of Olmsted Road	Vasu, Edward Barry, Donna L	0.03/1,147.9	None	None
101-231-004 Southwest of Olmsted Road	Butts, Hallock A, Rosemary Abbott	0.13/4,500.9	None	None
101-231-005 Southwest of Olmsted Road	City of Monterey & County of Monterey	0.38/16,664.6	None	None
259-011-064 Southwest of Olmsted Road	Tescher Christopher TR	0.06/2,458.1	None	None
259-011-027 Southeast of Olmsted Road	Knight, Christopher S	1.67/72,791.7	None	None
Totals	39 Parcels	8.81/350,446.1	0.05/1,951.9	0.06/2,510.6

Alternative 1 – Estimated Right of Way Acquisitions (State Route 68 and State Route 218 to State Route 68 and Ragsdale Drive)

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet	Permanent Slope Easement in Acres/Square Feet
012-601-033 Northwest of State Route 218	Monterey Peninsula Airport District	0.03/1378.9	None	None
012-601-034 Northwest of State Route 218	Monterey Peninsula Airport District	0.05/2480.1	None	None
259-031-003 Northeast of State Route 218	City of Monterey (Ryan Ranch Park)	0.58/25,076.9	None	1.61/70,138
259-011-082 Northeast of State Route 218	Property Owners Association	0.06/2,563	None	0.54/23,446
259-091-010 South of State Route 68	Paul Hiss	0.96/41,585.8	0.80/34,815.9	None
259-031-003 Northwest of Ragsdale Drive	City of Monterey	0.90/39,121.1	0.07/2,863.09	None
259-031-082 Northeast of Ragsdale Drive	Property Owners Association	0.52/22,437	None	None
259-071-008 Northeast of Ragsdale Drive	City of Monterey	0.66/28,354	None	None
259-091-010 Southwest of Ragsdale Drive	Paul Hiss	0.73/31,571.73	None	None
259-092-073 Southeast of Ragsdale Drive	Monterra Ranch Properties LLC	0.50/21,944.15	None	None
Totals	10 Parcels	4.98/216,513.8	0.90/37,679.0	2.15/93,584.1

Alternative 2 – Estimated Right of Way Acquisitions (State Route 68 and State Route 218 to State Route 68 and Ragsdale Drive)

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet	Permanent Slope Easement in Acres/Square Feet
012-601-034 Northwest of State Route 218	Monterey Peninsula Airport District	None	0.07/3,052.7	None
259-011-082 Northeast of State Route 218	Multiple Owners (2 Units)	0.69/30,406.6	None	0.10/4,409.6
259-031-003 Northeast of State Route 218	City of Monterey – Ryan Ranch Park	1.39/60,513.2	None	0.55/23,7743.3
259-071-008 Northeast of State Route 218	City of Monterey	0.20/8,806.9	None	None
259-031-082 Northeast of State Route 218	Property Owners Association	0.10/4,271	None	None
259-011-027 South of State Route 68	Knight, Christopher S	0.03/1,307.6	None	None
259-011-071 South of State Route 68	Hiss, Paul W 2001 Trust	0.94/40,079.4	None	None
259-091-010 South of State Route 68	Paul Hiss	0.41/18,027.3 0.07/3,100.1 0.01/627.4 2.64/115,030.1	None	None
259-092-073 South of State Route 68	Monterra Ranch Properties LLC	0.58/25,254.9	None	None
Totals	9 Parcels	7.07/307,424.7	0.07/3,052.7	0.65/28,186.9

Alternative 1 – Estimated Right of Way Acquisitions (State Route 68 and York Road)

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet
259-031-062 North and West of York Road	City of Monterey	0.07/3,145.4	None
259-181-008 North and West of York Road	Wilson Road Condominium Association Incorporated	0.35/15,429.6	0.52/22,664
173-071-042 North and East of York Road	County of Monterey	0.44/19,234.5	0.44/19,061.5
259-211-014 South and West of York Road	City of Monterey	0.13/5,669.6	0.21/9,360.7
259-231-027 South and East of York Road	City of Monterey	0.14/6,278.1	0.07/3,238.6
Totals	5 Parcels	1.14/49,757.3	1.24/54,324.9

Alternative 2 – Estimated Right of Way Acquisitions (State Route 68 and York Road)

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet
259-031-062 North and West of York Road	City of Monterey	0.70/30,434.4	None
259-181-008 North and West of York Road	Wilson Road Condominium Association Incorporated	0.90/39,023.1	0.55/23,833.0
173-071-042 North and East of York Road	County of Monterey	1.40/60,789.9	0.37/16,169.2
173-122-005 North and East of York Road	H2BMK	0.04/1,548,8	None
259-211-014 South and West of York Road	City of Monterey	0.80/35,009.1	0.19/8,535.6

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet
259-231-027 South and East of York Road	City of Monterey	0.89/38,950.6	0.07/3,160.82
Totals	6 Parcels	4.72/205,755.9	1.18/48,537.7

Alternative 1 – Estimated Right of Way Acquisition (State Route 68 and Pasadera Drive/Boots Road)

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet	Permanent Slope Easement (Acres/Square Feet)
173-071-056 Northwest of Pasadera Drive	New Cities Land Company Inc.	0.06/2,736.8 0.24/10,600.7	None	0.20/8,714.5 0.70/30,495.4 0.08/3,349.5
173-072-041 Northeast of Pasadera Drive	Pasadera Golf & Country Club	0.38/16,595.3	0.05/2,303.1	None
173-071-051 Northeast of Pasadera Drive	No Information	None	0.01/409.0	None
416-193-013 Southwest of Pasadera Drive	Lee, Lawrence E	None	None	0.08/3,550.2
416-193-015 Southwest of Pasadera Drive	Warren, Walter G & Loretta F	None	None	0.17/7,195.1
416-193-017 Southwest of Pasadera Drive	Mesa Hills West Homeowners Association	None	None	0.02/642.0
173-062-007 Southw West of Pasadera Drive	Wayland, F Warren, Marjorie H	None	None	0.13/5,668.0
173-062-006 Southwest of Pasadera Drive	Hallat, Robert Francis, Carly Renee	0.06/2,626.7	None	0.04/1,708.7
173-062-005 Southwest of Pasadera Drive	Bramers, John, B Janice	0.02/820.8	0.05/2,162.2	None
173-062-004 Southeast of Pasadera Drive	Bramers, John Tark, Jennifer	0.24/10,486.8	None	None

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet	Permanent Slope Easement (Acres/Square Feet)
Totals	10 Parcels	1.01/43,867.1	0.11/4,874.3	1.42/61,323.4

Alternative 2 – Estimated Right of Way Acquisition (State Route 68 and Pasadera Drive/Boots Road)

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Permanent Drainage Easement in Acres/Square Feet
173-071-056 Northwest of Pasadera Drive	New Cities Land Company Inc.	1.17/50,769.8	0.814/35,480.3
173-072-041 Northeast of Pasadera Drive	Pasadera Golf & Country Club LLC	1.53/66.529.0	None
416-193-013 Southwest of Pasadera Drive	Lee, Lawrence E	0.10/4,242.1	0.06/2,650.4
416-193-015 Southwest of Pasadera Drive	Warren, Walter G & Loretta F	None	0.17/7,226.4
416-193-017 Southwest of Pasadera Drive	Mesa Hills West Homeowners Association	0.00/4.9	0.02/643.4
173-062-007 Southwest of Pasadera Drive	Wayland, F Warren, Marjorie H	0.01/414.7	0.12/5,242.4
173-062-006 Southwest of Pasadera Drive	Hallat, Robert Francis, Carly Renee	0.41/1,764.2	0.04/1,810.5
173-062-005 Southwest of Pasadera Drive	Bramers, John, B Janice	0.04/1,789.6	None
173-062-004 Southeast of Pasadera Drive	Bramers, John Tark, Jennifer	0.04/1,803.3	None
173-062-003 Southeast of Pasadera Drive	Porter,Daniel Stewart, Debra R Sanders	0.21/9,063.5	None
173-062-002 Southeast of Pasadera Drive	Khiev, William Le, Juliette	0.18/7,617.3	None

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Permanent Drainage Easement in Acres/Square Feet
173-062-010 Southeast of Pasadera Drive	Khiev,William Le, Juliette	0.04/1,643.4	None
Totals	12 Parcels	3.71/145,641	1.22/53,053.5

Alternative 1 – Estimated Right of Way Acquisitions (State Route 68 and Laureles Grade Road)

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet
031-131-002 Northwest of Laureles Grade Road	County of Monterey	1.92/83,560.8	None
173-011-022 Southwest of Laureles Grade Road	Roman Catholic Bishop of Monterey	0.90/39,130.2	0.07/3,013.9
173-031-016 Southeast of Laureles Grade Road	Monterey County Regional Fire Protection	0.03/1,268.0	0.06/2,638.7
173-031-018 Southeast of Laureles Grade Road	Nghiem, Justine	0.15/6,724.4	None
Totals	4 Parcels	3.00/130,683.2	0.13/5,652.6

Alternative 2 – Estimated Right of Way Acquisitions (State Route 68 and Laureles Grade Road

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet
173-011-025 Northwest of Laureles Grade Road	County of Monterey	0.96/41,589.7	None
031-131-002 Northwest of Laureles Grade Road	County of Monterey	3.31/144,333.1	None
173-011-027 Southwest of Laureles Grade Road	Monterey County SPCA Inc.	0.29/12,542.4	None

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet
173-011-003 Southwest of Laureles Grade Road	Monterey County SPCA Inc.	0.09/3,732.4	None
173-011-005 Southwest of Laureles Grade Road	Roman Catholic Bishop of Monterey	0.04/1,908.5	None
173-011-022 Southwest of Laureles Grade Road	Roman Catholic Bishop of Monterey	2.20/95,739.6	None
173-031-016 Southeast of Laureles Grade Road	Monterey County Regional Fire Protection	0.03/1,154.7	0.02/784.0
173-031-018 Southeast of Laureles Grade Road	Nghiem, Justine	0.23/10,146.6	None
173-031-019 Southeast of Laureles Grade Road	Alvarez, Alan, Margaret	0.01/436.0	None
173-021-016 Southeast of Laureles Grade Road	Webb Sarah Elizabeth TR	0.02/808.4	None
173-021-015 Southeast of Laureles Grade Road	Justin D Farr Trust	0.02/1,025.1	None
173-021-013 South and East of Laureles Grade Road	Garneri, Domenico A	0.01/455.1	None
173-021-018 Southeast of Laureles Grade Road	Kubica Cheryl L TR	0.34/14,649.5	None
Totals	13 Parcels	7.52/328,521.0	0.02/784.0

Alternative 1 – Estimated Right of Way Acquisitions (State Route 68 and Corral De Tierra Road to State Route 68 and San Benancio Road)

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet
031-011-014 Northwest of Corral de Tierra Road	USA – Fort Ord National Monument	0.43/18,733.3	0.22/65,031.8

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet
161-251-011 Northeast of Corral de Tierra Road	Cypress Community Church	0.24/10,434.2	None
161-251-016 Northeast of Corral de Tierra Road	Tuttle, Thomas, Nancy	None	0.03/1,114.8
161-251-019 Northeast of Corral de Tierra Road	Small, Kelly P	0.04/1,812.0	0.07/3,195.6
161-251-018 Northeast of Corral de Tierra Road	Elizabeth Ward Trust	0.08/3,651.1	None
161-251-020 Northeast of Corral de Tierra Road	Sean and Amy Hillesheim	None	0.21/9,127.2
161-251-024 Northeast of Corral de Tierra Road	Alba, Janet Marie	0.15/6,610.55	0.41/17,870.8
161-642-019 Southwest of Corral de Tierra Road	Church, John P	0.01/250.9	None
161-571-002 Southeast of Corral de Tierra Road	Omni Resources LLC	0.16/6,827.4	None
161-571-003 Southeast of Corral de Tierra Road	Omni Enterprises LLC	0.12/5,295.5	None
161-541-001 Southeast of Corral de Tierra Road	Rancho El Torro Home Owner Association	None	0.43/18,787.1
161-061-003 Southeast of Corral de Tierra Road	McEldowney, L Hommedieu	None	0.17/7,571.4
161-061-015 Southwest of San Benancio Road	Harper Canyon Realty LLC	0.02/703.0	0.09/3,831.4
161-011-084 Southeast of San Benancio Road	Domain Corporation	0.25/10,877.99	None
Totals	14 Parcels	1.50/65,196.1	1.63/126,530.3

Alternative 2 – Estimated Right of Way Acquisitions (State Route 68 and Corral De Tierra Road to State Route 68 and San Benancio Road)

Assessor Parcel Numbers and General Locations	Parcel Owners	Permanent Acquisition in Acres/Square Feet	Temporary Construction Easement in Acres/Square Feet
031-011-014 Northwest of Corral de Tierra Road	USA – Fort Ord National Monument	1.97/86,023.7	0.09/3,975.0
161-251-011 Northeast of Corral de Tierra Road	Cypress Community Church	0.36/15,730.3	None
161-251-002 Northeast of Corral de Tierra Road	Antle, Mike V, Catherine R	0.05/2,274.9	None
161-251-015 Northeast of Corral de Tierra Road	Carranza, Charles G, Maricela	0.15/6,607.7	None
161-251-016 Northeast of Corral de Tierra Road	Tuttle, Thomas, Nancy	0.15/6,488.4	None
161-251-019 Northeast of Corral de Tierra Road	Small, Kelly P	0.21/9,057.0	0.04/1,512.7
161-251-018 Northeast of Corral de Tierra Road	Elizabeth Ward Trust	0.41/17,756.7	None
161-251-008 Northeast of Corral de Tierra Road	Julie Dalman &William Dalman RLT	0.02/763.3	None
161-641-014 Southwest of Corral de Tierra Road	Seeman, Ernest L	0.02/793.4	None
161-641-025 Southwest of Corral de Tierra Road	Weaver, Michael Robert	0.02/658.0	None
161-642-019 Southwest of Corral de Tierra Road	Church, John P	0.0021/92.0	None
161-571-002 Southeast of Corral de Tierra Road	Omni Resources LLC	0.07/3,067.4	None
161-571-003 Southeast of Corral de Tierra Road	Omni Enterprises LLC	0.38/16,151.4	None
161-571-001 Southeast of Corral de Tierra Road	Rancho El Torro Country Club	0.22/9,506.6	None
161-541-002 Southeast of Corral de Tierra Road	Rancho El Torro Home Owner Association	0.08/3,324.8	None

Assessor Parcel Numbers and General Locations	**Parcel Owners**	**Permanent Acquisition in Acres/Square Feet**	**Temporary Construction Easement in Acres/Square Feet**
161-541-003 Southeast of Corral de Tierra Road	Rancho El Torro Home Owner Association	0.12/5,165.1	None
161-541-001 Southeast of Corral de Tierra Road	Rancho El Torro Home Owner Association	0.43/18,911.7	0.21/9,102.8
161-061-003 Southeast of Corral de Tierra Road	McEldowney, L Hommedieu	0.29/12,773.3	None
161-061-015 Southeast of Corral de Tierra Road	Harper Canyon Realty LLC	0.06/2,494.3	None
161-011-084 Southeast of San Benancio Road	Domain Corporation	1.74/75,853.8	None
Totals	20 Parcels	6.74/293,493.9	0.24/10,615.4

Appendix K List of Technical Studies

The following studies and/or technical reports have been prepared and are incorporated by reference into this Draft Environmental Impact Report/ Environmental Assessment.

Air Quality and Greenhouse Gas Technical Memorandum, dated July 28, 2023

Community Impact Assessment, dated September 2023

Cumulative Impacts Analysis Technical Report, dated October 2023

Hazardous Waste Initial Site Assessment, dated September 26, 2023

Induced Traffic Demand Memorandum, dated September 25, 2020

Location Hydraulic Study, dated December 21, 2020

Location Hydraulic Study Addendum, dated September 28, 2023

Natural Environment Study, dated October 2023/ Jurisdictional Delineation Report, dated September 2023

Noise Abatement Decision Report, dated July 2023

Noise Study Report, dated June 2023

Paleontological Identification Report/Paleontological Evaluation Report, dated July 2023

Traffic Operations Analysis Report, dated September 30, 2020, revised December 3, 2020

Traffic Operations Analysis Report Addendum, dated August 2023

Visual Impact Assessment, dated October 2, 2023

Water Quality Technical Memorandum, dated July 27, 2023

To obtain a copy of one or more of these reports, please send your request to:

Matt Fowler, Senior Environmental Planner at 805-779-0793 or by email at matt.c.fowler@dot.ca.gov.

Please indicate the project name and project identifying code (under the project name on the cover of this document) and specify the technical report or document you would like. Provide your name and email address or U.S. Postal Service mailing address (street address, city, state, and zip code).

The following reports were also prepared for the project to document cultural resources. Please note, many State and federal laws limit the disclosure of sensitive cultural and tribal resource information to the public. Additional information regarding confidentiality of these resources can be found in the Standard Environmental Reference Volume 2 in Section 3.4.13 and Section 5.3.6.

Historical Property Survey Report, dated July 2023

Historic Resource Evaluation Report, dated August 2020

Archaeological Survey Report, dated March 2020

Supplemental Archaeological Survey, Extended Phase I and Phase II Testing Report, dated December 2021.