Solomon Canyon Rumble Strip/Shoulder Widening

On State Route 1 in Santa Barbara County
between Solomon Canyon Road and State Route 166
05-SB-1-PM R36.3/49.2
05-1H610, 0516000097
State Clearinghouse Number: 2021020247

Initial Study with Mitigated Negative Declaration

Prepared by the
State of California Department of Transportation

July 2021

Caltrans

General Information About This Document

The California Department of Transportation (Caltrans) has prepared this Initial Study with Mitigated Negative Declaration for the project located in Santa Barbara County, California. Caltrans is the lead agency under the National Environmental Policy Act (NEPA) and under the California Environmental Quality Act (CEQA).

The document tells you why the project is being proposed, what alternatives have been considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

The Initial Study circulated to the public for 30 of days between February 11, 2021 and March 12, 2021. Comments received during this period are included in Appendix F, and appropriate sections of the document have been updated as needed.

Additional copies of this document and the related technical studies are available for review at the 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

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: Jason Wilkinson, Central Region Environmental, 50 Higuera Street, San Luis Obispo, California 93401; phone 805-540-9165 (Voice), or use the California Relay Service 1-800-735-2929 (TTY), 1-800-735-2929 (Voice), or 711.

05-SB-1-R36.3/49.2
EA: 05-1H610, Project ID: 0516000097
State Clearinghouse Number: 2021020247

Widen shoulders and install rumble strips on State Route 1
from post miles R36.3 to 49.2 in Santa Barbara County

INITIAL STUDY
with Mitigated Negative Declaration

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation
Responsible Agencies: California Transportation Commission

John Luchetta
Office Chief, Central Region
Environmental Central Coast Office
California Department of Transportation
CEQA Lead Agency

July 1, 2021
Date

The following individual can be contacted for more information about this document:

Jason Wilkinson, 50 South Higuera Street, San Luis Obispo, California 93401, telephone: 805-540-9165

State Clearinghouse Number: 2021020247

Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to reduce the number and severity of roadway departure collisions in Santa Barbara County on State Route 1 from Solomon Road near the town of Orcutt to the intersection with State Route 166 in the city of Guadalupe. The project would widen shoulders, install edge-line rumble strips, raise the profile of the road at two critical points, extend the existing culverts, and relocate utility poles and other fixed objects outside of the clear recovery zone.

Determination

Caltrans has prepared an Initial Study for this project and, following public review, has determined from this study that the project would not have a significant effect on the environment for the following reasons:

The project would have no effect on energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, or wildfire.

The project would have less than significant effects to aesthetics, agriculture and forest resources, air quality, cultural resources, greenhouse gas emissions, and utilities and service systems.

The project would have no significant adverse effect on biological resources because the following mitigation measures would reduce potential effects to less than significant:

- To compensate for impacts to jurisdictional waters, mitigation at a 1 to 1 ratio for temporary impacts and a 3 to 1 ratio for permanent impacts to riparian vegetation via restoration is proposed.

- To compensate for impacts to the California tiger salamander and California tiger salamander habitat, Caltrans will purchase 17.4 credits at a California Endangered Species Act-certified and California Department of Fish and Wildlife-approved Conservation Bank (La Purisima Bank).

John Luchetta
Office Chief, Central Region
Environmental Central Coast Office
California Department of Transportation

July1, 2021
Date

Table of Contents

List of Figures

List of Tables

Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration, is the lead agency under the National Environmental Policy Act (NEPA). Caltrans is the lead agency under the California Environmental Quality Act (CEQA).

Caltrans proposes to reduce the number and severity of roadway departure collisions in Santa Barbara County on State Route 1 from Solomon Road near the town of Orcutt to its intersection with State Route 166 in the city of Guadalupe (approximately 9.5 miles). See Figures 1-1 and 1-2 for the project location and vicinity maps.

The project would widen shoulders, install edge-line rumble strips, raise the profile of the road at two critical points, extend the existing culverts, and relocate utility poles and other fixed objects outside of the clear recovery zone. The project would require right-of-way acquisition, utility easements, and construction easements.

The project was programmed in the 2018 State Highway Operation and Protection Program and amended in the 2020 State Highway Operation and Protection Program with funding from the 201.015 Collision Severity Reduction Program. The project is included in the Santa Barbara County Association of Governments' approved 2019 Federal Transportation Improvement Program under EA 05-1H610 and in the Santa Barbara County Association of Governments' approved 2040 Regional Transportation Plan (2017).

Construction is currently scheduled to begin in summer 2024 and is estimated to cost $19,780,000.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the project is to reduce the number and severity of roadway departure crashes within this segment of the State Route 1 by widening shoulders, installing edge-line rumble strips, and relocating fixed objects outside of the clear recovery zone.

Figure 1-1 Project Vicinity Map

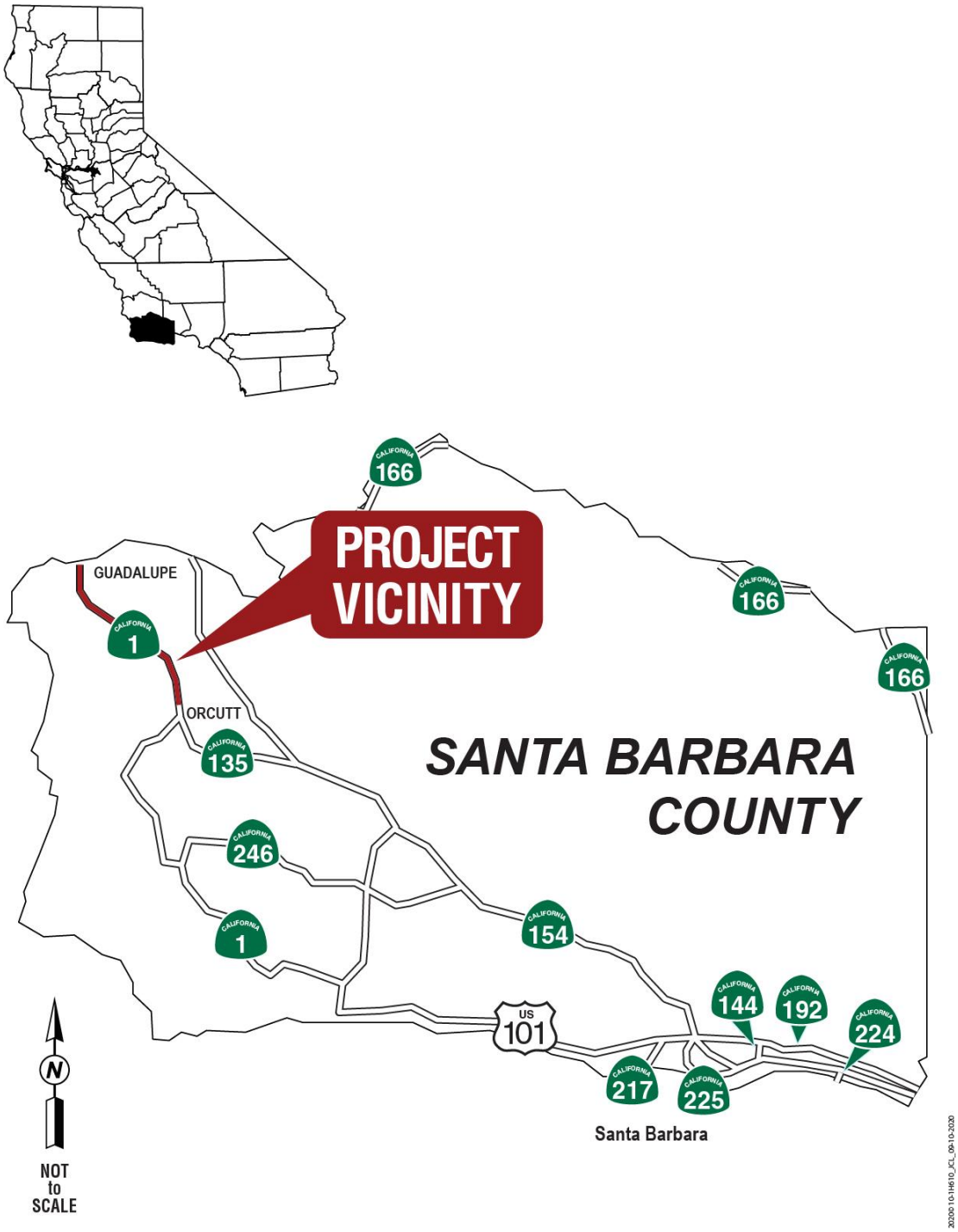
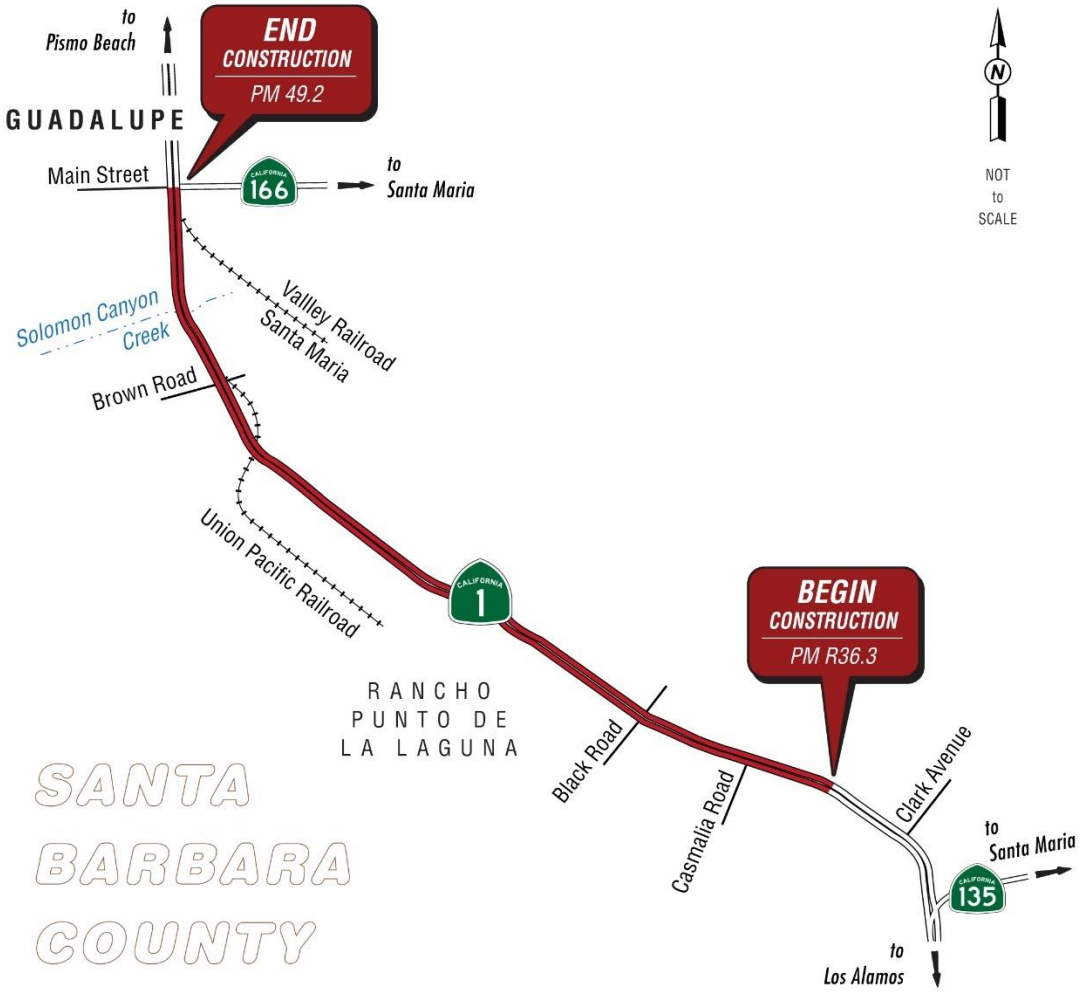


Figure 1-2 Project Location Map



1.2.2 Need

The project is needed is to address collision rates within the project limits that exceed statewide rates for similar facilities. Within the project limits, shoulders are narrow or absent, and fixed objects sit within the clear recovery zone. The project was identified in the California Roadway Departure Safety Implementation Plan, which was created based on guidelines from the Federal Highway Administration Roadway Departure Safety Program.

1.3 Project Description

The project would make improvements to State Route 1 in Santa Barbara County, east of Santa Maria and north of the town of Orcutt. Within the project limits, State Route 1 is a two-lane undivided highway with 12-foot lanes and 0.5- to 1-foot non-standard shoulders. The purpose of the project is to reduce the number and severity of roadway departure crashes within this segment of the highway.

Within the project limits are three at-grade intersections: Solomon Road (post mile 36.3), Black Road (post mile 41.8), and Brown Road (post mile 47.2). The project area consists of 9.5 miles of two-lane highway passing through rich agricultural land on which high-value crops are grown year-round. Two bridges occur within the project area: Waldorf Overhead Bridge at post mile 46.4, which is used by the Union Pacific Railroad, and Solomon Canyon Creek Bridge at post mile 47.9, which crosses over Solomon Canyon Creek.

The project would widen shoulders to 8 feet between Solomon Canyon Road and Black Road and widen shoulders to 5 feet between Black Road and State Route 166, as recommended by Traffic Safety. It would also replace guardrail at spot locations that Traffic Safety deems necessary as a preventative measure in areas with steep side slopes or fixed objects. A historic concrete box culvert at post mile 42.7 would be extended as part of the shoulder widening work. The project would also raise the profile of the highway, gradually up to 5 feet, at two locations (post miles 40.5 and 41.4) that are susceptible to flooding. An exclusionary berm feature will be installed on the southern side of the highway between post miles 42.1 and 42.2 to impede California tiger salamander movement across the highway.

Other work includes extending and/or replacing 35 culverts to meet new slopes, constructing or modifying existing V-ditches, relocating utility poles and other fixed objects from the clear recovery zone, and installing centerline and edge-line rumble strips.

Right-of-way acquisition would be required for the shoulder widening and for a separate utility easement. Existing utility poles, fences, and other fixed objects would be relocated to outside of the clear recovery zone. A temporary construction easement is required to reconstruct the driveways and access roads at the locations where the profile would be raised due to flooding.

1.4 Project Alternatives

Two alternatives are under consideration: a Build Alternative and a No-Build (No-Action) Alternative.

1.4.1 Build Alternative

This alternative would widen shoulders to 8 feet between Solomon Canyon Road and Black Road and widen shoulders to 5 feet between Black Road and State Route 166. It would also replace guardrail at spot locations in areas with steep side slopes. A historic-era concrete box culvert at post mile 42.7 would be extended as part of the shoulder widening work. The project would also raise the profile of the highway, gradually up to 5 feet, at two locations (post miles 40.5 and 41.4) where there has been flooding.

The Build Alternative would also extend and/or replace 35 culverts to meet new slopes (see Table 1-1), construct or modify existing V-ditches, relocate utility poles and other fixed objects from the clear recovery zone, and install centerline and edge-line rumble strips.

Table 1-1 Proposed Culvert Rehabilitation Locations

Post Mile	Size and Material	Culvert Modification
36.45	24-inch Reinforced Concrete Pipe	Extend pipe and modify inlet
40.53	Two 30-inch Corrugated Steel Pipes	Replace and extend with two 36-inch reinforced concrete pipes at existing elevation
40.85	36-inch Corrugated Steel Pipe	Replace and extend with 36-inch reinforced concrete pipes and reconstruct headwalls
41.09	24-inch Corrugated Steel Pipe	Replace and extend with 24-inch reinforced concrete pipe and reconstruct headwalls
41.41	72-inch Corrugated Steel Pipe	Replace and extend with 72-inch reinforced concrete pipe and reconstruct headwall at existing elevation
41.42	24-inch Corrugated Steel Pipe	Replace and extend with 24-inch reinforced concrete pipe and reconstruct headwall
41.66	42-inch Corrugated Steel Pipe	Extend with 42-inch reinforced concrete pipes and reconstruct headwalls
42.00	72-inch Corrugated Steel Pipe	Replace with 72-inch reinforced concrete pipe and reconstruct headwall
42.13	24-inch Corrugated Steel Pipe	Replace and extend with 36-inch reinforced concrete pipe and reconstruct headwall
42.70	54-inch Corrugated Steel Pipe	Extend with 54-inch corrugated steel pipe and reconstruct headwall
42.73	6-foot by 7-foot Concrete Box	Extend pipe

Post Mile	Size and Material	Culvert Modification
42.39	30-inch Corrugated Steel Pipe	Extend 30-inch corrugated steel pipe and reconstruct headwall
43.21	24-inch Corrugated Steel Pipe	Extend with 24-inch corrugated steel pipe and reconstruct headwall
43.39	24-inch Corrugated Steel Pipe	Extend with 24-inch corrugated steel pipe and reconstruct headwall
43.59	30-inch Corrugated Steel Pipe	Extend with 30-inch corrugated steel pipe and reconstruct headwall
43.94	66-inch Corrugated Steel Pipe	Reconstruct headwall
44.06	18-inch Corrugated Steel Pipe	Extend pipe and reconstruct headwall
44.19	24-inch Corrugated Steel Pipe	Replace with 36-inch reinforced concrete pipe and reconstruct headwall
44.31	24-inch Corrugated Steel Pipe	Extend 24-inch Corrugated Steel Pipe
44.70	48-inch Corrugated Steel Pipe	Extend 48-inch Corrugated Steel Pipe and reconstruct headwall
44.91	24-inch Corrugated Steel Pipe	Extend 24-inch Corrugated Steel Pipe and reconstruct headwall
45.01	48-inch Corrugated Steel Pipe	Extend 48-inch Corrugated Steel Pipe and reconstruct headwall
45.19	48-inch Corrugated Steel Pipe	Extend 48-inch Corrugated Steel Pipe and reconstruct headwall
45.31	18-inch Corrugated Steel Pipe	Extend 18-inch Corrugated Steel Pipe and reconstruct headwall
45.66	54-inch Corrugated Steel Pipe	Extend pipe and reconstruct headwall
45.69	18-inch Corrugated Steel Pipe	Extend 18-inch Corrugated Steel Pipe and reconstruct headwall
45.83	30-inch Corrugated Steel Pipe	Replace with 30-inch reinforced concrete pipe and reconstruct headwall
46.11	30-inch Corrugated Steel Pipe	Extend 30-inch Corrugated Steel Pipe and reconstruct headwall
46.16	48-inch Corrugated Steel Pipe	Replace and extend with 48-inch reinforced concrete pipe and reconstruct headwall
46.52	72-inch Corrugated Steel Pipe	Replace with 72-inch reinforced concrete pipe and reconstruct headwall

Post Mile	Size and Material	Culvert Modification
46.73	18-inch Corrugated Steel Pipe	Replace and extend 24-inch reinforced concrete pipe and reconstruct headwall
47.12	30-inch Corrugated Steel Pipe	Replace and extend with 30-inch reinforced concrete pipe and reconstruct headwall
47.20	18-inch Corrugated Steel Pipe	Replace with 24-inch reinforced concrete pipe; reconstruct headwall (2)
48.63	36-inch Corrugated Steel Pipe	Extend 36-inch Corrugated Steel Pipe

This project contains a number of 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 in Chapter 2.

1.4.2 No-Build (No-Action) Alternative

This alternative would leave the roadway as it is. No improvements would be made, super-elevation rates would remain nonstandard, and run-off-the-road collisions would not be addressed.

[The following heading and paragraph about a preferred alternative have been added since the draft environmental document was circulated.]

1.5 Identification of a Preferred Alternative

The Build Alternative as described in Section 1.4.1 has been identified as the preferred alternative because it meets the purpose and need of the project.

1.6 Alternatives Considered but Eliminated from Further Discussion Prior to the Draft Initial Study

The following alternatives were considered but eliminated from further discussion, for the reasons stated.

Alternative 2 proposed uniform 5-foot shoulders from Solomon Canyon Road to State Route 166. This alternative was eliminated due to the low probability of obtaining an additional required design exception for non-standard shoulder width throughout the project length. The cost reduction is negligible from the Build Alternative that proposes to widen a portion of the project limit to standard widths.

Alternative 3 proposed uniform 8-foot shoulders from Solomon Canyon Road to State Route 166. Extending the project scope to widen the shoulders to 8 feet beyond Black Road would greatly increase the project cost due to the need of extending culverts, relocating utility poles and other fixed objects, removing and replacing fences and gates, and realigning road access and driveways. This alternative would require more right-of-way acquisition and result in extensive environmental impacts and mitigation.

1.7 Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with the California Environmental Quality Act (CEQA) and other state laws and regulations. Separate environmental documentation, supporting a Categorical Exclusion determination, will be prepared in accordance with the National Environmental Policy Act. When needed for clarity, or as required by the California Environmental Quality Act, this document may contain references to federal laws and/or regulations (the California Environmental Quality Act, for example, requires consideration of adverse effects on species identified as a candidate, sensitive, or special-status species by the U.S. National Marine Fisheries Service and the U.S. Fish and Wildlife Service—in other words, species protected by the Federal Endangered Species Act).

1.8 Permits and Approvals Needed

The following permits, licenses, agreements, and certifications are required for project construction:

Agency	Permit/Approval	Status
U.S. Fish and Wildlife Service	Formal Section 7 Consultation for the California red-legged frog, California tiger salamander, and California tiger salamander critical habitat, and La Graciosa thistle critical habitat	The Biological Opinion was received on June 4, 2021
California Department of Fish and Wildlife	Section 2080.1 Consistency Determination for the California tiger salamander	Section 2080.1 Consistency Determination expected after final environmental document approval
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement for impacts to “Waters of the State”	To be obtained before construction
U.S. Army Corps of Engineers	Section 404 Nationwide Permit for impacts to jurisdictional “other waters”	To be obtained before construction
Central Coast Regional Water Quality Control Board	Section 401 Certification for impacts to “Waters of the State”	To be obtained before construction

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. So, there is no further discussion of these issues in this document.

- Existing and Future Land Use—Widening the shoulders and installing rumble strips is not expected to change or affect existing or future land use in the area, and would be consistent with existing state, regional, and local plans and programs.
- Consistency with State, Regional, and Local Plans and Programs—The project is consistent with local policy documents. (Santa Barbara County Association of Governments' approved 2040 Regional Transportation Plan)
- Coastal Zone—There will be no effects to coastal resources because the project is not located within the coastal zone based on California Coastal Commission coastal zone maps.
- Wild and Scenic Rivers—There are no Wild and Scenic Rivers subject to the National Wild and Scenic Rivers Act (16 U.S. Code 1271) and the California Wild and Scenic Rivers Act (California Public Resources Code Section 5093.50 et seq.) within or near the project area.
- Parks and Recreational Facilities—The project would not impact any parks or public recreational facilities. A golf course along the highway between post miles 40.4 and 41.1 is not protected by the Park Preservation Act because it is privately owned. (Project Plans)
- Timberland—The project site is not within, next to, or in the vicinity of any timberlands, and it would not impede access to existing timberlands. Therefore, there would be no effects on timberlands.
- Growth—The project would not increase capacity of the roadway and is not expected to negatively affect growth. (Project Description)
- Community Character and Cohesion—Due to the rural nature of the surrounding area, no community resources or public facilities or services are near the project location. Therefore, the project has no potential to affect community character and cohesion. (Project Plans)
- Relocations and Real Property Acquisition—The project would not require any residential or non-residential relocations or real property acquisition.

Partial property acquisition of farmland is discussed in section 2.1.1 Farmland. (Draft Project Report)

- Environmental Justice—No minority or low-income populations would be adversely affected by the project. Therefore, the project is not subject to the provisions of Executive Order 12898.
- Traffic and Transportation/Pedestrian and Bicycle Facilities—The project would have no adverse impact on modes of transportation. The widened shoulders would improve this segment of the Pacific Coast Bike Route for ease of use for all travelers. (Project Report)
- Cultural Resources—No known archaeological historic resources or architecturally historic resources would be impacted by the project. (Historic Property Survey Report, February 2020)
- Tribal Cultural Resources—No known tribal cultural resources would be impacted by the project. (Historic Property Survey Report, February 2020)
- Hydrology and Floodplain—The project would not alter flood sources or expose residences, buildings, or crops to flooding in the Orcutt Creek floodplain. (Location Hydraulic Study, September 2020)
- Water Quality and Storm Water Runoff—No long-term water quality impacts are expected. A Storm Water Pollution Prevention Plan would be prepared, and Temporary Construction Site Best Management Practices are proposed. (Water Quality Assessment, July 2020)
- Geology, Soils, Seismicity and Topography—The project would raise the roadway profile by 5 feet at two locations to address potential for flooding; most of the project would involve stable 4-to-1 fill slopes. There would be no increased risk of seismic activity. (Preliminary Geotechnical Design Report, July 2020)
- Paleontology—The project site has no probability of encountering paleontological resources. (Paleontology Review Memo, April 2020)
- Hazardous Waste and Materials—The issues identified in the Initial Site Assessment are routine construction issues that are handled in the construction contract through the inclusion of standard special provisions. This project can proceed with very little risk of impact due to unanticipated hazardous waste or other contamination-related issues. (Revised Initial Site Assessment, June 2020)
- Air Quality—No further air quality analysis is necessary. Caltrans Standard Specifications pertaining to dust control and dust palliative requirement are a required part of all construction contracts and would effectively reduce and control any emission impacts during construction. (Air Quality Technical Memo, September 2020)
- Noise—The project is not considered Type 1 under the National Environmental Policy Act, and no further noise analysis is necessary. Caltrans Standard Specifications to minimize noise and vibration

disturbance would be implemented during construction. (Noise Technical Memo, September 2020)

- Energy—The project would not cause the unnecessary consumption of energy resources because any increased energy consumption would be temporary and limited to construction.
- Wildfire—The project is not in an area where the fire danger is classified as very high or extreme based on California Fire Hazard Severity Zone mapping. The project would not affect the risk or response to wildfire and would not impair emergency response efforts or exacerbate wildfire risks.
- Plant Species—Botanical surveys were conducted within the Biological Study Area in May 2016 and April, May, June, and August of 2019. While potential habitat occurs within the Biological Study Area for several taxa, none were observed within the Biological Study Area and none are anticipated to occur. (Natural Environment Study, October 2020)
- Natural Communities—Based on botanical surveys and wetland delineation surveys, it was determined that regional habitats of concern were absent from the Biological Study Area. (Natural Environment Study, October 2020)

2.1 Human Environment

2.1.1 Farmland

Regulatory Setting

The National Environmental Policy Act and the Farmland Protection Policy Act (7 U.S. Code 4201-4209; and its regulations, 7 Code of Federal Regulations Part 658) require federal agencies, such as the Federal Highway Administration, to coordinate with the Natural Resources Conservation Service if their activities may irreversibly convert farmland (directly or indirectly) to nonagricultural use. For purposes of the Farmland Protection Policy Act, farmland includes prime farmland, unique farmland, and land of statewide or local importance.

The California Environmental Quality Act requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to discourage the early conversion of agricultural and open space lands to other uses.

Affected Environment

This section is based on the Community Impacts Assessment that was completed for the project on September 3, 2020. Assessor's Parcel Numbers are used to identify properties in this section.

The project is in a rural setting in northern Santa Barbara County. A review of public land use data identified agricultural land uses next to the project site. Agriculture, open space and recreation, larger-lot residences and various industries make up much of the land use.

Several planned residential subdivisions and golf resorts have been constructed north of the project site on the Nipomo Mesa and are continuing to be developed. The Rancho Maria Golf Course is at post mile 40.8 on State Route 1 and is visible from the highway. Although the region is becoming more suburbanized, the area still maintains much of its rural character, due in large part to the abundant cropland, open space, riparian areas and dunes.

[The following Farmland Classification section, including an updated Table 2-1 and new Figure 2-1, has been added to the document since the draft environmental document was circulated.]

Farmland Classification

The federal process for assessing farmland impacts is guided by provisions of the Farmland Protection Policy Act, which calls for completion of Form CPA-106 Farmland Conversion Impact Rating for Corridor Projects. The signed form is provided in Appendix E. The U.S. Department of Agriculture Natural Resources Conservation Service office in Santa Maria assisted in the completion of Form CPA-106 for the Build Alternative.

Farmland of statewide or local importance is farmland other than prime or unique, that is of statewide or local importance for the production of food feed, fiber, forage or oilseed crops, as determined by the state. Prime farmland is defined as land that has the best combination of physical and chemical characteristics for the production of food feed, fiber, forage or oilseed crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops.

In California, farmland is classified by the California Department of Conservation through the Farmland Mapping and Monitoring Program (see Figure 2-1 for details on farmland classification in the project). These classifications are based on soil quality and irrigation status. According to the Department of Conservation County Land Use Conversion Table, Santa Barbara County reported a total of 704,556 acres of agricultural land in 2018.

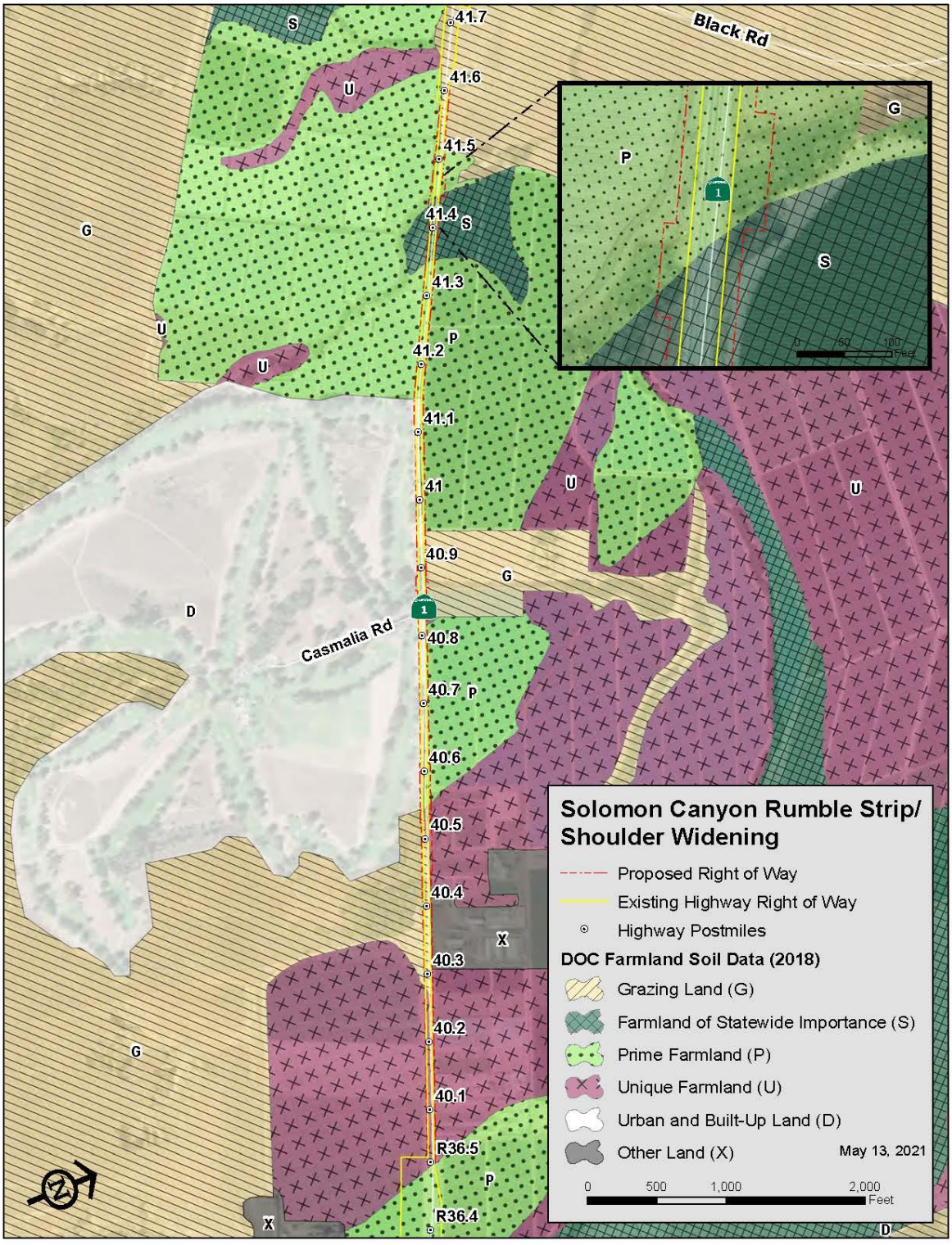
Of that total, 577,032 acres of grazing land were identified, and the remaining 127,524 acres were identified as important farmland, which includes, prime farmland, farmland of statewide importance, unique farmland, and farmland of local importance.

Table 2-1 lists parcels with proposed property acquisition by Assessor's Parcel Number, farmland classification, total property in acres, and the acres proposed for acquisition.

Table 2-1 Farmland Acquisition for the Project

Assessor's Parcel Number	Farmland Classification	Total Property (acres)	Proposed Acquisition (acres)
111-240-024	Prime Farmland, Unique Farmland	234.39	0.46
111-240-025	Unique Farmland	20.00	0.30
111-240-026	Prime Farmland, Unique Farmland, Other Land	20.00	0.30
111-240-018	Prime Farmland, Farmland of Statewide Importance	105.32	0.92
111-240-030	Grazing Land	145.95	0.08
113-250-008	Grazing Land	2.00	0.06
113-250-011	Unique Farmland, Grazing Land, Other Land	261.21	0.38
113-250-014	Urban and Built-Up Land	129.60	1.35
113-250-015	Urban and Built-Up Land	12.48	0.04
113-250-016	Grazing Land	106.72	0.234
113-250-017	Urban and Built-Up Land	70.00	0.40
113-250-018	Prime Farmland, Farmland of Statewide Importance	639.54	0.52

Figure 2-1 Farmland Mapping and Monitoring Program Classification Map



Williamson Act Land

The Williamson Act protects farmlands from being developed through the promotion of farmland conservation and providing the Williamson Act contract holder financial incentives to maintain the farmland for agricultural use. Certain criteria need to be met before any Williamson Act-protected land may be impacted by a project. Criteria applicable for the Solomon Canyon Rumble Strip/Shoulder Widening project are listed below.

> *The Williamson Act, California Government Code Section 51292, prohibits a public agency from acquiring farmland within an agricultural preserve unless the following are made:*
>
> *a) The location is not based primarily on a consideration of the lower cost of acquiring land in an agricultural preserve.*
> *b) If the land is an agricultural land covered under a Williamson Act Contract, that there is no other land within or outside the preserved on which it is reasonably feasible to locate the public improvement.*

Environmental Consequences

The project and project-related construction activities are not expected to prevent the continuation of existing farmland activities in the area. However, construction activities may temporarily generate dust that could be carried by the wind and settle on nearby farms.

[The following paragraph has been revised, and the next two figures have been added, since the draft environmental document was circulated.]

The project would widen shoulders, extend culverts, and raise the profile of the road at two points on State Route 1, which would require partial property acquisition of 12 parcels, 6 of which are classified as prime farmland, unique farmland, or land of statewide or local importance. Figures 2-2 and 2-3 show the proposed property acquisition for the project.

Figure 2-2 Property Acquisition Map 1

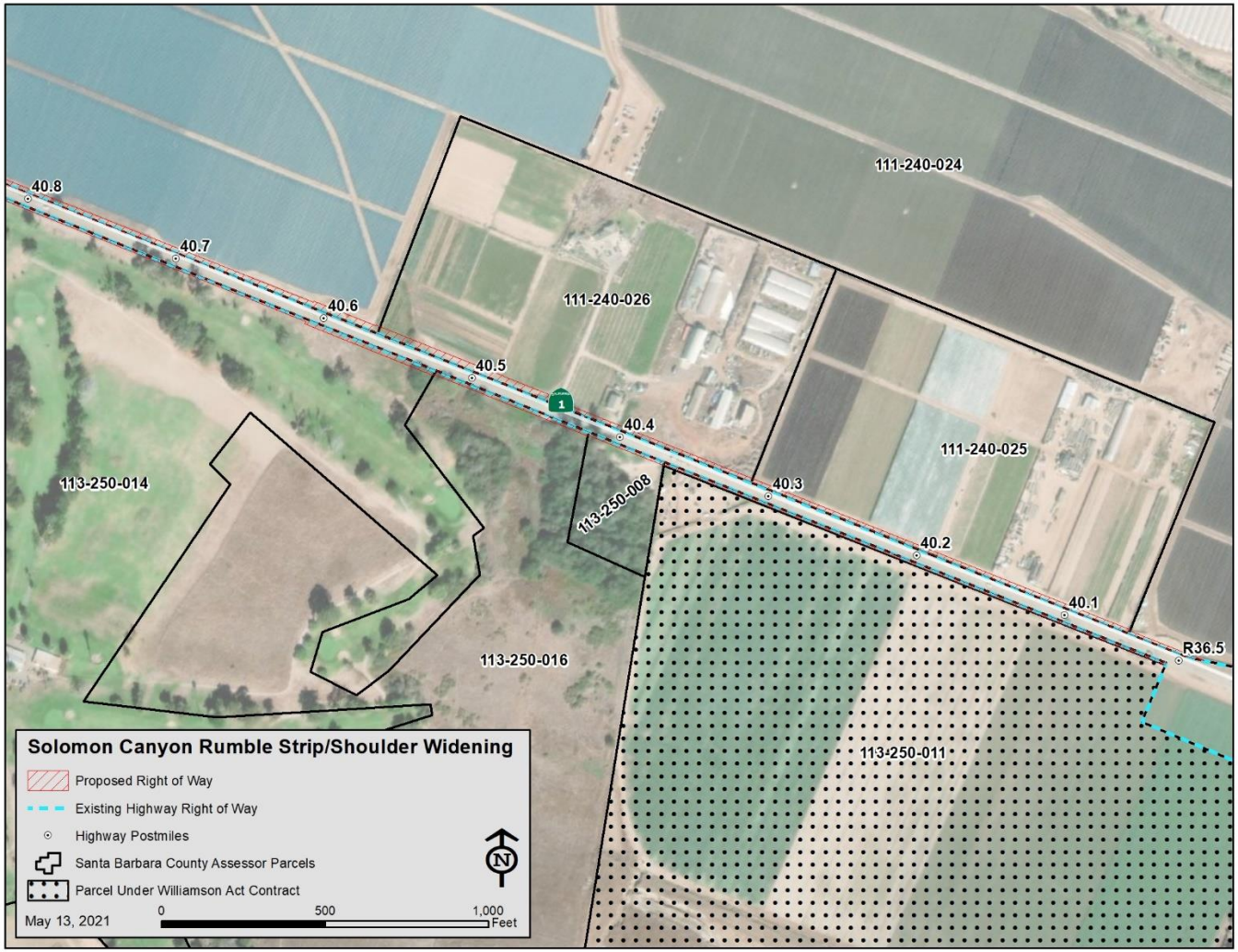
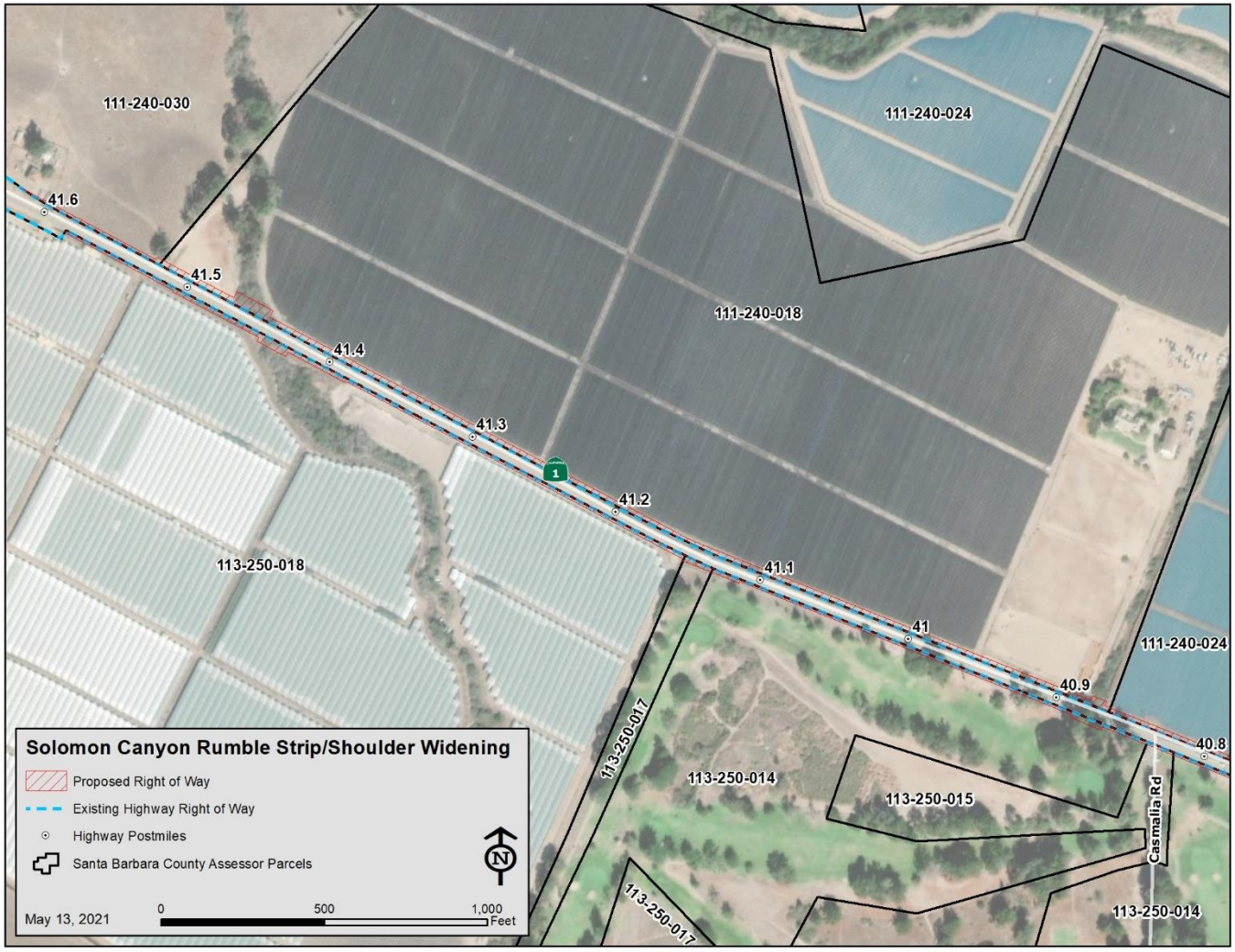


Figure 2-3 Property Acquisition Map 2



[The following three paragraphs have been added or revised since the draft environmental document was circulated.]

A Natural Resources Conservation Service Form CPA-106 (Farmland Conversion Impact Rating for Corridor Projects) was completed to evaluate farmland impacts as a result of the preferred Build Alternative. The site assessment evaluation is based on criteria such as the percentage of a site being farmed, the protection provided by state and local governments, and the availability of agricultural support services nearby. The form assigns the affected farmland a combined score of up to 260 points, composed of up to 100 points for relative value and up to 160 points for the site assessment. A score of 160 points is used as the minimum impact rating indicator for the Natural Resources Conservation Service and others to evaluate and consider the impacts to farmland as a result of a proposed alternative. For scores 160 and above, there is the potential for an adverse impact.

In December 2020, a Natural Resources Conservation Service Form CPA-106 was submitted to the Natural Resources Conservation Service in Santa Maria (see form in Appendix E). The Build Alternative resulted in a Farmland Conversion Impact Rating score of 116 points. Natural Resources Conservation Service farmland conversion guidance indicates that sites scoring less than 160 points do not require further consideration for protection or additional evaluation.

The project would require approximately 5 acres of land to be converted to transportation use. Form CPA-106 identified 2.6 acres of this land as prime and unique farmland and 0.3 acre as statewide and local important farmland. This represents a 0.00002% reduction in important farmland in Santa Barbara County. This loss of property is not expected to prevent the continuation of agricultural practices on these properties.

Williamson Act Land

Within the limits of the project, only one farmland property possesses a Williamson Act contract, identified as Assessor's Parcel Number 113-250-011. The property sits on the southbound side of State Route 1 from post mile 36.2 to post mile 40.35 and shares its eastern boundary line with the existing right-of-way. The property is approximately 261.21 acres. The project would require acquisition of approximately 0.38 acre from the eastern extent of the property and result in the loss of less than 0.01% of the existing property.

The project would acquire 0.38 acre of Williamson Act contract land and over 4 acres of land that is not under a Williamson Act contract. The decision to widen shoulders at this location was not based on the lower cost of acquiring land in an agricultural preserve.

This property is next to State Route 1 at the beginning of the project limits near the highway's intersection with Solomon Canyon Road, where the

project would widen the highway in both directions. Shifting the entire alignment of the highway to avoid the partial acquisition of Assessor's Parcel Number 113-250-011 is not feasible.

The project is not expected to prevent the property from maintaining its Williamson Act contract, and it would not adversely affect farmland properties. The project would comply with the California Environmental Quality Act guidelines because it would not result in the cancellation of a Williamson Act contract for parcels exceeding 100 acres.

Avoidance, Minimization, and/or Mitigation Measures

Adequate compensation would be provided for property acquisition, including relocation assistance for residents and businesses as required by law. Caltrans Right-of-Way agents would work with affected property owners to address issues of concern and compensation for their property's fair market value and any temporary loss of production due to the project. Projects under a Williamson Act contract would need to comply with all conditions of the act including, but not limited to, the following:

- California Government Code Section 51291(c): When land in an agricultural preserve is acquired by a public entity, the public entity will notify the Director of Conservation within 10 working days. The notice will include a general explanation of the decision and the findings made pursuant to Section 51292.

- California Government Code Section 51291(d): If, after giving the notice required under subdivision (c) and before the project is completed within an agricultural preserve, the public agency or person proposes any significant change in the public improvement, it will give notice of the changes to the Director of Conservation and the local governing body responsible for the administration of the preserve. Within 30 days thereafter, the Director of Conservation and the local governing body may forward to the public agency or person their comments with respect to the effect of the change to the public improvement on the land within the preserve and the compliance of the changed public improvements with this article. Those comments will be considered by the public agency or person, if available within the time limits set by this subdivision.

The following avoidance and minimization measures would be implemented to address potential impacts on farmland resources:

1. The project would limit the amount of right-of-way that is acquired from nearby farmland properties; it would acquire only right-of-way that is necessary for project completion.

2. To the extent possible, construction-related storage, staging, and access would avoid properties that are currently involved in agricultural activities or properties that are identified as prime farmland.

3. Infill materials that would be used in the project would not be obtained from borrow sites that contain prime farmland.

4. Areas next to farmland properties that are disturbed during construction would be re-stabilized using native vegetation and soils that are clear of invasive plant species at the end of construction. Soil amendments, if used, must comply with the requirements of the California Food and Agricultural Code. Soil amendments must not contain paint, petroleum products, pesticides, or any other chemical residues that are harmful to animal life or plant growth.

5. When selecting sites for other project-related mitigations (e.g., wetland restoration, replanting, etc.), the project would avoid prime farmland to the extent possible.

6. Construction activities would be coordinated with local farmland operators to ensure that access to nearby farmland properties is maintained during project construction.

2.1.2 Utilities and Emergency Services

Affected Environment

This section is based on the Draft Project Report that was completed for the project in September 2020.

Utilities

Overhead utility lines and utility poles that provide electrical service and an underground high-pressure gas line run along the highway for most of the project length. Toward the end of the project limits are two underground high-pressure gas lines, a subsurface fiber optic line that runs from Brown Road to State Route 166, a Union Oil wastewater line, and an underground PG&E conduit. There are also two abandoned Chevron lines: a water line that runs along State Route 166 at the end of the project and an oil pipeline that runs along State Route 1 on the south side from State Route 166 for about 200 feet before crossing toward the railroad tracks.

Emergency Services

Emergency services in the project vicinity are provided by the Guadalupe Fire Department, Guadalupe Police Department, Santa Barbara County Sheriff, Santa Barbara County Fire Department Station 21, and California Highway Patrol. The Santa Barbara County Sheriff and Santa Barbara County Fire Department Station 21 are about 2 miles east of the project site in the town of

Orcutt. The Guadalupe Fire Department and Guadalupe Police Department are about 1 mile north of the project site. The nearest California Highway Patrol office is about 10 miles east of the project area in the city of Santa Maria.

Environmental Consequences

Utilities

Existing utility poles, fences, and other fixed objects would be relocated to outside of the clear recovery zone of the highway's widened shoulders. There are 114 utility poles that have been identified for possible relocation. Utility location would be verified before construction.

Water pumps, pipe, and a well would be impacted by the project and need to be relocated. It is assumed that the high-pressure gas line would be protected in place.

Emergency Services

Construction staging activities could cause temporary and intermittent delays to emergency responders that require access through the project site.

During project construction, emergency services might require access through the project site to respond to emergencies. Access through the project site would be maintained during construction, with two lanes available for traffic use. The need for any temporary lane closures during construction would be communicated to the appropriate emergency service agency.

Also, a Traffic Management Plan would be implemented to inform, guide, and assist emergency responders to ensure the continuation of adequate service and minimize potential delays in response times.

Avoidance, Minimization, and/or Mitigation Measures

The project would implement the following avoidance and minimization measures to ensure that it is consistent with the utility and service system protection goals along State Route 1:

Utilities

1. Temporarily relocated utilities would remain in operation during project construction.

2. Before starting utility relocation activities, coordination with utility users would be required to inform them about the date and timing of potential service disruptions.

3. The Caltrans Right-of-Way Manual and the Federal Utility Relocation and Accommodation on Federal-Aid Highway Projects Program Guide would be used to process utility relocations.

Emergency Services

4. The Caltrans Resident Engineer that is assigned to the project would regularly coordinate with local emergency responders on project activities that could potentially affect emergency response times.

5. A Transportation Management Plan would be adopted and would allow emergency service vehicles to access the project site during construction to minimize response delays.

2.1.3 Visual/Aesthetics

Regulatory Setting

The National Environmental Policy Act 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 U.S. Code 4331[b][2]). To further emphasize this point, the Federal Highway Administration, in its implementation of the National Environmental Policy Act (23 U.S. Code 109[h]), directs that final decisions on projects are to be made in the best overall public interest considering adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

The California Environmental Quality Act 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" (California Public Resources Code 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

A Visual Impact Assessment was prepared and completed for the project in April 2020.

State Route 1 within San Luis Obispo and northern Santa Barbara counties is generally a north-south-oriented highway that follows the coastline of the Pacific Ocean. Through the project area, the highway is a designated part of the Pacific Coast Bicycle Route.

The project site lies between the cities of Guadalupe and Orcutt. Guadalupe is a small town with a population of just over 7,000 that serves as a regional goods movement hub for agriculture, manufacturing, trucking, warehousing and storage. The city has a total area of approximately 1.3 square miles and is generally compact in form. The layout of the city is defined by the central business district along State Route 1, with residential neighborhoods

extending to the east and west, surrounded by agricultural land. State Route 1 passes through the center of Guadalupe, serving as the city's main street. The landscape immediately surrounding the town is mostly flat, with hills seen from south of town; the Nipomo Mesa is approximately 4 miles to the northeast.

Orcutt is a larger town with a population of more than 30,000 and is a suburb of Santa Maria to the north. It lies between State Route 135 on the east and south, and State Route 1 on the west. The landscape begins to transition from the mostly flat agricultural areas, past the Rancho Maria Golf Course, to the more rolling hills with riparian areas to the south and west of Orcutt.

Scenic vistas in the project vicinity include views of the riparian vegetation of the creeks and drainages, and distant views of the hills to the west and south. From the project site, the hills are the most visually dominant scenic element because they contrast against the horizon as seen from the surrounding flat agricultural fields and highway. The riparian areas are also primary contributors to the scenic vista but are less visually dominant because of intervening vegetation and viewing distance. The existing overhead utilities paralleling Solomon Canyon Creek Bridge detract from the scenic vista and add visual clutter to the views.

Environmental Consequences

As seen from State Route 1, the main public viewpoint, the project would possibly affect views for a short duration. The proposed metal guardrail, metal guardrail transitions, and concrete bridge rail transitions would be slightly taller and would cause a minimal effect on views of scenic vistas in the area. By themselves, these types of elements are not uncommon and would not be seen as unexpected visual elements in a highway setting. The concrete bridge rail transitions would be similar to the existing concrete bridge rail and largely unnoticed by the casual observer. The addition of all these elements together would create a more utilitarian appearance and would add a degree of visual clutter to the setting. As a result, these visual changes would cause a minor reduction of rural character and visual quality to the immediate project area.

Approximately 50 eucalyptus trees would be removed from areas that are within the clear recovery zone. The trees occur in clusters at approximately 13 locations throughout the project length. Though these trees can contribute to the skyline views, their removal would enhance the scenic vista of the hills to the west and south.

Although existing riparian trees and other plants would be removed by the project, the vegetation removed would be fully replaced and established. As a result, over time, the riparian areas would be fully revegetated and result in a somewhat natural-appearing visual condition. Construction access roads and

areas of demolition, if restored to natural-appearing landforms, would reduce the noticeability of disturbance and engineered alterations.

Avoidance, Minimization, and/or Mitigation Measures

The project would implement the following avoidance and minimization measures to ensure that it is consistent with the aesthetic and visual resource protection goals along State Route 1:

1. Preserve as much existing vegetation as possible. Prescriptive clearing and grubbing and grading techniques that save the most existing vegetation possible should be employed.

2. Revegetate disturbed areas to the greatest extent possible, considering safety and horticultural appropriateness.

3. Following construction, re-grade and re-contour all new construction access roads, staging areas, and other temporary uses as necessary to match the surrounding pre-project topography.

4. Replacement planting will include aesthetic considerations as well as the inherent biological goals. Revegetation will include native trees and plants as determined by the Caltrans Biologist and Caltrans Landscape Architect. Planting should be maintained until established. Revegetation will occur at the maximum extent horticulturally viable. Planting will be maintained until fully established.

2.2 Biological Environment

2.2.1 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.

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 effects. 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 the U.S. Environmental Protection Agency's Section 404(b)(1) Guidelines (40 Code of Federal Regulations 230), and whether permit approval is in the public's best interest. The Section 404(b)(1) Guidelines were developed by the U.S. Environmental Protection Agency 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 that 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" 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, Executive Order 11990 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 other waters are regulated mainly by the State Water Resources Control Board, Regional Water Quality Control

Boards, and 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 Lake or 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 Water Discharge Requirements and may be required even when the discharge is already permitted or exempt under the Clean Water Act. Through the Porter-Cologne Water Quality Control Act, the Regional Water Quality Control Board asserts jurisdiction over waters of the state of California, which is generally the same as waters of the U.S. but may also include isolated waterbodies. The Porter-Cologne Act defines waters of the state of California as “surface water or groundwater, including saline waters, within the boundaries of the state.” 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.

Affected Environment

The information in this section is based on the Natural Environment Study that was completed for the project in October 2020.

The Biological Study Area is defined as the area that may be directly, indirectly, temporarily, or permanently impacted by construction and construction-related activities. For the project, the Biological Study Area is 144 acres and generally extends 65 feet from the centerline on both sides of State Route 1 to include the roadwork site and staging/access areas in a rural location. At two locations, the Biological Study Area was extended up to 115 feet from the roadway centerline, which included an additional 2.4 acres of potential impact. (See Appendix C for Biological Study Area maps.)

A preliminary assessment and delineation of potentially jurisdictional areas were conducted within the Biological Study Area by Caltrans biologists on November 5, 2019 and November 28, 2019.

The Santa Maria Valley contains several streams that flow from the southern Solomon and Casmalia Hills to Orcutt Creek, just north of the project area. Orcutt Creek is described as an intermittent tributary to the Santa Maria River, which flows to the Pacific Ocean. Although Orcutt Creek is outside the Biological Study Area, the system of small tributaries and drainages located within the Biological Study Area flow into Orcutt Creek.

Within the Biological Study Area, 18 culverts were delineated as jurisdictional areas. Jurisdictional areas within the Biological Study Area consist of drainages, riparian habitat, and wetlands. Most of the drainages within the project limits have been heavily disturbed and channelized by the landowners and no longer exhibit typical meandering flows. In many cases, the drainages appear to be regraded on a regular basis and contain slopes with exposed soil, which has led to sedimentation issues at the downstream culverts. The banks of these drainages are mostly unvegetated and contain steep slopes upward of 60%.

The U.S. Fish and Wildlife Service National Wetland Inventory was used to help identify historic streams within the project area to determine U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife jurisdiction for permitting. This was useful to differentiate drainages that conveyed solely roadside and agricultural runoff versus historic streams that have been channelized since the development of the agricultural lands.

Environmental Consequences

Sixteen of the jurisdictional areas have the potential to be impacted as a result of the project widening shoulders, removing, replacing, and extending culverts, and modifying headwalls. Permanent impacts to jurisdictional areas would result from shoulder widening, culvert extensions, and new headwalls. (See Appendix D for Impacts to Jurisdictional Waters maps.)

Approximately 0.036 acre of U.S. Army Corps of Engineers “other waters” and 0.056 acre of Regional Water Quality Control Board and California Department of Fish and Wildlife Waters of the State would be permanently impacted. About 0.020 acre of the permanently impacted Waters of the State is riparian vegetation that would be removed due to the project.

Temporary impacts would be caused by staging activities and access to jurisdictional areas. Approximately 0.206 acre of U.S. Army Corps of Engineers “other waters” and 0.004 acre of jurisdictional wetlands would be temporarily impacted. About 0.748 acre of Regional Water Quality Control Board and California Department of Fish and Wildlife Waters of the State

would be temporarily impacted, with roughly 0.562 acre of the impacted area characterized as riparian vegetation.

A Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers, a Clean Water Act Section 401 Water Quality Certification from the Regional Water Quality Control Board, and a California Fish and Game Code Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife will be required for the project. Permit coordination with the regulatory agencies will begin during the final design phase and permits will be obtained prior to construction.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures would be implemented to reduce the potential impacts to these jurisdictional areas resulting from the project:

1. Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing will be installed around jurisdictional waters, 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.

2. If needed during construction, the temporary stream diversion will be timed to occur between June 1 and October 31 in any given year, or as otherwise directed by the regulatory agencies, when the surface water is likely to be dry or at seasonal minimum. Deviations from this work window will be made only with permission from the relevant regulatory agencies.

3. 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 by the contractor onsite at all times during construction.

4. During construction, erosion control measures will be implemented. Silt fencing, fiber rolls, and barriers will be installed as needed between the project site and jurisdictional other waters and riparian habitat.

5. All equipment and vehicles will be checked and maintained by the contractor on a daily basis to ensure proper operation and avoid potential leaks or spills.

6. Prior to the removal of the diversion, stream contours will be restored as close as possible to their original condition.

Compensatory Mitigation

The goal of compensatory mitigation is to prevent a net loss of wetlands or other aquatic resource acreage, function, and value. Several types of compensatory mitigation are available to offset impacts on Waters of the U.S., including creation, restoration, enhancement, and preservation. Compensatory mitigation can be either onsite or offsite.

The impacts to jurisdictional waters would consist of culvert replacement and extensions, and removal of vegetation. 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 riparian vegetation via restoration (re-establishment). To ensure success of the mitigation planting, monitoring and a three-year plant establishment period would be required, which would include semi-annual inspections, weeding, and replacement of failed plantings as necessary.

Prior to construction, Caltrans would prepare a Mitigation and Monitoring Plan to mitigate impacts to vegetation and natural habitats. The Mitigation and Monitoring Plan would be consistent with federal and state regulatory requirements and would be amended with any regulatory permit conditions, as required. Caltrans would implement the Mitigation and Monitoring Plan as necessary during construction and immediately following project completion.

Mitigation plantings will be detailed in Caltrans' Landscape Architecture Landscape Planting Plan and the final Mitigation and Monitoring Plan. The Mitigation and Monitoring Plan would be developed in coordination with the project biologist and would include planting specifications and grading plans to ensure survival of planted vegetation and re-establishment of functions and values. The final Mitigation and Monitoring Plan will detail mitigation commitments and be consistent with standards and mitigation commitments from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife. The Mitigation and Monitoring Plan would be prepared when full construction plans are prepared and be finalized through the permit review process with regulatory agencies. It is anticipated that restoration plantings would consist mainly of native riparian species, native wetland species, and associated riparian understory and creek bank species.

2.2.2 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, 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 2.2.4. 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 National Oceanic and Atmospheric Administration 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

Affected Environment

The information in this section is based on the Natural Environment Study that was completed for the project in October 2020.

To identify special-status animal species within the Biological Study Area, a query was made of California Natural Diversity Database documents for special-status animal species—federally listed, state listed, California Fully Protected Species, California Species of Special Concern, and/or protected by the Migratory Bird Treaty Act and California Fish and Game Code—and the official U.S. Fish and Wildlife Service species list for the project area.

In addition, numerous species of nesting birds that do not appear in the California Natural Diversity Database or U.S. Fish and Wildlife Service species list were included for consideration based on the presence of suitable habitat. Such species have the potential to occur in the Biological Study Area and are protected by the Migratory Bird Treaty Act and California Fish and Game Code Section 3503.

Based on online searches and field surveys, the animal species of concern listed in Table 2-2 have the potential to occur in the Biological Study Area and be impacted by project activities.

Due to their threatened and/or endangered status, the California tiger salamander, California red-legged frog, and Swainson’s hawk are discussed in Section 2.2.3 Threatened and Endangered Species.

[In the following table, rows for the western spadefoot and southwestern pond turtle have been added since the draft environmental document was circulated.]

Table 2-2 Animal Species of Concern

Common/ Scientific Name	Federal/ State/Other Status	General Habitat Description	Habitat Present/ Absent	Rationale
American badger *Taxidea taxus*	California Species of Special Concern	Occurs in open stages of shrub, forest, and herbaceous habitats from high alpine meadows to sea level. Needs uncultivated ground with friable soils.	Habitat Present	● State Route 1 may serve as a movement corridor, and badgers may be present within the Biological Study Area; numerous California Natural Diversity Database records show the badger as roadkill in this region. ● Avoidance and minimization measures recommended.
Western spadefoot *Spea hammondii*	California Species of Special Concern	Inhabits vernal pools in primarily grassland, but also in valley and foothill hardwood woodlands.	Habitat Present	● Suitable migration and refuge habitat in the Biological Study Area. ● Not observed during surveys. ● Not expected to occur in the Biological Study Area. ● No further studies recommended.
Southwestern pond turtle *Emys marmorata*	California Species of Special Concern	Occurs in quiet waters of ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Needs basking sites and suitable upland habitat like sandy banks or grassy open fields up to 0.3 mile from water for egg-laying.	Habitat Present (marginal)	● Marginal suitable habitat in the Biological Study Area. ● Not observed during surveys. ● Not expected to occur in the Biological Study Area; irrigation ditches lack basking sites and sandy banks. Most habitat surrounding ditches is agricultural and highly disturbed and could not be used for egg-laying. ● No further studies recommended.
Other nesting birds Class Aves	Migratory Bird Treaty Act/ California Fish and Game Code Section 3503	Various habitats (nesting).	Habitat Present	• Suitable nesting habitat occurs under the two structures and in various trees within the Biological Study Area. • Avoidance and minimization measures have been recommended.

Common/ Scientific Name	Federal/ State/Other Status	General Habitat Description	Habitat Present/ Absent	Rationale
Pallid bat *Antrozous pallidus*	California Species of Special Concern	Prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Found near water; often associated with open, sparsely vegetated grasslands. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Night roosts may be in more open sites, such as porches and buildings.	Habitat Present (marginal)	• Marginal habitat in trees within the Biological Study Area, although existing structures in the Biological Study Area do not provide roosting habitat. • No bats or sign of bats (guano, grease spots, prey remains) were observed in the Biological Study Area. • Taxon forages widely and could occur within the Biological Study Area for brief periods. • Avoidance/minimization measures recommended.
Townsend's big-eared bat *Corynorhinus townsendii*	California Species of Special Concern	Occurs in a wide variety of habitats. Most common in mesic sites. May use trees for day and night roosts; however, requires caves, mines, rock faces, bridges or buildings for maternity roosts. Maternity roosts are in relatively warm sites.	Habitat Present (marginal)	• Marginal habitat in trees within the Biological Study Area, though existing structures in the Biological Study Area do not provide roosting habitat. • No bats or sign of bats (guano, grease spots, prey remains) were observed in the Biological Study Area. • Taxon forages widely and could occur within the Biological Study Area for brief periods. • Avoidance/minimization measures recommended.
Western red bat *Lasiurus blossevillii*	California Species of Special Concern	Roosts mostly in trees, often in edge habitats adjacent to streams, fields, or urban areas. Mating occurs in August and September, and young are born from late May through early July.	Habitat Present (marginal)	• Marginal habitat in trees within the Biological Study Area. • No bats or sign of bats (guano, grease spots, prey remains) were observed in the Biological Study Area. • Taxon forages widely and could occur within the Biological Study Area for brief periods. • Avoidance/minimization measures recommended.
Yuma myotis *Myotis yumanensis*	California Natural Diversity Database Special Animals List	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	Habitat Present (marginal)	• Marginal habitat in trees within the Biological Study Area, though existing structures in the Biological Study Area do not provide roosting habitat. • No bats or sign of bats (guano, grease spots, prey remains) were observed in the Biological Study Area. • Taxon forages widely and could occur within the Biological Study Area for brief periods. • Avoidance/minimization measures recommended.

American Badger

The American badger (*Taxidea taxus*) is considered a California Department of Fish and Wildlife Special-Status species. It is an uncommon, permanent resident found throughout most of California, except in the northern North Coast area. The species is abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable (crumbly) soils. Badgers are a stocky, low-slung member of the weasel family with distinctive white and black head markings, short powerful legs, and long claws adapted for digging. Badgers are carnivorous and eat burrowing rodents such as rats, mice, chipmunks, and especially ground squirrels and pocket gophers. Their diet shifts seasonally and yearly in response to availability of prey, and they will also eat some reptiles, insects, earthworms, eggs, birds, and carrion.

Badgers dig burrows in crumbly soil for cover. They often reuse old burrows, though some may dig a new den each night, especially in summer. Dens are typically greater than 6 inches in diameter and horizontally oval-shaped, occasionally with claw marks along the inner surface. Badgers are active yearlong, both day and night, with variable periods of inactivity in the winter. They mate in the summer and early fall, and two to three young are born mostly in March and April. Badgers are non-migratory, and their home range estimates vary geographically and seasonally from 4.9 to 1,791.5 acres.

[The following paragraph has been revised since the draft environmental document was circulated.]

Survey Results

No badgers, live or dead, or potential badger dens were observed during surveys of the Biological Study Area. No dirt piles, prey remains, claw marks inside burrows, or other signs of badgers were observed within the project site. Numerous California Natural Diversity Database records show the badger as roadkill in this region, and badgers could be present within the Biological Study Area. Soils within much of the Area of Potential Impact are compacted due to agricultural practices, but some locations could potentially support denning.

[The following information on the western spadefoot and southwestern pond turtle has been added since the draft environmental document was circulated.]

Western Spadefoot

The western spadefoot (*Spea hammondii*) is considered a California Department of Fish and Wildlife Species of Special Concern that inhabits vernal pools mostly in grassland, but also in valley and foothill hardwood woodlands. The western spadefoot measures 1.5 to 2.4 inches long and is dusky green or gray above, and whitish below, without markings. It breeds in winter and spring in quiet streams and temporary pools (such as vernal

pools). The cycle of reproduction is very rapid, permitting the species to take advantage of transient breeding sites. The western spadefoot historically occurred throughout the Central Valley, the bordering foothills, and the Coast Ranges south of San Francisco Bay, and in northwest Baja California. It is found mostly below 3,000 feet in elevation. Vernal pools and other ephemeral wetlands have been substantially reduced by agriculture and development, thus reducing this species' habitat.

Survey Results

Suitable migration and refuge habitat for the western spadefoot occurs within the Biological Study Area. The species was not observed during surveys and is not expected to occur within the Biological Study Area due to the highly disturbed agricultural setting.

Southwestern Pond Turtle

The southwestern pond turtle (*Emys marmorata*) is considered a California Department of Fish and Wildlife Species of Special Concern. It is found in quiet waters of ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Southwestern pond turtles need basking sites and suitable upland habitat like sandy banks or grassy open fields 0.3 mile from water for egg-laying. Breeding occurs between April and November, with most activity occurring between April and May.

Survey Results

No occurrences of the species were observed during surveys, and the irrigation ditches that occur within the Biological Study Area lack basking sites and sandy banks due to their routine maintenance by heavy farming machinery.

Nesting Birds

No nesting birds were seen during appropriately timed surveys of the Biological Study Area. Common bird species found in or near the Biological Study Area included the American crow (*Corvus brachyrhynchos*), American robin (*Turdus migratorius*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), California towhee (*Melozone crissalis*), cliff swallow (*Petrochelidon pyrrhonota*), downy woodpecker (*Picoides pubescens*), lesser goldfinch (*Carduelis psaltria*), mourning dove (*Zenaida macroura*), red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), red-winged blackbird (*Agelaius phoeniceus*), turkey vulture (*Cathartes aura*), and western scrub jay (*Aphelocoma californica*).

Numerous swallow nests were found under the Waldorf Overhead and Solomon structures, and potential nesting habitat for birds occurs in trees within the Biological Study Area, though the habitat within proximity to the State Route 1 travel corridor is somewhat compromised.

Pallid Bat

The pallid bat (*Antrozous pallidus*) is considered a Species of Special Concern by the California Department of Fish and Wildlife. Pallid bats range over much of the western United States, and from central Mexico to British Columbia. They are found throughout California, especially in lowland areas below 6,400 feet. Pallid bats are not migratory, but make local seasonal movements. This nocturnal species lives in colonies of a dozen to over 100 individuals. Pallid bats roost in deep crevices, caves, mines, rock faces, bridges, and buildings. Like many bat species, pallid bats maintain both day and night roosts. Night roosts are used for feeding and are typically a quarter-mile from the day roosts, which are used for sleeping. Their main food source is ground-dwelling insect species, including crickets, grasshoppers, beetles, and centipedes. They maintain nursery colonies with 30 to 100 or more individuals. Females have one to two pups for each pregnancy, usually born between mid- to late June. Pallid bats often establish day, maternity, and night roosts on bridges.

Townsend's Big-eared Bat

The Townsend's big-eared bat (*Corynorhinus townsendii*) is considered a Species of Special Concern by the California Department of Fish and Wildlife. It was considered a candidate for state listing as threatened, but the California Fish and Game Code determined that listing was not warranted on October 25, 2016. The Townsend's big-eared bat requires caves, mines, tunnels, buildings, or other human-made structures for roosting. It may use separate sites for night, day, hibernation, or maternity roosts. Maternity roosts are the most important limiting resource and are found in caves, tunnels, mines, and buildings. Small clusters or groups (usually fewer than 100 individuals) of females and young form the maternity colony. Maternity roosts are in relatively warm sites. Most mating occurs from November to February. Births occur in May and June, peaking in late May. This species is very sensitive to disturbance of roosting sites; a single visit may result in abandonment of the roost. Numbers have declined steeply in California. Townsend's big-eared bats occasionally establish day, maternity, and night roosts on bridges.

Western Red Bat

The western red bat (*Lasiurus blossevillii*) is considered a Species of Special Concern by the California Department of Fish and Wildlife. The red bat is locally common in some areas of California, occurring from Shasta County to the Mexican border, west of the Sierra Nevada/Cascade crest and deserts. Roosting habitat includes forests and woodlands from sea level up through mixed conifer forests. The western red bat feeds over a wide variety of habitats, including grasslands, shrublands, open woodlands and forests, and croplands. Mating occurs in August and September, and births are from late May through early July. Western red bats are not known to roost on bridges, but may roost in trees.

Yuma Myotis

The Yuma myotis (*Myotis yumanensis*) is common and widespread in California. Optimal habitats are open forests and woodlands with sources of water over which to feed. The Yuma myotis roosts in buildings, mines, caves, or crevices. It mates in the fall, and birth of pups occurs in late May to mid-June with a peak in early June; some young are born in July in some areas. The Yuma myotis commonly establishes day, maternity, and night roosts on bridges.

Survey Results

Bridges often have structural features similar to natural roosts, and the large mass offers the thermal buffer that roosting bats require. Bridges often replace natural roosts in altered landscapes. Night roosts are commonly found in concrete girder bridges, where the girders create warm air pockets and the bridge deck temperature is warmer and more stable than the outside temperature.

Solomon Canyon Creek bridge and the Waldorf Overhead were determined to not have the typical bridge features (concrete girders, joints, and crevices) that form suitable microclimates for roosting. The Waldorf Overhead spans a frequently used railway line, and this may prevent it from being used as roosting habitat. However, these special-status bats have the potential to roost in trees in or near the project area.

Environmental Consequences

American Badger

While the Biological Study Area supports habitat for the American badger, the area within the Area of Potential Impact was assessed to be marginal habitat at best as it occurs next to the State Route 1 travel corridor, and crumbly soils are not present within the Area of Potential Impact. There is very low potential for denning to occur for the American badger in the Area of Potential Impact.

If present during construction, American badgers could accidentally be injured or killed by construction equipment. Noise and disturbance associated with construction could adversely affect foraging and dispersal behaviors. Although there is marginal potential habitat within the project site, the potential for adverse effects to the American badger is considered very low.

[The following information on the western spadefoot and southwestern pond turtle has been added since the draft environmental document was circulated.]

Western Spadefoot

The western spadefoot is not expected to occur within the Biological Study Area due to the highly disturbed agricultural setting. If present during construction, the western spadefoot could be impacted by clearing and

grubbing and subsequent construction equipment traffic. The potential need to capture and relocate a western spadefoot could subject the animal to stresses that could result in adverse effects. Injury or mortality could occur through accidental crushing by worker foot-traffic or construction equipment. Avoidance and minimization measures included for other species, such as the California red-legged frog, would also apply to the western spadefoot. Prior to construction, a qualified biologist would survey the Area of Potential Impact and, if the species were present, the biologist would capture and relocate any western spadefoots to the nearest suitable habitat outside of the Area of Potential Impact.

Southwestern Pond Turtle

Most of the habitat surrounding the ditches involves intensive agricultural activity and is highly disturbed, therefore it was determined that the habitat would not be suitable for egg-laying. If present during construction, southwestern pond turtles could be impacted by clearing and grubbing and subsequent construction equipment traffic. The potential need to capture and relocate a western spadefoot could subject the animal to stresses that could result in adverse effects. Injury or mortality could occur through accidental crushing by worker foot-traffic or construction equipment. Avoidance and minimization measures included for other species of herptofauna, such as pre-construction surveys and work windows, would also apply to the southwestern pond turtle. Prior to construction, a qualified biologist would survey the Area of Potential Impact and, if the species were present, the biologist would capture and relocate any southwestern pond turtles to the nearest suitable habitat outside of the Area of Potential Impact.

Nesting Birds

Project impacts could alter the perching, foraging, and nesting behavior of birds within the project area. No direct impacts are anticipated as a result of this project, and indirect impacts may occur as a result of vegetation removal and noise and disturbance associated with construction. Avoidance and minimization measures will be used to protect all nesting bird species protected by the Federal Endangered Species Act, California Endangered Species Act, Migratory Bird Treaty Act, and California Fish and Game Code.

Bats

A low potential exists for bats to establish roosts in trees within the Biological Study Area. However, no direct impacts to bats are anticipated to occur resulting from project activities. Indirect impacts could result from noise and disturbance associated with construction, which could also alter roosting behaviors. The implementation of pre-construction surveys will reduce the potential for adverse effects to roosting bat species.

Avoidance, Minimization, and/or Mitigation Measures

American Badger

The following avoidance and minimization measures would be implemented to address potential impacts to American badgers:

1. No less than 14 days and no more than 30 days prior to beginning of ground disturbance and/or construction activities, a qualified biologist will conduct a survey to determine if any American badger dens are present at the project site. If dens are found, they will be monitored for badger activity. If it is determined that dens may be active, the entrances of the dens will be blocked with soil, sticks, and debris for 3 to 5 days to discourage the use of these dens prior to project disturbance activities. The den entrances will be blocked to an incrementally greater degree over the 3- to 5-day period. After it has been determined that badgers have stopped using active dens, the dens will be hand-excavated with a shovel to prevent re-use during construction. No disturbance of active dens will take place when cubs may be present and dependent on parental care.

2. Any observations of occupied badger dens or American badgers will be reported to the California Department of Fish and Wildlife.

Nesting Birds

The following avoidance and minimization measures would be implemented to address potential impacts on nesting birds:

1. If construction activities are proposed to occur within 100 feet of potential habitat during the nesting season (February 1 to September 30), a nesting bird survey will be conducted by a biologist determined qualified by Caltrans no more than 3 days prior to construction. If an active nest is found, a qualified biologist will determine an appropriate buffer and monitoring strategy 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.

Bats

The following avoidance and minimization measures would be implemented to address potential impacts on roosting bats:

1. No more than 14 days prior to construction, a roosting bat survey will be conducted for the existing bridge by a biologist determined qualified by Caltrans. If an active roost is found, a qualified biologist will determine an appropriate buffer and monitoring strategy based on the habits and needs of the species. The buffer area will be avoided until a qualified biologist has determined that all bats have left the roost.

2. If an active bat roost is found, Caltrans will coordinate with the California Department of Fish and Wildlife to determine an appropriate buffer based on the habits and needs of the species. Readily visible exclusion zones will be established in areas where roosts must be avoided using Environmentally Sensitive Area fencing. Work in the buffer area will be avoided until a qualified biologist has determined that roosting activity has ceased. Active bat maternity roosts will not be disturbed or destroyed at any time.

2.2.3 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 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 the 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 the California Department of Fish and Wildlife.

For species listed under both the Federal Endangered Species Act and the California Endangered Species Act requiring a Biological Opinion under Section 7 of the 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

The information in this section is based on the Natural Environment Study that was completed for the project in October 2020.

Based on the searches conducted, three federally and/or state listed species have the potential to occur within the Biological Study Area and may be affected by the project: California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii*), and Swainson's hawk (*Buteo swainsoni*). In addition, federally designated critical habitat for the California red-legged frog and La Graciosa thistle is present within the Biological Study Area.

Table 2-3 lists threatened and endangered species that could potentially occur in the project vicinity that may be impacted by the project.

Table 2-3 Threatened and Endangered Species

Common/ Scientific Name	Federal/State/ Other Status	General Habitat Description	Habitat Present/ Absent	Rationale
California red-legged frog *Rana draytonii*	Federal Threatened/ Critical Habitat/ California Species of Special Concern	Aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 2.3 feet, and the presence of fairly sturdy underwater supports such as cattails.	Habitat Present, Species Present	● Suitable migration, breeding, and refuge habitat in the Biological Study Area; the Biological Study Area does not occur in a designated critical habitat unit. ● Protocol surveys were not conducted; taxon is known to occur in ponds and waterways adjacent to State Route 1, and presence in the Biological Study Area is inferred. ● The Federal Endangered Species Act Section 7 effects determination is the project: 1) may affect, and is likely to adversely affect, California red-legged frog; and, 2) will have no effect on California red-legged frog critical habitat. ● Avoidance/minimization measures recommended.
California tiger salamander *Ambystoma californiense*	Federal Threatened/ Critical Habitat/ State Threatened	Occurs in grasslands or oak woodlands that support natural ephemeral pools or ponds that mimic them. This species requires seasonal water for breeding and small mammal burrows, crevices in logs, piles of lumber, and shrink-swell cracks in the ground for refuges. To be suitable, aquatic sites must retain at least 12 inches of water for a minimum of 10 weeks in the winter.	Habitat Present, Species Present, Critical Habitat	● Suitable migration and refuge habitat in the Biological Study Area; the Biological Study Area occurs in a designated critical habitat unit. ● Protocol surveys were not done; taxon is known to occur in ponds and waterways next to State Route 1, and presence in the Biological Study Area is inferred. ● Known breeding ponds within the Biological Study Area include SAMA 21, GUAD-6 and Potential GUAD-7, GUAD-10. ● The California Endangered Species Act determination is that there may be take of the species. Will require a 2080.1 Consistency Determination. ● The Federal Endangered Species Act Section 7 effects determination is the project: 1) may affect, and is likely to adversely affect, California tiger salamander; and, 2) may affect and is likely to adversely affect federally designated California tiger salamander critical habitat. ● Avoidance/minimization measures recommended.

Common/ Scientific Name	Federal/State/ Other Status	General Habitat Description	Habitat Present/ Absent	Rationale
Swainson's hawk *Buteo swainsoni*	State Threatened	General habitat includes open desert, grassland, or cropland containing scattered, large trees or small groves. Roosts in large trees but will roost on the ground if none available. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley.	Habitat Present (marginal)	• Marginal foraging habitat may occur in the Biological Study Area but with a very low potential for occurrence. • The California Endangered Species Act determination is that there will be no take of the species. • Not expected to occur in the Biological Study Area, but avoidance and minimization measures have been recommended to ensure take avoidance.
La Graciosa thistle *Cirsium scariosum* var. *loncholepis*	Federal Endangered, Critical Habitat/ State Threatened	Perennial herb found in cismontane woodlands, coastal dunes, coastal scrub, brackish marsh, riparian scrub, and foothill and valley grasslands. Sandy, mesic areas. Flowers May to August. Elevation 13 to 722 feet.	Habitat Present	● Some suitable grassland and riparian habitat in the Biological Study Area; critical habitat for the taxon occurs in the Biological Study Area. ● Not observed during appropriately timed surveys. ● Area of Potential Impact has some habitat (riparian areas and dispersal potential), but it is highly degraded due to private landowners' and Caltrans maintenance regimes. ● There are no California Natural Diversity Database or Calflora species occurrence records within the Biological Study Area. ● The California Endangered Species Act determination is that there will be no take of the species. ● The Federal Endangered Species Act Section 7 effects determination is the project 1) will have no effect on la Graciosa thistle; and 2) may affect, and is likely to adversely affect La Graciosa thistle critical habitat. ● No further studies recommended.

California Red-Legged Frog

The California red-legged frog (*Rana draytonii)* is federally threatened and a California Species of Special Concern. It is recognized by the reddish color that forms on the underside of its legs and belly and the presence of a fold across its back. The California red-legged frog historically ranged from Marin County southward to northern Baja California. Now, Monterey, San Luis Obispo, and Santa Barbara counties support the largest remaining California red-legged frog populations within California.

California red-legged frogs are found in aquatic, riparian, and upland habitats. They prefer aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 27 inches, and the presence of subsurface supports such as cattails. The largest densities of this species are typically associated with dense stands of overhanging willows and a mix of sturdy emergent vegetation. The California red-legged frog breeds from January to July, with peak breeding in February and March. Softball-sized egg masses are attached to subsurface vegetation, and hatched tadpoles require 11 to 20 weeks to grow into frogs, typically occurring from July to September.

The California red-legged frog uses both riparian and upland habitats for foraging, shelter, cover, and nondispersal movement. Upland use may be natural, such as the spaces under boulders or rocks and organic debris (downed trees or logs), or human-made, such as certain industrial debris and agricultural features (drains, watering troughs, abandoned sheds, or stacks of hay or other vegetation). The California red-legged frog also uses small mammal burrows and moist leaf litter as refuge. Adults are mostly nocturnal, while juveniles can be active at any time of day. Riparian habitat degradation, urbanization, predation by bullfrogs, and historic market harvesting have all contributed to the decline of the species.

[The following Survey Results paragraph has been revised since the draft environmental document was circulated.]

Survey Results

No protocol surveys were done for the California red-legged frog, and the species was not found during surveys. There are known occurrence records for the California red-legged frog within and near the Biological Study Area (California Natural Diversity Database 2020). California red-legged frog presence was inferred because suitable migration, breeding, and refuge habitat occurs within the Biological Study Area, and various drainages and ponds adjacent to State Route 1 are known to support the species. The California red-legged frog critical habitat unit near the project site is approximately 0.2 mile southwest of the Biological Study Area and will be completely avoided.

California Tiger Salamander

The California tiger salamander (*Ambystoma californiense*) is a large 7- to 8-inch, stocky terrestrial salamander with a broad rounded snout. California tiger salamanders are known only from California. They occur in the Central Valley, Sierra foothills, and Coast Ranges and intermountain valleys near Petaluma and Sacramento in the north to Tulare and Santa Barbara counties in the south.

The Santa Barbara County distinct population segment of the California tiger salamander was listed by the U.S. Fish and Wildlife Service throughout its entire range as endangered in 2000. This distinct population segment is prevalent in the northern portion of Santa Barbara County and currently consists of six distinct metapopulations. The recovery priority number for the Santa Barbara County California tiger salamander is 3C, indicating a high potential for recovery and a high degree of threat in conflict with development. West Santa Maria/Orcutt, where the Biological Study Area occurs, is one of the six metapopulations and contains 15 known extant breeding ponds. California tiger salamanders are also listed as a threatened species under the California Endangered Species Act.

California tiger salamanders spend most of their lives underground in small mammal burrows, mostly those of the California ground squirrel (*Spermophilus beecheyi*) and Botta's pocket gopher (*Thommomys bottae*). California tiger salamanders may also use landscape features such as leaf litter or cracks in the soil for upland refuge. Winter rains trigger California tiger salamanders to emerge from refuge and seek breeding ponds.

The California tiger salamander's breeding habitat includes vernal pools, and seasonal and perennial ponds (such as stock ponds). California tiger salamanders also inhabit surrounding upland areas in grassland and oak savannah plant communities. Adults mate in vernal pools and similar aquatic habitats. Females lay their eggs in the water from December to February, attaching eggs to vegetation or debris. In ponds with little or no vegetation, females may attach eggs to objects such as rocks and boards on the bottom. Larvae hatch in 10 to 28 days, and the larval stage lasts 3 to 6 months until metamorphosis. Juveniles leave breeding sites in late spring or early summer.

California tiger salamanders can make long-distance migrations and disperse long distances. Studies have recorded migration and dispersal distances by adult and juvenile California tiger salamanders and, though none of these studies were conducted within the range of the Santa Barbara County California tiger salamanders, they are considered the best available scientific information on the species. In general, studies show that adults can move up to 1.2 miles but no more than 1.4 miles from breeding ponds. Estimates differ on the proportion of the population likely to move large distances, with studies finding that 95% of a population occurs within 2,034 feet or 1.1 miles of a breeding pond.

Survey Results

No protocol surveys were done for the California tiger salamander, and the species was not found during surveys. Presence within the Biological Study Area is inferred based on California Natural Diversity Database occurrence records for the California tiger salamander (California Natural Diversity Database 2020) and the presence of suitable aquatic and upland habitat within migratory and dispersal movement distance around and within the Biological Study Area.

California Tiger Salamander Critical Habitat

California tiger salamander critical habitat Unit 1 is composed of approximately 4,135 acres west and southwest of the city of Santa Maria. The project area is within this habitat and therefore supports one or more of the physical and biological features that are essential for the conservation of the species.

La Graciosa Thistle Critical Habitat

La Graciosa thistle critical habitat Unit 2 is composed of approximately 13,227 acres of land and is located along the lower 5 miles of the Santa Maria River and along the length of Orcutt/Solomon Creek (U.S. Fish and Wildlife Service 2009). This habitat is essential because it contains the last La Graciosa thistle population in riparian habitat.

Swainson's Hawk

The Swainson's hawk (*Buteo swainsoni*) was listed as a state threatened species in 1983 by the California Fish and Game Commission. The species is a medium-sized bird with relatively long, pointed wings that curve up somewhat while the bird is in flight. Adults have dark heads and a dark breast band distinctive from the lighter colored belly, and the underside of the wing with the linings lighter than the dark gray flight feathers. The Swainson's hawk breeds in the western United States and Canada and winters in South America as far south as Argentina. A raptor adapted to the open grasslands, it has become increasingly dependent on agriculture, especially alfalfa crops, as native communities are converted to agricultural lands. Its diet is varied, with the California vole being its staple food; however, a variety of other small mammals, birds, and insects are also taken. Swainson's hawks often nest near riparian systems. They will also use lone trees in agricultural fields or pastures and roadside trees when available and adjacent to suitable foraging habitat.

The species is protected by the Migratory Bird Treaty Act and California Fish and Game Code Section 3503. Numerous other nesting bird species protected by these two regulatory laws have the potential to nest in habitats within the Biological Study Area.

Survey Results

No Swainson's hawks were observed during appropriately timed surveys of the Biological Study Area. While foraging habitat for the Swainson's hawk is present in the open grassland and cropland habitat of the Biological Study Area, it was assessed to be marginal habitat as it occurs next to the busy State Route 1 travel corridor. The Swainson's hawk was determined to have a very low potential for occurrence within the Biological Study Area. Also, the open grassland and cropland habitat within the Biological Study Area occurs outside of the Area of Potential Impact and is not expected to be impacted as a result of project activities.

Environmental Consequences

[The following paragraphs discussing federally listed species with no effect findings has been added since the draft environmental document was circulated.]

The Federal Endangered Species Act Section 7 effects determination is that the proposed project will have no effect on the following federally listed plant species: beach layia (*Layia carnosa)*, Gambel's watercress (*Nasturtium gambelii)*, La Graciosa thistle (*Cirsium scariosum* var. *loncholepis)*, Gaviota tarplant (*Deinandra increscens* ssp. *villosa)*, Lompoc Yerba Santa (*Eriodictyon capitatum)*, marsh sandwort (*Arenaria paludicola)*, or salt marsh bird's beak (*Cordylanthus maritimus* ssp. *Maritimus)*. This determination is based on a lack of suitable habitat and/or no observations during appropriately-timed surveys.

The project will have no effect on the following federally listed animal species: least Bell's vireo (*Vireo bellii pusillus)*, southwestern willow flycatcher (*Empidonax traillii extimus)*, vernal pool fairy shrimp (*Branchinecta lynchi)*, El Segundo blue butterfly, California condor (*Falco peregrinus anatum)*, California least tern (*Sternula antillarum browni)*, marbled murrelet (*Brachyramphus marmoratus)*, western snowy plover (*Charadrius alexandrinus nivosus)*, tidewater goby (*Eucyclogobius newberryi)*, or unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni)*. The basis for this determination is that there is no suitable habitat within the project area for these species. There will be no impacts to federally designated critical habitat for any of these federally listed species.

The Federal Endangered Species Act Section 7 effects determination is that the proposed project will have no effect on Southern California steelhead Distinct Population Segment (*Oncorhynchus mykiss irideus)*. The basis for this determination is that the drainages and waterways where work will occur for this project do not support steelhead. There will be no effect to critical habitat for Southern California steelhead Distinct Population Segment.

The Federal Endangered Species Act Section 7 effects determination is that the proposed project will have no effect on south-central California coast steelhead Distinct Population Segment (*Oncorhynchus mykiss irideus)*. The project occurs south of the Santa Maria River, which is the southern boundary for this Distinct Population Segment. There will, therefore, be no effect to federally designated critical habitat for south-central California coast steelhead Distinct Population Segment.

[The following paragraph has been added since the draft environmental document was circulated.]

The U.S. Fish and Wildlife Service provided a Biological Opinion for this project on June 4, 2021 concurring with the Federal Endangered Species Act Section 7 effects determinations made in this section.

California Red-Legged Frog

Project construction could result in the injury or death of California red-legged frogs if present. The potential need to capture and relocate California red-legged frogs could subject these animals to stresses that could result in adverse effects. Injury or death could occur as a result of accidental crushing by worker foot-traffic or construction equipment.

The Federal Endangered Species Act Section 7 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 California red-legged frog presence has been inferred, and there would be a low but possible potential for take of the species due to project activities.

California Tiger Salamander

Approximately 0.85 acre (permanent) and 7.25 acres (temporary) of ruderal/disturbed upland and dispersal habitat (8.1 acres total) would be impacted because of the project. Shoulder widening and construction activity could result in the injury or death (via accidental crushing by equipment) of an unknown number of California tiger salamanders residing in small mammal burrows within upland habitat in the Biological Study Area. This could be particularly detrimental during rains during the breeding season (about November 1 to May 6) when adults could potentially disperse to ponds surrounding the Biological Study Area to breed or during moist nights in May and June when juveniles are dispersing out of ponds to upland habitat. California tiger salamanders could also be entombed in small mammal burrows collapsed by construction activities, which could result in injury or death. Finally, the potential need to capture and relocate California tiger salamanders could subject these animals to stresses that could result in adverse effects. There would be no impacts to breeding habitat because of the project.

The Federal Endangered Species Act Section 7 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 is inferred and there would be a low but possible potential for take of the species because of project activities.

The project may result in take of the California tiger salamander, which is a state listed threatened species; therefore, California Endangered Species Act consultation is required. A Section 2080.1 Consistency Determination from the California Department of Fish and Wildlife would be required.

California Tiger Salamander Critical Habitat

The Federal Endangered Species Act Section 7 effects determination is that the project may affect, and is likely to adversely affect, California tiger salamander critical habitat. There would be a relatively small amount of permanent impacts (0.85 acre) to California tiger salamander critical habitat along the shoulders of State Route 1 because of shoulder widening and construction-related activities.

La Graciosa Thistle Critical Habitat

Within La Graciosa thistle critical habitat, approximately 5.09 acres would be permanently impacted along State Route 1 due to shoulder widening, and up to 26.52 acres would be temporarily impacted. Of the 13,227 acres within the La Graciosa thistle critical habitat unit *Santa Maria-Orcutt*, the 31.61 acres of total impacts associated with the project would equate to approximately 0.24% of this critical habitat unit.

The Federal Endangered Species Act Section 7 effects determination is that the project may affect, and is likely to adversely affect, designated federal critical habitat for the La Graciosa thistle. Most of the project footprint occurs in regularly disturbed areas (maintained road shoulder, driveways, intensive agriculture); project work would have small permanent effects on habitats that are mesic, support associated natural communities (wetland communities), have soils with a sandy component, or have features that allow for dispersal and connectivity. The project would have little effect on the conservation value and function of habitat and the physical and biological features within the critical habitat unit because the impacts would occur in currently highly disturbed areas such as the roadway prism and agriculture.

Swainson's Hawk

No direct impacts to nesting birds are anticipated. Indirect impacts could result from noise and disturbance associated with construction, which could alter perching, foraging, and/or nesting behaviors. Implementation of the avoidance and minimization measures such as pre-activity surveys and buffer areas would reduce the potential for adverse effects to nesting bird species.

Avoidance, Minimization, and/or Mitigation Measures

California Tiger Salamander and La Graciosa Thistle Critical Habitat

Numerous measures in this section apply to the California tiger salamander, La Graciosa thistle, and other taxa and are also applicable to federally designated critical habitat. These measures have been assessed as sufficient to minimize impacts to California tiger salamander and La Graciosa thistle critical habitat.

The compensatory mitigation described below to offset permanent and temporary impacts to the California tiger salamander would also be suitable to mitigate for impacts to California tiger salamander critical habitat. No additional compensatory mitigation is required, and none is proposed.

While the project takes place within La Graciosa thistle critical habitat, the natural habitat that would be impacted was determined to be ruderal and highly disturbed in riparian and wetland areas. These areas are not likely to have high value in terms of physical and biological features essential to the conservation of the species. No compensatory mitigation for La Graciosa thistle is required, and none is proposed.

California Red-Legged Frog

This project qualifies for Federal Endangered Species Act incidental take coverage under the Programmatic Biological Opinion for Projects Funded or Approved under the Federal Highway Administration's Federal Aid Program (U.S. Fish and Wildlife Service 2011), which includes the following project-specific measures:

1. Only U.S. Fish and Wildlife Service-approved biologists will participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.

2. Ground disturbance will not begin until written approval is received from the U.S. Fish and Wildlife Service that the biologist is qualified to conduct the work.

3. A U.S. Fish and Wildlife Service-approved biologist will survey the project 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 begins. The U.S. 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 project. The relocation site will be in the same drainage to the extent practicable. Caltrans will coordinate with the U.S. Fish and Wildlife

Service on the relocation site prior to the capture of any California red-legged frogs.

4. Before any activities begin on a project, a U.S. 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 project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, with a qualified person on hand to answer any questions.

5. A U.S. Fish and Wildlife Service-approved biologist will be present at the work site until all California red-legged frogs have been removed, workers have been instructed, and disturbance of habitat has been completed. After this time, Caltrans will designate a person to monitor onsite compliance with all minimization measures. The U.S. Fish and Wildlife Service-approved biologist will ensure this monitor receives the training outlined in measure 4 above and in the identification of California red-legged frogs. If the monitor or the U.S. 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 the U.S. Fish and Wildlife Service during review of the proposed action, he or she will notify the resident engineer immediately. The resident engineer will resolve the situation by requiring that all actions that are causing these effects be halted. When work is stopped, the U.S. Fish and Wildlife Service will be notified as soon as possible.

6. During project activities, all trash that may attract predators or scavengers will be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and debris will be removed from work areas.

7. All refueling, maintenance and staging of equipment and vehicles will occur at least 60 feet from riparian habitat or water bodies and not in a location from where a spill would drain directly toward aquatic habitat, unless otherwise pre-approved by the necessary agencies. The monitor will ensure contamination of habitat does not occur during 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.

8. Habitat contours will be returned to a natural configuration at the end of the project activities. This measure will be implemented in all areas

disturbed by activities associated with the project, unless the U.S. Fish and Wildlife Service and Caltrans determine that it is not feasible, or modification of original contours would benefit the California red-legged frog.

9. 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 project. 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.

10. 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 the U.S. Fish and Wildlife Service during project planning will be used to assist in scheduling work activities to avoid sensitive habitats during key times of year.

11. To control sedimentation during and after project completion, Caltrans will implement Best Management Practices outlined in any authorizations or permits issued under the authorities of the Clean Water Act received for the project. If Best Management Practices are ineffective, Caltrans will attempt to remedy the situation immediately, in coordination with the U.S. Fish and Wildlife Service.

12. A U.S. Fish and Wildlife Service-approved biologist will permanently remove any individuals of exotic species, such as bullfrogs (*Rana catesbeiana*), signal and red swamp crayfish (*Pacifastacus leniusculus; Procambarus clarkii*), and centrarchid fishes from the project area, to the maximum extent possible. The U.S. Fish and Wildlife Service-approved biologist will be responsible for ensuring his or her activities are in compliance with the California Fish and Game Code.

13. Project sites will be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials will be used to the extent practicable. Invasive, exotic plants will be controlled to the maximum extent practicable. This

measure will be implemented in all areas disturbed by activities associated with the project, unless the U.S. Fish and Wildlife Service and Caltrans determine that it is not feasible or practical.

No compensatory mitigation for the California red-legged frog is proposed.

California Tiger Salamander

The following avoidance and minimization measures are recommended for protecting the California tiger salamander:

[The following measures have been revised to reflect the language included in the U.S. Fish and Wildlife Service's Biological Opinion, received on June 4, 2021.]

1. Caltrans will obtain U.S. Fish and Wildlife Service and California Department of Fish and Wildlife approval of Designated Biologist(s) and Designated Monitor(s) prior to project-related activities that may result in impacts to the California tiger salamander. The Designated Biologist(s) will serve as a representative responsible for communications with State and Federal authority and hold all applicable and current State and Federal Permits, including an active Scientific Collecting Permit from California Department of Fish and Wildlife that specifically names California tiger salamander surveys as an authorized activity. Any proposed Biologist(s) that do not have the required permits must work under the supervision of one who does have the required permits. These individuals will be referred to as Designated Monitors. The role of the Designated Biologists(s) and Designated Monitor(s) includes the following:

   a) The Designated Biologist or Designated Monitor with the appropriate permits will be present to conduct surveys prior to and monitor all initial ground- or vegetation-disturbing activities in areas of potential California tiger salamander habitat to help minimize or avoid impacts. Daily written observations and inspection records summarizing oversight activity, compliance inspection, observations of California tiger salamander and their sign, survey results, and monitoring activities will be kept. Designated Monitors may monitor project activities after initial ground-disturbing activities have been completed provided the permitted Designated Biologist is readily available should the need arise to relocate a California tiger salamander.

   b) Caltrans will submit a relocation plan to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife for approval prior to construction. The Designated Biologist will follow the approved plan which will use best available scientific evidence and specifically follow guidance provided in Shaffer et al. 2008. Designated Biologists who handle California tiger salamanders will ensure that their activities

do no transmit diseases or pathogens harmful to amphibians, such as chytrid fungus (*Batrachochytrium dendrobatidis*), by following the fieldwork code of practice developed by the Declining Amphibians Task Force. The Designated Biologist will photograph and measure (snout-vent) individuals prior to relocation and provide this documentation to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife within 24 hours.

c) Work activities that could potentially harm the California tiger salamander will be required to stop until the Designated Biologist arrives to relocate the California tiger salamander to the pre-approved location. If the Designated Biologist or Designated Monitor recommends that work stop, he or she will notify the resident engineer immediately. The resident engineer will resolve the situation by requiring that all actions that are causing these effects stop immediately. The Designated Biologist will record any project-related non-compliance of measures outlined in this biological opinion and will notify the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife in writing within 24 hours.

2. Caltrans will not initiate ground-disturbing activities until it has received written approval of Designated Biologists from the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife. Initial ground disturbance or vegetation clearing activities between post miles R36.3 and 46.0 will be restricted to occur between June 1 to October 1 unless prior Service and California Department of Fish and Wildlife approval is obtained. Caltrans will minimize the area of ground disturbance and vegetation clearing to the extent practicable and clearly delineate this area for all contractors and equipment operators.

3. Before work activities begin, the Designated Biologist will conduct an education program for all persons employed or otherwise working on the project site prior to performing any work onsite. The program will include a discussion of the biology of the California tiger salamander and project-specific avoidance and minimization measures. Upon completion of the program, employees will sign a form stating they attended the program and understand all protection measures.

4. Before work activities begin, the Designated Biologist will identify and flag all burrow features that he or she determines may serve as suitable refuge habitat for California tiger salamanders between post mile R36.3 and post mile 46.0 within project areas subject to ground disturbance. The Designated Biologist will excavate the flagged burrows that cannot be avoided using hand tools or via gentle excavation using construction equipment under his or her direct supervision. Caltrans will not conduct excavation between October 1 to

June 1 to avoid work during California tiger salamander breeding season and most juvenile dispersal movements.

5. Caltrans will not conduct work activities within the potential California tiger salamander habitat at night between October 1 and June 1. Caltrans will restrict work activities to daylight hours between October 1 and June 1, and within periods of low rainfall (less than 0.5-inch of precipitation per 24-hour period), unless California tiger salamander exclusion fencing has been installed. Therefore, project activities may continue during a low rainfall event only if work areas contain California tiger salamander exclusionary fencing and have also been cleared by the Designated Biologist. Work within the potential California tiger salamander habitat will not occur when there is over a 70% chance of greater than 0.5-inch precipitation (high rainfall) during a 24-hour period. Caltrans will consult the National Weather Service 24-hour forecast daily. If any precipitation is forecasted, the Designated Biologist will survey the project site to minimize effects to the California tiger salamander. If an unpredicted rainfall event starts while construction activities are in progress and an exclusion fence is not installed in the work area, Caltrans will suspend all work activities within the potential California tiger salamander habitat and equipment and personnel will be demobilized. Caltrans may move equipment to a designated staging area until work within the potential California tiger salamander habitat can resume.

6. Caltrans will maintain copies of the Biological Opinion and a list of all personnel who have successfully completed the education program at the worksite. Caltrans will provide the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife reasonable access to work areas to verify compliance with all outlined mitigation measures.

7. During project activities, Caltrans will properly contain all trash that may attract predators. Caltrans will remove and dispose of trash from the work site weekly. Following construction, Caltrans will remove all trash and construction debris from work areas. No hazardous materials will be stored or handled within the project area. All construction-related vegetative debris (e.g., larger brush, tree limbs, tree trunks) will be stored inside a designated stockpile and hauled offsite for disposal weekly.

8. All refueling, maintenance and staging of equipment and vehicles will occur at least 60 feet from riparian habitat or water bodies and not in a location from where a spill would drain directly toward aquatic habitat, unless otherwise preapproved by the necessary agencies. The Designated Biologist will ensure contamination of habitat does not occur during operations. Prior to the onset of work, Caltrans will develop a plan that addresses the prompt and effective response to

any accidental spills. The Designated Biologist will inform all workers of the importance of preventing spills and of the appropriate measures to take should a spill occur. Contractors will use drip pans under staged equipment and check all vehicles and equipment daily for leaks. Contractors will not leave equipment outside of designated staging areas overnight.

9. Caltrans will install erosion control materials adjacent to riparian features following the recommendations of the Designated Biologist. Caltrans will not use any materials potentially harmful to covered species. Areas of soil stockpiles will be located over 60 feet from all riparian and pond habitat. Contractors will cover soil stockpiles one day prior to any rain event to prevent soil erosion.

10. During project activities, Caltrans will implement dust control measures when warranted. Caltrans will use the minimal amount of water necessary to avoid puddle formation.

11. Prior to starting work-related activities within the potential California tiger salamander habitat occurring in the rainy season (October 1 to June 1), temporary exclusionary fencing will be installed between post mile R40.1 and post mile 43 to protect California tiger salamander habitat as well as to prevent individuals from dispersing into work areas. Caltrans will submit the design for fencing to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife for approval no less than 30 days prior to starting the aforementioned work. Caltrans will continue to maintain the barrier throughout construction. The Designated Biologist will conduct pre-ground disturbance surveys in conjunction with exclusion fence installation. The Designated Biologist or Monitor will inspect the area daily, ensure it is in working condition, and ensure that workers avoid entering designated habitat. During dry conditions, contractors will bury fencing 6 inches into the ground and extend it 3 feet above the ground. Caltrans will not use plastic monofilament netting to avoid potential entanglement of the California tiger salamander.

12. Caltrans will limit all project-related vehicle and pedestrian access to established roads and staging areas. Caltrans will locate staging areas within previously disturbed areas to the extent possible, clearly delineate them, and they will contain all project-related parking and storage needs. Caltrans will limit the number of access routes, size of staging areas, and the total area of activity to the maximum extent feasible to achieve the project.

13. The Designated Biologist will inspect all open trenches, holes, or other excavations for covered species and other wildlife prior to reinitiating work each day and before any open features are backfilled.

Contractors will cover trenches or provide adequate means of escape (earthen ramps not more than 2:1 slope, wooden boards, etc.).

14. To compensate for the loss in California tiger salamander reproductive value and to meet California Department of Fish and Wildlife's fully mitigated standard, Caltrans will purchase 17.4 credits at the La Purisima Conservation Bank. Should a new conservation bank or other conservation easement option local to the West Santa Maria/Orcutt metapopulation become available and be approved prior to anticipated project implementation in 2024, Caltrans will coordinate with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to discuss alternative mitigation options. Caltrans, the U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife will work to prioritize local habitat preservation recovery goals for the affected metapopulation.

15. To meet the California Department of Fish and Wildlife's fully mitigated standard and abate existing potential for vehicle strikes, Caltrans will install an exclusionary berm feature on the southern side of State Route 1 between post miles 42.1 and 42.2. Caltrans will design the feature to impede California tiger salamander northern movement across the roadway and redirect individuals back south toward open habitat. Caltrans will design the feature in such a way that allows any individuals moving from the north side of the roadway in a southward direction to be able to freely cross without impediment. Once the exclusionary berm feature is completed, Caltrans will conduct annual routine inspections, maintenance, and repairs prior to the start of the rainy season. Caltrans will ensure that soil, debris, leaf litter, and other materials are kept from accumulating along the feature and will perform necessary repairs promptly.

16. Caltrans will require the Designated Biologist to monitor the effectiveness of the exclusionary berm feature using wildlife camera trap stations. Caltrans will design camera trap arrays to assess whether the exclusionary berm feature is performing as designed and to ensure it is effective at excluding California tiger salamander northern movements across the roadway. Caltrans will start camera monitoring during the first November following exclusionary berm completion. Monitoring will occur during the rainy season (November 1 to May 1) of each year, when California tiger salamanders are anticipated to make dispersal movements. Data collection and camera maintenance will occur every 2-4 weeks for the duration of the rainy season of each year in the monitoring period, unless otherwise agreed to by the California Department of Fish and Wildlife. Monitoring will continue for up to 5 years or until the occurrence of 3 years of at least 70% average rainfall occurring between September 1 and April 1 as

measured at the nearest National Oceanic and Atmospheric Administration climate station.

Additional measures relating to California tiger salamander and La Graciosa thistle critical habitat include the following:

17. During construction, Caltrans will ensure that the spread or introduction of invasive exotic plant species is avoided to the maximum extent possible.

18. Caltrans will import only clean fill. When practicable, Caltrans will remove and properly dispose of invasive exotic plants in the project site. Caltrans will take all vegetation removed from the construction site to a landfill to prevent the spread of invasive species. If soil from weedy areas needs to be removed offsite, Caltrans will dispose of the top 6 inches containing the seed layer in areas with weedy species at a landfill.

19. Caltrans will establish wash stations onsite for construction equipment under the guidance of the Designated Biologist if deemed necessary in order to avoid/minimize the spread of invasive plants and/or seed within the construction area.

20. The Caltrans erosion control seed mix or landscaping planting plans will not include any invasive species listed in the Cal-IPC Invasive Plant Inventory.

21. Caltrans will condition contracts for permanent erosion control and restoration plantings to require the use of regionally appropriate California native forb and grass species that occur in the same general geographic area as the project site.

22. To minimize impacts to breeding California tiger salamander individuals, eggs, and larvae, Caltrans must condition any contracts to require work adjacent to breeding pond feature GUAD-7 when the feature is completely dry.

23. Caltrans must locate staging areas a minimum of 0.25 mile away from breeding ponds GUAD-7 and SAMA-21. Caltrans must submit staging area locations to U.S Fish and Wildlife Service and California Department of Fish and Wildlife prior to project implementation and utilize existing paved areas to the extent feasible.

24. To avoid impacting California tiger salamander individuals and breeding populations, Caltrans must conduct a hydrological effects analysis of all culvert locations within 0.25 mile of breeding pond

features (GUAD-7 and SAMA-21). Using the results of this analysis, culverts must be designed in such a way that they do not alter the hydrology of existing pond features nor newly enable movement of California tiger salamander into degraded habitat on the north side of the roadway.

Compensatory Mitigation

A condition of the Section 2080.1 Consistency Determination (to be procured during the Plans Specifications and Estimate [PS&E] phase in 2021) under the California Endangered Species Act will be to fully mitigate impacts of take resulting from project impacts. In addition to the impacts to California tiger salamander critical habitat, there is also potential for California tiger salamander upland and migratory/dispersal habitat to be impacted. The following mitigation estimate has been made for the project.

[The following paragraph has been added since the draft environmental document was circulated. Of particular note, the credits amount in that paragraph and the next paragraph now reflects the current updated amount of 17.4 credits.]

To compensate for the loss in reproductive value and to meet the California Department of Fish and Wildlife's fully mitigated standard, Caltrans will purchase 17.4 credits at the La Purisima Conservation Bank. Should a new conservation bank or other conservation easement option local to the West Santa Maria/Orcutt metapopulation become available and be approved prior to anticipated project implementation in 2024, Caltrans will coordinate with the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife to discuss alternative mitigation options. Caltrans, the U.S. Fish and Wildlife Service, and the California Department of Fish and Wildlife will work to prioritize local habitat preservation recovery goals for the affected metapopulation.

Prior to initiating ground- or vegetation-disturbing project activities, Caltrans will satisfy the California Department of Fish and Wildlife requirement to provide California tiger salamander habitat mitigation by purchasing 17.4 credits at a California Endangered Species Act-certified and California Department of Fish and Wildlife-approved Conservation Bank (La Purisima Bank) authorized to sell credits for the California tiger salamander.

Swainson's Hawk

1. If construction activities are proposed to occur within 100 feet of potential habitat during the nesting season (February 1 to September 30), a nesting bird survey will be conducted by a biologist determined qualified by Caltrans no more than 3 days prior to construction. If an active nest is found, a qualified biologist will determine an appropriate buffer and monitoring strategy 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.

2. If Swainson's hawks are observed within 100 feet of the Area of Potential Impact during the course of construction, a qualified biologist will implement an exclusion zone and work will be avoided within the exclusion zone until the Swainson's hawk is located greater than 100 feet from project-related disturbance.

2.2.4 Invasive Species

Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order 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 analysis for a proposed project.

Affected Environment

The information in this section is based on the Natural Environment Study that was completed for the project in October 2020.

Thirty-five plant species in the online California Invasive Plant Council Database (2020) were found in the Biological Study Area (see Table 2-5). Four exotic plant species with a "High" invasiveness rating were found in the Biological Study Area: red brome (*Bromus madritensis ssp. rubens*), highway iceplant (*Carpobrotus edulis*), yellow star-thistle (*Centaurea solstitialis*), and fennel (*Foeniculum vulgare*). Eight plant species with a California Invasive Plant Council invasiveness rating of "Moderate" and eight species with an invasiveness rating of "Limited" were found in the Biological Study Area.

The invasive plant species were sparsely scattered throughout the Biological Study Area and most common in ruderal/disturbed areas at the edge of agricultural production.

Table 2-5 Plants in the Biological Study Area that are in the California Invasive Plant Council's Invasive Plant Inventory

Scientific Name	Common Name	Family	Cal-IPC Invasiveness Rating
Anagallis arvensis	scarlet pimpernell	Primulaceae	Not evaluated
Anthemis cotula	stinking chamomile	Asteraceae	Evaluated, but not listed
Avena barbata	slender wild oat	Poaceae	Moderate
Brassica nigra	black mustard	Brassicaceae	Moderate
Bromus diandrus	ripgut brome	Poaceae	Moderate
Bromus madritensis ssp. *rubens*	red brome	Poaceae	High
Carduus pycnocephalus	Italian thistle	Asteraceae	Moderate
Carpobrotus edulis	iceplant	Aizoaceae	High
Centaurea calcitrapa	purple star thistle	Asteraceae	Moderate
Centaurea solstitialis	yellow star thistle	Asteraceae	High
Cichorium intybus	chicory	Asteraceae	Pending assessment
Cirsium vulgare	bull thistle	Asteraceae	Moderate
Conium maculatum	poison hemlock	Apiaceae	Moderate
Erigeron bonariensis	hairy fleabane	Asteraceae	Not evaluated
Erodium cicutarium	redstem filaree	Geraniaceae	Limited
Eucalyptus globulus	blue gum	Myrtaceae	Not evaluated
Foeniculum vulgare	fennel	Apiaceae	High
Helminthotheca echioides	bristly oxtongue	Asteraceae	Limited
Hordeum murinum	foxtail barley	Poaceae	Moderate
Lactuca serriola	prickly lettuce	Asteraceae	Pending assessment
Malva parviflora	cheeseweed	Malvaceae	Not evaluated
Medicago polymorpha	burclover	Fabaceae	Limited
Melilotus indicus	yellow sweetclover	Fabaceae	Pending assessment
Plantago coronopus	cutleaf plantain	Plantaginaceae	Pending assessment
Plantago lanceolata	English plantain	Plantaginaceae	Limited
Polygonum aviculare	prostrate knotweed	Polygonaceae	Pending assessment
Polypogon monspeliensis	rabbitsfoot grass	Poaceae	Limited
Portulaca oleracea	common purslane	Portulacaceae	Not evaluated
Pseudognaphalium luteoalbum	Jersey cudweed	Asteraceae	Not evaluated
Raphanus sativus	wild radish	Brassicaceae	Limited
Rumex crispus	curly leaved Dock	Polygonaceae	Limited
Senecio vulgaris	common groundsel	Asteraceae	Pending assessment
Silybum marianum	milk thistle	Asteraceae	Limited
Sonchus asper ssp. asper	prickly sow thistle	Asteraceae	Evaluated, but not listed
Xanthium spinosum	spiny clotbur	Asteraceae	Not evaluated

Environmental Consequences

Ground disturbance and other aspects of project construction (such as staging areas) could potentially spread or introduce invasive species within the Biological Study Area. Invasive plant species are sparsely scattered throughout the Biological Study Area, mostly in ruderal/disturbed areas along the edges of State Route 1.

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 will not use species listed as invasive. None of the species on the California list of invasive species is used by Caltrans for erosion control or landscaping in Northern Santa Barbara County. All equipment and materials will be inspected for the presence of invasive species and cleaned if necessary. In areas of particular sensitivity, extra precautions will 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

The following measures would prevent the spread of invasive plant species:

1. During construction, Caltrans will ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.

2. Only clean fill will be imported. When practicable, invasive exotic plants in the project site will be removed and properly disposed of. All vegetation removed from the construction site will be taken to a landfill to prevent the spread of invasive species. If soil from weedy areas must be removed offsite, the top 6 inches containing the seed layer in areas with weedy species will be disposed of at a landfill.

3. If necessary, wash stations onsite will be established for construction equipment under the guidance of Caltrans in order to avoid/minimize the spread of invasive plants and/or seed within the construction area.

4. Invasive species listed in the California Invasive Plant Council Database Invasive Plant Inventory will not be included in the Caltrans erosion control seed mix or landscaping planting plans.

5. The contract specifications for permanent erosion control and plantings will require the use of regionally appropriate California native forb and grass species that occur in the same general geographic area as the project site.

2.2.5 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 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, alteration 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 changes in community character, traffic patterns, housing availability, and employment.

The 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 California Environmental Quality Act is found in Section 15355 of the California Environmental Quality Act Guidelines. A definition of cumulative impacts under the National Environmental Policy Act is found in 40 Code of Federal Regulations Section 1508.7.

Affected Environment

Caltrans guidance for National Environmental Policy Act/California Environmental Quality Act cumulative impacts assessments includes defining a Resource Study Area. A Resource Study Area is the geographic area within which impacts on a particular resource are analyzed. The boundaries of Resource Study Areas for cumulative impacts analysis are often broader than the boundaries used for project-specific analysis.

Jurisdictional Wetlands, Other Waters, and Riparian Habitats

The Resource Study Area identified for jurisdictional wetlands, other waters, and riparian habitats is the Santa Maria Valley watershed. Cumulative impacts on these Santa Maria Valley watershed resources would result from construction of other general development projects in Santa Barbara County. The Santa Maria watershed is impacted by residential and agricultural land use, greenhouses, orchards, and oil field operations such as the one in Orcutt Hill. Most of the flow in the sub-watersheds is captured and infiltrated prior to reaching the Santa Maria River.

Construction of the project would contribute to the cumulative loss of jurisdictional waters of the United States and/or state. However, with implementation of the avoidance and minimization efforts to reduce impacts, and because the project would permanently impact approximately 0.036 acre of “other waters” and 0.056 acre of “Waters of the U.S.,” the project would not substantially contribute to this effect on jurisdictional wetlands, other waters, or riparian habitats. Compensatory riparian planting would also expand the extent of native riparian vegetation onsite, improving creek habitat at this

location. Most of the flow in the sub-watersheds is captured and infiltrated prior to reaching the Santa Maria River.

California Red-Legged Frog

The Resource Study Area for California red-legged frog cumulative impacts is within California red-legged frog Recovery Unit 7 – Northern Transverse Ranges and Tehachapi Mountains, Core Area 24 – Santa Maria River-Santa Ynez River, which is recognized as a core area source population and provides connectivity between known populations. Adult California red-legged frogs have been documented to travel over land for nearly 2 miles regardless of vegetation type or topography. Cumulative impacts to the California red-legged frog could result from construction of other development projects in Santa Barbara County. With the implementation of avoidance and minimization measures, the project will not substantially contribute to cumulative impacts to the California red-legged frog.

California Tiger Salamander

The Resource Study Area occurs within the West Santa Maria/Orcutt California tiger salamander metapopulation. The Resource Study Area identified for California tiger salamander cumulative impacts analysis is a 1.24-mile buffer around known California tiger salamander breeding ponds that overlap with the project area. The 1.24-mile buffer is based on guidance of Orloff 2011, which found that to be the maximum dispersal distance for the California tiger salamander. Population size and trends for the Santa Barbara County California tiger salamander are unknown due to its cryptic life history strategy and the restriction of access to ponds for surveys. There are 15 known extant breeding ponds, two vernal pool complexes, and a few isolated ponds within the 4,135 acres of this metapopulation.

Current threats to the Santa Barbara distinct population segment include habitat loss, fragmentation, alteration, disease, predation, hybridization, competition, vehicle-strike death, contaminants, and climate change. Because the project will require temporary and permanent impacts to potential upland and dispersal/migratory habitat for the California tiger salamander, the project is contributing to a cumulative impact to this species. However, cumulative impacts are estimated to be very low considering the following:

1. Habitat that will be impacted is highly disturbed, degraded, and sub-optimal.

2. The amount of potential habitat that would be affected in relation to the total amount of habitat that occurs in the Resource Study Area is very small.

3. The likelihood for take is low.

The project would have little effect on the conservation value and function of habitat and the physical and biological features for the California tiger salamander within this critical habitat unit because almost all impacts would occur within already highly disturbed areas that do not intrude on areas of undisturbed, high value habitat and would not create any additional barriers for connectivity.

Federally Designated Critical Habitat

The Resource Study Area identified for California tiger salamander critical habitat cumulative impact analysis is the federally designated critical habitat for the species located in Western Santa Maria/Orcutt.

The Resource Study Area identified for La Graciosa thistle critical habitat cumulative impact analysis is the federally designated critical habitat for the species located near the Santa Maria River-Orcutt Creek.

See Figures 2-4 and 2-5 for maps of the Resource Study Areas for these species.

Figure 2-4 Resource Study Area Map for California Tiger Salamander

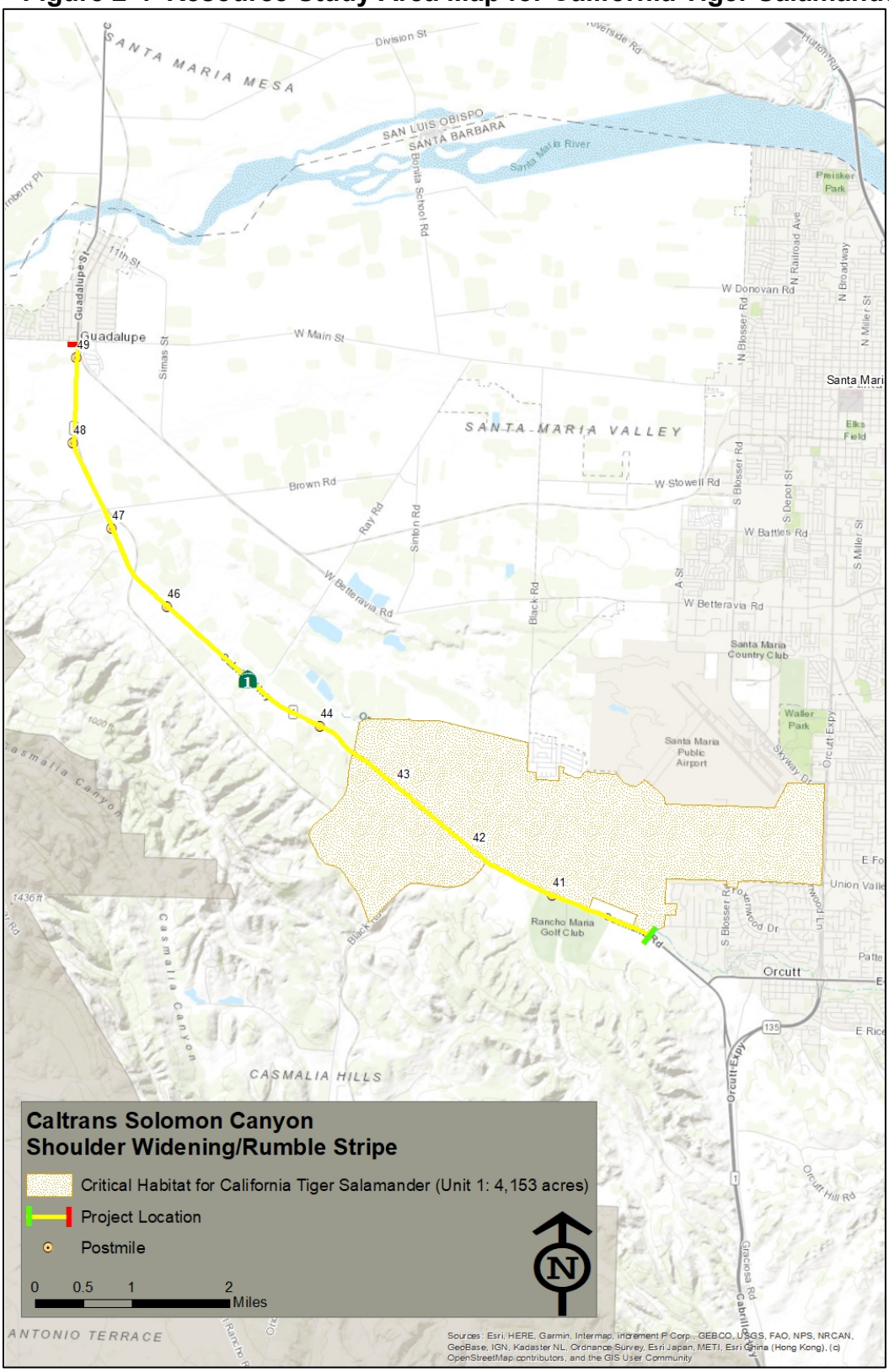
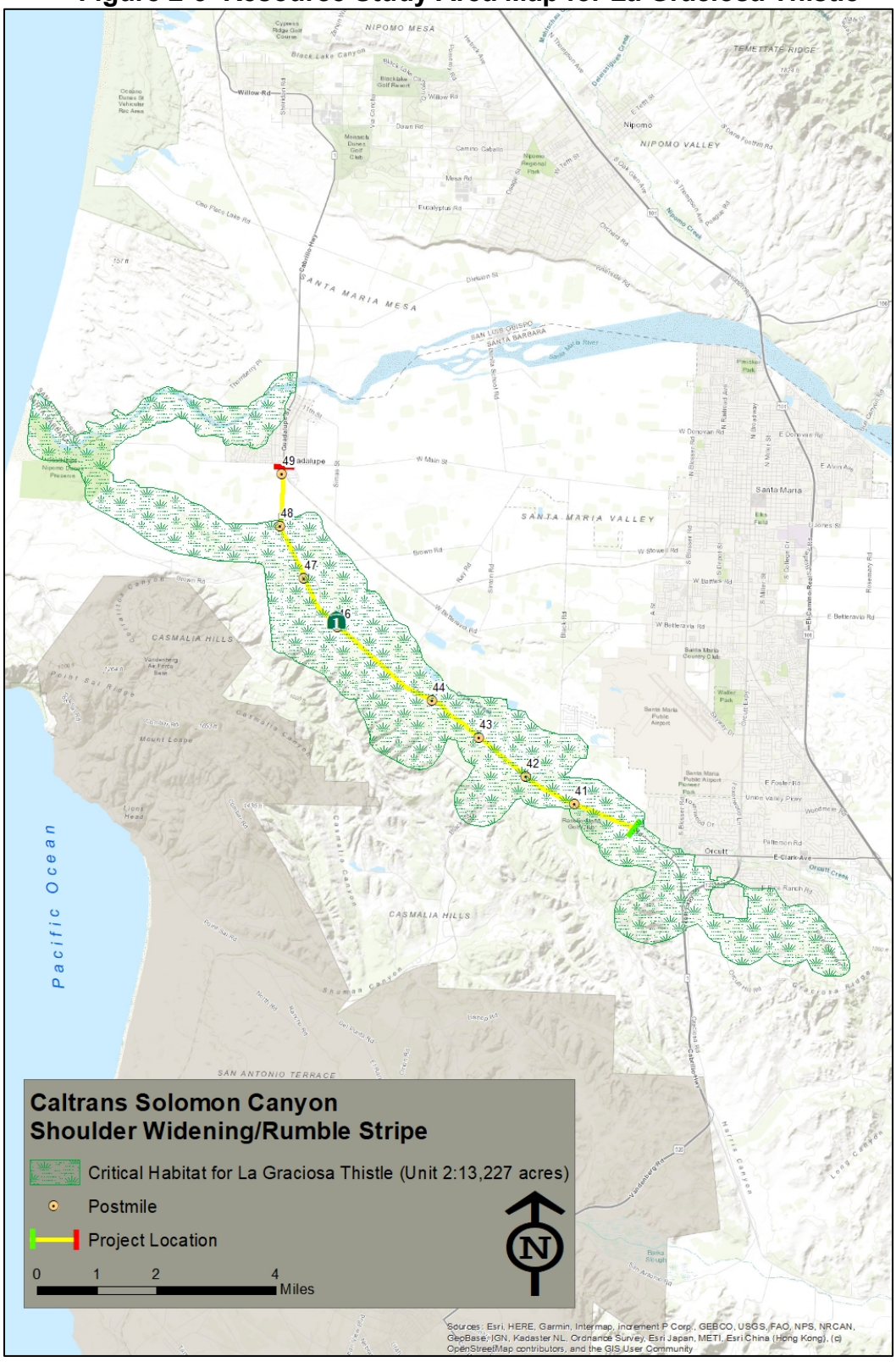


Figure 2-5 Resource Study Area Map for La Graciosa Thistle



Other projects in the vicinity of the project area, and the Resource Study Area for which cumulative impacts were considered, include the following:

1. Santa Maria Airport Business Park—Proposal to build a mixed-use development encompassing 1,002 acres adjacent to the Santa Maria Airport. The proposed project is within California tiger salamander critical habitat area.

2. The Neighborhoods of Willow Creek and Hidden Canyon—Proposal to build up to 146 residential units on 189.2 acres around the Rancho Maria Golf Course on State Route 1 near post mile 40.8. The proposed project is within La Graciosa thistle critical habitat area.

3. Curletti Farmworker Housing Project—Proposed farm labor camp that would consist of 30 bunk houses and 3 common area structures with a total square footage of 49,446 square feet. The proposed project is located approximately 1 mile northwest of the intersection of State Route 1 and Black Road and is within California tiger salamander critical habitat area and La Graciosa thistle critical habitat area.

4. Laguna County Sanitation District Expansion Project—Upgrade, modify, replace, and expand the capacity of the wastewater reclamation facility within the next 30 years, located approximately 0.8 mile west of the intersection of Black Road and Dutard Road. The proposed project is within California tiger salamander critical habitat area and La Graciosa thistle critical habitat area.

Environmental Consequences

Critical habitat for the Santa Barbara distinct population segment for the California tiger salamander was designated in 2004. For the California tiger salamander critical habitat Resource Study Area under consideration, the greatest threats are those of agricultural activities and residential and commercial development. Santa Barbara County's population is projected to grow by at least 160,000 people in the next 30 years, and all of the urban areas in the county except Santa Maria and Orcutt have nearly exhausted land zoned for residential development. Prime farmland east and west of Santa Maria currently designated by the City of Santa Maria as "No Urban Development Areas" is expected to face increasing pressure to develop as the city exhausts land available for development.

Critical habitat for the La Graciosa thistle was originally designated in 2004 (U.S. Fish and Wildlife Service) and revised in 2009. For the La Graciosa critical habitat Resource Study Area under consideration, the greatest threats are those from habitat fragmentation. If populations of the La Graciosa thistle in habitat with physical and biological features are able to remain connected, it is believed that the species could be conserved and recovered. La Graciosa

thistle critical habitat area is essential to the conservation of the species because it contains the last La Graciosa thistle population in riparian habitat. This habitat also contains what has historically been recognized as the largest La Graciosa thistle population. The area contains large blocks of intact riparian habitat along the Santa Maria River and the southwest side of Orcutt Creek and is essential as a dispersal corridor for the species.

Within California tiger salamander critical habitat, the Santa Maria Airport District has proposed a Specific Plan for the development of the Santa Maria Airport Business Park. The main features of this Specific Plan include open space and recreation areas, mixed-use commercial, commercial/professional office, airport services, public facilities, and area designated for light manufacturing use. The Specific Plan was developed in the 1980s and has undergone numerous revisions since then. The Airport Business Park Specific Plan will impact 188.32 acres of California tiger salamander upland habitat, while conserving and restoring 543 acres of habitat to offset impacts from the Airport Business Park development.

Within La Graciosa thistle critical habitat area, the Orcutt Rancho project includes the proposal to construct up to 146 residential units on 189.2 acres around the Rancho Maria Golf Course on State Route 1 near post mile 40.8 (County of Santa Barbara 2017). This project's environmental review was underway as of June 2020. The proposed Specific Plan for the Orcutt Rancho project states that it has been designed to maximize contiguous natural open space and minimize potential impacts to wildlife and sensitive vegetation (County of Santa Barbara 2017). Wildlife corridors and habitat connectivity are maintained throughout the site through protection of natural corridors such as canyons and creeks in dedicated open space. The proposed Specific Plan includes 96.7 acres of private undisturbed open space, which makes up 51% of the overall Specific Plan area (County of Santa Barbara 2017).

The Curletti farmworker housing project proposes to build 30 bunk houses and 3 common area structures within California tiger salamander critical habitat area and La Graciosa thistle habitat area. According to the Habitat Conservation Plan (2017) for this project, the cumulative effects of project implementation on the California tiger salamander are considered to be low given the small number of small mammal burrows within the project area and the low quality of the project site due to existing disturbance and development. To compensate for California tiger salamander upland habitat loss, the applicant is in the process of coordinating with the U.S. Fish and Wildlife Service to establish either a conservation easement on applicant-owned land or the purchase of credits from an approved California tiger salamander mitigation bank prior to starting any ground-disturbing activities or any other activity that could result in take of the California tiger salamander.

The Laguna County Sanitation District expansion project proposes to construct new treatment facilities on district property and conduct ongoing

operation and maintenance activities within established rights-of-way over a 30-year period. According to the Habitat Conservation Plan (Santa Barbara County Public Works Department 2017) for this project, the covered activities that would take place as part of the project would permanently remove 37.63 acres of upland habitat suitable for the California tiger salamander and La Graciosa thistle; however, it would permanently protect and preserve 132.83 acres of upland habitat and a known breeding pond, preventing future loss of breeding and upland habitat within the conservation easement area.

Avoidance, Minimization, and/or Mitigation Measures

The Solomon Canyon Rumble Strip/Shoulder Widening project is not expected to have a substantial contribution to cumulative impacts to area resources. No additional measures would be required beyond those already included for impacts to specific resources.

Chapter 3 CEQA Evaluation

3.1 Determining Significance Under CEQA

The project is a joint project by Caltrans and the Federal Highway Administration and is subject to federal and state environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the National Environmental Policy Act (known as NEPA) and the California Environmental Quality Act (known as CEQA). The Federal Highway Administration's responsibilities 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 U.S. Code 327) and the Memorandum of Understanding dated December 23, 2016 and executed by the Federal Highway Administration and Caltrans. Caltrans is the lead agency under NEPA and CEQA.

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, or a lower level of documentation, will be required. NEPA requires that an Environmental Impact Statement be prepared when the proposed federal action (the 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 Environmental Impact Statement, it is the magnitude of the impact that is evaluated and no judgment 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 document.

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 must be prepared. Every significant effect on the environment must be disclosed in the Environmental Impact Report and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an Environmental Impact Report. 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 project. Potential impact determinations include Potentially Significant 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 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.

"No Impact" determinations in each section are based on the scope, description, and location of the proposed project as well as the appropriate technical report (bound separately in Volume 2), and no further discussion is included in this document.

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?

Less Than Significant Impact—The slightly taller proposed metal guardrail, metal guardrail transitions, and concrete bridge rail transitions would cause a minimal effect on scenic vistas in the area. The relocation of utility poles and wires farther away from the highway would cause the utilities to appear lower than the distant hills, further enhancing the views of the hills to the west and south. Approximately 50 eucalyptus trees are proposed for removal from areas that are within the clear recovery zone. The trees occur in clusters at approximately 13 locations throughout the project. Although the trees can contribute to the skyline views, the removal would enhance the scenic vista of the hills to the west and south.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact.

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?

Less Than Significant Impact—The concrete bridge rail transitions would be similar to the existing concrete bridge rail and largely unnoticed by the casual observer. The new guardrail would be slightly taller than the existing guardrail which, when seen with the wider road shoulders, would increase the visual scale and engineered appearance of the highway. The addition of all these elements together would create a more utilitarian appearance and would add a degree of visual clutter to the setting. As a result, these visual changes would cause a minor reduction of rural character and visual quality to the immediate project area.

Although existing riparian trees and other plants would be removed by the project, vegetation removed would be fully replaced and established. As a result, the riparian areas would over time be fully revegetated and result in a somewhat natural-appearing visual condition. Construction access roads and areas of demolition, if restored to natural-appearing landforms, would reduce the noticeability of disturbance and engineered alterations.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact.

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?

Less Than Significant Impact—The project would require approximately 4.37 acres split between nine properties zoned for farmland use by Santa Barbara County. The project's Natural Resources Conservation Service's Farmland Conversion Impact Rating did not meet the minimum threshold required for further investigation and coordination with the Natural Resources Conservation Service for farmland impacts, so the project impact would be less than significant.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Less Than Significant Impact—The project would result in the loss of approximately 0.37 acre of agricultural land from Assessor's Parcel Number 113-250-011, and it is anticipated that the remaining 260.84 acres of the property would still be viable for agricultural practices. The project's partial property acquisition would not prevent the property from maintaining its Williamson Act contract or prevent the continuation of agricultural practices on the property. Therefore, the project is not expected to adversely affect existing Williamson Act contracts.

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))?

No Impact.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact.

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.

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?

No Impact.

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?

No Impact.

c) Expose sensitive receptors to substantial pollutant concentrations?

No Impact.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact—The project will not cause an increase in long-term air emissions. With implementation of construction air quality measures, the impact would be less than significant.

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—With the proposed avoidance, minimization, and mitigation measures, the project would not have a significant adverse effect on the California red-legged frog, California tiger salamander, American badger, Swainson's hawk, nesting birds, and bat species. For the California tiger salamander, Caltrans proposes to purchase the number of California Department of Fish and Wildlife-required California tiger salamander credits from a California Department of Fish and Wildlife-approved mitigation or conservation bank; or, acquire, permanently preserve,

and perpetually manage the California Department of Fish and Wildlife-required amount of acreage of Habitat Management Lands. With the incorporation of avoidance, minimization, and mitigation measures discussed in Sections 2.2.2 and 2.2.3, impacts would be less than significant with mitigation incorporated.

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 Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant With Mitigation Incorporated—The avoidance, minimization, and mitigation measures for the California tiger salamander would offset impacts to California tiger upland critical habitat and the La Graciosa thistle (Section 2.2.3).

The project would permanently impact U.S. Army Corps of Engineers “other waters” and Regional Water Quality Control Board and California Department of Fish and Wildlife Waters of the State due to shoulder widening, culvert extensions, and new headwalls. It would also temporarily impact U.S. Army Corps of Engineers “other waters” and Regional Water Quality Control Board and California Department of Fish and Wildlife Waters of the State by staging activities and access to jurisdictional areas.

A Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers, a Clean Water Act Section 401 Water Quality Certification from the Regional Water Quality Control Board, and a California Fish and Game Code Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife would be required for the project. 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 riparian vegetation via restoration (re-establishment). With this mitigation and the measures listed in Section 2.2.1, impacts would be less than significant.

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 Impact—Approximately 0.004 acre of jurisdictional wetlands would be temporarily impacted by staging activities and access to jurisdictional areas during construction. No permanent impacts to jurisdictional wetlands are expected; with use of avoidance and minimization measures discussed in Section 2.2.1, impacts would be less than significant.

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?

No Impact.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact.

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.

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—The project would extend a 1984 historic-era box culvert that is a Type 1 resource under the Section 106 Programmatic Agreement, meaning it is exempt from consideration and not eligible for listing in the National Register of Historic Places or the California Register of Historical Resources. Therefore, the project's impact to historical resources would be less than significant.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

No Impact.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

No Impact.

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.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact.

3.2.7 Geology and Soils

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:

No Impact.

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?

No Impact.

ii) Strong seismic ground shaking?

No Impact.

iii) Seismic-related ground failure, including liquefaction?

No Impact.

iv) Landslides?

No Impact.

b) Result in substantial soil erosion or the loss of topsoil?

No Impact.

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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact.

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?

No Impact.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact.

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—While the project would result in greenhouse gas emissions during construction, it is anticipated that the project would not result in any increase in operational greenhouse gas emissions. With implementation of construction greenhouse gas-reduction measures, the impact would be less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact—The project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction greenhouse gas-reduction measures, the impact would be less than significant.

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?

No Impact.

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?

No Impact.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact.

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?

No Impact.

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.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact.

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?

No Impact.

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.

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 onsite or offsite;

No Impact.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;

No Impact.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

No Impact.

iv) Impede or redirect flood flows?

No Impact.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact.

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.

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?

No Impact.

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.

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.

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?

No Impact—No permanent impacts to noise levels are expected. Local noise levels will be the same after completion of the project, and Caltrans Standard Specifications to minimize noise and vibration disturbance would be implemented during construction.

b) Generation of excessive groundborne vibration or groundborne noise levels?

No Impact.

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?

No Impact.

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.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact.

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.

Police protection?

No Impact.

Schools?

No Impact.

Parks?

No Impact.

Other public facilities?

No Impact.

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?

No Impact.

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.

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.

b) Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No Impact.

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.

d) Result in inadequate emergency access?

No Impact.

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

No Impact.

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.

No Impact.

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—Temporary and permanent utility relocations are expected for electrical power lines, water pumps, and a well within the project limits. Utilities would be relocated to ensure their avoidance during project construction. It is expected that temporary and permanent utility relocations would not result in significant environmental impacts. The Caltrans Right-of-Way Manual provides guidance on managing and processing utility relocations to minimize potential impacts to the environment. The project would also have to comply with the Federal Utility Relocation and Accommodation on Federal-Aid Highway Projects Program Guide.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact.

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.

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.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact.

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?

No Impact.

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.

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.

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.

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?

Less Than Significant With Mitigation Incorporated—Detailed discussions regarding the existing environment, species, and habitat that could be affected by the project, and expected project measures, are found in Section 2.2 of this document.

The project would result in a combination of direct and indirect effects on biological resources as a result of temporary and permanent project-related impacts. The project could affect several species that have the potential to be found within the project area. The project could also affect potential species habitat within the project area. However, the project would incorporate avoidance, minimization, and/or mitigation measures that would reduce or offset any potential project-related impacts to biological resources.

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.)

Less Than Significant Impact—Detailed discussions regarding potential cumulative impacts, as a result of the project, are discussed in Section 2.2.6.

The project has the potential to contribute to cumulative impacts on biological species and habitat. The project would result in the permanent loss of potential species habitat. Project construction activities could kill individual special-status species. However, with the incorporation of avoidance, minimization, and mitigation measures already included for specific biological resources, the project is not expected to result in substantial negative cumulative impacts on biological species and habitat.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

No Impact.

3.3 Climate Change

The information in this section is based on the Climate Change Technical Study that was completed for the project in August 2020.

3.3.1 Regulatory Setting

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 (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—“the triple bottom line of sustainability” (FHWA n.d.). 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.

Various efforts have been made at the federal level 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) and Corporate Average Fuel Economy Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the Corporate Average Fuel Economy program based on each manufacturer’s average fuel economy for the portion of its vehicles produced for sale in the United States.

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. Environmental Protection Agency in conjunction with the National Highway Traffic Safety Administration is responsible for setting greenhouse gas emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence greenhouse gas emissions.

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 that can be found listed in the Climate Change Technical Study.

3.3.2 Affected Environment

The project is in a rural area along State Route 1 between the small agriculture-based town of Guadalupe and the unincorporated town of Orcutt that is a suburb of Santa Maria at the mouth of the Santa Maria Valley. This section of the highway runs north-south between the two towns and is a major road that serves the surrounding vicinity. Agriculture, open space, recreation, larger-lot residences and varied industry make up much of the land use in the project area. The Santa Barbara County Association of Governments' Regional Transportation Plan guides transportation development in the area.

The California Air Resources Board sets regional targets for California's 18 Metropolitan Planning Organizations to use in their Regional Transportation Plan/Sustainable Communities Strategy to plan future projects that will cumulatively achieve greenhouse gas reduction goals. Targets are set at a percentage reduction of passenger vehicle greenhouse gas emissions per person from 2005 levels. The regional reduction target for the Santa Barbara County Association of Governments is 13% by 2020 and 17% by 2035.

The project was included in the Santa Barbara County Association of Governments' approved 2040 Regional Transportation Plan (2017) within State Highway Operation and Protection Program-funded Collision Reduction projects.

The Santa Barbara County Comprehensive Plan, Energy Element, Goal 8.3, tells the county to implement the Energy and Climate Action Plan to reduce greenhouse gas emissions from community-wide sources by a minimum of 15% from 2007 baseline emissions by 2020. The Energy and Climate Action Plan includes greenhouse gas reduction measures such as T4— Enhance alternative and active transportation, T5—Complete an integrated bikeway system, and BE10—Implement Best Management Practices for construction equipment operation.

3.3.3 Environmental Consequences

Operational Emissions

The purpose of the project is to reduce the number and severity of roadway departure crashes. The project will not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational greenhouse gas emissions. Because the project would not increase the number of travel lanes on State Route 1, no increase in vehicle miles traveled would occur as result of project implementation.

While some greenhouse gas emissions during the construction period would be unavoidable, the project once completed would not lead to an increase in operational greenhouse gas emissions.

Construction Emissions

Construction greenhouse gas emissions would result from material processing, 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.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the greenhouse gas emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Construction greenhouse gas emissions were estimated using Caltrans' Construction Emissions Tool and default settings for a roadside improvement project. The estimated carbon dioxide emissions would be 809 tons per year or a total of 368 tons generated over a period of about 30 months for project construction.

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all the California Air Resources Board emission reduction regulations; the contracts also include Section 14-9.02, Air Pollution Control,

which 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.

The project would also implement Caltrans standardized measures (such as construction best management practice) that apply to most or all Caltrans projects. Certain common regulations, such as equipment idling restrictions and development and implementation of a traffic control plan that reduce construction vehicle emissions, also help reduce greenhouse gas emissions.

While the project would result in greenhouse gas emissions during construction, it is anticipated that the project would not result in any increase in operational greenhouse gas emissions. The project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction greenhouse gas-reduction measures, the impact would be less than significant.

3.3.4 Avoidance, Minimization, and/or Mitigation Measures

The following measures would reduce greenhouse gas emissions and potential climate change impacts from the project:

The project would include a Transportation Management Plan that would reduce delays and related short-term increases in greenhouse gas emissions from disruptions in traffic flow during construction. Also, in the event that portable changeable message signs are required as part of the Transportation Management Plan, message signs would be solar powered when possible and would not result in greenhouse gas emissions during use.

Caltrans staff will enhance the environmental training provided for contractor staff by adding a module on greenhouse gas emissions reduction strategies, including limiting equipment idling time as much as possible.

The project would revegetate previously undisturbed areas, where applicable, following construction completion. Landscaping reduces surface warming and, through photosynthesis, removes carbon dioxide from the atmosphere.

The contractor would be required to use the following measures:

- Reduce construction waste and maximize the use of recycled materials.
- Operate construction equipment with improved fuel efficiency by:
    - Properly tuning and maintaining equipment.
    - Limiting idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.

  - Using the right-size equipment for the job.

- Caltrans Standard Specifications Section 14-9, Air Quality, a part of all construction contracts, requires contractors to comply with all federal, state, regional, and local rules, regulations, and ordinances related to air quality. Requirements of the Santa Barbara County Air Pollution Control District will apply to this project. Requirements that reduce vehicle emissions, such as limits on idling time, may help reduce greenhouse gas emissions.

Chapter 4 Comments and Coordination

Early and continuing coordination with the public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures, and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including project development team meetings and interagency coordination meetings.

This chapter summarizes the results of Caltrans' efforts to identify, address, and resolve project-related issues through early and continuing coordination.

4.1 Cultural Resources Coordination

A request was sent to the Native American Heritage Commission to search the Sacred Lands Files for cultural resources in or near the project area. On February 18, 2020, the Native American Heritage Commission responded that the Sacred Lands Files search was positive and requested that Caltrans contact the San Luis Obispo County Chumash Council for more information. Several attempts were made to contact the San Luis Obispo County Chumash Council, but the contact information is outdated. On February 19, 2020, a letter was sent to the San Luis Obispo County Chumash Council, but no response has been received to date.

Section 106 and Assembly Bill 52 consultation letters were sent to Native American representatives who are known to have knowledge of the project area. The recipients included: Richard Angulo; Vincent Armenta; Randy Guzman-Folks, Julie Tumamait-Stenslie; Charles Parra; Carol Pulido; John Sespe; Patrick Tumamait; and Gilbert Unzueta Jr. No one responded to Caltrans' attempts to consult on the project. Caltrans has conducted consultation in recent decades for several projects in the same area, and Native American representatives have expressed no concerns over the highway corridor in the past.

On December 5, 2019, Caltrans sent letters to potentially interested parties, including the following: Dr. Anne Petersen, Executive Director of the Santa Barbara Trust for Historic Preservation; Cindy Ransick, Executive Director of the Santa Maria Valley Historical Society; David Villalobos, Supervising Board Assistant at the Santa Barbara County Historic Landmarks Advisory Commission; Doug Jenzen, Executive Director of the Guadalupe-Nipomo Dunes Center; Michael Redmon, Executive Director of the Santa Barbara Historical Society; representatives from the Orcutt Historical Society; and Shirley Boydstun, the Secretary of the Rancho de Guadalupe Historical Society. Caltrans requested comments on the project from these

organizations including any information about historic properties in the project area or any specific concerns in the project vicinity.

On December 20, 2019, the Rancho De Guadalupe Historical Society responded with information regarding a historic dairy that once stood near the project area, called Guilt Edge Creamery. The dairy once occupied the area near where the Salmon Canyon Creek Bridge (Number 51-0103) now stands. According to the Historical Society, from the 1880s through early 1900s, many dairies were owned and managed by Swiss and Italian immigrants in this area and westward to the Casmalia foothills, down Point Sal Road to the coast. However, no such creameries still exist within the vicinity of the project area. Therefore, it has been determined that no such properties would be affected by the project.

David Villalobos from Santa Barbara County Planning and Development and Mike Imwalle from the Santa Barbara Trust of Historic Preservation responded on January 3 and 14, 2020, respectively. Both organizations indicated they were not aware of any cultural resources or official designations within the project area.

Therefore, except for the Rancho de Guadalupe Historical Society, there has been no response with additional information about the project study area and no objection to the project proposed by any parties to date.

4.2 Biological Resources Coordination

September 6, 2019: Larissa Clarke (Caltrans District 5 Biologist) submitted an online request through the U.S. Fish and Wildlife Service IPaC website for an official U.S. Fish and Wildlife Service species list for the project area. The official species list was received the same day. An official species list was requested and received from the National Marine Fisheries Service.

September 18, 2019: Larissa Clarke obtained a California Natural Diversity Database species list from an online search of the California Department of Fish and Wildlife Rarefind 5 for U.S. Geological Service California Santa Maria, Orcutt, Guadalupe, and Casmalia West 7.5-minute quadrangles.

December 16, 2019: Larissa Clarke emailed Rachel Henry of the U.S. Fish and Wildlife Service to request information on any current or future projects that may be located within the same critical habitat units as the project. Rachel Henry replied with one additional project proposed within the critical habitat units.

January 9, 2020: Larissa Clarke emailed Morgan Jones of Santa Barbara County Public Works to request results from a previous project near the Black

Road Bridge (Number 51C-013) where wildlife cameras were placed on the roof of the undercrossings for California tiger salamander monitoring.

January 14, 2020: Morgan Jones replied with the Black Road Bridge Camera Study dated June 27, 2019 (in summary, over 290,000 photos were taken, and no California tiger salamanders were captured on camera).

January 23, 2020: Larissa Clarke emailed Baron Barrera of the California Department of Fish and Wildlife to request information on any current or future projects that may be located within the same critical habitat units as the project.

February 4, 2020: Baron Barrera replied via email requesting more information. Larissa Clarke replied with additional details and project maps.

February 10, 2020: Baron Barrera replied with additional projects, a Notice of Preparation of a Draft Environmental Impact Report, and conservation easements proposed and occurring within the vicinity of the project location.

June 11, 2021: Larissa Clarke obtained updated resource agency species lists (from the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Natural Diversity Database).

4.2.1 Essential Fish Habitat Consultation Summary

On June 11, 2021, an official species list was requested and received from the National Marine Fisheries Service. The list shows that no Essential Fish Habitat for federally managed species occurs in the project location; therefore, no Essential Fish Habitat consultation will be necessary.

4.2.2 California Endangered Species Act Consultation Summary

On January 23, 2020, Caltrans contacted the California Department of Fish and Wildlife via email to present a summary of the project and to ask for assistance with identifying any foreseeable future projects the California Department of Fish and Wildlife was aware of that may be located within critical habitat for California tiger salamander Unit 1 and/or La Graciosa thistle Unit 2.

On February 10, 2020, the California Department of Fish and Wildlife responded via email with future projects that the California Department of Fish and Wildlife was aware of within the critical habitat units.

[The following two paragraphs have been added or revised since the draft environmental document was circulated.]

The project may result in the take of California tiger salamander, a state listed threatened species, therefore California Endangered Species Act consultation is required with the California Department of Fish and Wildlife.

Because this species is listed under both the Federal Endangered Species Act and the California Endangered Species Act, Fish and Game Code section 2080.1 allows an applicant who has obtained a federal incidental take statement (federal Section 7 consultation) to request that the Director of the California Department of Fish and Wildlife find the federal documents consistent with the California Endangered Species Act. Provided the federal documents are found to be consistent with the California Endangered Species Act, a consistency determination can be issued and no further authorization or approval is necessary under the California Endangered Species Act. Following coordination with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife in 2021, a California Department of Fish and Wildlife Consistency Determination is anticipated for this project.

Chapter 5 List of Preparers

This document was prepared by the following Caltrans Central Region staff:

Ruben Atilano, Transportation Engineer (Civil). M.S., Civil Engineering (Geotechnical Focus), California Polytechnic State University, San Luis Obispo; B.S., Civil Engineering, San Francisco State University; 2 years of transportation engineering experience. Contribution: Preliminary Geotechnical Design Report.

Larissa Clarke, Environmental Planner (Natural Sciences). M.S., Marine Resource Management, Oregon State University; B.S., Environmental and Natural Resources, Clemson University; 6 years of experience in watershed conservation and restoration, ecology, and environmental planning. Contribution: Field studies, documentation, regulatory permitting, monitoring, and reporting.

Mitch Doucette, Environmental Planner (Natural Sciences). B.S., Biology, Minor in Chemistry, Colorado State University, Pueblo; 3 years of experience in fisheries, biological studies, and environmental planning and permitting. Contribution: Field studies, documentation, regulatory permitting, monitoring, and reporting.

Benedict Erchul. P.E., Civil Engineer. B.S., Civil Engineering; 14 years of experience in Caltrans hydraulics/floodplain/fish passage studies. Contribution: Location Hydraulic Study.

Nicole Kim, Associate Environmental Planner. B.S., Environmental Science and Public Policy, Duke University; 4 years of air quality research and environmental planning experience. Contribution: Preparation of Initial Study/Mitigated Negative Declaration.

Rajvi Koradia, Environmental Engineer. M.S., Civil and Environmental Engineering, San Jose State University; B.S., Environmental Engineering, L.D. College of Engineering, Ahmedabad, India; 2 years of environmental engineering experience. Contribution: Air and Noise Studies.

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 6 years of experience in the fields of Architectural History and Historic Preservation Planning. Contribution: Principal Architectural Historian.

Isaac Leyva, Engineering Geologist. B.S., Geology; 30 years of experience in petroleum geology, environmental geology, geotechnical engineering. Contribution: Hazardous Waste Memorandum, Paleontology Review Memorandum, Water Quality Assessment Memorandum.

Christina MacDonald, Associate Environmental Planner (Archaeology). M.A., Cultural Resources Management, Sonoma State University; B.A., Anthropology, University of California, Los Angeles; over 20 years of experience in California prehistoric and historical archaeology. Contribution: Principal Investigator – Prehistoric and Historical Archaeology.

Tamra Nunes, Associate Environmental Planner (Natural Sciences). B.A., Biology, California State University, Fresno; 25 years of biology experience. Contribution: Quality Assurance/Quality Control content reviewer.

Jane Sellers, Associate Environmental Planner. B.A., Journalism, California State University, Fresno; 21 years of environmental compliance experience, focusing on Quality Assurance/Quality Control and reviewing and editing NEPA and CEQA environmental documents. Contribution: Technical edit and review of the draft and final environmental documents, including Caltrans Web Accessibility for All compliance.

Jason Wilkinson, Senior Environmental Planner. B.S., Natural Resource Management, Minor in Geographical Information System (GIS), California Polytechnic State University, San Luis Obispo; 13 years of environmental planning experience. Contribution: Supervised the preparation of the Initial Study with proposed Mitigated Negative Declaration and the final environmental document.

Chapter 6 Distribution List

Guadalupe Branch Library
4719 West Main Street
Guadalupe, CA 93434

Santa Maria Public Library
421 South McClelland Street
Orcutt, CA 93455

Orcutt Branch Library
175 Broadway Street
Orcutt, CA 93455

Santa Barbara County Planning and Building Department
123 East Anapamu Street
Santa Barbara, CA 93101-2058

Santa Barbara County Public Works Department
620 West Foster Road
Santa Maria, CA 93455

City of Guadalupe Building and Planning Office
918 Obispo Street
Guadalupe, CA 93434

California Highway Patrol
Santa Maria Office
1710 North Carlotti Drive
Santa Maria, CA 93454-1505

Baron Barrera
California Department of Fish and Wildlife
South Coast Region
4665 Lampson Avenue, Suite C
Los Alamitos, CA 90720

Leilani Takano
U.S. Fish and Wildlife Service
2493 Portola Road, Suite B
Ventura, CA 93003-7726

Theresa Stevens
U.S. Army Corps of Engineers
60 South California Street, Suite 201
Ventura, CA 93001

Jessica Adams
NOAA-National Marine Fisheries Service
501 West Ocean Boulevard, Suite 4200
Long Beach, CA 90802

Mark Cassady
Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Appendix A Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-6130
FAX (916) 653-5776
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

August 2020

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 nondiscriminatory 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) 324-8379 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 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at <Title.VI@dot.ca.gov>.

Original signed by
Toks Omishakin
Director

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Appendix B Avoidance, Minimization and/or Mitigation Summary

To ensure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as shown in the proposed Environmental Commitments Record that follows) would be implemented. During project design, avoidance, minimization, and/or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in the Environmental Commitments Record are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. Because the following Environmental Commitments Record is a draft, some fields have not been completed; they will be filled out as each of the measures is implemented.

Note: Some measures may apply to more than one resource area. Duplicated or redundant measures have not been included in this Environmental Commitments Record.

Farmland

The following avoidance and minimization measures would be implemented to address potential impacts on farmland resources:

1. The project would limit the amount of right-of-way that is acquired from nearby farmland properties; it would acquire only right-of-way that is necessary for project completion.

2. To the extent possible, construction-related storage, staging, and access would avoid properties that are currently involved in agricultural activities or properties that are identified as prime farmland.

3. Infill materials that would be used in the project would not be obtained from borrow sites that contain prime farmland.

4. Areas next to farmland properties that are disturbed during construction would be re-stabilized using native vegetation and soils that are clear of invasive plant species at the end of construction. Soil amendments, if used, must comply with the requirements of the California Food and Agricultural Code. Soil amendments must not contain paint, petroleum products, pesticides, or any other chemical residues that are harmful to animal life or plant growth.

5. When selecting sites for other project-related mitigations (e.g., wetland restoration, replanting, etc.), the project would avoid prime farmland to the extent possible.

6. Construction activities would be coordinated with local farmland operators to ensure that access to nearby farmland properties is maintained during project construction.

Utilities

The following avoidance and minimization measures would be implemented to address potential impacts on utilities:

1. Temporarily relocated utilities would remain in operation during project construction.

2. Before starting utility relocation activities, coordination with utility users would be required to inform them about the date and timing of potential service disruptions.

3. The Caltrans Right-of-Way Manual and the Federal Utility Relocation and Accommodation on Federal-Aid Highway Projects Program Guide would be used to process utility relocations.

Emergency Services

The following avoidance and minimization measures would be implemented to address potential impacts on emergency services:

1. The Caltrans resident engineer that is assigned to the project would regularly coordinate with local emergency responders on project activities that could potentially affect emergency response times.

2. A Transportation Management Plan would be adopted and would allow emergency service vehicles to access the project site during construction to minimize response delays.

Visual/Aesthetics

The following avoidance and minimization measures would be implemented to address potential impacts on visual resources:

1. Preserve as much existing vegetation as possible. Prescriptive clearing and grubbing and grading techniques that save the most existing vegetation possible should be employed.

2. Revegetate disturbed areas to the greatest extent possible, considering safety and horticultural appropriateness.

3. Following construction, re-grade and re-contour all new construction access roads, staging areas, and other temporary uses as necessary to match the surrounding pre-project topography.

4. Replacement planting will include aesthetic considerations as well as the inherent biological goals. Revegetation will include native trees and plants as determined by the Caltrans Biologist and Caltrans Landscape Architect. Planting should be maintained until established. Revegetation will occur at the maximum extent horticulturally viable. Planting will be maintained until fully established.

Wetlands and Other Waters

The following avoidance and minimization measures would be implemented to address potential impacts on wetlands and other waters:

1. Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing will be installed around jurisdictional waters 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.

2. If needed during construction, the temporary stream diversion will be timed to occur between June 1 and October 31 in any given year, or as otherwise directed by the regulatory agencies, when the surface water is likely to be dry or at seasonal minimum. Deviations from this work window will be made only with permission from the relevant regulatory agencies.

3. 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 by the contractor onsite at all times during construction.

4. During construction, erosion control measures will be implemented. Silt fencing, fiber rolls, and barriers will be installed as needed between the project site and jurisdictional other waters and riparian habitat.

5. All equipment and vehicles will be checked and maintained by the contractor on a daily basis to ensure proper operation and avoid potential leaks or spills.

6. Prior to the removal of the diversion, stream contours will be restored as close as possible to their original condition.

Compensatory Mitigation:

The goal of compensatory mitigation is to prevent a net loss of wetlands or other aquatic resource acreage, function, and value. Several types of compensatory mitigation are available to offset impacts on Waters of the U.S., including creation, restoration, enhancement, and preservation. Compensatory mitigation can be either onsite or offsite.

The impacts to jurisdictional waters would consist of culvert replacement and extensions, and removal of vegetation. 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 riparian vegetation via restoration (re-establishment). To ensure success of the mitigation planting, monitoring and a three-year plant establishment period will be required, which will include semi-annual inspections, weeding, and replacement of failed plantings as necessary.

Prior to construction, Caltrans will prepare a Mitigation and Monitoring Plan to mitigate impacts to vegetation and natural habitats. The Mitigation and Monitoring Plan will be consistent with federal and state regulatory requirements and will be amended with any regulatory permit conditions, as required. Caltrans will implement the Mitigation and Monitoring Plan as necessary during construction and immediately following project completion.

Mitigation plantings will be detailed in Caltrans' Landscape Architecture Landscape Planting Plan and the final Mitigation and Monitoring Plan. The Mitigation and Monitoring Plan will be developed in coordination with the project biologist and will include planting specifications and grading plans to ensure survival of planted vegetation and re-establishment of functions and values. The final Mitigation and Monitoring Plan will detail mitigation commitments and be consistent with standards and mitigation commitments from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife. The Mitigation and Monitoring Plan will be prepared when full construction plans are prepared and will be finalized through the permit review process with regulatory agencies. It is anticipated that restoration plantings will consist mainly of native riparian species, native wetland species, and associated riparian understory and creek bank species.

American Badger

The following avoidance and minimization measures would be implemented to address potential impacts on American badgers:

1. No less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities, a qualified biologist will conduct a survey to determine if any American badger dens are present at the project site. If dens are found, they will be

monitored for badger activity. If it is determined that dens may be active, the entrances of the dens will be blocked with soil, sticks, and debris for 3 to 5 days to discourage the use of these dens prior to project disturbance activities. The den entrances will be blocked to an incrementally greater degree over the 3- to 5-day period. After it has been determined that badgers have stopped using active dens, the dens will be hand-excavated with a shovel to prevent re-use during construction. No disturbance of active dens will take place when cubs may be present and dependent on parental care.

Any observations of occupied badger dens or American badgers will be reported to the California Department of Fish and Wildlife.

Nesting Birds

The following avoidance and minimization measures would be implemented to address potential impacts on nesting birds:

1. If construction activities are proposed to occur within 100 feet of potential habitat during the nesting season (February 1 to September 30), a nesting bird survey will be conducted by a biologist determined qualified by Caltrans no more than 3 days prior to construction. If an active nest is found, a qualified biologist will determine an appropriate buffer and monitoring strategy 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.

Bats

The following avoidance and minimization measures would be implemented to address potential impacts on roosting bats:

1. No more than 14 days prior to construction, a roosting bat survey will be conducted for the existing bridge by a biologist determined qualified by Caltrans. If an active roost is found, a qualified biologist will determine an appropriate buffer and monitoring strategy based on the habits and needs of the species. The buffer area will be avoided until a qualified biologist has determined that all bats have left the roost.

2. If an active bat roost is found, Caltrans will coordinate with the California Department of Fish and Wildlife to determine an appropriate buffer based on the habits and needs of the species. Readily visible exclusion zones will be established in areas where roosts must be avoided using Environmentally Sensitive Area fencing. Work in the buffer area will be avoided until a qualified biologist has determined that roosting activity has ceased. Active bat maternity roosts will not be disturbed or destroyed at any time.

California Tiger Salamander and La Graciosa Thistle Critical Habitat

Numerous measures in this section apply to the California tiger salamander, La Graciosa thistle, and other taxa and are also applicable to federally designated critical habitat. These measures have been assessed as sufficient to minimize impacts to California tiger salamander and La Graciosa thistle critical habitat.

The compensatory mitigation described below to offset permanent and temporary impacts to the California tiger salamander will also be suitable to mitigate for impacts to California tiger salamander critical habitat. No additional compensatory mitigation is required, and none is proposed.

While the project takes place within La Graciosa thistle critical habitat, the natural habitat that will be impacted was determined to be ruderal and highly disturbed in riparian and wetland areas. These areas are not likely to have high value in terms of physical and biological features essential to the conservation of the species. No compensatory mitigation for the La Graciosa thistle is required, and none is proposed.

California Red-Legged Frog

The following avoidance and minimization measures would be implemented to address potential impacts on the California red-legged frog:

1. Only U.S. Fish and Wildlife Service-approved biologists will participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.

2. Ground disturbance will not begin until written approval is received from the U.S. Fish and Wildlife Service that the biologist is qualified to conduct the work.

3. A U.S. Fish and Wildlife Service-approved biologist will survey the project 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 begins. The U.S. 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 project. The relocation site will be in the same drainage to the extent practicable. Caltrans will coordinate with the U.S. Fish and Wildlife Service on the relocation site prior to the capture of any California red-legged frogs.

4. Before any activities begin on a project, a U.S. 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 project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, with a qualified person on hand to answer any questions.

5. A U.S. Fish and Wildlife Service-approved biologist will be present at the work site until all California red-legged frogs have been removed, workers have been instructed, and disturbance of habitat has been completed. After this time, Caltrans will designate a person to monitor onsite compliance with all minimization measures. The U.S. Fish and Wildlife Service-approved biologist will ensure this monitor receives the training outlined in measure 4 above and in the identification of California red-legged frogs. If the monitor or the U.S. 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 U.S. Fish and Wildlife Service during review of the proposed action, he or she will notify the resident engineer immediately. The resident engineer will resolve the situation by requiring that all actions that are causing these effects be halted. When work is stopped, the U.S. Fish and Wildlife Service will be notified as soon as possible.

6. During project activities, all trash that may attract predators or scavengers will be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and debris will be removed from work areas.

7. All refueling, maintenance and staging of equipment and vehicles will occur at least 60 feet from riparian habitat or water bodies and not in a location from where a spill would drain directly toward aquatic habitat, unless otherwise preapproved by the necessary agencies. The monitor will ensure contamination of habitat does not occur during 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.

8. Habitat contours will be returned to a natural configuration at the end of the project activities. This measure will be implemented in all areas disturbed by activities associated with the project, unless the U.S. Fish and Wildlife Service and Caltrans determine that it is not feasible, or modification of original contours would benefit the California red-legged frog.

9. 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 project. 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.

10. 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 the U.S. Fish and Wildlife Service during project planning will be used to assist in scheduling work activities to avoid sensitive habitats during key times of year.

11. To control sedimentation during and after project completion, Caltrans will implement Best Management Practices outlined in any authorizations or permits issued under the authorities of the Clean Water Act received for the project. If Best Management Practices are ineffective, Caltrans will attempt to remedy the situation immediately, in coordination with the U.S. Fish and Wildlife Service.

12. A U.S. Fish and Wildlife Service-approved biologist will permanently remove any individuals of exotic species, such as bullfrogs (*Rana catesbeiana*), signal and red swamp crayfish (*Pacifastacus leniusculus; Procambarus clarkii*), and centrarchid fishes from the project area, to the maximum extent possible. The U.S. Fish and Wildlife Service-approved biologist will be responsible for ensuring his or her activities are in compliance with the California Fish and Game Code.

13. Project sites will be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials will be used to the extent practicable. Invasive, exotic plants will be controlled to the maximum extent practicable. This measure will be implemented in all areas disturbed by activities associated with the project, unless the U.S. Fish and Wildlife Service and Caltrans determine that it is not feasible or practical.

No compensatory mitigation for the California red-legged frog is proposed.

California Tiger Salamander

The following avoidance and minimization measures would be implemented to address potential impacts on the California tiger salamander and California tiger salamander critical habitat:

[The following measures have been revised to reflect the language included in the U.S. Fish and Wildlife Service's Biological Opinion, received on June 4, 2021.]

1. Caltrans will obtain U.S. Fish and Wildlife Service and California Department of Fish and Wildlife approval of Designated Biologist(s) and Designated Monitor(s) prior to project-related activities that may result in impacts to the California tiger salamander. The Designated Biologist(s) will serve as a representative responsible for communications with State and Federal authority and hold all applicable and current State and Federal Permits, including an active Scientific Collecting Permit from California Department of Fish and Wildlife that specifically names California tiger salamander surveys as an authorized activity. Any proposed Biologist(s) that do not have the required permits must work under the supervision of one who does have the required permits. These individuals will be referred to as Designated Monitors. The role of the Designated Biologists(s) and Designated Monitor(s) includes the following:

   a) The Designated Biologist or Designated Monitor with the appropriate permits will be present to conduct surveys prior to and monitor all initial ground or vegetation disturbing activities in areas of potential California tiger salamander habitat to help minimize or avoid impacts. Daily written observations and inspection records summarizing oversight activity, compliance inspection, observations of California tiger salamander and their sign, survey results, and monitoring activities will be kept. Designated Monitors may monitor project activities after initial ground-disturbing activities have been completed provided the permitted Designated Biologist is readily available should the need arise to relocate a California tiger salamander.

   b) Caltrans will submit a relocation plan to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife for approval prior to construction. The Designated Biologist will follow the approved plan which will use best available scientific evidence and specifically follow guidance provided in Shaffer et al. 2008. Designated Biologists who handle California tiger salamander will ensure that their activities do no transmit diseases or pathogens harmful to amphibians, such as chytrid fungus (*Batrachochytrium dendrobatidis*), by following the fieldwork code of practice developed by the Declining Amphibians Task Force. The Designated Biologist will photograph and measure (snout-vent) individuals prior to relocation and provide this

documentation to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife within 24 hours.

c) Work activities that could potentially harm the California tiger salamander will be required to stop until the Designated Biologist arrives to relocate the California tiger salamander to the pre-approved location. If the Designated Biologist or Designated Monitor recommends that work stop, he or she will notify the resident engineer immediately. The resident engineer will resolve the situation by requiring that all actions that are causing these effects stop immediately. The Designated Biologist will record any project-related non-compliance of measures outlined in this Biological Opinion and will notify the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife in writing within 24 hours.

2. Caltrans will not initiate ground-disturbing activities until it has received written approval of Designated Biologists from the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife. Initial ground disturbance or vegetation clearing activities between post miles R36.3 and 46.0 will be restricted to occur between June 1 to October 1 unless prior Service and California Department of Fish and Wildlife approval is obtained. Caltrans will minimize the area of ground disturbance and vegetation clearing to the extent practicable and clearly delineate this area for all contractors and equipment operators.

3. Before work activities begin, the Designated Biologist will conduct an education program for all persons employed or otherwise working on the project site prior to performing any work onsite. The program will include a discussion of the biology of the California tiger salamander and project-specific avoidance and minimization measures. Upon completion of the program, employees will sign a form stating they attended the program and understand all protection measures.

4. Before work activities begin, the Designated Biologist will identify and flag all burrow features that he or she determines may serve as suitable refuge habitat for California tiger salamanders between post mile R36.3 and post mile 46.0 within project areas subject to ground disturbance. The Designated Biologist will excavate the flagged burrows that cannot be avoided using hand tools or via gentle excavation using construction equipment under his or her direct supervision. Caltrans will not conduct excavation between October 1 to June 1 to avoid work during California tiger salamander breeding season and most juvenile dispersal movements.

5. Caltrans will not conduct work activities within the potential California tiger salamander habitat at night between October 1 and June 1. Caltrans will restrict work activities to daylight hours between October

1 and June 1, and within periods of low rainfall (less than 0.5-inch of precipitation per 24-hour period), unless California tiger salamander exclusion fencing has been installed. Therefore, project activities may continue during a low rainfall event only if work areas contain California tiger salamander exclusionary fencing and have also been cleared by the Designated Biologist. Work within the potential California tiger salamander habitat will not occur when there is over a 70% chance of greater than 0.5-inch precipitation (high rainfall) during a 24-hour period. Caltrans will consult the National Weather Service 24-hour forecast daily. If any precipitation is forecasted, the Designated Biologist will survey the project site to minimize effects to California tiger salamander. If an unpredicted rainfall event commences while construction activities are in progress and an exclusion fence is not installed in the work area, Caltrans will suspend all work activities within the potential California tiger salamander habitat and equipment and personnel will be demobilized. Caltrans may move equipment to a designated staging area until work within the potential California tiger salamander habitat can resume.

6. Caltrans will maintain copies of the Biological Opinion and a list of all personnel who have successfully completed the education program at the worksite. Caltrans will provide the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife reasonable access to work areas to verify compliance with all outlined mitigation measures.

7. During project activities, Caltrans will properly contain all trash that may attract predators. Caltrans will remove and dispose trash from the work site weekly. Following construction, Caltrans will remove all trash and construction debris from work areas. No hazardous materials will be stored or handled within the project area. All construction-related vegetative debris (e.g., larger brush, tree limbs, tree trunks) will be stored inside a designated stockpile and hauled offsite for disposal weekly.

8. All refueling, maintenance and staging of equipment and vehicles will occur at least 60 feet from riparian habitat or water bodies and not in a location from where a spill would drain directly toward aquatic habitat, unless otherwise preapproved by the necessary agencies. The Designated Biologist will ensure contamination of habitat does not occur during operations. Prior to the onset of work, Caltrans will develop a plan that addresses the prompt and effective response to any accidental spills. The Designated Biologist will inform all workers of the importance of preventing spills and of the appropriate measures to take should a spill occur. Contractors will use drip pans under staged equipment and check all vehicles and equipment daily for leaks. Contractors will not leave equipment outside of designated staging areas overnight.

9. Caltrans will install erosion control materials adjacent to riparian features following the recommendations of the Designated Biologist. Caltrans will not use any materials potentially harmful to covered species. Areas of soil stockpiles will be located over 60 feet from all riparian and pond habitat. Contractors will cover soil stockpiles one day prior to any rain event to prevent soil erosion.

10. During project activities, Caltrans will implement dust control measures when warranted. Caltrans will use the minimal amount of water necessary to avoid puddle formation.

11. Prior to starting work-related activities within the potential California tiger salamander habitat occurring in the rainy season (October 1 to June 1), temporary exclusionary fencing will be installed between post mile R40.1 and post mile 43 to protect California tiger salamander habitat as well as to prevent individuals from dispersing into work areas. Caltrans will submit the design for fencing to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife for approval no less than 30 days prior to starting the aforementioned work. Caltrans will continue to maintain the barrier throughout construction. The Designated Biologist will conduct pre-ground disturbance surveys in conjunction with exclusion fence installation. The Designated Biologist or Monitor will inspect the area daily, ensure it is in working condition, and ensure that workers avoid entering designated habitat. During dry conditions, contractors will bury fencing 6 inches into the ground and extend it 3 feet above the ground. Caltrans will not use plastic monofilament netting to avoid potential entanglement of California tiger salamander.

12. Caltrans will limit all project-related vehicle and pedestrian access to established roads and staging areas. Caltrans will locate staging areas within previously disturbed areas to the extent possible, clearly delineate them, and they will contain all project-related parking and storage needs. Caltrans will limit the number of access routes, size of staging areas, and the total area of activity to the maximum extent feasible to achieve the project.

13. The Designated Biologist will inspect all open trenches, holes, or other excavations for covered species and other wildlife prior to reinitiating work each day and before any open features are backfilled. Contractors will cover trenches or provide adequate means of escape (earthen ramps not more than 2:1 slope, wooden boards, etc.).

14. To compensate for the loss in California tiger salamander reproductive value and to meet California Department of Fish and Wildlife's fully mitigated standard, Caltrans will purchase 17.4 credits at the La Purisima Conservation Bank. Should a new conservation bank or other

conservation easement option local to the West Santa Maria/Orcutt metapopulation become available and be approved prior to anticipated project implementation in 2024, Caltrans will coordinate with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to discuss alternative mitigation options. Caltrans, the U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife will work to prioritize local habitat preservation recovery goals for the affected metapopulation.

15. To meet California Department of Fish and Wildlife's fully mitigated standard and abate existing potential for vehicle strikes, Caltrans will install an exclusionary berm feature on the southern side of State Route 1 between post miles 42.1 and 42.2. Caltrans will design the feature to impede California tiger salamander northern movement across the roadway and redirect individuals back south toward open habitat. Caltrans will design the feature in such a way that allows any individuals moving from the north side of the roadway in a southward direction to be able to freely cross without impediment. Once the exclusionary berm feature is completed, Caltrans will conduct annual routine inspections, maintenance, and repairs prior to the start of the rainy season. Caltrans will ensure that soil, debris, leaf litter, and other materials are kept from accumulating along the feature and will perform necessary repairs promptly.

16. Caltrans will require the Designated Biologist to monitor the effectiveness of the exclusionary berm feature using wildlife camera trap stations. Caltrans will design camera trap arrays to assess whether the exclusionary berm feature is performing as designed and to ensure it is effective at excluding California tiger salamander northern movements across the roadway. Caltrans will start camera monitoring during the first November following exclusionary berm completion. Monitoring will occur during the rainy season (November 1 to May 1) of each year, when California tiger salamander are anticipated to make dispersal movements. Data collection and camera maintenance will occur every 2-4 weeks for the duration of the rainy season of each year in the monitoring period, unless otherwise agreed to by California Department of Fish and Wildlife. Monitoring will continue for up to 5 years or until the occurrence of 3 years of at least 70% average rainfall occurring between September 1 and April 1 as measured at the nearest National Oceanic and Atmospheric Administration climate station.

Additional measures relating to California tiger salamander and La Graciosa Thistle critical habitat include the following:

17. During construction, Caltrans will ensure that the spread or introduction of invasive exotic plant species is avoided to the maximum extent possible.

18. Caltrans will import only clean fill. When practicable, Caltrans will remove and properly dispose of invasive exotic plants in the project site. Caltrans will take all vegetation removed from the construction site to a landfill to prevent the spread of invasive species. If soil from weedy areas need to be removed off-site, Caltrans will dispose of the top 6 inches containing the seed layer in areas with weedy species at a landfill.

19. Caltrans will establish wash stations onsite for construction equipment under the guidance of the Designated Biologist if deemed necessary in order to avoid/minimize the spread of invasive plants and/or seed within the construction area.

20. The Caltrans erosion control seed mix or landscaping planting plans will not include any invasive species listed in the Cal-IPC Invasive Plant Inventory.

21. Caltrans will condition contracts for permanent erosion control and restoration plantings to require the use of regionally appropriate California native forb and grass species that occur in the same general geographic area as the project site.

22. To minimize impacts to breeding California tiger salamander individuals, eggs, and larvae, Caltrans must condition any contracts to require work adjacent to breeding pond feature GUAD-7 when the feature is completely dry.

23. Caltrans must locate staging areas a minimum of 0.25 mile away from breeding ponds GUAD-7 and SAMA-21. Caltrans must submit staging area locations to U.S Fish and Wildlife Service and California Department of Fish and Wildlife prior to project implementation and utilize existing paved areas to the extent feasible.

24. To avoid impacting California tiger salamander individuals and breeding populations, Caltrans must conduct a hydrological effects analysis of all culvert locations within 0.25 mile of breeding pond features (GUAD-7 and SAMA-21). Using the results of this analysis, culverts must be designed in such a way that they do not alter the hydrology of existing pond features nor newly enable movement of California tiger salamander into degraded habitat on the north side of the roadway.

Compensatory mitigation:

A condition of the Section 2080.1 Consistency Determination (to be procured during the Plans Specifications and Estimate [PS&E] phase in 2021) under the California Endangered Species Act will be to fully mitigate impacts of take resulting from project impacts. In addition to the impacts to California tiger salamander critical habitat, there is also potential for California tiger salamander upland and migratory/dispersal habitat to be impacted. The following mitigation estimate has been made for this project.

[The following paragraph has been added since the draft environmental document was circulated. Of particular note, the credits amount in that paragraph and the next paragraph now reflects the current updated amount of 17.4 credits.]

To compensate for the loss in reproductive value and to meet the California Department of Fish and Wildlife's fully mitigated standard, Caltrans will purchase 17.4 credits at the La Purisima Conservation Bank. Should a new conservation bank or other conservation easement option local to the West Santa Maria/Orcutt metapopulation become available and be approved prior to anticipated project implementation in 2024, Caltrans will coordinate with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to discuss alternative mitigation options. Caltrans, the U.S. Fish and Wildlife Service, and the California Department of Fish and Wildlife will work to prioritize local habitat preservation recovery goals for the affected metapopulation.

Prior to initiating ground- or vegetation-disturbing project activities, Caltrans will satisfy the California Department of Fish and Wildlife requirement to provide California tiger salamander habitat mitigation by purchasing 17.4 credits at a California Endangered Species Act-certified and California Department of Fish and Wildlife-approved Conservation Bank (La Purisima Bank) authorized to sell credits for the California tiger salamander.

Swainson's Hawk

1. If construction activities are proposed to occur within 100 feet of potential habitat during the nesting season (February 1 to September 30), a nesting bird survey will be conducted by a biologist determined qualified by Caltrans no more than 3 days prior to construction. If an active nest is found, a qualified biologist will determine an appropriate buffer and monitoring strategy 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.

2. If Swainson's hawks are observed within 100 feet of the Area of Potential Impact during the course of construction, a qualified biologist will implement an exclusion zone and work will be avoided within the

exclusion zone until the Swainson's hawk is located greater than 100 feet from project-related disturbance.

Invasive Species

The following measures would prevent the spread of invasive plant species:

1. During construction, Caltrans will ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.

2. Only clean fill will be imported. When practicable, invasive exotic plants in the project site will be removed and properly disposed of. All vegetation removed from the construction site will be taken to a landfill to prevent the spread of invasive species. If soil from weedy areas must be removed offsite, the top 6 inches containing the seed layer in areas with weedy species will be disposed of at a landfill.

3. If necessary, wash stations onsite will be established for construction equipment under the guidance of Caltrans in order to avoid/minimize the spread of invasive plants and/or seed within the construction area.

4. Invasive species listed in the California Invasive Plant Council Database Invasive Plant Inventory will not be included in the Caltrans erosion control seed mix or landscaping planting plans.

5. The contract specifications for permanent erosion control and plantings will require the use of regionally appropriate California native forb and grass species that occur in the same general geographic area as the project site.

Climate Change

The following measures would reduce greenhouse gas emissions and potential climate change impacts from the project:

The project would include a Transportation Management Plan that would reduce delays and related short-term increases in greenhouse gas emissions from disruptions in traffic flow during construction. Also, in the event that portable changeable message signs are required as part of the Transportation Management Plan, message signs would be solar powered when possible and would not result in greenhouse gas emissions during use.

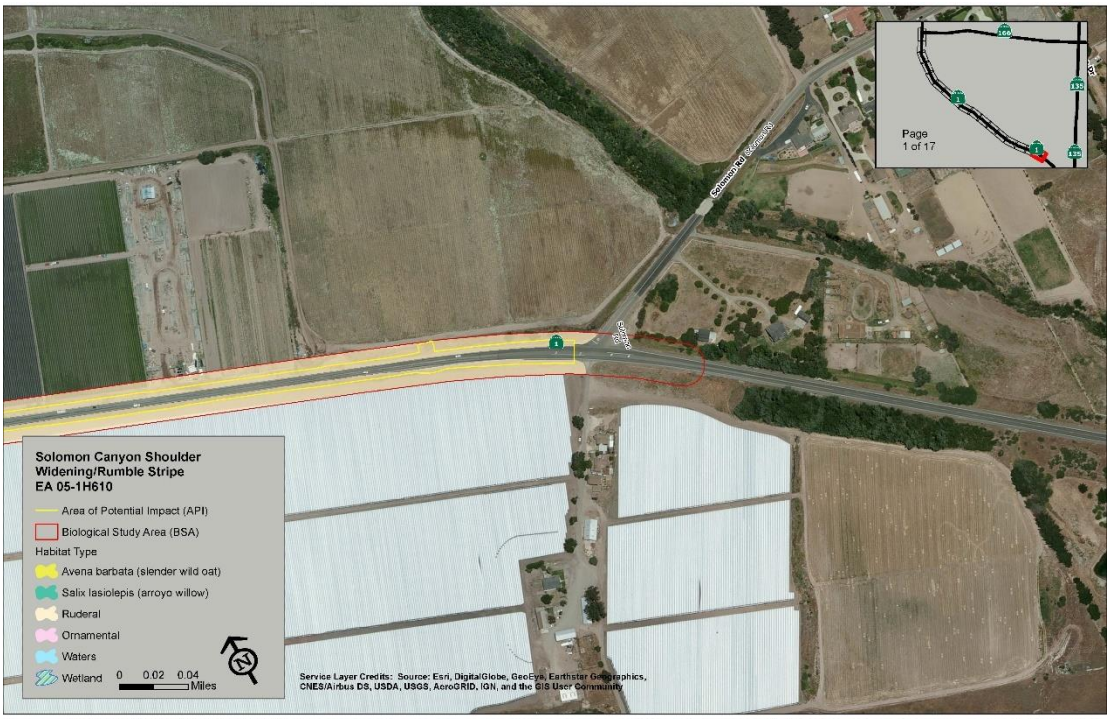
Caltrans staff will enhance the environmental training provided for contractor staff by adding a module on greenhouse gas emissions reduction strategies, including limiting equipment idling time as much as possible.

The project would revegetate previously undisturbed areas, where applicable, following construction completion. Landscaping reduces surface warming and, through photosynthesis, removes carbon dioxide from the atmosphere.

The contractor would be required to use the following measures:

- Reduce construction waste, and maximize the use of recycled materials.
- Operate construction equipment with improved fuel efficiency by:
    - Properly tuning and maintaining equipment.
    - Limiting idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.
    - Using the right-size equipment for the job.
- Caltrans Standard Specifications Section 14-9, Air Quality, a part of all construction contracts, requires contractors to comply with all federal, state, regional, and local rules, regulations, and ordinances related to air quality. Requirements of the Santa Barbara County Air Pollution Control District will apply to this project. Requirements that reduce vehicle emissions, such as limits on idling time, may help reduce greenhouse gas emissions.

Appendix C Biological Study Area Maps



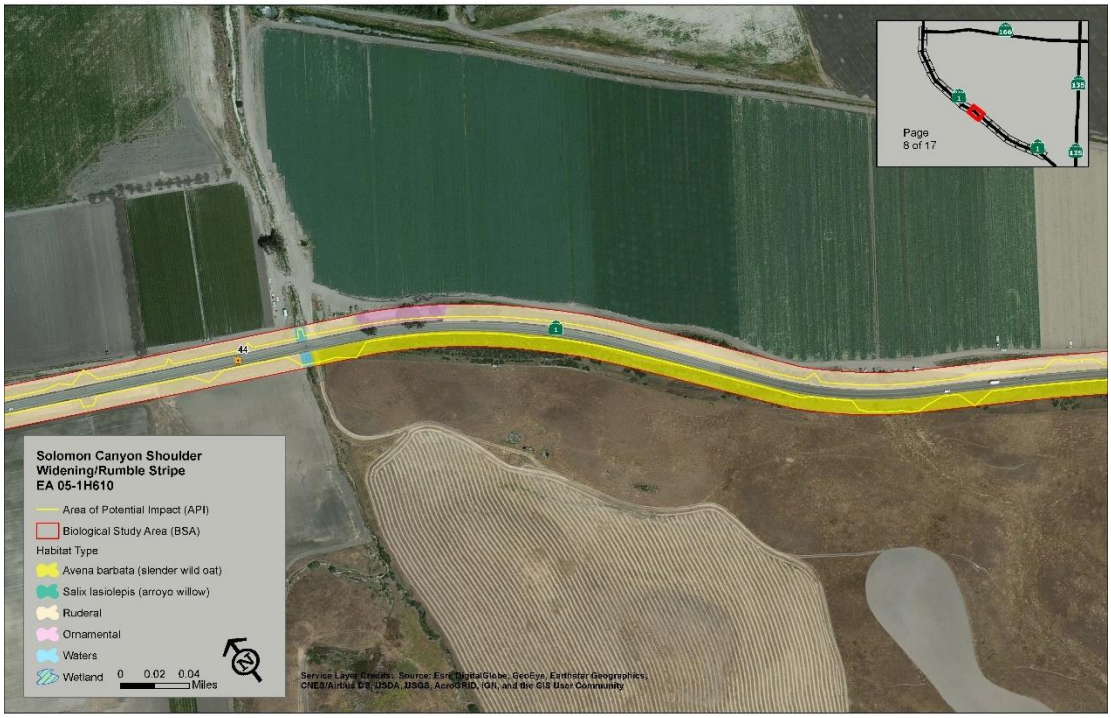

Page
3 of 17
41
Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Page
4 of 17
Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Page
5 of 17
42
Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

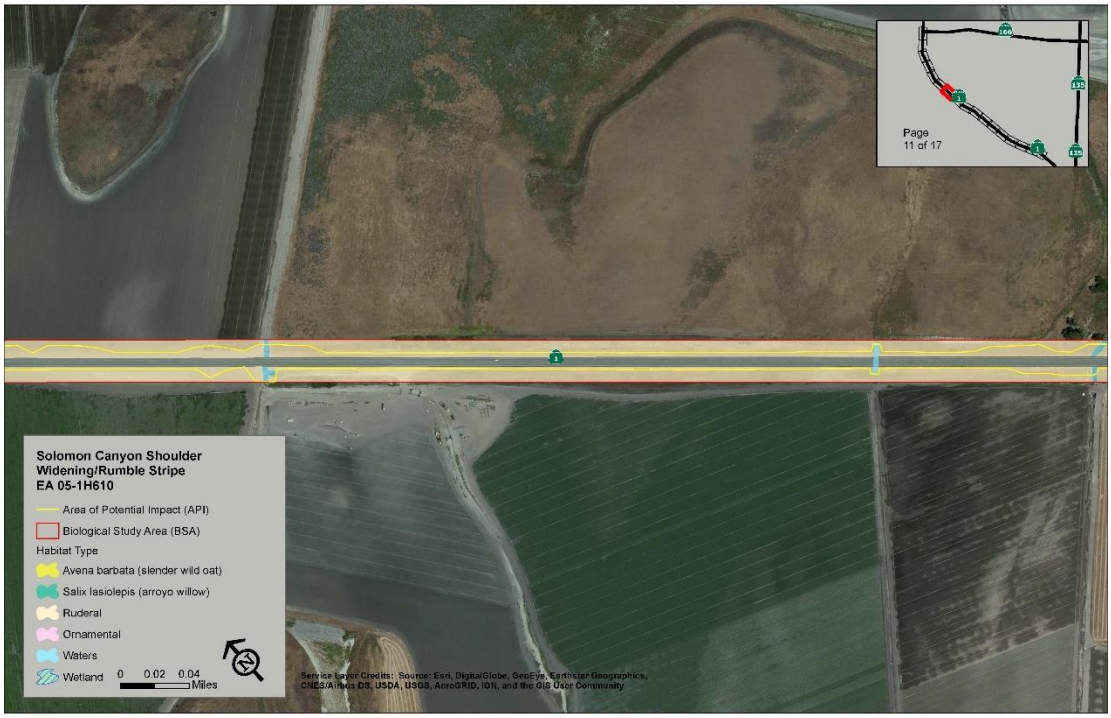

Page
6 of 17
43
Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

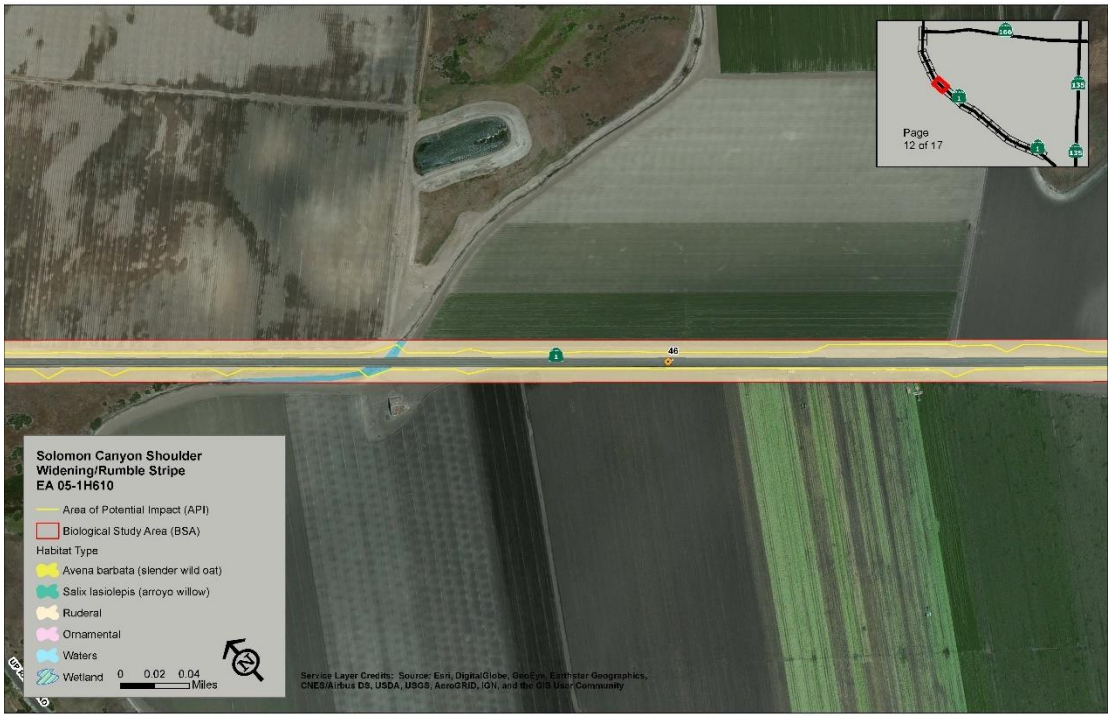

Page
7 of 17
43
Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Page
8 of 17
44
Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Page
9 of 17
Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

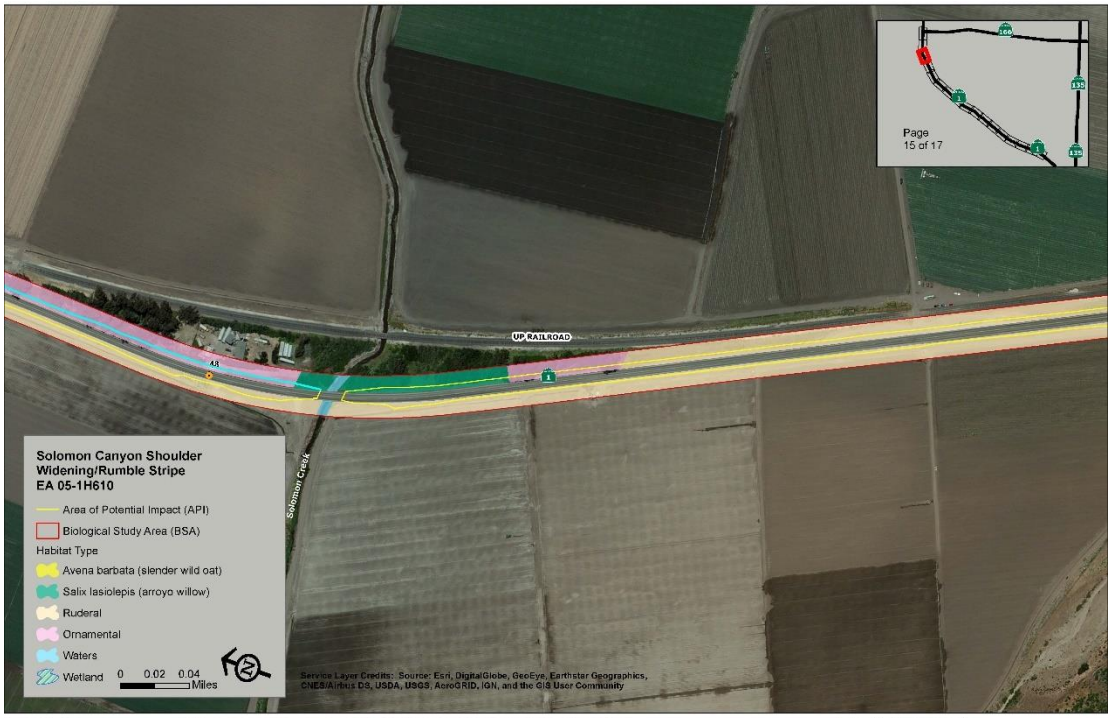

Page
10 of 17
Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Page
11 of 17
Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,
CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Page
12 of 17
46
Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,
CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


UP RAILROAD
Page
13 of 17
Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

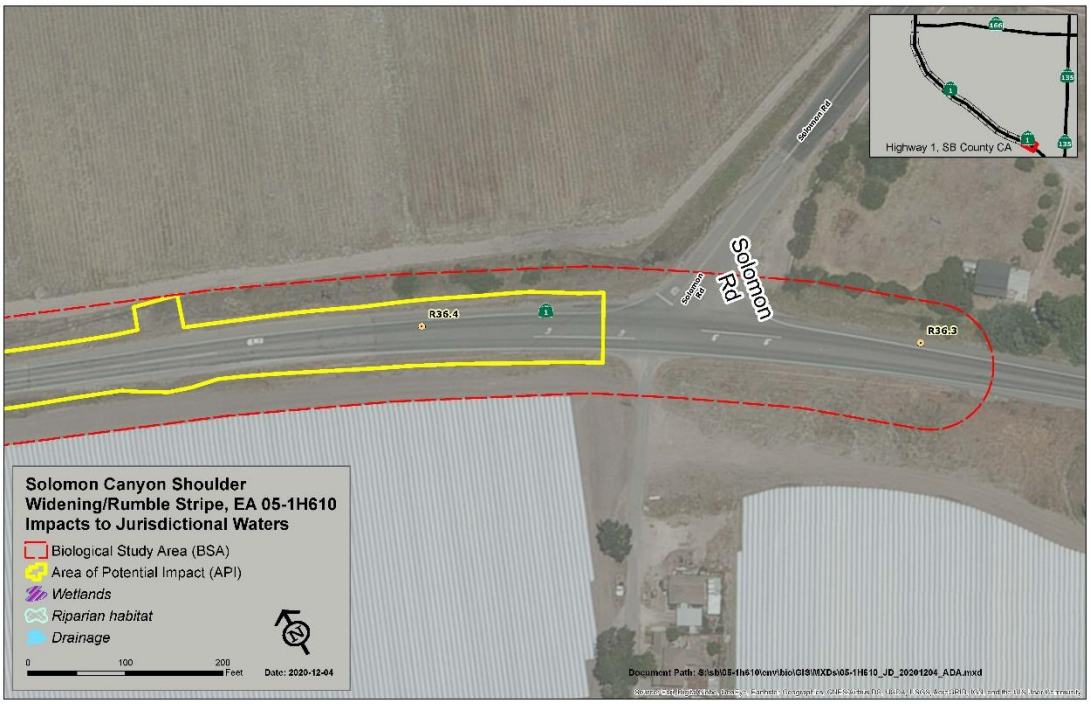

Page
14 of 17
UP RAILROAD
47
Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

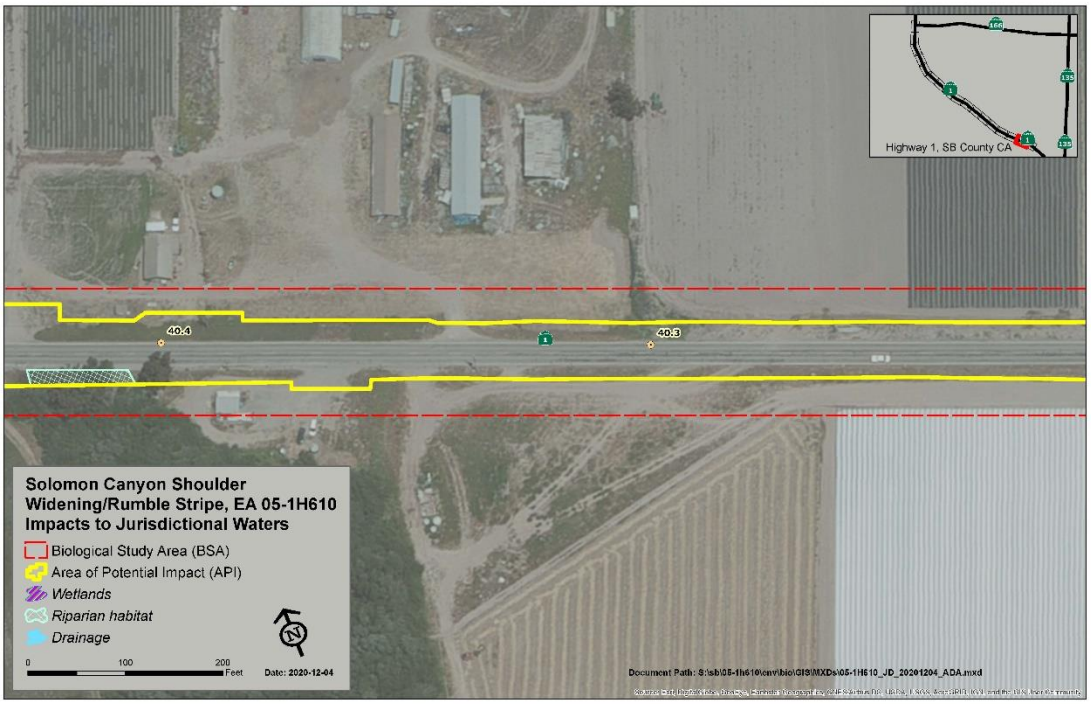

Page
15 of 17
UP RAILROAD
Solomon Creek
Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Page
16 of 17
UP RAILROAD
Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

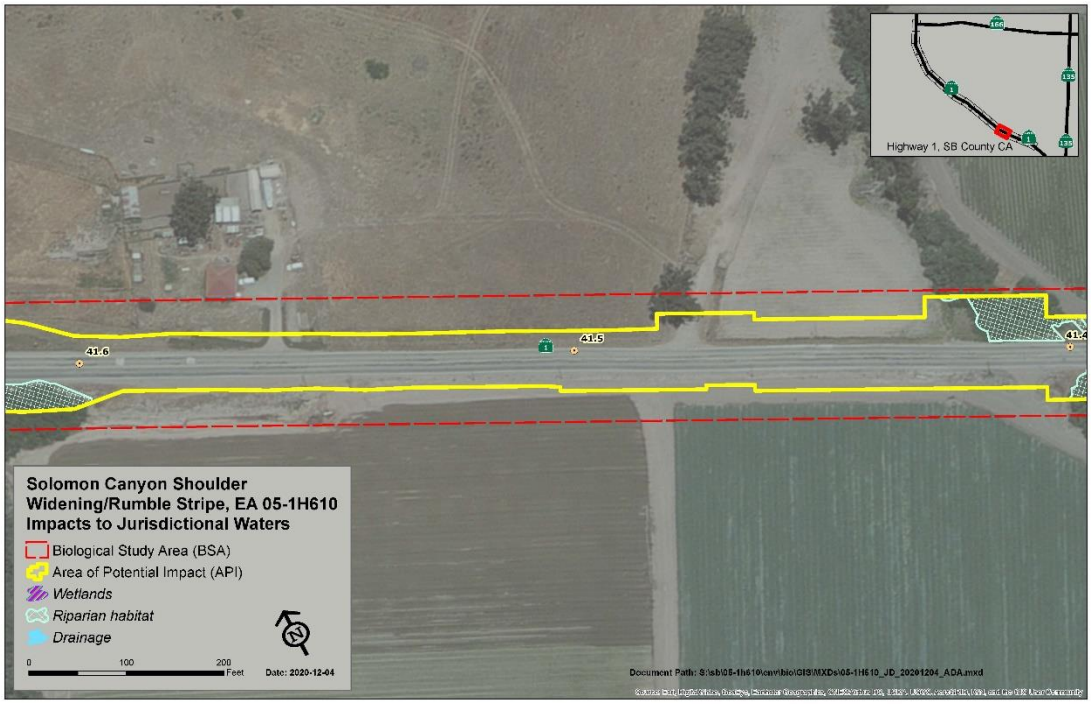

Solomon Canyon Shoulder
Widening/Rumble Stripe
EA 05-1H610
Area of Potential Impact (API)
Biological Study Area (BSA)
Habitat Type
Avena barbata (slender wild oat)
Salix lasiolepis (arroyo willow)
Ruderal
Ornamental
Waters
Wetland
0 0.02 0.04
Miles
Page
17 of 17
UP RAILROAD
SMV RAILROAD
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

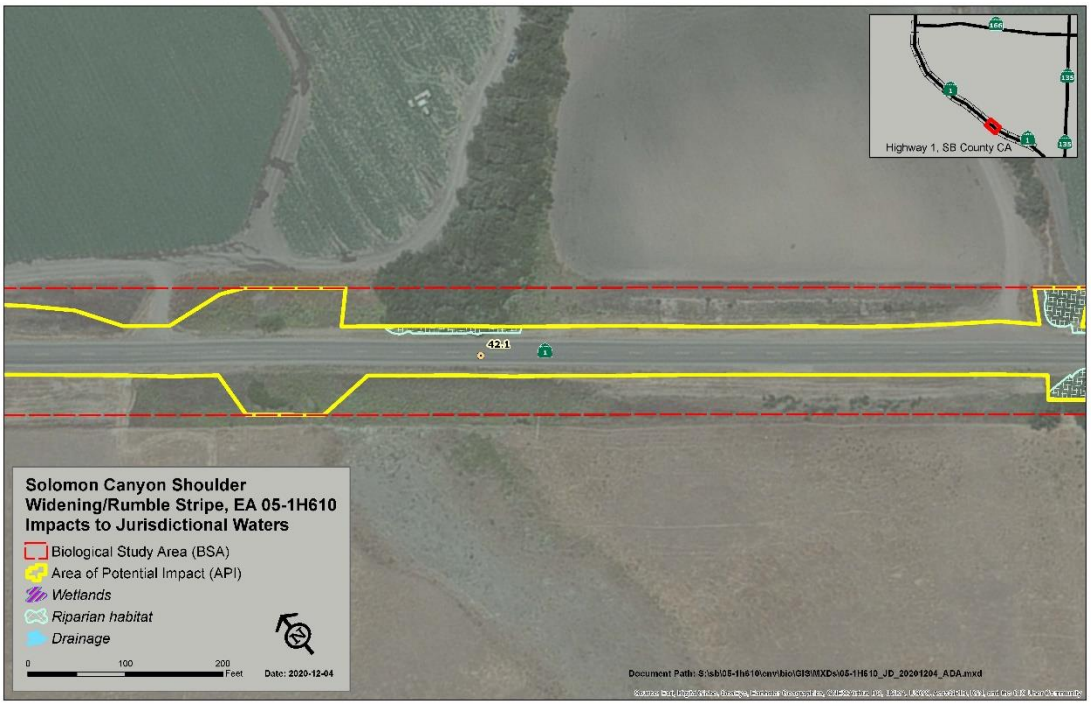
Appendix D Impacts to Jurisdictional Waters

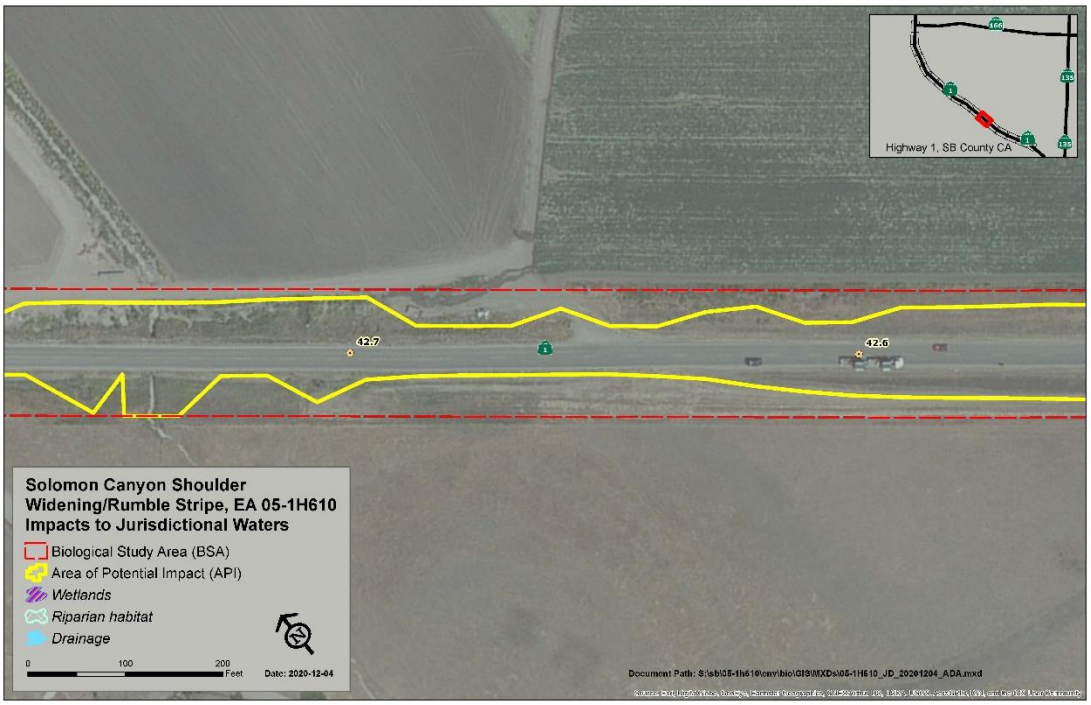


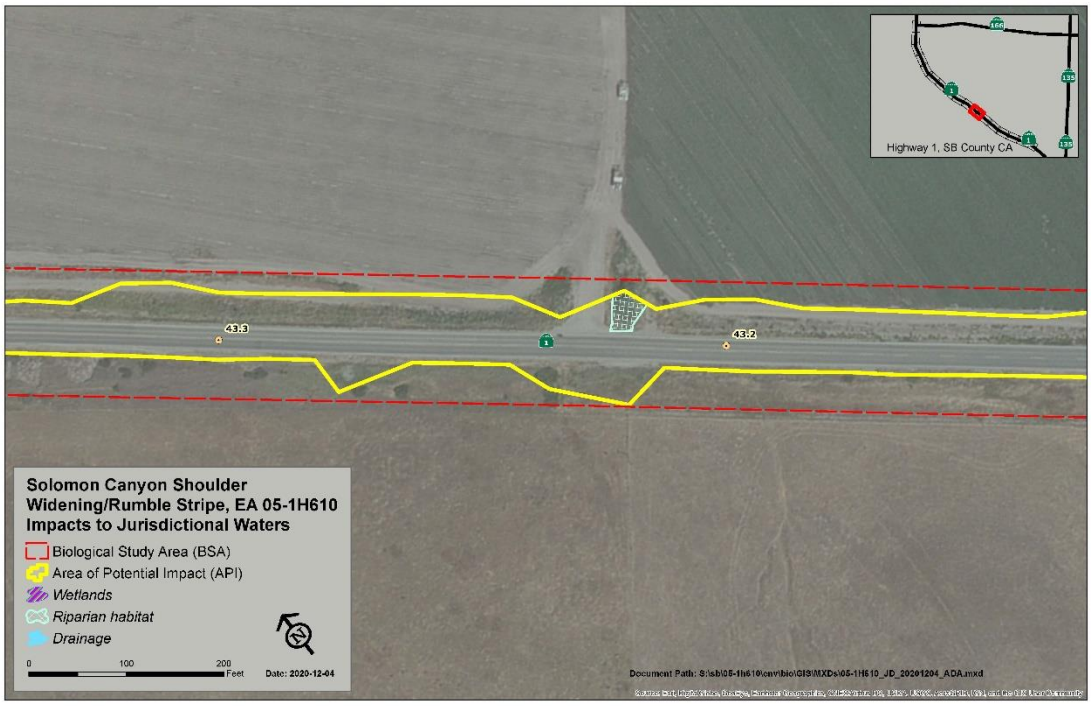


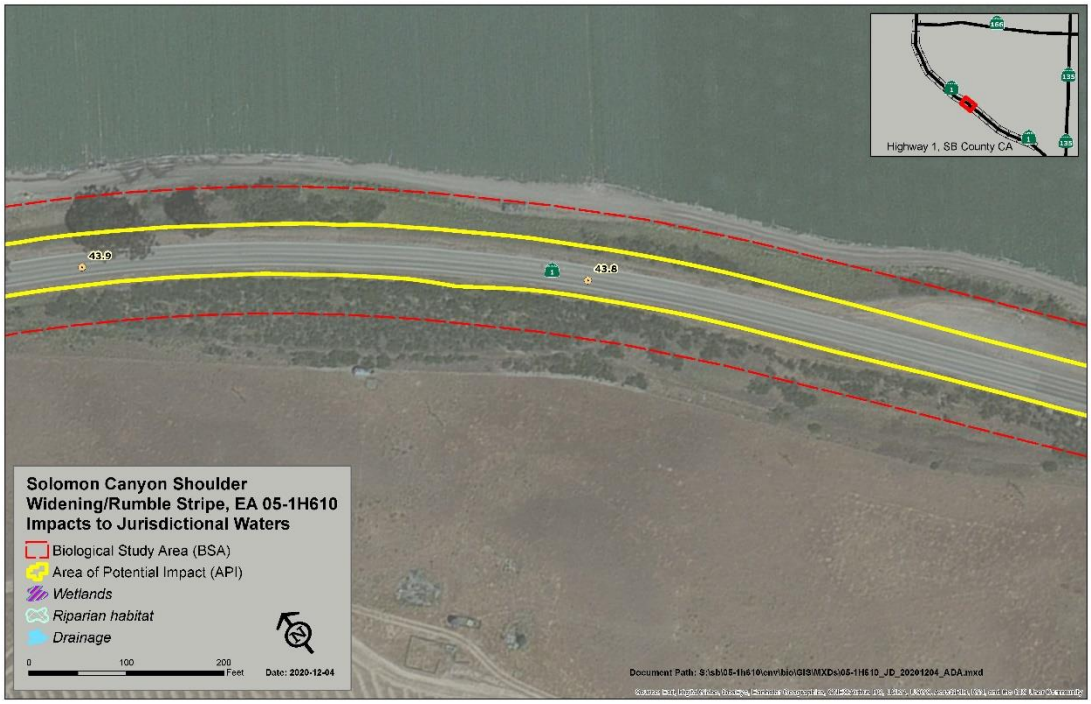

Highway 1, SB County CA
41
40.9
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\envbio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd

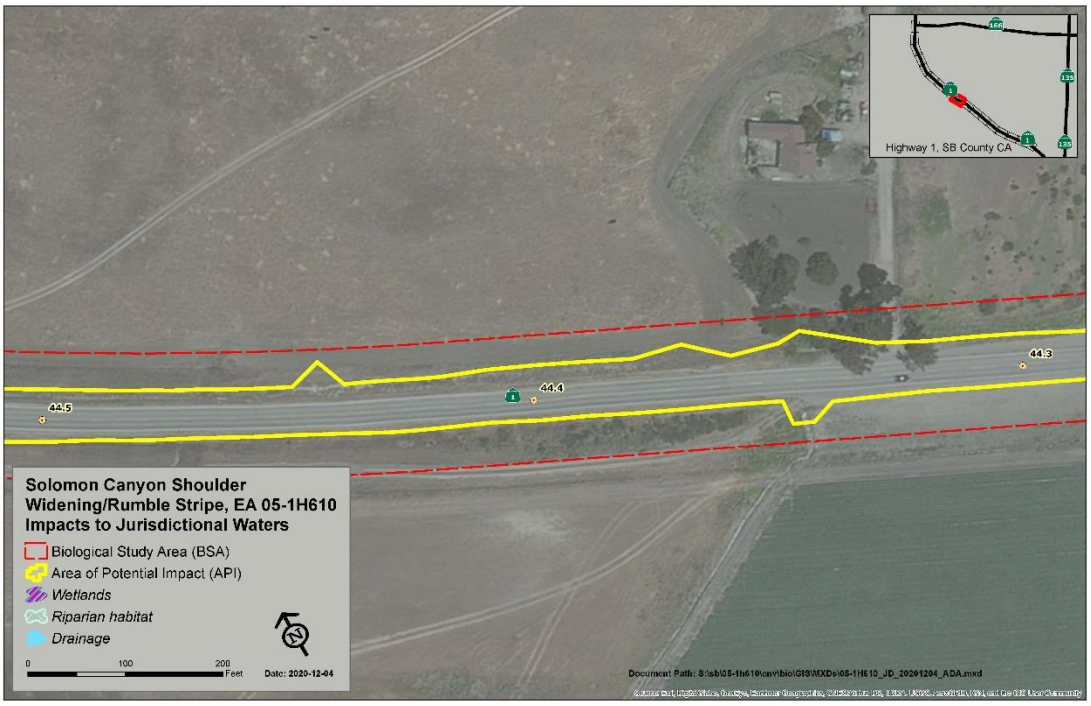

Highway 1, SB County CA
41.6
41.5
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\envbio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd

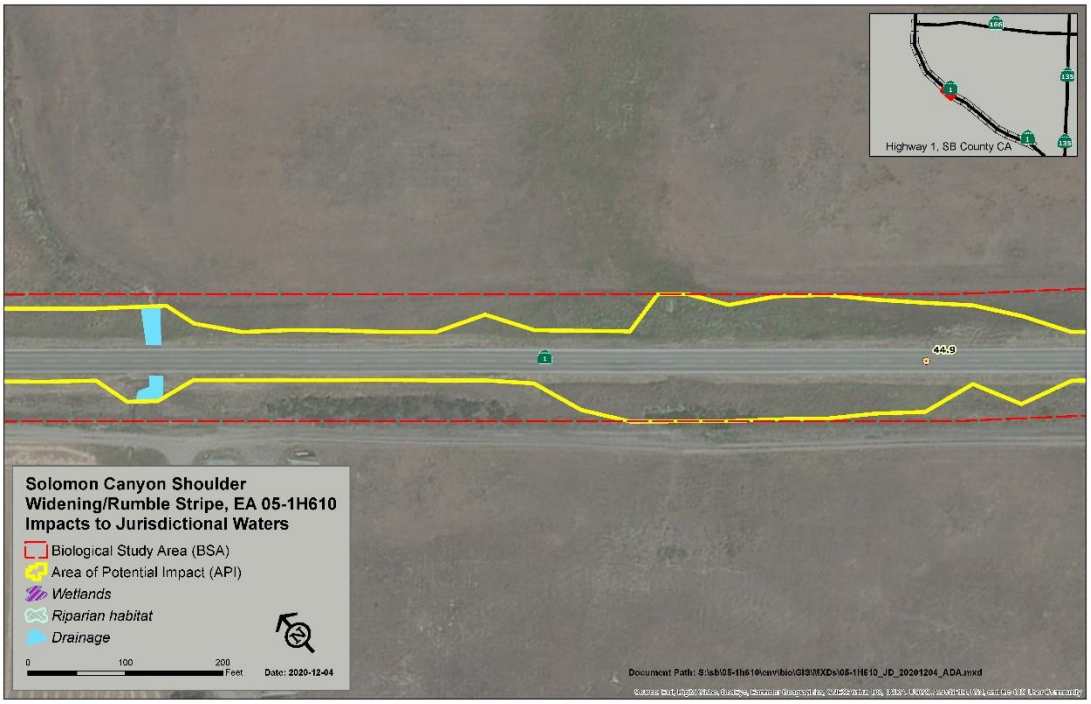

Highway 1, SB County CA
42.1
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\env\bio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd


Highway 1, SB County CA
42.7
42.6
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\env\bio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd

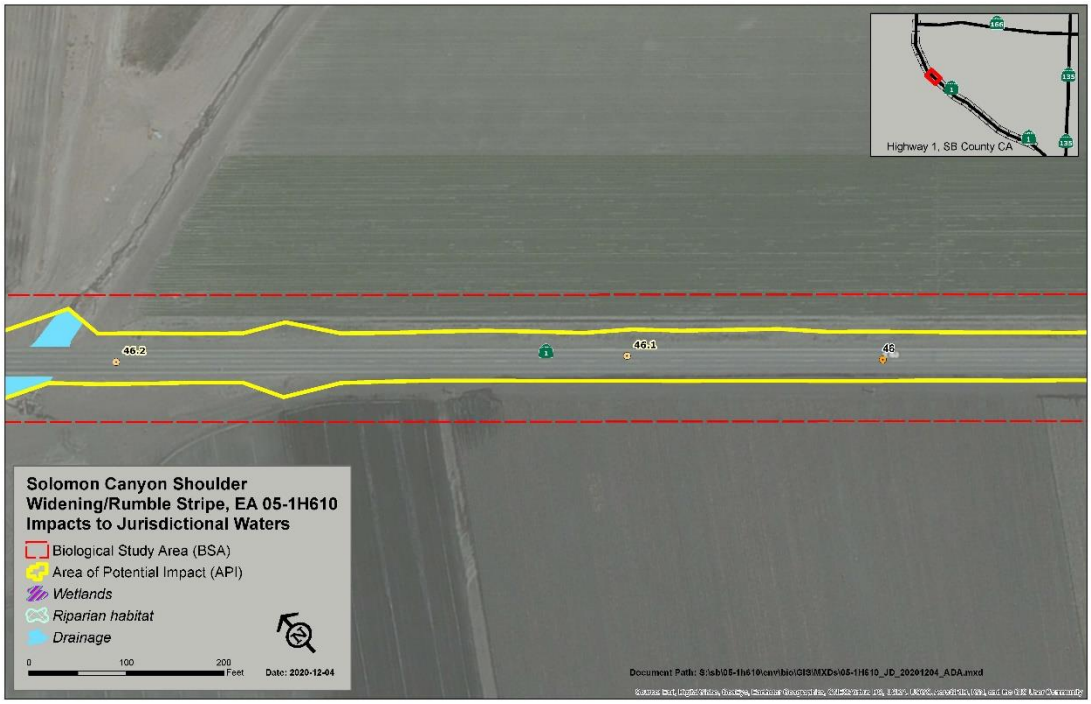

Highway 1, SB County CA
43.3
43.2
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\envbio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd

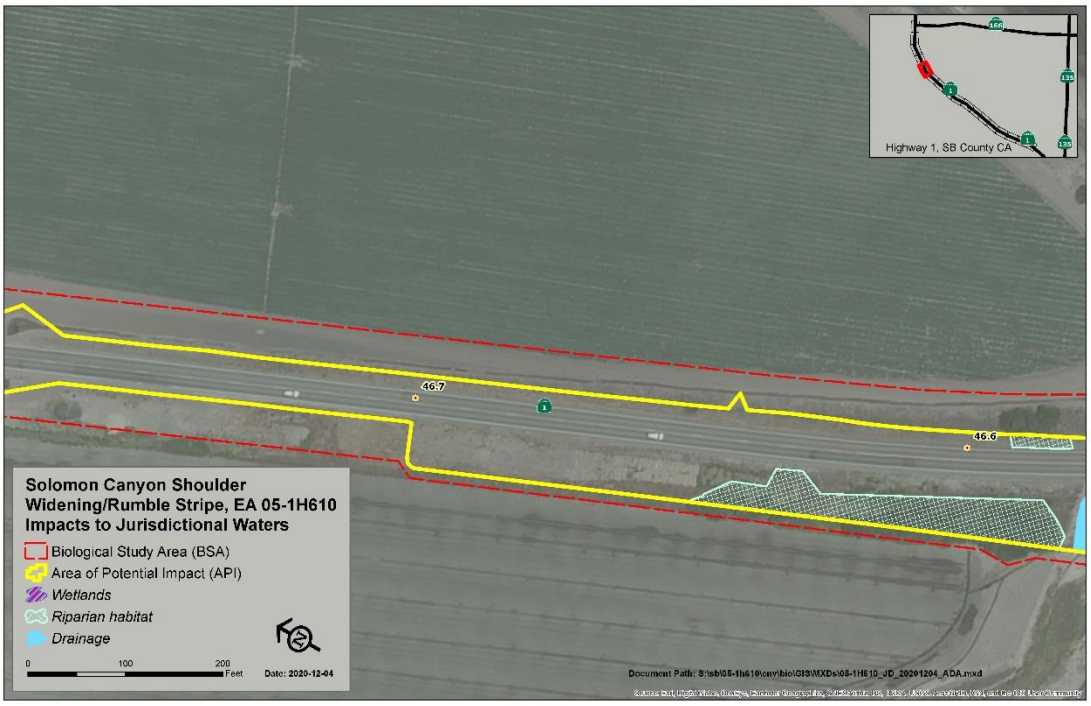

Highway 1, SB County CA
43.9
43.8
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\envbio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd

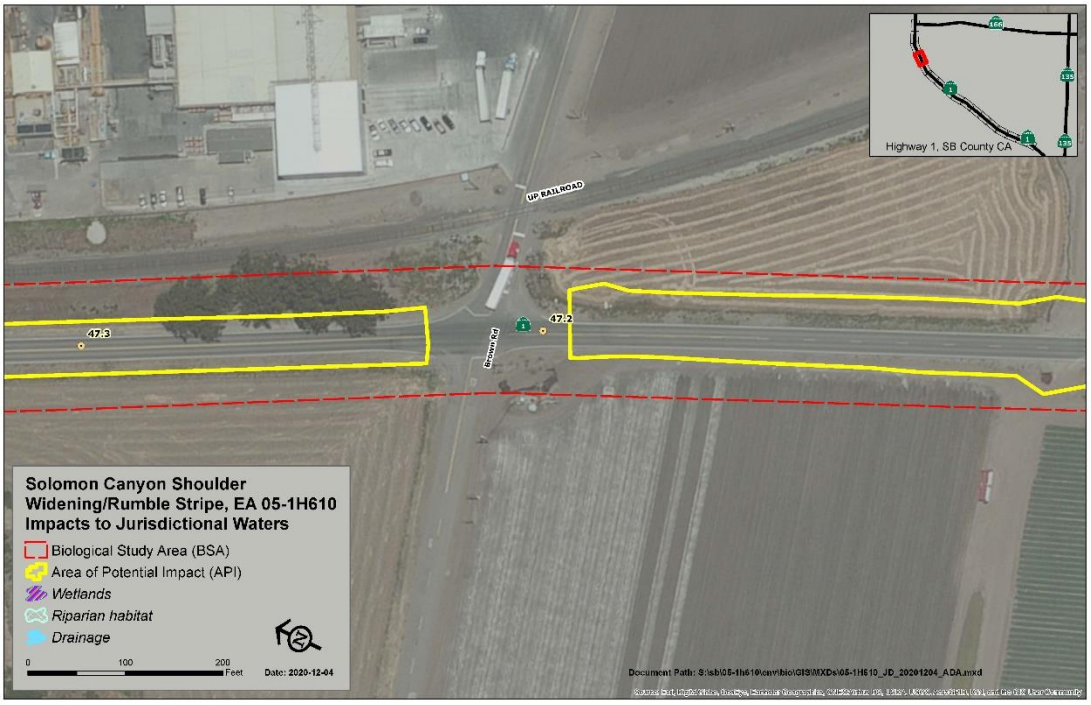

Highway 1, SB County CA
44.5
44.4
44.3
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\env\bio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd


Highway 1, SB County CA
44.9
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\env\bio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd

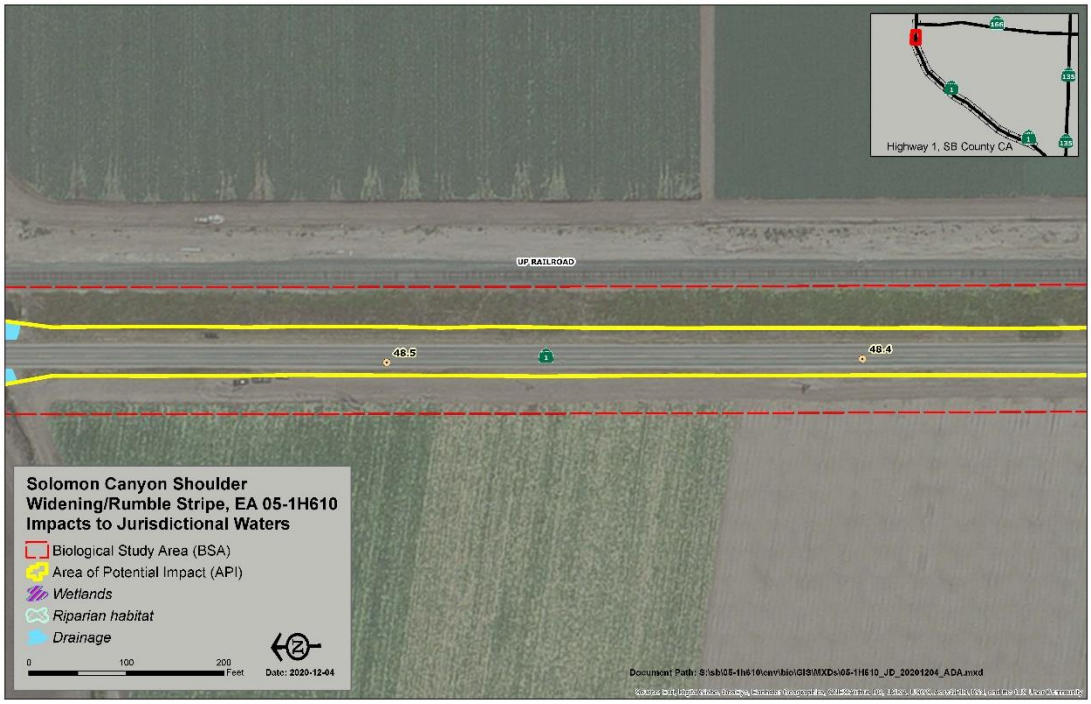

Highway 1, SB County CA
45.6
45.5
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\envbio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd

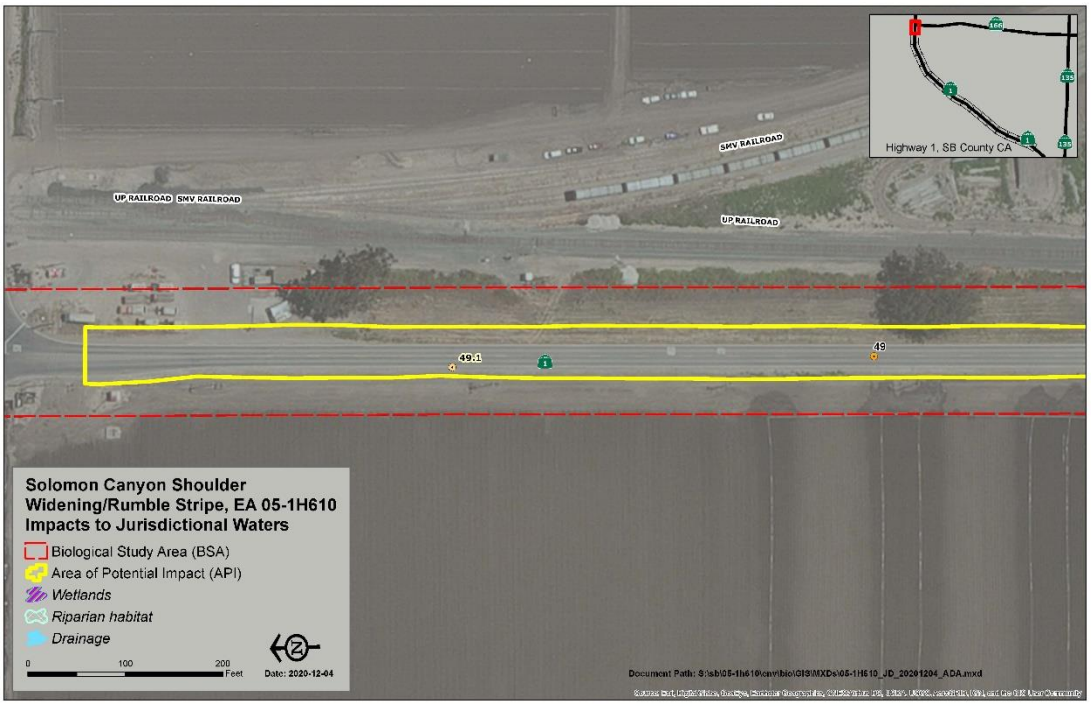

Highway 1, SB County CA
46.2
46.1
46
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\envbio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd


Highway 1, SB County CA
46.7
46.6
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\env\bio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd


Highway 1, SB County CA
UP RAILROAD
47.3
47.2
Brown Rd
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\env\bio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd


Highway 1, SB County CA
UP RAILROAD
47.8
47.9
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\env\bio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd


Highway 1, SB County CA
UP RAILROAD
48.5
48.4
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\env\bio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd


UP RAILROAD
SMV RAILROAD
SMV RAILROAD
UP RAILROAD
49.1
49
Highway 1, SB County CA
Solomon Canyon Shoulder
Widening/Rumble Stripe, EA 05-1H610
Impacts to Jurisdictional Waters
Biological Study Area (BSA)
Area of Potential Impact (API)
Wetlands
Riparian habitat
Drainage
0
100
200
Feet
Date: 2020-12-04
Document Path: S:\sb\05-1h610\env\bio\GIS\MXDs\05-1H610_JD_20201204_ADA.mxd

Appendix E Farmland Conversion Impact Rating

[This appendix has been added since the draft environmental was circulated.]

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request 12/3/20	4. Sheet 1 of 1
1. Name of Project Solomon Canyon Rumble Strip/Shoulder Wide	5. Federal Agency Involved FHWA represented by Caltrans	
2. Type of Project Rumble strip and shoulder widening	6. County and State Santa Barbara, CA	
PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS 12/11/20	2. Person Completing Form Philip Smith
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☑ NO ☐		4. Acres Irrigated 119,925 | Average Farm Size 487
5. Major Crop(s) Strawberries, Wine Grapes and Nursery Pro	6. Farmable Land in Government Jurisdiction Acres: 380,710 % 23.3	7. Amount of Farmland As Defined in FPPA Acres: 211,469 % 12.9
8. Name Of Land Evaluation System Used CA Revised Storie Index	9. Name of Local Site Assessment System None	10. Date Land Evaluation Returned by NRCS 12/28/20

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	4.4			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	0			
C. Total Acres In Corridor	4.4			
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	2.6			
B. Total Acres Statewide And Local Important Farmland	.3			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	.0014			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	4.58			
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*	70			

PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	Maximum Points				
1. Area in Nonurban Use	15	14			
2. Perimeter in Nonurban Use	10	10			
3. Percent Of Corridor Being Farmed	20	0			
4. Protection Provided By State And Local Government	20	20			
5. Size of Present Farm Unit Compared To Average	10	0			
6. Creation Of Nonfarmable Farmland	25	0			
7. Availablility Of Farm Support Services	5	0			
8. On-Farm Investments	20	2			
9. Effects Of Conversion On Farm Support Services	25	0			
10. Compatibility With Existing Agricultural Use	10	0			
TOTAL CORRIDOR ASSESSMENT POINTS	160	46	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	100	70	0	0	0
Total Corridor Assessment (From Part VI above or a local site assessment)	160	46	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	116	0	0	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES ☐ NO ☐

5. Reason For Selection:

Signature of Person Completing this Part: Nicole Kim | DATE 12/28/20

NOTE: Complete a form for each segment with more than one Alternate Corridor

Clear Form

Appendix F Comment Letters and Responses

[This appendix has been added since the draft environmental document was circulated.]

This appendix contains the comments received during the public circulation and comment period from February 11, 2021 to March 12, 2021. Oral comments from telephone calls are paraphrased to highlight the main concerns of the commenter. Written comments were retyped for readability and are shown verbatim, with acronyms, abbreviations and any original grammatical or typographical errors. A Caltrans response follows each comment presented. Copies of the original comment letters and documents can be found in Volume 2 of this document.

Comments from Jimmy Bognuda

During a phone call with Jimmy Bognuda on March 2, 2021, the following comments were received:

1. Concern over the disruption of electricity to the pole that supplies power to the agricultural well on his property.

   Comment 1 Response: Caltrans will coordinate with landowners and the utility companies after the final environmental document is completed and design plans are finalized to relocate the overhead power poles with minimal or no disruption to service.

2. A recommendation to remove communication poles on the southwest side of the highway and add the communication lines to the PG&E poles across the highway, thereby reducing the number of existing utility poles along the highway.

   Comment 2 Response: This idea will be suggested during coordination with the utility companies. The companies will address the relocation of their utility poles outside of the clear recovery zone and will need to comply with Public Utility Standards while fulfilling their requirements to serve customers.

3. Interest in discussing the potential to exchange land with Caltrans instead of selling to the state.

   Comment 3 Response: In the final design phase, Caltrans Right of Way agents will coordinate and communicate with property owners about property acquisition.

Comments from Kenneth Wolf

1. Hello Caltrans, As a resident of Orcutt, my direct line of travel to Guadalupe is via Highway 1. I support your proposed plan of upgrading Highway 1 from PM 36.1 to PM 49.2. With increased usage; making that stretch of Highway 1 safer is very much needed and most welcome. I also strongly support Caltrans offering a public community meeting for the people to be heard directly. The meeting should be held in either Guadalupe or Orcutt. Thank you very much.

   Phone call between Kenneth Wolf and Jason Wilkinson (Senior Environmental Planner): After discussing setting up a virtual public meeting, Mr. Wolf decided he would no longer like to request a public meeting.

2. Caltrans should look into adding a turn-lane on northbound Highway 1 for vehicles turning into the golf course since it creates queuing on the highway and prevents vehicles and emergency services from continuing through.

   Comment 2 Response: Caltrans will not be able to add a turn lane into the Rancho Maria Golf Club because that would require additional right-of-way acquisitions, increase the environmental impacts, change the original project scope, increase the number of relocated utilities, delay the project schedule, and increase project costs. The 8-foot paved shoulders and adjacent 2.5-foot unpaved area that are proposed for the section of the highway by the golf course would provide more room than is currently available, improving the traffic safety and operations of the location.

Comment from Jackson Hurst

I have reviewed the environmental document for the Solomon Canyon Rumble Strip/Shoulder Widening Project and I support the build alternative because the build alternative will help increase safety by adding rumble strips which will decrease run off the road crashes.

Comment Response: Thank you for your review and support of the draft environmental document.

Comments from Rancho Maria Golf Club

1. Project Description: The Project Description is unclear regarding where the edge of the proposed new pavement is next to our property line. Is there any planning for a shoulder next to the proposed pavement? After further inquiry with Caltrans District 5 Personnel, we received the “Draft Project Report” which describes project details like the Hwy CL, the RW edge, the proposed RW implying acquisition, cross-sections,

and cost details among other things. The Project report shows incorrect ownership and APN identification for our Golf Course on sheets L-3, L-4, L-5 and DPP- 3, DPP-4, and DPP-5. Shouldn't more accurate details be included in the project information description?

Comment 1 Response: The Project Description and Build Alternative description state that shoulders would be widened to 8 feet between Solomon Canyon Road and Black Road. Adjacent to the 8-foot paved shoulder would be approximately 2.5 feet of unpaved flat area. The updated Table 2-1 in Section 2.1.1 of the final environmental document lists each parcel that would require partial property acquisition, the parcel's farmland classification, total property in acres, and property acquired. Detailed right-of-way maps (Figures 2-2 and 2-3) were added to Section 2.1.1 of the final environmental document showing the proposed right-of-way acquisition, existing right-of-way, and parcel data.

Rancho Maria Golf Club is now properly identified as the owner of Assessor's Parcel Number 113-250-014 in the Final Project Report's layout sheets.

2. Notice of Availability: We received notification from our neighbors to the east (the Bognuda's) when they forwarded us a copy of the letter they had received. The Notice of Availability letter didn't include any close of a public comment period. We did not have 30 days to comment, a 30-day comment period was not identified in the letter, and the project description is incomplete and inaccurate. Other property owners adjacent to Highway 1 may not have been noticed.

   Comment 2 Response: Caltrans mailed Notice of Availability letters to all property owners in the project area on February 12, 2021. A Notice of Availability was sent to Rancho Maria Golf Club, Inc. at 1950 Highway 1, Santa Maria, CA 93455. Caltrans Right of Way staff used the same address to correspond with Rancho Maria Golf Club, Inc. in November 2019 to obtain consent to enter the property for environmental surveys for the project. English and Spanish ads were also published in the *Santa Maria Sun* on February 18, 2021 to notify the community of the draft environmental document's release.

   The 30-day public circulation and comment period for the Solomon Canyon Rumble Strip/Shoulder Widening project ran from February 11, 2021 to March 12, 2021. The end of the public comment period was listed in the ads and on the project website, which was included in the Notice of Availability letters.

The comment about the project description does not raise specific comments on the adequacy of the analysis in the draft environmental document. No response is required.

3. Highway Signage indicating areas subject to flooding: Highway 1 is posted with signs indicating areas subject to flooding along the easterly side of the Golf Course. How will the project resolve flooding issues? Shouldn't the Highway be raised at this point and adequate enlarged culverts be provided?

   Comment 3 Response: The Project Description states that the profile of the highway will be gradually raised up to 5 feet at two locations (post miles 40.5 and 41.4) that are susceptible to flooding. The location along the easterly side of the golf course at post mile 40.5 has two culverts located at a sag in the highway where flooding occurs during moderate storm activity due to sediment deposition from the adjacent agricultural fields. The project proposes to raise the roadway profile 5 feet and replace the two 30-inch corrugated steel pipe culverts with larger 36-inch reinforced concrete pipes at the existing elevation to prevent sediment and build-up and to allow storm flows to pass unhindered.

   Table 1-1 was added to the Build Alternative Description in Section 1.4.1 with details of the proposed culvert rehabilitations.

4. There are significant biological resources on the golf course that are related to resources on the other side of the highway: We have undertaken significant biological studies on the golf course and the biological information in the project Initial Study/Mitigated Negative Declaration seems deficient. Please see attached our concerns prepared by our Wildlife Biologist John Storrer.

   Comment 4 Response: Please see responses 1-7 to Storrer Environmental Services later in this appendix.

5. Rancho Maria Golf Course entry architectural walls: It appears that the widening is going to cut off our existing architectural entry walls. Is Caltrans going to pay for the necessary refinishing of the shortened walls?

   Comment 5 Response: The existing architectural entry walls at Rancho Maria Golf Club will need to be shortened. During the right-of-way acquisition process, appropriate compensation to the property owner will be determined for property acquired and any alterations to existing facilities, including restoring the walls to their pre-construction condition.

6. Rancho Maria Golf Course trees (RMGC) and fences along Hole 2 Fairway (easterly of golf course entry) and Hole 16 (westerly of golf course entry): RMGC owns and maintains trees and fences along the existing right-of-way of Highway 1. It appears that the widening will require the removal of the existing fencing and grading and possible trenching underneath the driplines of trees protecting the highway travelers from errant golf shots. Is Caltrans going to pay for damaged trees and re-installation of the fences in their proper location after construction?

   Comment 6 Response: Caltrans will pay for all capital work related to this project. Appropriate compensation to the property owner will be determined for any property acquired or alterations to existing facilities through the Caltrans right-of-way acquisition process. Two trees near the culvert at post mile 40.9 will need to be removed. The fence will be relocated approximately 10 feet back from its existing location, and the new edge of pavement after the highway is widened will be in roughly the location of the current fence.

7. Rancho Maria Golf Course impact on well: RMGC has developed and operated a well very near the fence line along the Hole 2 (easterly of the golf course entry). Is Caltrans going to give us an easement for future continued use of this well or pay for our costs to drill a new well outside of the proposed future right of way? Proposed expanded right-of-way expansion and utility relocation impacts on Rancho Maria Golf Course: Is Caltrans going to pay for narrowing our fairways and making it more difficult for screening traffic from errant golf shots? Are the utility lines even needed? Can they be undergrounded or combined with utilities on the north side?

   Comment 7 Response: The project is not expected to impact the private water well near post mile 40.8 or the fairways and trees adjacent to the fairways at Rancho Maria Golf Course. Please see response 6 above for more information on tree removal and fence relocation.

   Undergrounding or combining the utilities will be suggested during coordination with the utility companies. The companies will address the relocation of their utility poles outside of the clear recovery zone and will need to comply with Public Utility Standards while fulfilling their requirements to serve customers.

8. Thank you for the opportunity to comment. We would like to see the Initial Study and Mitigated Negative Declaration and supporting Project Report revised and recirculated for an additional 30 days with clear details on how the “Rumble Strip” widening will be implemented (with dimensions indicating where the construction zone is and where new

paving will be relative to our existing property and future acquisition across our property frontage) and how these details will affect our driveway.

Comment 8 Response: The draft environmental document circulated by Caltrans is legally adequate. Caltrans has complied with the public noticing requirements under California Environmental Quality Act Section 15072. Chapter 1 of the draft environmental document provided a comprehensive description of the project that includes all proposed actions within the project footprint that have potential to result in direct or indirect changes to the environment, including but not limited to: shoulder widening, guardrail replacement, raising the profile of the highway, culvert modification, relocating utility poles and fixed objects, installing rumble strip, and right-of-way acquisition. Project impacts to specific and relevant environmental resources as a result of project actions were presented in detail in Chapter 2.

The 8-foot paved shoulder was stated in Section 1.3 Project Description and discussed in response 1 above.

Comments from Storrer Environmental Services, LLC

1. Section 1.7 (Permits and Approvals Needed): A permit from the U.S. Fish and Wildlife Service (USFWS) for incidental take of federally-listed species, including California tiger salamander and California red-legged frog, may also be required.

   Comment 1 Response: Section 7 consultation with the U.S. Fish and Wildlife Service for listed species in the project area began in November 2020, and Caltrans received the final Biological Opinion on June 4, 2021. Section 7 consultation was added to the table in Section 1.8 of the final environmental document.

2. Table 2-2 (Animal Species of Special Concern) omits two important taxa. There are records for southwestern pond turtle (*Actinemys marmorata*) along this segment of State Route 1, which parallels Orcutt/Solomon Creek. Sources that contain records for this species in the project area include the Santa Barbara Museum of Natural History Department of Vertebrate Zoology collections and a Biological Assessment completed in support of the Orcutt Community Plan EIR. The southwestern pond turtle is a California species of special concern and is likely to be proposed for federal listing in the near future. There are also records for western spadefoot (*Spea hammondii*) in the Western Santa Maria Valley. This amphibian is also recognized as a California species of special concern and has been recently proposed for listing under the Federal Endangered Species Act. Inclusion of these two species is essential to the impact analysis, because they

may be more at risk from a highway construction project than volant species such as birds and bats. This is true both during and following construction of highway improvements.

Comment 2 Response: The project's Natural Environment Study includes both the southwestern pond turtle and western spadefoot in its analysis. Both species were added to Table 2-2, and additional discussion was included in Section 2.2.2 of the final environmental document.

3. The interpretation of survey results and CNDDB query understates the presence of American badger in the Biological Study Area. I surveyed a property northeast of the junction of State Route 1 and Black Road in 2015 and found ample evidence of badgers in the form of diggings, den sites, and tracks.

   Comment 3 Response: The project's Natural Environment Study includes the American badger in its analysis. The following information from the Natural Environment Study was added to Section 2.2.2 of the final environmental document:

   > Numerous California Natural Diversity Database records show badger as roadkill in this region, and badgers could be present within the Biological Study Area. Soils within much of the Area of Potential Impact are compacted due to agricultural practices, but some locations could potentially support denning.

   The avoidance and minimization measures for American badgers in Section 2.2.2 follow California Department of Fish and Wildlife recommendations.

4. Table 2-4 (Threatened and Endangered Species) acknowledges documentation of California tiger salamander (*Ambystoma californiense*) and California red-legged frog (*Rana draytonii*) within the Biological Study Area. The table should also note that there are several documented ("known") and potential California tiger salamander breeding ponds proximate to this segment of the State Route 1 right-of-way.

   The fact that neither California tiger salamanders or California red-legged frogs were found during the general field reconnaissance is not at all surprising. "Protocol surveys" as referenced in the MND are much more rigorous and in the case of the frog, require nighttime surveys. Aquatic surveys for California tiger salamander have been recently conducted by the USFWS in the project vicinity and have found breeding populations to be extant in at least three locations that are well within dispersal distance from the State Route 1 right-of-way.

Known breeding locations for both California tiger salamander and California red-legged frog should be identified in the MND and this information used to predict where these species are most likely to be encountered. This would help to inform where measures to facilitate wildlife movement might be integrated in the project's design. I suggest that known occurrences of California tiger salamander and California red-legged frog be illustrated on Figure 2-1 (Resource Study Area Map for California Tiger Salamander).

Comment 4 Response: Table 2-3 was updated in the final environmental document to include the documented U.S. Fish and Wildlife Service known and potential California tiger salamander breeding ponds within the biological study area: known breeding ponds SAMA-21, GUAD-6, and potential breeding ponds GUAD-7 and GUAD-10.

5. This conclusion: "The potential for impacts to California red-legged frogs is anticipated to be low because no California red-legged frogs were found within the Biological Study Area during surveys" is not substantiated by the timing, level, or method of the survey effort. Documented occurrence of this species within the Biological Study Area suggests that the potential for encounters is high under certain circumstances (e.g., nighttime, rainy weather, periods of seasonal dispersal).

   Comment 5 Response: The project's Natural Environment Study includes the California red-legged frog in its analysis. It was determined in the Natural Environment Study that suitable migration, breeding, and refuge habitat occurs within the Biological Study Area, and that the drainages and ponds adjacent to State Route 1 are known to support California red-legged frogs. Therefore, presence of the species was inferred. Section 7 consultation for the species was initiated with the U.S. Fish and Wildlife Service. The effects determination is that the project may affect, and is likely to adversely affect, the California red-legged frog. All avoidance and minimization measures from the Programmatic Biological Opinion for the California red-legged frog will be included with the project to minimize impacts to the species. Information in Section 2.2.3 of the final environmental document regarding the potential for impacts to the California red-legged frog was revised to accurately reflect the Natural Environment Study.

6. I also question the basis for this conclusion: "There would be no impacts to [California tiger salamander] breeding habitat because of the project." While it may be the case that known or potential breeding ponds will not be altered or eliminated, the possibility that drainage improvements could adversely affect known and potential breeding

ponds adjacent to the highway should be considered. These include Known CTS Breeding Pond SAMA-1 and Potential CTS Breeding Pond GUAD-7.

Comment 6 Response: No impacts from the project to SAMA-1 (referred to in Caltrans documents as SAMA-21 in accordance with U.S. Fish and Wildlife Service-provided data layers) or GUAD-7 are anticipated. Discussion of SAMA-21 is included in Response 3 to the Law Office of Alan Seltzer below. Proposed drainage work in the vicinity of GUAD-7 is not expected to affect the hydraulic regime of the potential breeding pond at GUAD-7.

7. The MND proposes various "minimization and avoidance measures" to reduce the potential for impacts to California tiger salamander and California red-legged frog. Compensatory mitigation through purchase of credits at the La Purisima Conservation Bank is proposed to offset permanent impact of 0.85 acres and temporary impact of 7.25 acres of California tiger salamander upland refuge and dispersal habitat. I'm curious if any design features were considered that might facilitate wildlife movement (in particular amphibians) over or beneath the highway. When CalTrans prepared the MND for the State Route 246 Passing Lanes Project in the Santa Rita Valley in 2008/09, a much more rigorous evaluation of potential for impacts to California tiger salamander and California red-legged frog was undertaken. The analysis resulted in design features such as elevating the roadway at major concentration points for dispersal to reduce the possibility of vehicle strikes. The Black Road Bridge Replacement Project that was completed about five years ago incorporated a culvert designed to enable amphibian dispersal beneath the roadway. Have culverts, tunnels, or other design options been considered in the discussion of mitigation alternatives in addition to standard mitigation measures and monetary compensation through purchase of offsite mitigation credits?

   Comment 7 Response: For this specific project, the U.S. Fish and Wildlife Service does not recommend efforts to increase connectivity across the highway. The U.S. Fish and Wildlife Service does not believe this would benefit California tiger salamanders at this location since 100% of the project alignment supports active agriculture on at least one side of the roadway. Efforts to increase connectivity into areas of active agriculture are expected to reasonably result in higher mortality. The U.S. Fish and Wildlife Service consulted with California tiger salamander species expert Dr. Brad Schaffer at the University of California at Los Angeles regarding this specific question, particularly with regard to the implementation of a passageway at the intersection of Black Road and State Route 1—the single location along the alignment that would allow a very narrow connection between undeveloped upland habitat. Based on the land configuration, Dr.

Schaffer advised that adding any passageway at this pinch-point location is not anticipated to result in additional benefit. Data from past studies have indicated that passageways need to be strategically located for California tiger salamanders with consideration of pond geometry, otherwise the passageways are unlikely to be used. Consequently, the U.S. Fish and Wildlife Service advises, for this individual project, that monetary compensation through the purchase of offsite mitigation credits would be the most meaningful mitigation.

Comments from the Law Office of Alan Seltzer

1. The Project Description is Inadequate and Inaccurate and, therefore, the Proposed MND is Improper.

   A stable, complete and accurate project description "...is the sine qua non of an informative and legally sufficient [CEQA document*]." County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193 (italics in original); see also CEQA Guidelines § 15124 (requirements for project description). The Caltrans Guidance Manual for CEQA Compliance cites CEQA Guidelines §15124 as the standard for composing the project description for Initial Studies and Negative Declarations. The Solomon Canyon Rumble Strip/Shoulder Widening MND fails to meet this most fundamental requirement of CEQA to provide an adequate and accurate description of the proposed project with respect to the Rancho Maria Golf Course.

   Comment 1 Response: Chapter 1 of the draft environmental document provides a comprehensive description of the project that includes all proposed actions within the project footprint that have potential to result in direct or indirect changes to the environment, including but not limited to: shoulder widening, guardrail replacement, raising the profile of the highway, culvert modification, relocating utility poles and fixed objects, installing rumble strip, and right-of-way acquisition. Project impacts to specific and relevant environmental resources as a result of project actions are presented in detail in Chapter 2.

2. Section 1.3 of the Initial Study and Proposed MND contains the Project Description. With respect to the road segment adjacent to the RMGC (between post miles 40.4 and 41.1), the project description states the project would widen shoulders to 8 feet, and "raise the profile of the highway, gradually up to 5 feet" at two locations adjacent to the RMGC that are susceptible to flooding (post miles 40.5 and 41.4). The Proposed MND does not contain any information on how the highway will be raised up to 5' in these locations immediately adjacent to the RMGC. It does not state the points at which the road profile will change, or the length or slope of the changed profile between points.

Instead, the project description only generally describes other project components as including “extending and/or replacing approximately 30 culverts to meet new slopes, constructing or modifying existing V-ditches, relocating utility poles and other fixed objects from the clear recovery zone, and installing centerline and edge-line rumble strips.” This general description is inadequate to inform the public and affected landowners such as the RMGC of the scope of work that is proposed to take place adjacent to and on their property. Here, for example, in addition to omitting any explanation of how the road profile change shall be accomplished, there is no statement of whether the raised profile of the highway to 5’ will result in the installation of culverts to meet new slopes as a result of the profile changes.

Comment 2 Response: The project proposes to raise the profile at two locations. The first proposed alignment is to be raised gradually up to 5 feet at post mile 40.5 at +0.625% grade and down -0.625% slope over a total of 1,612 feet. Of the three existing culverts within the section of the proposed profile change, the 30-inch corrugated steel pipe at post mile 40.53 will be replaced and extended with a larger 36-inch reinforced concrete pipe.

The second profile change at post mile 41.5 will raise the highway gradually up to 5 feet at +0.710% grade and down -0.710% slope over a total of 1,423 feet. Within this segment of the highway, a 72-inch corrugated steel pipe at post mile 41.41 will be replaced with a 72-inch reinforced concrete pipe, and at post mile 41.42, a 24-inch corrugated steel pipe will be replaced with a 24-inch reinforced concrete pipe with a reconstructed headwall.

No new culverts will be installed as a result of the raised highway profile.

3. This failure to adequately describe project details also results in the failure to adequately assess project impacts. The known CTS Breeding Pond SAMA-1 is located nearby the location of the raised road profile on the western edge of the RMGC. There is no analysis of the impacts the road profile change may have on the CTS Breeding Pond SAMA-1 or the CTS itself.

   Comment 3 Response: Impacts to the California tiger salamander and its federally designated critical habitat are discussed in Section 2.2.3 Threatened and Endangered Species. A more comprehensive analysis of these impacts is also detailed in the project’s Natural Environment Study (2020), which is available upon request.

   With regard to the known California tiger salamander breeding pond SAMA-1 (referred to in Caltrans documents as SAMA-21 in

accordance with U.S. Fish and Wildlife Service-provided data layers), the raised road profile near the Rancho Maria Golf Course is focused to the southeast of the California tiger salamander breeding pond location near post mile 40.53 and is not in a proximity to impact the pond. The start of the road profile area south of California tiger salamander pond SAMA-21 is approximately 0.36 mile from the breeding pond. The raised road profile north of the Rancho Maria Golf Course is proposed to occur at post mile 41.5. The proposed alignment is to be raised gradually to 5 feet (+0.625% grade along the highway) and gradually down (-0.625% slope) to conform with the existing pavement over a total length of 1,612 feet with a maximum longitudinal slope of 0.625% and cross slopes of 2%.

4. The Project Description at section 1.3 also minimally states that "right-of-way acquisition would be required for the shoulder widening and for a separate utility easement. Existing utility poles, fences, and other fixed objects would be relocated to outside of the clear recovery zone. A temporary construction easement is required to reconstruct the driveways and access roads at the locations where the profile would be raised due to flooding." This portion of the project description is also insufficient to inform RMGC and other landowners of the scope and impact of the proposed project.

   Comment 4 Response: Chapter 2 describes the impacts to farmland and utility and emergency services. Section 2.1.1 of the final environmental document includes an updated Table 2-1, which lists each parcel that would require partial property acquisition, the parcel's farmland classification, total property in acres, and property acquired. Detailed right-of-way maps (Figures 2-2 and 2-3) were added to the Farmland section of the final environmental document to show the proposed right-of-way, existing right-of-way, and parcel data.

5. As Board President Cheryl Severn writes in her cover letter, the proposed road widening project would cut off existing architectural entry walls, result in possible trenching underneath the driplines of trees that protect the vehicles from errant golf shots, remove existing fencing, and narrow fairways. None of these impacts arising from the location of the project's new highway edge and shoulder, nor the project's right of way acquisition requirements, was capable of being found in the Proposed MND much less its Project Description. Instead, RMGC learned about the specifics of the project only after Ms. Severn serendipitously learned of the existence of a separate document entitled "Draft Project Report," including an Attachment C," just days before the close of the 30 day comment period. While the Draft Project Report contains important project details like the Highway Center Line, the ROW edge, and cross-sections, it is no substitute for the Proposed

MND and the requirement that project details be in the MND and its Project Description.

In fact, the information in the "Draft Project Report" reveals just how impoverished is the Proposed MND. Its failure to include essential project details is highlighted by the fact that there is no link in the MND to the information in the Draft Public Report. By failing to include these details in a manner accessible to the public, the Proposed MND fails the requirement under CEQA that it "must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal.3d 376, 405; see also Sierra Club v. County of Fresno (2018) 6 Cal.5th 502, 516.

Comment 5 Response: Please see responses 5, 6, and 7 to Rancho Maria Golf Club regarding the architectural entry walls, trees, fencing, existing fairways, and errant golf shots. Also see response 1 above regarding the Project Description and project impacts.

The existing condition of each resource is described in Chapter 2, Affected Environment, for all identified resources where potential impacts were identified. The detail provided for each resource type describes the baseline condition of each of the resources at a project level. Additionally, the draft environmental document states all technical studies are available upon request. The information provided in the circulated draft environmental document is sufficient to allow the public and decisionmakers to review, comment, and make informed decisions.

6. Caltrans' CEQA Guidance for an Initial Study recognizes that "public participation is considered an essential part of the CEQA process." The failure to include correct critical project details in the Proposed MND has prevented public participation in violation of the Caltrans CEQA Guidance on "Public Participation," which states that "to comply with CEQA and the CEQA Guidelines, Caltrans must provide a notice of intent to adopt a negative declaration or mitigated negative declaration to the public…sufficiently prior to adoption by the lead agency of the negative declaration or mitigated negative declaration to allow the public and agencies the 30 day review period." This includes "…3. Direct mailing to the owners and occupants of contiguous property shown on the latest equalized assessment roll." *Ibid*.

   RMGC did not receive any such direct mailing notwithstanding that it is the owner of the Golf Course. This is because the information in the Draft Public Report is fatally incorrect. The RMGC owns the Golf Course located on APN 113-250-014. In Attachment C to the Draft

Project Report, on Sheets L3, L4, and L5, portions of APN 113-250-014 owned by RMGC is erroneously identified as APN 113-250-016 and owned by Orcutt Rancho LLC. The same error is made in Attachment D to the Draft Project Report, on Sheets DPP 3, DPP 4, and DPP 5.

In order to remedy these defects, the MND Project Description must be made complete, erroneous information must be corrected, and an adequate time to comment must be given so that the public, including affected landowners like RMGC, may have effective public participation in this environmental review process.

Comment 6 Response: Please see response 2 to Rancho Maria Golf Course regarding public noticing.

The incorrect labelling in Attachment C of the Draft Project Report did not interfere with the public noticing for the draft environmental document. Rancho Maria Golf Club is now properly identified as the owner of Assessor's Parcel Number 113-250-014 in the Final Project Report's layout sheets.

Please see response 1 to the Law Office Alan Seltzer regarding the Project Description and response 2 to Rancho Maria Golf Club regarding the public noticing for the draft environmental document.

7. Biological Impacts Have Not Been Adequately Analyzed.

In revising the Proposed MND, additional surveys and review of potential impacts to special, threatened and endangered species should be undertaken as set forth in the letter from Storrer Environmental Services submitted by RMGC. This should include analysis of the impacts the proposed road profile change may have on Known Breeding Pond SAMA-1 and the CTS.

Caltrans Comment Response: Please see responses 1-7 to Storrer Environmental Services and response 3 to the Law Office of Alan Seltzer, above.

List of Technical Studies

Air Quality, Noise, and Greenhouse Gas Memorandum

Revised Water Quality Assessment

Natural Environment Study

- Biological Opinion

Location Hydraulic Study

Historic Property Survey Report

- Historical Resource Evaluation Report
- Archaeological Survey Report

Revised Initial Site Assessment

Visual Impact Assessment

Paleontology Review Memorandum

Community Impacts Analysis

Climate Change Technical Study

Preliminary Geotechnical Design Report

To obtain a copy of one or more of these technical studies/reports or the Initial Study, please send your request to the following email address: jason.wilkinson@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 a copy of. Provide your name and email address or U.S. postal service mailing address (street address, city, state and zip code).