State Route 25 Curve Restoration Project

In San Benito County, California
05-SBt-25-PM 18.8/19.2
05-1H810, 0516000164

Initial Study with Proposed Mitigated Negative Declaration

Prepared by the
State of California Department of Transportation

June 2020

Caltrans

General Information About This Document

What's in this document:
The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of the alternatives being considered for the proposed project located in San Benito County, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). This document tells you why the project is being proposed, what alternatives we have 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.

What you should do:

- Please read this document.
- Additional copies of the document are available for review at Caltrans District Office, 50 South Higuera Street, San Luis Obispo, California 93401. This document can also be accessed at the following website: https://dot.ca.gov/caltrans-near-me/district-5/district-5-current-projects
- Due to the current COVID-19 pandemic, Caltrans changed the in-person public hearing to a virtual format. The virtual public hearing will provide the same information as an in-person public meeting. In addition, the public circulation of the environmental document has been extended an additional 2 weeks. Please contact Caltrans using the information below if you'd like to discuss or have questions on the project.
- The related technical studies are available upon request.
- Tell us what you think. If you have any comments regarding the proposed project, please send your written comments via U.S. mail to: Jason Wilkinson, California Department of Transportation, 50 South Higuera Street, San Luis Obispo, California 93401; contact Jason Wilkinson by phone at 805-542-4663, or submit comments via email to: jason.wilkinson@dot.ca.gov.
- Submit comments by the deadline: August 3, 2020.

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

Alternative Formats:
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 call or write to Department of Transportation, Attention: Jason Wilkinson, Central Region Environmental, 50 South Higuera Street, San Luis Obispo, CA 93401; 805-542-4663 (Voice), or use the California Relay Service 1-800-735-2929 (TTY), 1-800-735-2929 (Voice), or 711.

05-SBt-25-18.8/19.2
05-1H810/0516000164

Curve alignment restoration on State Route 25 from post miles 18.8-19.2 in San Benito County

INITIAL STUDY with Proposed 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
Environmental Office Chief
California Department of Transportation
CEQA Lead Agency

June 2, 2020
Date

The following may be contacted for more information about this document:

Jason Wilkinson, 50 South Higuera Street, San Luis Obispo, California 93401, phone: 805-542-4663

DRAFT Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to provide a permanent solution to the failure of the cut slopes of the original State Route 25 Curve Realignment Project (EA/PN: 05-0T640/0500020030). In December 2015, construction was completed on the original project where a tight curve was straightened by cutting back slopes through a hillside and realigning the roadway. Soon after construction was completed, the cut slopes on both sides began to fail, and the newly constructed roadway needed to be closed for the safety of the traveling public. Under an emergency project, a temporary detour was constructed along the historic roadway alignment and is functioning today with temporary stop signs with flashing beacons to allow traffic to continue to use the highway. The temporary detour is an interim solution, and the proposed project will provide a permanent solution.

The proposed project is located in San Benito County on State Route 25, about 32 miles south of the city of Hollister, from 0.7 miles north of Old Hernandez Road (post mile 8.8) to 2.3 miles south of State Route 146 (PM 19.2). The proposed project would provide a permanent solution to the failed 2015 State Route 25 Curve Realignment Project by flattening the cut slopes to 2:1 (horizontal to vertical dimensions) to reduce erosion, promote revegetation regrowth, and prevent repeated slope failure. The horizontal curves and superelevation (banking of the roadway such that the outside edge of pavement is higher than the inside edge, allowing a vehicle to travel through a curve more safely) will allow speeds up to 51 miles per hour. The project will also improve access to private driveways within the project limits.

The project would construct two 12-foot lanes with 4-foot outside shoulders. Because the existing right of way cannot accommodate the proposed flattening of the slopes, additional permanent right-of-way acquisition would be required for the roadway alignment of the roadbed. The project would require an additional 1.95 acres of right of way, 0.2 acres of drainage easement, 0.41 acres of slope easement, and 0.21 acres of temporary construction.

It is estimated that 17 blue oak trees and 1 valley oak tree with a diameter-at-breast-height greater than 4 inches may need to be removed to accommodate the proposed project. This project will also include additional tree planting to replace blue oaks that were removed as part of the original curve realignment project. Tree replacement for the original project was not completed because the proposed replacement planting site was along the temporary detour that is currently being used. Ten blue oak trees between 4 and 23 inches diameter-at-breast-height and 3 large blue oaks greater than 24 inches diameter-at-breast-height were removed as part of the original curve correction project. These trees will be replaced at the same ratios (for example, 3:1 for trees 4 to 23 inches diameter-at-breast-height and 10:1 for trees greater than 24 inches diameter-at-breast-height). In total, a minimum of 191 blue oak trees will be planted within the proposed planting areas. A three-year plant establishment period is proposed. The scope of the replacement planting

would be entirely within the limits of this project and within existing and proposed state right-of-way.

Determination

This proposed Mitigated Negative Declaration is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a Mitigated Negative Declaration for this project. This does not mean that Caltrans' decision on the project is final. This proposed Mitigated Negative Declaration is subject to change based on comments received from interested agencies and the public. Caltrans has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons.

The project would have no effect on: wetlands and other waters, plant species, agriculture and forestry resources; air quality; 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; utilities and service systems; and wildfire.

The project would have no significant effect on aesthetics, cultural resources, animal species, and individual oak trees because the minimization and avoidance measures proposed in the Initial Study would reduce potential effects to less than significant.

The project would have no significant adverse effect on California tiger salamander because the mitigation measures below would reduce potential effects to less than significant.

The proposed road restoration project would result in permanent impacts to 4.16 acres of upland habitat as well as temporary impacts to 0.49 acres of upland habitat. To compensate for the loss of habitat the following measures are being proposed:

1. To compensate for loss to upland habitat of temporary impacts, mitigation at a minimum ratio of 1.1:1; permanent impact credits at a minimum ratio of 3:1; will be purchased at an approved California tiger salamander mitigation bank.

2. Caltrans shall also restore 0.49 of temporarily impacted California tiger salamander habitat on site.

_____

John Luchetta
Environmental Office Chief
District 5 - California Department of Transportation

_____

Date

Table of Contents

DRAFT Proposed Mitigated Negative Declaration iii
Table of Contents v
List of Figures vii
List of Tables vii
Chapter 1 Proposed Project 1
1.1 Introduction 1
1.2 Purpose and Need 5
1.2.1 Purpose 5
1.2.2 Need 5
1.3 Project Description 5
1.4 Project Alternatives 7
1.4.1 Build Alternative 7
1.4.2 No-Build (No-Action) Alternative 7
1.5 Alternatives Considered but Eliminated from Further Discussion 7
1.6 Discussion of the NEPA Categorical Exclusion 8
1.7 Permits and Approvals Needed 8
Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures 9
2.1 Human Environment 12
2.1.1 Visual/Aesthetics 12
Regulatory Setting 12
Affected Environment 12
Environmental Consequences 13
Avoidance, Minimization, and/or Mitigation Measures 14
2.2 Cultural Resources 14
2.2.1 Regulatory Setting 14
Affected Environment 15
Environmental Consequences 16
Avoidance, Minimization, and/or Mitigation Measures 17
2.3 Biological Environment 17
2.3.1 Natural Communities 17
Affected Environment 17
Environmental Consequences 18
Avoidance, Minimization, and/or Mitigation Measures 21
2.3.2 Animal Species 21
Regulatory Setting 21
Affected Environment 22
Environmental Consequences 33
Avoidance, Minimization, and/or Mitigation Measures 34
2.3.3 Threatened and Endangered Species 36
Regulatory Setting 36
Affected Environment 37
Environmental Consequences 46
Avoidance, Minimization, and/or Mitigation Measures 49

2.3.4 Invasive Species 56
Regulatory Setting 56
Affected Environment 57
Environmental Consequences 58
Avoidance, Minimization, and/or Mitigation Measures 58
2.4 Cumulative Impacts 58
Chapter 3 CEQA Evaluation 61
3.1 Determining Significance under CEQA 61
3.2 CEQA Environmental Checklist 62
3.2.1 Aesthetics 62
3.2.2 Agriculture and Forest Resources 63
3.2.3 Air Quality 64
3.2.4 Biological Resources 65
3.2.5 Cultural Resources 66
3.2.6 Energy 67
3.2.7 Geology and Soils 67
3.2.8 Greenhouse Gas Emissions 68
3.2.9 Hazards and Hazardous Materials 68
3.2.10 Hydrology and Water Quality 69
3.2.11 Land Use and Planning 70
3.2.12 Mineral Resources 71
3.2.13 Noise 71
3.2.14 Population and Housing 71
3.2.15 Public Services 72
3.2.16 Recreation 72
3.2.17 Transportation 73
3.2.18 Tribal Cultural Resources 73
3.2.19 Utilities and Service Systems 74
3.2.20 Wildfire 75
3.2.21 Mandatory Findings of Significance 75
3.3 Greenhouse Gas Emissions 76
3.3.1 Affected Environment 77
3.3.2 Environmental Consequences 77
3.3.3 Avoidance, Minimization, and/or Mitigation Measures 79
Chapter 4 Comments and Coordination 80
4.1 Cultural Resources Coordination 80
4.1.1 Biological Resource Coordination 81
Federal Endangered Species Act Consultation Summary 81
Chapter 5 List of Preparers 82
Chapter 6 Distribution List 84
Appendix A Section 4(f) *De Minimis* Determination 86
Appendix B Title VI Policy Statement 88
Appendix C Avoidance, Minimization and/or Mitigation Summary 90
List of Technical Studies 101

List of Figures

Figure 1-1 Project Vicinity Map 1
Figure 1-2 Project Location Map 2
Figure 1-3 Proposed Highway Alignment 3
Figure 2-1 Biological Study Area and Habitat Map 19

List of Tables

Table 2-1. Animal Species of Concern 23
Table 2-2. Threatened and Endangered Species 39
Table 2-3. Federal Endangered Species Act Effects Determinations 48
Table 2-4. Plants Observed in the Biological Study Area Included in the California Invasive Plant Council's Invasive Plant Inventory 57

Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) is the lead agency under the California Environmental Quality Act (CEQA). Caltrans proposes to provide a permanent solution to a substantial cut slope failure on the completed State Route 25 Curve Realignment Project, located in San Benito County on State Route 25, about 32 miles south of the City of Hollister, from 0.7 miles north of Old Hernandez Road to 2.3 miles south of Route 146. Figures 1-1 and 1-2 show the project vicinity and project location.

Figure 1-1 Project Vicinity Map

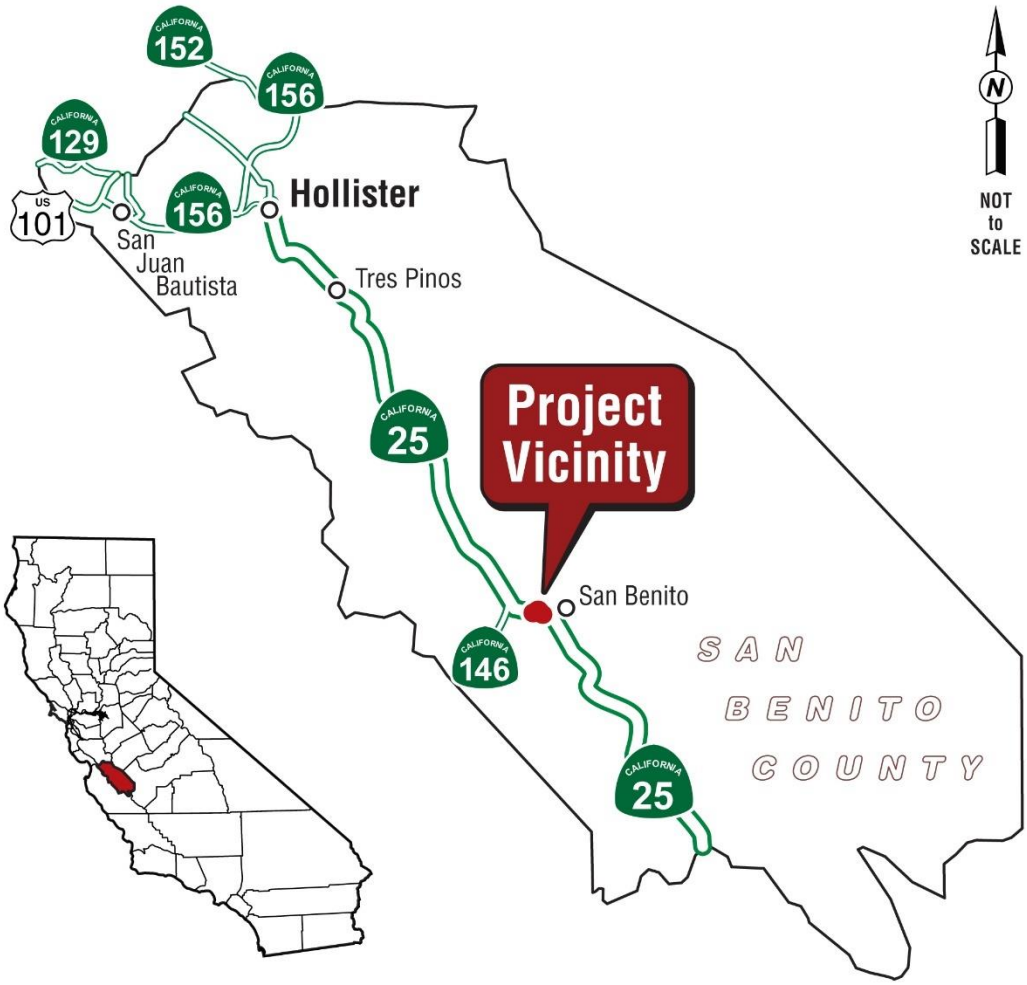
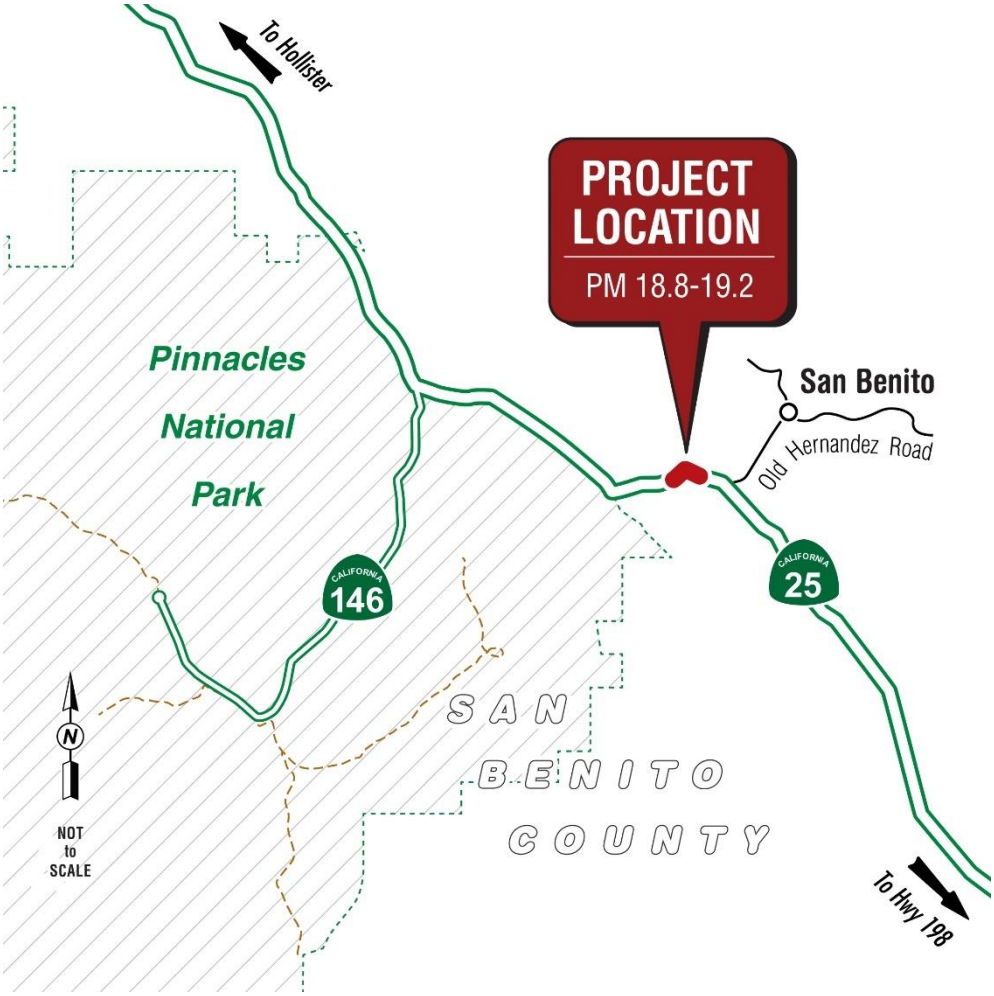


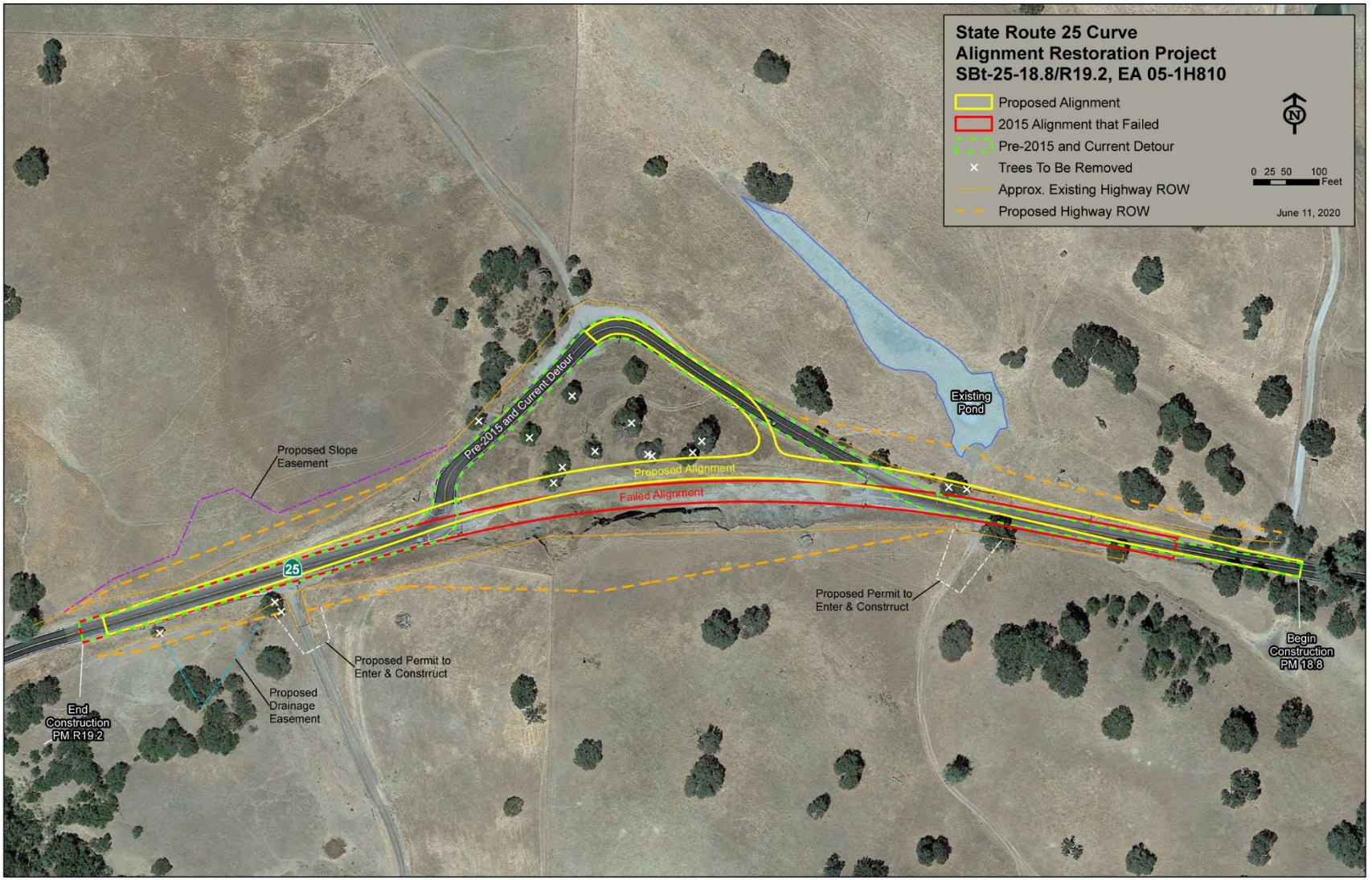
Figure 1-2 Project Location Map



In December 2015, construction was completed for the Route 25 Curve Realignment Project. The purpose of the realignment project was to reduce a higher than average number of collisions by straightening a curve on State Route 25 by cutting through a hillside and realigning the roadway. Soon after construction was completed, the cut slopes began to fail due to unstable rock, and the newly constructed roadway needed to be closed for the safety of the traveling public. Under an emergency project, a temporary detour was constructed along the historic State Route 25 roadway alignment and is functioning today with temporary stop signs with flashing beacons.

The proposed project will repair the failed cut slopes on both sides of State Route 25 by flattening them to two to one (2:1; horizontal to vertical dimensions) to reduce erosion, promote revegetation, and prevent repeated slope failure. The proposed alignment will be slightly shifted to the north to avoid environmental impacts on the south side of the roadway. The historic highway alignment (which is now being used as the temporary detour), the failed 2015 alignment, and the proposed alignment are shown on Figure 1-3.

Figure 1-3 Proposed Highway Alignment



About 72,000 cubic yards of material will be excavated. The project proposes to construct two 12-foot lanes with 4-foot shoulders. The horizontal curves and superelevation (banking of the roadway such that the outside edge of pavement is higher than the inside edge, allowing a vehicle to travel through a curve more safely) will allow speeds up to 51 miles per hour. The project will also improve access to private driveways within the project limits.

Oak tree removal and resetting of two utility poles is expected. Permanent and temporary right-of-way acquisition will be required. Replacement planting, including a required 3-year plant establishment period, is proposed. The scope of the planting project is entirely within the limits of the project and within current and proposed Caltrans right-of-way. The project is funded from the 201.010 Safety Improvement (Collision Reduction) Program and was amended into the 2016 State Highway Operation and Protection Program.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the proposed project is to provide a permanent solution to the slope failure that occurred following completion of the State Route 25 Curve Realignment project, and to improve highway safety through the project limits. The purpose of the proposed project is also to address the replacement of the blue oak trees that were removed to complete the original project in 2015.

1.2.2 Need

The original State Route 25 Curve Realignment project completed in 2015 was needed to reduce a higher than average number of collisions as compared to similar roadways throughout the state. Because of the cut slope failure of the original project and closing of the roadway, the need for the original project has not been met. Although the temporary detour is currently functioning as an interim solution under the operation of stop signs with flashing beacons, it cannot function as a permanent solution nor does it address the failure of the cut slopes. In addition, replacement of the blue oak trees removed from the original State Route 25 Curve Realignment Project has not been completed. Therefore, the proposed project is also needed to address the replacement of the blue oak trees.

1.3 Project Description

The proposed project is located in San Benito County on State Route 25, about 32 miles south of the city of Hollister, from 0.7 miles north of Old Hernandez Road (post mile 8.8) to 2.3 miles south of State Route 16 (post mile 19.2) (see Figures 1-1 and 1-2). The proposed project would flatten the

failed cut slopes to 2:1 (vertical to horizontal dimensions) on both sides of State Route 25 to reduce erosion, promote re-vegetation, and prevent repeated slope failure. The project would also include improving the highway superelevation, lengthening the vertical curve to improve sight distance, and improving access to the private driveways.

About 72,000 cubic yards of material would need to be excavated. The project would include construction of two 12-foot lanes with 4-foot outside shoulders. Existing right-of-way is about 30 feet from the centerline of the roadway. Because the existing right of way cannot accommodate the proposed flattening of the slopes, additional permanent right-of-way acquisition would be required for the improved roadway alignment and to accommodate the roadbed. The project would require an additional 1.95 acres of right-of-way, 0.2 acres of drainage easement, 0.41 acres of slope easement, and 0.21 acres of temporary construction easement. Right of entry easements would be requested from adjacent property owners as needed to improve driveway access. No land developments or businesses would be affected.

Oak tree removal and resetting of two utility poles are included in the scope. A landscape planting project with a 3-year plant establishment period is proposed. A portion of the existing State Route 25 roadbed would be removed and rehabilitated to allow for revegetation for oak trees. It is estimated that 17 blue oak trees and 1 valley oak tree with a diameter-at-breast-height greater than 4 inches may need to be removed to accommodate the proposed project. Impacts to trees will be offset by replacement planting within the project limits, using a 3:1 ratio for each removed oak tree between 4 and 23 inches diameter-at-breast-height, and a 10:1 ratio for each removed oak tree greater than 24 inches diameter-at-breast-height.

This project will also include additional blue oak tree planting to replace blue oaks that were removed by the original curve realignment project. The original project did not include tree replacement because the proposed replacement planting site was along the temporary detour that is currently being used. Ten blue oak trees between 4 and 23 inches diameter-at-breast-height and 3 large blue oaks greater than 24 inches diameter-at-breast-height were removed as part of the original curve correction project. In total, a minimum of 191 blue oak trees will be planted within the proposed planting areas. A three-year plant establishment period would be required. The scope of the replacement planting is entirely within the limits of this project and within existing and proposed state right-of-way.

1.4 Project Alternatives

1.4.1 Build Alternative

Only one build alternative, permanently restoring the roadway, is proposed for this project. The build alternative project description is presented in Section 1.3.

The build alternative 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 found in Chapter 2.

1.4.2 No-Build (No-Action) Alternative

Under the no-build alternative, full unimpeded access through Route 25 project site will remain closed due to unstable slopes and rockfall and would not result in any road improvements. The temporary detour would continue to remain in use. The no-build alternative would not meet the purpose and need for the project.

1.5 Alternatives Considered but Eliminated from Further Discussion

Anchored draperies

Anchored drapery and retaining walls were considered as possible solutions. Anchored draperies (wire or cable mesh sheets anchored in place used to retain rocks on a slope) can be used to retain individual rocks up to 3 feet in dimension and small rockslides up to about 10 cubic yards to prevent them from reaching the traveled way if a sufficient rock catchment area could be created. The volume and depth of the failures observed in the cut slopes would exceed the functional capacity of anchored drapery systems. Therefore, this alternative does not meet the project purpose and need and is no longer being considered.

Retaining walls

Two retaining wall types were evaluated as potential solutions:

A) Bottom-up retaining walls are walls that are constructed by building the wall starting at the bottom or toe of the slope and working up to the top. This type of wall construction requires workers to be exposed below the slope and due to the instability of this existing slopes this alternative method of wall

construction is not safe. Therefore, bottom-up retaining wall construction is no longer being considered.

B) Top-down retaining walls, such as an anchored soldier pile wall or a structurally faced rock bolting pattern constructed from above and behind the existing cut slopes is a viable retaining wall option. However, the wall height would need to be over 40-feet to withstand the soil load and would cost about $11 million. Therefore, this type of retaining wall is no longer being considered due to excessive cost.

1.6 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 CEQA, this document may contain references to federal laws and/or regulations (CEQA, for example, requires consideration of adverse effects on species identified as a candidate, sensitive, or special-status species by the United States National Marine Fisheries Service and the United States Fish and Wildlife Service—in other words, species protected by the Federal Endangered Species Act).

1.7 Permits and Approvals Needed

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

Agency	Permit/Approval	Status
California Department of Fish and Wildlife	Section 2080.1 Incidental Take Permit (or Amendment) for California Tiger Salamander	Section 2081 Incidental Take Permit (or Amendment) expected after Final Environmental Document approval
U.S. Fish and Wildlife Service	Section 7 Consultation for Threatened and Endangered Species—California Tiger Salamander	Biological Opinion received on June 13, 2019
United States Fish and Wildlife Service	Section 7 Consultation for Threatened and Endangered Species—California Red-Legged Frog and Critical Habitat	Authorization to use Programmatic Biological Opinion received on June 13, 2019
California Transportation Commission	California Transportation Commission vote to approve funds	Following the approval of the Final Environmental Document, the California Transportation Commission will be required to vote to approve funding for the project

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: The project is within an area designated as rangeland, which is intended to maintain open space for grazing on hills, mountains, and remote areas of the county. The proposed project would not result in any changes to this designation. (San Benito County 2035 General Plan; Land Use Element)

Consistency with State, Regional, and Local Plans and Programs: The project is consistent with all requirements of the San Benito County 2035 General Plan. The project will also follow all state requirements under CEQA. (San Benito County 2035 General Plan)

Relocations and Real Property Acquisition: Although the project will require partial acquisitions of land slivers from four privately owned properties, no relocations will be required. In addition, because the project area is within designated rangeland and is sparsely populated, there are no neighborhoods, public facilities, non-profit organizations, or families having special composition (for example, ethnic, minority, elderly, disabled, or other factors) that would be affected by the project. (San Benito County 2035 General Plan, July 2015)

Coastal Zone: There will be no effects to coastal resources because the project is not located within the coastal zone.

National Marine Fisheries Service: A National Marine Fisheries Service species list for the region was requested and obtained. Although the species list identified two species of steelhead and critical habitat, it was concluded that there is no suitable habitat within the Biological Study Area for these species because there are no creeks or drainages, the project would have no effect, and that no further studies are required. (Natural Environment Study, 2020)

Wild and Scenic Rivers: There are no Wild and Scenic Rivers subject to the National Wild and Scenic Rivers Act (16 United States 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 location is about 2 miles east of the Pinnacles National Monument East Entrance. The proposed project would not limit access to the park, and the temporary detour will remain in place during project construction. (Mapping and Project Description)

Farmland/Timberland: The project would not impact farmland or forest land. The project is not located within or near California prime farmland, unique farmland, or farmlands of importance. The project would not conflict with zoning of forest land or result in the loss of forest land or conversion of forest land to non-forest use. (California Department of Conservation Maps)

Growth: This project will not increase capacity of the roadway and will not affect growth. (Project Description)

Community Character and Cohesion: Due to rural nature of the surrounding area, there are no community resources or public facilities or services near the project location. Therefore, the project doesn't have the potential to affect community character and cohesion. (Project Plans)

Environmental Justice: No minority or low-income populations would be adversely affected by the proposed project. Therefore, this project is not subject to the provisions of Executive Order 12898.

Utilities/Emergency Services: The project will not result in any changes to utility service. Emergency services would not be affected during construction of the new alignment because the temporary detour currently in use will remain open to traffic. Once the new alignment is constructed, the safe travel speed of the roadway within the project limits would increase, possibly improving emergency vehicle service times.

Traffic and Transportation/Pedestrian and Bicycle Facilities: The project would have no adverse impact on modes of transportation. The detour would remain open to maintain access during construction. Most of Highway 25 does not have designated shoulders for bicyclists. However, this project would add 4-foot shoulders within the project limits. (Project Report)

Hydrology and Floodplain: There will be no effect to floodplains because the project is not located within a 100-year base floodplain.

Water Quality and Storm Water Runoff: No long-term water quality impacts are expected. A Storm Water Pollution Prevention Plan will be prepared, and Temporary Construction Site Best Management Practices are proposed. The project has less than 1 acre of post construction impervious surfaces that drain to Waters of the United States, so permanent Storm Water Treatment

Best Management Practices are not required. (Water Quality Assessment and Storm Water Data Report)

Geology, Soils, Seismicity and Topography: The project proposes to flatten the slopes to 2:1 (horizontal to vertical dimensions). This meets the geotechnical recommendations of at least 1:1 for north cut slopes and 1.5:1 for south cut slopes. (Geotechnical Design Report, June 2018). In addition, no structures are located within the project limits and there is no increased risk from seismic activity.

Paleontology: The project site has a low probability of encountering paleontological resources during excavations. However, in the event that unexpected paleontological resources are encountered, the site will be evaluated by a professional paleontologist. (Paleontology Assessment Memo, March 2018)

Hazardous Waste and Materials: There are no materials containing hazardous waste located within the project limits. No additional hazardous waste studies are required. (Hazardous Waste Scoping Momo, July 2016)

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 will effectively reduce and control any emission impacts during construction. (Air and Noise Study Report, March 2018)

Noise and Vibration: This project is not considered Type 1 under NEPA, and no further noise analysis is necessary. However, noise due to project construction will be intermittent and the intensity of it will vary. Caltrans Standard Specifications to minimize noise and vibration disturbance will be implemented during construction. (Air and Noise Study Report, March 2018)

Wetlands and Other Waters: There are multiple seasonal ponds that occur in the project vicinity one of which occurs directly adjacent to the biological study area and is surrounded by a wetland. Neither of these ponds nor any other jurisdictional waters, wetlands, or riparian habitat would be impacted by the proposed project. (Natural Environmental Study, April 2020)

Plant Species: No special status plant species were observed during surveys and are not expected to occur within the Biological Study Area. No federally designated critical habitat for federally listed plant species occurs within the Biological Study Area. Therefore, impacts to special status plant species are not expected. (Natural Environment Study, April 2020)

Wildfire: Although the project is located in an area where the fire hazard is potentially high, it is not located in an area where the fire danger is classified as very high or extreme (https://egis.fire.ca.gov/FHSZ/). The project will not

affect the risk or response to wildfire and it will not impair emergency response efforts or exacerbate wildfire risks.

Energy: The project will not affect the unnecessary consumption of energy resources since any increased energy consumption is temporary and limited to construction.

2.1 Human Environment

2.1.1 Visual/Aesthetics

Regulatory Setting

National Environmental Policy Act (NEPA) of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings (42 U.S. Code 4331[b][2]). To further emphasize this point, the Federal Highway Administration, in its implementation of NEPA (23 U.S. Code 109[h]), directs that final decisions on projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

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

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

Affected Environment

The Visual Impact Assessment was prepared and completed for the project in May 2018. The project is located about 32 miles south of Hollister in a rural area of San Benito County. The visual setting is distinctly rural, with grazing and low-intensity agriculture uses occurring on the valley floors and lower slopes of the adjacent hillsides. Scenic vistas in the project vicinity include views of open space, oak trees, and distant views of the hills to the east and west.

Individual oak trees and non-native annual grasslands are the predominant vegetation on the upper hillsides, with sycamore and cottonwood trees in the drainages and riparian corridors. Rock outcroppings are noticeable throughout the area.

State Route 25 throughout the project vicinity is a curved two-lane roadway with narrow paved and unpaved shoulders. The existing visual quality of the area is moderately high, due mostly to the varied topography and natural vegetation patterns. The somewhat narrow, curved roadway adds to the rural visual quality of the setting. State Route 25 is not a designated scenic route however, it is a popular recreational corridor providing quality rural views for travelers.

Environmental Consequences

Due to the rural land use and sparse population surrounding the project, the primary viewer group affected by the project would be users of the highway itself. An average of 750 vehicles per day currently pass through the project limits. Views of the project while travelling the highway would last about 25 seconds. Long distance views of the project would be generally unavailable for highway users due to the curvilinear roadway, varied topography, and scattered mature trees throughout the area. Although scattered ranch houses are found along the corridor, few if any would provide views of the project.

The project would flatten the slopes through the existing roadway, however this would result in no noticeable reduction of views to the distant hills. Because of the short duration of affected view, combined with the abundance of vistas along the corridor, the overall effect on the scenic vista would be minimal. The varied topography, scattered mature trees, and curved roadway limit long-range views to the project from distant locations on the highway. Highway travelers are expected to have a moderate level of sensitivity to the visual changes proposed by the project. State Route 25 is not a designated scenic route and has relatively few vehicles but it is a popular recreational corridor providing quality rural views for the traveler.

The existing visual character of the project site and its surroundings is based primarily on the rural character resulting from open space and agricultural land uses and scattered-oak covered rolling terrain. The project proposes flattening the steep cut slopes which would slightly open-up the visual scale of the highway facility. The project would improve the appearance of the existing scarred roadsides resulting from the failed slopes of the previous project. For most viewers, the cut slopes on both sides would appear as a logical continuation of the pattern of cut slopes and would not detract from the overall viewing experience for the highway user. Tree removal would result in a minor alteration of the roadside views. However, the required tree planting combined with several remaining mature trees in the immediate area would help maintain the natural appearance of the corridor. The project would not detract from the overall viewing experience for the highway user and would result in only a minor effect on the existing visual character and quality of the site and its surroundings.

Avoidance, Minimization, and/or Mitigation Measures

With implementation of the following minimization and avoidance measures, potential visual impacts would be reduced to less than significant:

- Impacts to native oak trees should be minimized to the greatest extent possible. Trees to be preserved shall be identified on the plans and in the field with the use of Environmentally Sensitive Area fencing installed around the driplines.
- Any limb or root pruning of trees should be minimized and only where required under the supervision of a Certified Arborist.
- Native oaks shall be restored at a ratio determined by Caltrans Landscape Architecture in conjunction with the Caltrans Biologist. The new planting shall include a minimum three-year plant establishment period.
- Slope-rounding, slope-warping and landform grading should be implemented where it would not result in the removal of additional oak trees.

2.2 Cultural Resources

2.2.1 Regulatory Setting

The term “cultural resources,” as used in this document, refers to the “built environment” (for example, structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including “historic properties,” “historic sites,” “historical resources,” and “tribal cultural resources.” Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places. Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 Code of Federal Regulations 800). On January 1, 2014, the First Amended Section 106 Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the Department went into effect for Department projects, both state and local, with Federal Highway Administration involvement. The Programmatic Agreement implements the Advisory Council on Historic Preservation’s regulations, 36 Code of Federal

Regulations 800, streamlining the Section 106 process and delegating certain responsibilities to the Department. The Federal Highway Administration's responsibilities under the Programmatic Agreement have been assigned to the Department as part of the Surface Transportation Project Delivery Program (23 U.S. Code 327).

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as "unique" archaeological resources. California Public Resources Code Section 5024.1 established the California Register of Historical Resources and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the California Register of Historical Resources and, therefore, a historical resource. Historical resources are defined in California Public Resources Code Section 5020.1(j). In 2014, Assembly Bill 52 added the term "tribal cultural resources" to CEQA, and Assembly Bill 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in California Public Resources Code Section 21074(a), a tribal cultural resource is a California Register of Historical Resources or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in California Public Resources Code Section 21083.2.

California Public Resources Code Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the National Register of Historic Places listing criteria. It further requires Caltrans to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register of Historic Places or are registered or eligible for registration as California Historical Landmarks. Procedures for compliance with California Public Resources Code Section 5024 are outlined in a Memorandum of Understanding between Caltrans and the State Historic Preservation Officer, effective January 1, 2015. For most Federal-aid projects on the State Highway System, compliance with the Section 106 Programmatic Agreement will satisfy the requirements of California Public Resources Code Section 5024.

Affected Environment

Cultural resources studies completed for the project are summarized in the Historic Property Survey Report (April 2020). These studies included detailed records searches, ethnographic interviews (including Native American interviews and consultation), field surveys, and soil and bedrock testing within a defined Area of Potential Effects. The Area of Potential Effects includes the

area where project activities could potentially result in ground disturbance and is comprised of the existing right-of-way and additional private property on both sides of State Route 25 for a total of 13.5 acres. It includes the boundaries of archaeological site CA-SBN-275. The vertical Area of Potential Effects includes all surface and subsurface soils down to the bedrock within the horizontal Area of Potential Effects.

An archaeological survey conducted during the original project had identified archaeological site CA-SBN-275 within the Area of Potential Effects. The site is a blue schist rock outcrop with two bedrock mortars (cup shaped depressions located within bedrock historically used to grind various materials). The site was studied further to determine the presence/absence of subsurface archaeological deposits, and its eligibility for listing in the National Register of Historic Places (National Register).

Results of the cultural resources studies found that CA-SBN-275 is associated with a network of similar sites that that were used as guide markers for directing travelers along corridors to important places.

Environmental Consequences

Within the project Area of Potential Effects, archaeological site CA-SBN-275 was the only cultural resource identified that has been determined eligible for inclusion to the National Register of Historic Places. CA-SBN-275 will be avoided and protected by defining an Environmentally Sensitive Area. Thus, Caltrans has determined a “finding no adverse effect with standard conditions – environmentally sensitive area” finding for the archaeological site.

If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

Caltrans initiated consultation with the State Historic Preservation Officer in April of 2020. Concurrence was received in May of 2020 which agreed with the determination that CA-SBN-275 was eligible under Criteria A and C, and with the “finding of no adverse effect with standard conditions – environmentally sensitive area”.

Caltrans determined that CA-SBN-275 is a Section 4(f) resource due to its eligibility for listing in the National Register and that it warrants preservation in place. A Section 4(f) *de minimis* determination was made for CA-SBN-275 (see Appendix A). A *de minimis* determination is one that, after taking into account avoidance, minimization and/or mitigation measures, results in no adverse effect to the activities, features, or attributes qualifying a resource for protection under Section 4(f).

Avoidance, Minimization, and/or Mitigation Measures

With the proposed avoidance and minimization measure below, the proposed project would not result in adverse impacts to archaeological resources.

Prior to any construction activities, Environmentally Sensitive Area fencing will be installed around archaeological site CA-SBN-275.

2.3 Biological Environment

2.3.1 Natural Communities

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. The emphasis of the section should be on the ecological function of the natural communities within the area. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in the Threatened and Endangered Species, Section 2.3.3.

Affected Environment

The Natural Environment Study prepared in April of 2020 was the primary source of information used in the preparation of this section. Natural communities and vegetation within the Biological Study Area are characterized using the naming conventions of *A Manual of California Vegetation* (Sawyer et al. 2009) and the *Preliminary Description of Terrestrial Natural Communities of California* (Holland 1986). Natural communities are mapped in Figure 2-1.

The Biological Study Area is defined as the area that may be directly, indirectly, temporarily, or permanently impacted by construction and construction-related activities (Figure 2-1). The size of the Biological Study Area is about 9.3 acres and includes a polygon encompassing the existing road surface, the proposed road improvements, and surrounding areas. The Biological Study Area includes a roughly 0.3-mile section of State Route 25 and adjacent agricultural land primarily used for grazing. Other prominent features in the region include Pinnacles National Monument about 2 miles to the northwest and the San Benito River about 1 mile to the north.

The affected environment consists primarily of non-native weedy plant species and non-native grassland with individual oak trees. There are no natural communities of concern within the Biological Study Area, however

there are oak trees within the project area. Oaks are a very slow growing species and the impact of poor regeneration and loss of oaks due to clearing land for more profitable uses such as agriculture, grazing and urban development has caused a decline of oaks statewide. Oaks provide foraging and nesting habitat for a variety of bird species, and various mammal species may den inside hollow trunks.

California State Senate Concurrent Resolution Number 17 requests that state agencies preserve and protect native oaks to the maximum extent feasible or to provide replacement planting where blue, Englemann, valley or coast live oaks are removed.

Most of the area within the Biological Study Area with slope failure associated with the previous realignment project has created disturbed, rocky conditions. These areas are dominated by non-native ruderal plant species such as black mustard (*Brassica nigra*), summer mustard (*Hirschfeldia incana*), star-thistles (*Centaurea* spp.) that tend to colonize following disturbance.

The non-native grassland within the Biological Study Area occurs in relatively undisturbed areas. This vegetation type is identified in Figure 2-1 as Bromus-Brachypodium alliance and is dominated by introduced annual grasses in association with many species of showy native wildflowers, especially in years of abundant rainfall.

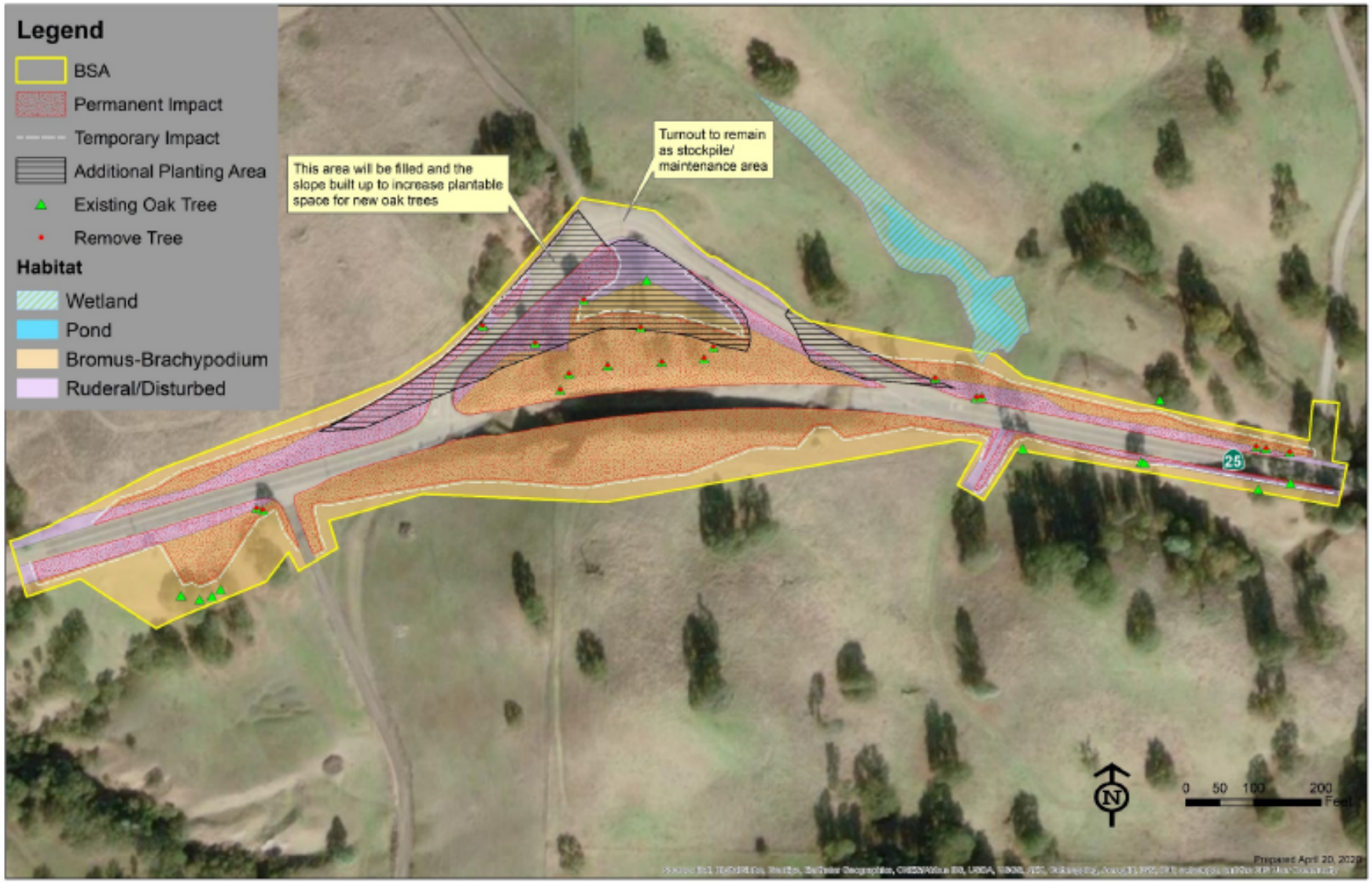
Environmental Consequences

Please note that estimated impacts to critical habitat for threatened and endangered species are discussed in Section 2.3.3.

Individual Oak Trees

To accommodate the State Route 25 restoration, as many as 17 blue oak trees and 1 valley oak tree ranging in size from 5 to 48 inches diameter-at-breast-height are expected to be impacted via removal. Figure 2-1 illustrates the locations of trees within the Biological Study Area which may need to be removed during construction.

Figure 2-1 Biological Study Area and Habitat Map



These potential impacts may not only affect individual oak trees but also wildlife species that could use these trees as foraging, nesting, roosting, and/or denning habitat. The number of oak trees estimated for removal is a conservative estimate. If the actual number of trees removed differs from the estimated number, replacement planting will be adjusted upwards or downwards accordingly.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures for oak trees are recommended:

- Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing will be installed around the dripline of trees to be protected within project limits.
- Impacts to native oak trees greater than 4 inches diameter-at-breast-height would be offset by replacement planting within the project limits. Replacement plantings would be achieved using a minimum 3:1 ratio for each removed oak tree between 4 to 23 inches diameter-at-breast-height and a minimum 10:1 ratio for each removed oak tree greater than 24 inches diameter-at-breast-height. A portion of the original State Route 25 (for example, the old alignment) would be removed and rehabilitated to allow for revegetation with oak trees. Replacement plantings will be detailed in Caltrans' Landscape Architecture Landscape Planting Plan, in coordination with a biologist, with developed planting specifications to assure survival of the replacement trees.
- The 13 blue oak trees that were removed during construction of the original State Route 25 Curve Correction Project will also be replaced.

2.3.2 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 2.3.3 below. 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's National Marine Fisheries Service 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 through 1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

Affected Environment

The Natural Environment Study prepared in April 2020 was the primary sources of information used in the preparation of this section. A list of special-status animal species that have the potential to occur within the project area was obtained by conducting a search of the California Natural Diversity Database and obtaining a copy of the most recent U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service species lists.

Based on the searches conducted, there are two California Department of Fish and Wildlife fully protected species having the potential to occur within the Biological Study Area, the golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Two species of birds, the Cooper's hawk (*Accipiter cooperii*) and sharp-shinned hawk (*Accipiter striatus*) having the potential to occur within the Biological Study Area are on the California Department of Fish and Wildlife watch list. The California Department of Fish and Wildlife watch list includes species that do not meet the criteria for Species of Special Concern but additional species information is needed. A total of nine special-status species of bats included on the California Natural Diversity Database Special Animals List were identified as having the potential to occur within the Biological Study Area. Two other California Species of Special Concern, the American badger (*Taxidea taxus*) and western spadefoot (*Spea hammondii*) were identified as having the potential to occur within the Biological Study Area.

The special status animal species having the potential to occur within the Biological Study Area are summarized in Table 2-1. Although there is suitable habitat for these species in or near the Biological Study Area, none of the special status species having the potential to occur within the Biological Study Area were observed during site visits.

Table 2-1. Animal Species of Concern

Common / Scientific Name	Federal / State / Other Status	General Habitat Description	Habitat Present / Absent	Rationale
western spadefoot *Spea hammondii*	California Species of Special Concern	Occurs primarily in grassland habitats but can also be found in valley-foothill woodlands. Vernal pools are essential for breeding and egg-laying.	Habitat Present / Species Present (inferred)	• Upland habitat in grasslands with small mammal burrows are present in the Biological Study Area; potential breeding ponds occur within dispersal distance of the Biological Study Area. • Not observed during surveys; presence in uplands is inferred based on nearby California Natural Diversity Database occurrence records and suitable habitat. • Avoidance and minimization measures recommended.
Cooper's hawk *Accipiter cooperii*	California Department of Fish and Wildlife Watch List species	General habitat includes woodland, chiefly of open, interrupted, or marginal type. Nests sites are mainly in riparian growths of deciduous trees, as in canyon bottoms or river floodplains; also live oaks.	Habitat Present (marginal)	• Marginal nesting habitat for this taxon occurs in the Biological Study Area. • Not observed during surveys. • Measures to avoid or minimize impacts have been recommended.
sharp-shinned hawk *Accipiter striatus*	California Department of Fish and Wildlife Watch List species	General habitat includes ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine; prefers riparian areas. Microhabitat includes north-facing slopes; plucking perches are critical requirements; nests usually within 275 feet of water.	Habitat Present (marginal)	• Marginal nesting habitat for this taxon occurs in the Biological Study Area. • Not observed during surveys. • Measures to avoid or minimize impacts have been recommended.
golden eagle *Aquila chrysaetos*	BGEPA / Fully Protected / California Department of Fish and Wildlife Watch List species	General habitat includes rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons and large trees in open areas provide nesting habitat in most parts of its range.	Habitat Present (marginal)	• Marginal nesting and wintering habitat for this taxon occurs in the Biological Study Area. • Not observed during surveys. • Measures to avoid or minimize impacts have been recommended.
white-tailed kite *Elanus leucurus*	Fully Protected	General habitat includes rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodlands. Microhabitat includes open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Habitat Present (marginal)	• Marginal nesting habitat for this taxon occurs in the Biological Study Area. • Not observed during surveys. • Measures to avoid or minimize impacts have been recommended.

Other nesting birds Class Aves	Migratory Bird Treaty Act / California Fish and Game Code Section 3503	Various habitats (nesting).	Habitat Present	• Nesting habitat for various bird taxa occurs in the Biological Study Area. • No nests or nesting birds were observed in the Biological Study Area during surveys. • There is potential for nesting within trees in the Biological Study Area. • Measures have been recommended to avoid or minimize any future unexpected impacts to nesting birds.
pallid bat *Antrozous pallidus*	California Species of Special Concern	Inhabits deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	Habitat Present (marginal)	• Marginal roost habitat occurs in oak trees within the Biological Study Area. • No roosting bats were observed during surveys. • Measures to avoid or minimize impacts 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. Roosts in the open hanging from walls and ceilings. Extremely sensitive to human disturbance.	Habitat Present (marginal)	• Marginal roost habitat occurs in oak trees within the Biological Study Area. • No roosting bats were observed during surveys. • Measures to avoid or minimize impacts recommended.
western mastiff bat *Eumops perotis californicus*	California Species of Special Concern	Occurs in open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in cliff faces, buildings, trees, and tunnels.	Habitat Present (marginal)	• Marginal roost habitat occurs in oak trees within the Biological Study Area. • No roosting bats were observed during surveys. • Measures to avoid or minimize impacts recommended.
western red bat *Lasiurus blossevillii*	California Species of Special Concern	Roosts primarily in trees, 2-40 feet above ground, from sea level through mixed conifer forests. Prefers habitat edges and mosaics with trees protected from above and open below with open areas for foraging.	Habitat Present (marginal)	• Marginal roost habitat occurs in oak trees within the Biological Study Area. • No roosting bats were observed during surveys. • Measures to avoid or minimize impacts recommended.
hoary bat *Lasiurus cinereus*	California Natural Diversity Database Special Animals List	Prefers open habitats or mosaics, with access to tree cover and open areas or edges for feeding. Roosts in dense foliage of medium to large trees; feeds primarily on moths; requires water.	Habitat Present (marginal)	• Marginal roost habitat occurs in oak trees within the Biological Study Area. • No roosting bats were observed during surveys. • Measures to avoid or minimize impacts recommended.

western small-footed myotis *Myotis ciliolabrum*	California Natural Diversity Database Special Animals List	Optimal habitats are open forests and woodlands with sources of water. Distribution tied to bodies of water. Maternity colonies in caves, mines, buildings, or crevices.	Habitat Present (marginal)	• Marginal roost habitat occurs in oak trees within the Biological Study Area. • No roosting bats were observed during surveys. • Measures to avoid or minimize impacts recommended.
long-eared myotis *Myotis ciliolabrum*	California Natural Diversity Database Special Animals List	Found in all brush, woodland, and forest habitats from sea level to about 9,000 feet. Prefers coniferous woodlands and forests. Nursery colonies occur in buildings, crevices, spaces under bark, and snags. Caves used primarily as night roosts.	Habitat Present (marginal)	• Marginal roost habitat occurs in oak trees within the Biological Study Area. • No roosting bats were observed during surveys. • Measures to avoid or minimize impacts recommended.
fringed myotis *Myotis thysanodes*	California Natural Diversity Database Special Animals List	Occurs in a wide variety of habitats; optimal habitats are pinyon-juniper, valley foothill hardwood, and hardwood-conifer. Uses caves, mines, buildings, or crevices for maternity colonies and roosts.	Habitat Present (marginal)	• Marginal roost habitat occurs in oak trees within the Biological Study Area. • No roosting bats were observed during surveys. • Measures to avoid or minimize impacts recommended.
Yuma myotis *Myotis yumanensis*	California Natural Diversity Database Special Animals List	Optimal habitats are open forests and woodlands with sources of water. Distribution is closely tied to bodies of water, maternity colonies in caves, mines, buildings, or crevices.	Habitat Present (marginal)	• Marginal roost habitat occurs in oak trees within the Biological Study Area. • No roosting bats were observed during surveys. • Measures to avoid or minimize impacts recommended.
American badger Taxidea taxus	California Species of Special Concern	Drier open stages of shrub, forest, and herbaceous habitats, with friable soils; needs sufficient food and open, uncultivated ground; digs burrows.	Habitat Present (marginal)	• Marginal habitat occurs within the Biological Study Area. • The Biological Study Area occurs about 6.0 miles northwest of the nearest California Natural Diversity Database occurrence record for the species; • Species was not observed during surveys; no suitable potential dens were observed during surveys. • Not expected to occur within the Biological Study Area, but measures to avoid or minimize impacts have been recommended.

Western Spadefoot

The western spadefoot (*Spea hammondii*) is considered a California Species of Special Concern by California Department of Fish and Wildlife. It is a small, 1.5 to 2.5-inch toad that is dusky green on top with orange or reddish skin tubercles. The eyes are usually pale gold and have been described as “cat-like” with vertical pupils. There is a wedge-shaped glossy black spade on each hind foot.

Western spadefoot toads occur in the San Joaquin and Sacramento valleys, bordering foothills, and Coast Ranges south of San Francisco Bay, into Baja California. They are a lowland species that frequents washes, alluvial fans, playas, river floodplains, alkali flats, and vernal pools. They can also be found in foothills and mountains. They prefer areas of open vegetation with soil that is sandy or gravelly and can also be found in open chaparral and pine-oak woodlands. Western spadefoot toads are now extinct throughout much of lowland southern California.

During the dry season, western spadefoot toads are inactive, retreating to self-made burrows, or other burrows made by other animals such as ground squirrels, kangaroo rats, and other small mammals. Dispersal distances are unknown, but it is presumed that upland movements are not very far. Western spadefoot toads breed January through May in pools that form in heavy rain, or in slow streams, reservoirs, or irrigation ditches. As with the California red-legged frog and the California tiger salamander, western spadefoot toad breeding pools usually lack crawfish, fishes, and bullfrogs because these exotic predators reduce larvae.

Metamorphosis can be complete in as little as three weeks after larvae emerge, so spadefoot toads can breed in much more ephemeral water bodies than either the California tiger salamander or the California red-legged frog.

Survey Results

During past protocol surveys for California red-legged frog conducted at the pond located east of the Biological Study Area for the original project, no western spadefoot were observed. No western spadefoot life stages were observed during pre-construction surveys, burrow excavation, or during construction for the original project throughout 2015 or during recent site surveys in 2020. The nearest California Natural Diversity Database occurrence record for western spadefoot is from the east end of the project site along State Route 25 where one adult was observed in April 1999 (California Natural Diversity Database Element Occurrence Index Number 44424); The presence of western spadefoot is inferred based on the proximity of the nearby occurrence record and suitable upland habitat.

Cooper's Hawk, Sharp-Shinned Hawk, Golden Eagle, White-Tailed Kite, and Other Nesting Birds

Nesting bird species with the potential to occur within the Biological Study Area are addressed together because they have similar habitat requirements, potential project-related habitat impacts, and recommended avoidance and minimization measures.

Cooper's Hawk

The Cooper's hawk (*Accipiter cooperii*) is included on the California Department of Fish and Wildlife Watch List. It is a fairly large hawk ranging throughout the United States and is widely distributed throughout California, though its numbers are declining. Adults are slender, crow-sized birds with short, rounded wings and a long, white-tipped tail rounded at the tip. The Cooper's hawk occupies forests and woodlands, especially near edges. It is rarely found in areas without dense tree stands or patchy woodland habitat. This species nests and forages in and near deciduous riparian areas. Breeding occurs March to August, peaking from May to July. Clutch sizes range from two to six eggs. Incubation lasts about 36 days, and young hatch and fledge about five to eight weeks later. Prey includes birds and small mammals. Cooper's hawks hunt in broken woodland and habitat edges, catching prey in air, on ground, and in vegetation.

Sharp-Shinned Hawk

The sharp-shinned hawk (*Accipiter striatus*) is included on the California Department of Fish and Wildlife Watch List. It is similar in appearance to the Cooper's hawk, except smaller with a squared-off tail. The species breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. It prefers, but is not restricted to, riparian habitats. North facing slopes, with plucking perches (a landing where the hawk waits and catches their prey) are critical requirements. All habitats except alpine, open prairie, and bare desert are used in winter. Breeding occurs from April through August, with peak activity late May to July. Clutches average four to five eggs. Incubation lasts 34 to 35 days, by both parents, and fledging occurs at about 60 days. Prey items include mostly small birds, and also small mammals, insects, reptiles, and amphibians. The sharp-shinned hawk perches and darts out in sudden flight to surprise prey; it also cruises rapidly in search flights. It often hunts in low, gliding flights and forages in openings at edges of woodlands, hedgerows, brushy pastures, and shorelines, especially where migrating birds are found.

Golden Eagle

The golden eagle (*Aquila chrysaetos*) is protected by the federal Bald and Golden Eagle Protection Act and is identified as a State of California Fully Protected species and is also included on the California Department of Fish and Wildlife Watch List. The golden eagle is an uncommon permanent resident and migrant throughout California, except for the center of the

Central Valley, ranging from sea level up to 11,500 feet. Habitat typically includes rolling foothills, mountain areas, sage-juniper flats, and desert, with secluded cliffs featuring overhanging ledges and large trees used for cover. Breeding occurs from late January through August, with peak activity from March through July. Clutch size is one to three eggs (usually two) and eggs are laid early February to mid-May. Incubation takes 43 to 45 days and the nestling period is usually 65-70 days. The golden eagle eats mostly rabbits and rodents, but also takes other mammals, birds, reptiles, and some carrion (dead animals). Its diet is most varied in the nonbreeding season. The golden eagle uses open terrain for hunting, including grasslands, deserts, savannahs, and early growth stages of forest and shrub habitats.

White-Tailed Kite

The white-tailed kite (*Elanus leucurus*) is a State of California Fully Protected species. It is a medium-sized white raptor with a grey back and a dark patch on the fore-edge of the upper wing. It is a yearlong resident throughout valley and coastal lowlands in California, and most commonly, near agricultural areas. Nesting and roosting occur in dense, broad-leafed deciduous groves of trees. Breeding occurs from February to October, peaking in May to August. Its eggs (typically four to five) are incubated for about 28 days, with the young subsequently fledging 35 to 40 days thereafter. There is a past California Natural Diversity Database record of nesting white-tailed kites about 0.6 mile west of the Biological Study Area and several other nesting records from Pinnacles National Park.

The species described above are each protected by the Migratory Bird Treaty Act and California Fish and Game Code Section 3503.

Other Nesting Birds

In addition to these species, numerous other nesting bird species protected by these two regulatory laws have the potential to nest in trees within the Biological Study Area. Nearly all migratory birds, with a few exceptions, are eligible for protection under the Migratory Bird Treaty Act.

Survey Results

A nesting western kingbird (*Tyrannus verticalis*) was previously observed nesting in a blue oak that eventually had to be removed (outside of the nesting season) for the original construction project. In surveys conducted in 2017, none of the bird species described above or other nesting bird species have been observed during recent surveys. Common birds observed during recent surveys included western scrub jay (*Aphelocoma californica*), northern mockingbird (*Mimus polyglottos*), and American crow (*Corvus brachyrhynchos*). Marginal nesting habitat for Cooper's hawk, sharp-shinned hawk, golden eagle, white-tailed kite, and other bird species occurs in oak trees within the Biological Study Area. No active or inactive nests were observed during surveys conducted in 2017.

Pallid Bat, Townsend's Big-eared Bat, Western Mastiff Bat, Western Red Bat, Hoary Bat, Western Small-footed Myotis, Long-eared Myotis, Fringed Myotis, and Yuma Myotis

Roosting bat species are addressed here as a group because they have similar habitat requirements, potential project-related habitat impacts, and recommended avoidance and minimization measures.

Pallid Bat

The pallid bat (*Antrozous pallidus*) is considered a California Species of Special Concern by California Department of Fish and Wildlife. Pallid bats range over much of the western United States, from central Mexico to British Columbia. They are found throughout California, especially in lowland areas below 6,400 feet. Pallid bats are apparently not migratory, but make local, seasonal movements. This nocturnal species resides in colonies consisting 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 0.25 mile from day roosts, which are used for sleeping. Their primary food source is ground dwelling insect species including crickets, grasshoppers, beetles, and centipedes. They maintain nursery colonies with 30 to over 100 individuals. Females have one to two pups for each pregnancy, usually born between mid to late June.

Townsend's Big-Eared Bat

Townsend's big-eared bat (*Corynorhinus townsendii*) is considered a California Species of Special Concern by California Department of Fish and Wildlife and was considered a candidate for state listing as threatened but the California Fish and Game Commission determined in 2016 that listing was not warranted. 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. They may occasionally roost in old, large oaks. 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 extremely sensitive to disturbance of roosting sites. A single visit may result in abandonment of the roost. Numbers reportedly have declined steeply in California.

Western Mastiff Bat

The western mastiff bat (*Eumops perotis californicus*) is considered a California Species of Special Concern by California Department of Fish and Wildlife (CDFW 2017). It is an uncommon resident in the southeastern San Joaquin Valley and Coast Ranges from Monterey County southward through southern California. This species occurs in many open, semi-arid to arid

habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban. Crevices in cliff faces, high buildings, trees, and tunnels are required for roosting. Nursery roosts are in tight rock crevices or crevices in buildings. Mating occurs most frequently in early spring (March) but can vary throughout the year. Pups are born and raised from early April through August or September. This bat rarely uses night roosts, and it forages up to six to seven hours each night.

Western Red Bat

The western red bat (*Lasiurus blossevillii*) is considered a California Species of Special Concern by California Department of Fish and Wildlife (CDFW 2017). 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.

Hoary Bat

The hoary bat (*Lasiurus cinereus*) is included on the California Department of Fish and Wildlife Special Animals List (CDFW 2017). It is the most widespread North American bat and may be found at any location in California, although distribution can be patchy in southeastern deserts. Habitats suitable for bearing young include all woodlands and forests with medium to large-size trees and dense foliage. The hoary bat generally roosts in dense foliage of medium to large trees. Preferred sites are hidden from above, with few branches below, and have ground cover of low reflectivity. Females and young tend to roost at higher sites in trees. Breeding occurs in autumn, in migration or on the wintering grounds. The young are born from mid-May through early July.

Western Small-Footed Myotis

The western small-footed myotis (*Myotis ciliolabrum*) is included on the California Department of Fish and Wildlife Special Animals List (CDFW 2017). It is a common bat of arid uplands in California. In coastal California it occurs from Contra Costa County south to the Mexican border. The western small-footed myotis occurs in a wide variety of habitats, primarily in relatively arid wooded and brushy uplands near water. This bat seeks cover in caves, buildings, mines, crevices, and occasionally under bridges and under bark. The species mates in the fall and young are born from May through June, with a peak in late May. Most young are flying by mid-August.

Long-Eared Myotis

The long-eared myotis (*Myotis ciliolabrum*) is included on the California Department of Fish and Wildlife Special Animals List (CDFW 2017). The long-eared myotis is widespread in California, but generally is believed to be uncommon in most of its range (Zeiner et al. 1990). This bat species has been found in nearly all brush, woodland, and forest habitats, from sea level to at least 9,000 feet, but coniferous woodlands and forests seem to be preferred. This species roosts in buildings, crevices, spaces under bark, and snags. Caves are used primarily as night roosts. Mating probably occurs in the fall and the young are born from May to July, with a peak in June. Most young are flying by early August.

Fringed Myotis

The fringed myotis (*Myotis thysanodes*) is included on the California Department of Fish and Wildlife Special Animals List (CDFW 2017). This bat species is widespread in California. Its abundance is irregular but it may be common locally (Zeiner et al. 1990). Optimal habitats are pinyon-juniper, valley foothill hardwood and hardwood-conifer at 4,000 to 7,000 feet. The fringed myotis roosts in caves, mines, buildings, and crevices. Separate day and night roosts may be used. Mating occurs in the fall and the young are born from May through July, but most are born in late June.

Yuma Myotis

The Yuma myotis (*Myotis yumanensis*) is included on the California Department of Fish and Wildlife Special Animals List (CDFW 2017). This bat species 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. It is likely that some young are born in July in some areas.

Survey Results

Numerous bat species have roosting colonies at the nearby Pinnacles National Monument and could also potentially roost in trees within the Biological Study Area with marginal roosting habitat. No daytime bat roosting was observed in trees within the Biological Study Area during surveys. No nighttime roost surveys were conducted due to the marginal quality of available habitat within the Biological Study Area, and no evidence of bat roosting (for example, guano deposits, grease stains, piles of invertebrate prey remains) was observed.

American Badger

The American badger (*Taxidea taxus*) is considered a California Species of Special Concern by California Department of Fish and Wildlife. It is a stocky, low-slung member of the weasel family (Mustelidae) with distinctive white and black head markings, short powerful legs, and long claws adapted for digging.

Suitable habitat for badgers is characterized by herbaceous, shrub, and other open habitats with dry, friable soils. Badgers dig burrows in friable soil for cover and frequently reuse old burrows. Dens are typically greater than 6 inches in diameter and horizontally oval-shaped, occasionally with claw marks along the inner surface.

Badgers are active year-long, nocturnally and diurnally, with variable periods of inactivity in winter. They mate in summer and early fall and two to three young are born mostly in March and April. Badgers are carnivorous and eat burrowing rodents, preying on rats, mice, chipmunks, and especially ground squirrels and pocket gophers. Badger diets shift seasonally and yearly in response to availability of prey.

Survey Results

The relative habitat suitability of the site for American badger can be characterized as poor to fair, influenced by the fragmented habitat within proximity of State Route 25, the terrain, and disturbances from vehicle traffic and agricultural operations.

No potential badger dens have been observed during recent survey transects of the Biological Study Area conducted in 2017. No dirt piles, prey remains, claw marks inside burrows, or other sign of badgers within the project site have been observed. No badgers have been observed in the vicinity of the project area during numerous daytime and nighttime site visits from 2011 to 2017, including monitoring during construction for the original project throughout 2015.

Environmental Consequences

Western Spadefoot

Construction activities could result in the injury or mortality (via accidental crushing by equipment) of western spadefoot toads residing in small mammal burrows within upland habitat in the Biological Study Area. This could be particularly detrimental during rain events during the breeding season when adults could potentially disperse to ponds near the Biological Study Area to breed. Western spadefoot toads could also be buried in small mammal burrows collapsed by construction activities, which could result in injury or mortality. Finally, the potential need to capture and relocate western spadefoot toads could subject these animals to stresses that could result in adverse effects. There will be no impacts to breeding habitat.

Cooper's Hawk, Sharp-Shinned Hawk, Golden Eagle, White-Tailed Kite, and Other Nesting Birds

Caltrans typically expects the bird nesting season to occur from February 1 to September 30. The removal of vegetation could directly impact active bird nests and any eggs or young residing in nests. Wintering golden eagles could be impacted if found roosting in trees within the Biological Study Area during

winter months, but this potential is considered low. Indirect impacts could also result from noise and disturbance associated with construction, which could alter perching, foraging, and/or nesting behaviors. While temporary loss of oak trees supporting potential nesting habitat could occur, this would be offset by planting of new oak trees. The implementation of the avoidance and minimization measures such as appropriate timing of vegetation removal, pre-activity surveys, and exclusion zones will reduce the potential for adverse effects to nesting bird species.

Pallid Bat, Townsend's Big-Eared Bat, Western Mastiff Bat, Western Red Bat, Hoary Bat, Western Small-Footed Myotis, Long-Eared Myotis, Fringed Myotis, and Yuma Myotis

Although no bat roosts were observed during surveys, there is a marginal potential that bats could establish roosts in trees within the area of potential impact, which includes all areas that could be permanently or temporarily impacted during construction. Direct impacts to bats could result during removal of vegetation if bats are found to be roosting in these areas. These direct effects could result in the injury or mortality of bats or harassment that could alter roosting behaviors. Indirect impacts could also result from noise and disturbance associated with construction, which could also alter roosting behaviors. The implementation of pre-activity surveys and exclusion zones will reduce the potential for adverse effects to roosting bat species.

American Badger

Impacts to American badger could be caused by grading, vegetation removal, ground disturbance, and removal of trees. If present, denning badgers could accidentally be entombed during grading or injured by construction equipment, resulting in the adverse effects of injury or mortality. Noise and disturbance associated with construction could adversely affect foraging and dispersal behaviors. Although there is potential habitat within the project site, the potential for adverse effects to American badger are estimated to be very low since: 1) no badgers have been observed in the vicinity of the project area during numerous daytime and nighttime site visits; 2) no potential badger dens have been observed during recent survey; and 3) no dirt piles, prey remains, claw marks inside burrows, or other sign of badgers have been observed within the project site.

Avoidance, Minimization, and/or Mitigation Measures

Western Spadefoot

The following measures applying specifically to western spadefoot are proposed:

- Prior to construction, Caltrans shall conduct an informal worker environmental training program including a description of western spadefoot along with their legal/protected status, proximity to the project

site, and avoidance/minimization measures to be implemented during the project.

- Prior to construction, a qualified biologist shall survey the project area and, if present, capture and relocate any western spadefoot to suitable habitat outside of the project area. Observations of western spadefoot shall be documented on California Natural Diversity Database forms and submitted to California Department of Fish and Wildlife.
- Implementation of proposed mitigation measures for the protection of the federal and state threatened California tiger salamander will also serve to avoid and minimize impacts to western spadefoot toad.

Cooper's Hawk, Sharp-shinned Hawk, Golden Eagle, White-tailed Kite, and Other Nesting Birds

Caltrans proposes to implement the following measure to protect nesting birds.

If feasible, tree removal shall be scheduled to occur from October 1 to January 31, outside of the typical nesting bird season, to avoid potential impacts to nesting birds. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat during the nesting season (February 1 to September 30) or the golden eagle wintering season (December 1 to February 14), a nesting/wintering bird survey shall be conducted by a biologist determined qualified by Caltrans no more than three days prior to construction. If an active nest or winter roost is found, a qualified biologist shall determine an appropriate buffer or monitoring strategy based on the habits and needs of the species. The buffer area shall be avoided or monitoring shall continue until a qualified biologist has determined that juveniles have fledged or wintering golden eagles have left the roost.

Pallid Bat, Townsend's Big-Eared Bat, Western Mastiff Bat, Western Red Bat, Hoary Bat, Western Small-Footed Myotis, Long-Eared Myotis, Fringed Myotis, and Yuma Myotis

Caltrans has proposed to implement the following measure to protect roosting bats.

If tree removal is required during the bat maternity roosting season (February 1 to September 30), a bat roost survey shall be conducted by a qualified biologist within three days prior to removal. If an active bat roost is found, a qualified biologist shall determine an appropriate buffer or monitoring strategy based on the habits and needs of the species. The buffer area shall be avoided or monitoring shall continue until a qualified biologist has determined that roosting activity has ceased. Active bat maternity roosts shall not be disturbed or destroyed at any time.

American Badger

The avoidance and minimization measures proposed for San Joaquin kit fox (Section 2.3.3) will also be applicable to the American badger, except any observations of occupied badger dens or American badgers will be reported to California Department of Fish and Wildlife instead of U.S. Fish and Wildlife Service, because this species is protected by the State of California/ California Department of Fish and Wildlife and is not a federally listed species.

2.3.3 Threatened and Endangered Species

Regulatory Setting

The primary 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 the Department, 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 Federal Endangered Species Act defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act, California Fish and Game Code Section 2050, et seq. The California Endangered Species Act emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife is the agency responsible for implementing the California Endangered Species Act. Section 2080 of the California Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California Endangered Species Act allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by California Department of Fish and Wildlife. For species listed under both Federal Endangered Species Act and the California Endangered Species Act requiring a Biological Opinion under

Section 7 of Federal Endangered Species Act, the California Department of Fish and Wildlife may also authorize impacts to California Endangered Species Act species by issuing a Consistency Determination under Section 2081 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 Natural Environment Study prepared in April 2020 was the primary source of information used in the preparation of this section.

Based on the searches conducted, three federally and/or state listed species have the potential to occur within the Biological Study Area: California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii),* and San Joaquin kit fox (*Vulpes macrotis mutica)*. In addition, federally designated critical habitat for California red-legged frog is present within the Biological Study Area. Federally listed species and federally designated critical habitat having the potential to occur within the Biological Study Area are summarized in Table 2-2.

The Biological Study Area exists within a critical habitat unit for California tiger salamander, however this unit has been excluded from final critical habitat designation (USFWS 2005). On this basis, impacts to California tiger salamander critical habitat will not be evaluated further.

Table 2-2. Threatened and Endangered Species

Common / Scientific Name	Federal / State / Other Status	General Habitat Description	Habitat Present / Absent	Rationale
California tiger salamander *Ambystoma californiense*	Federal Threatened / Federal Critical Habitat Designated / State Threatened / California Species of Special Concern	Grassland or open woodland habitats, shallow ephemeral, semi-permanent, or occasionally permanent pools and ponds that fill during winter rains.	Habitat Present / Species Present (inferred)	• Upland habitat in grasslands with small mammal burrows are present in the Biological Study Area; potential breeding ponds occur within dispersal distance of the Biological Study Area; the Biological Study Area occurs within a critical habitat unit for the taxon that was excluded from final designation (USFWS 2005). • No salamander protocol surveys were conducted, and the taxon was not observed; presence in uplands is inferred based on nearby California Natural Diversity Database occurrence records and suitable habitat. • Effects determination is the project may affect, and is likely to adversely affect, California tiger salamander; the project will have no effect on its critical habitat. • Avoidance and minimization measures recommended.
California red-legged frog *Rana draytonii*	Federal Threatened / Federal Critical Habitat Designated / 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 (inferred) / Designated Critical Habitat	• Upland habitat in grasslands with small mammal burrows are present in the Biological Study Area; potential breeding ponds occur within dispersal distance of the Biological Study Area. Presence in uplands is inferred based on nearby California Natural Diversity Database occurrence records and suitable habitat. • Effects determination is the project may affect, and is likely to adversely affect, California red-legged frog • A total of 4.395 acres would be permanently and temporarily impacted, which equates to less than 0.0001 percent of critical habitat Unit SNB-3; the proposed project may affect, but is not likely to adversely affect, California red-legged frog critical habitat. • Avoidance and minimization measures recommended.
San Joaquin kit fox *Vulpes macrotis mutica*	Federal Endangered / State Threatened	Occurs in annual grasslands or grassy open stages with scattered shrubby vegetation. Needs loose-textured sandy soils for burrowing and a suitable prey base.	Habitat Present (marginal)	• Marginal habitat occurs within the Biological Study Area. • The Biological Study Area occurs within the California Department of Fish and Wildlife range map for the kit fox and about 1 mile northwest of a 1986 California Natural Diversity Database occurrence record (roadkill) for the species. • Species was not observed during surveys; no suitable potential dens were observed during surveys. • Not expected to occur within the Biological Study Area, but measures to avoid or minimize impacts have been recommended.

California Tiger Salamander

The California tiger salamander is a federally threatened and state threatened species and is also included on the California Department of Fish and Wildlife Watch List. It is a large terrestrial salamander with several white or pale yellow spots or bars on jet-black skin. The species ranges from Sonoma County, south to northwest Tulare County, and in the Coast Range south to Buellton and Lompoc in the Santa Ynez drainage. The California tiger salamander occurs from sea level to about 3,600 feet (CNDDB 2020).

California tiger salamander breeding habitat includes vernal pools, and seasonal and perennial ponds (such as stock ponds), and salamanders also inhabit surrounding upland areas in grassland and oak savannah plant communities (USFWS 2004). Adult California tiger salamanders mate in vernal pools and similar aquatic habitats. Females typically 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 14 days and the larval stage lasts three to six months until metamorphosis. Metamorphosed juveniles leave breeding sites in late spring or early summer.

After breeding, adults leave the pool and return to small mammal burrows in surrounding uplands (USFWS 2004). Adult California tiger salamanders spend most of their life in upland habitats with burrows. They cannot dig their own burrows, and as a result their presence is associated with burrowing mammals such as ground squirrels (*Otospermophilus beecheyi*). California tiger salamanders use both occupied and unoccupied burrows (USFWS 2004). During the mating season, these salamanders move to nearby vernal pools and similar water bodies. Breeding pools are typically large and may include stock ponds if they are managed to preclude predatory fish species such as sunfish (Family Centrarchidae) and bullfrogs.

Survey Results

No protocol surveys have been conducted for California tiger salamander for the original project or the current project. During past protocol surveys for California red-legged frog conducted for the original project at a pond located east of the Biological Study Area, no California tiger salamanders were observed. No California tiger salamander life stages were observed during pre-construction surveys, burrow excavation, or during construction for the original project throughout 2015 or during recent site surveys in 2020.

Regardless, the presence of California tiger salamander is inferred within the Biological Study Area for the following reasons:

- There are three California tiger salamander California Natural Diversity Database occurrence records within 3.1 miles (5 kilometers) of the project site (California Natural Diversity Database search 2020). These include:

  - Site Number 1 located just north of the west end of the project site on a parcel of private land located on the opposite side of State Route 25. The habitat at this location consists of a stock pond surrounded by grazed annual grassland and oak woodland. A total of 23 juveniles were observed at this location in March 2003 (California Natural Diversity Database Element Occurrence Index Number 53640).
  - Site Number 2 located at the east end of the project site along State Route 25, between Dry Lake and State Route 146. The habitat at this location consists of annual grassland and oak woodland. Observations at this location include one adult and one juvenile in March 1999 and another adult in April 2000 (California Natural Diversity Database Element Occurrence Index Number 44417); and,
  - Site Number 3 located 1.46 miles (2.35 kilometers) southeast of the project site along State Route 25 next to Dry Lake. The habitat at this location consists of a large vernal pool/sag pond surrounded by grassland, chaparral, and oak woodland. Observations at this location include two adults in March 1999, three juveniles in January 2000, and one adult and one juvenile in June 2000 (California Natural Diversity Database Element Occurrence Index Number 44415).

- The Biological Study Area occurs within an area proposed as California tiger salamander critical habitat Unit 16. While this unit was eventually excluded from final designation in 2005, it contains all three primary constituent elements (for example, standing bodies of fresh water, upland habitats adjacent and accessible to and from breeding ponds that contain small mammal burrows, and accessible upland dispersal habitat) and nine extant occurrences of the species (USFWS 2005); and,
- The Biological Study Area includes two of the three primary constituent elements including suitable upland habitat with small mammal burrows and accessible upland dispersal habitat.

California Red-Legged Frog

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

California red-legged frogs use a variety of areas, including 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 2.3 feet, and the presence of fairly sturdy underwater supports such as cattails. The largest densities of this species are typically associated with

dense stands of overhanging willows and an intermixed fringe of sturdy emergent vegetation. The California red-legged frog typically breeds from January to July, with peak breeding occurring in February and March. Softball-sized egg masses are attached to subsurface vegetation, and hatched tadpoles require 11 to 20 weeks to metamorphose. Metamorphosis typically occurs from July to September.

The California red-legged frog uses both riparian and upland habitats for foraging, shelter, cover, and nondispersal movement. Upland refugia may be natural, such as the spaces under boulders or rocks and organic debris (for example, downed trees or logs), or humanmade, such as certain industrial debris and agricultural features (for example, drains, watering troughs, abandoned sheds, or stacks of hay or other vegetation); the California red-legged frog will also use small mammal burrows and moist leaf litter as refugia (USFWS 2010). Adults are predominantly nocturnal, while juveniles can be active at any time of day. Riparian habitat degradation, urbanization, predation by bullfrogs, and historic market harvesting have all reportedly contributed to the decline of the species.

California Red-Legged Frog Critical Habitat

The Biological Study Area occurs within California red-legged frog critical habitat Unit San Benito County (SNB)-3 (Pinnacles National Monument). This unit is located in the Gabilan Range at Pinnacles National Monument, about 3.5 miles west of the town of San Benito in southern San Benito County. The unit consists of federal and private lands. Critical habitat Unit SNB–3 contains each of the primary constituent elements essential for the conservation of the species (in essence, aquatic breeding habitat, aquatic non-breeding habitat, upland habitat, and dispersal habitat).

Survey Results

No protocol California red-legged frog surveys have been conducted within the current Biological Study Area. At the recommendation of the U.S. Fish and Wildlife Service, protocol California red-legged frog surveys were conducted for the original project from April to September 2011 at a small pond located east of the Biological Study Area. No California red-legged frogs were observed or heard during protocol surveys. Numerous western toads (toadlets) and Pacific chorus frogs (larvae and froglets) were observed during these protocol surveys, but no special-status amphibian species were observed. No California red-legged frog life stages were observed during pre-construction surveys, burrow excavation, or during construction for the original project throughout 2015 or during recent site surveys in 2020.

Despite no observations during past survey and monitoring efforts and no California Natural Diversity Database records within 1 mile (1.6 kilometers) of the Biological Study Area, the presence of California red-legged frog is inferred within the Biological Study Area for the following reasons:

- There are two California red-legged frog California Natural Diversity Database occurrence records in the vicinity of the project site (CNDDB 2011). These include:
    - Site Number 1 located 1.7 miles (2.8 kilometers) west of the project site along State Route 146 in Bear Valley, 1 mile (1.6 kilometers) south of the intersection of State Route 25, east of Pinnacles National Monument. The habitat at this location consists of a pool formed by a blocked culvert under the road in a sandy, intermittent drainage. Two adults were heard calling on 13 different nights in April and May 2000 (California Natural Diversity Database Element Occurrence Index Number 44406);
    - Site Number 2 located 2.5 miles (4.1 kilometers) east of the project site along the San Benito River. The habitat at this location consists of a deep pool-run along a sharp bend of the San Benito River. One large adult was observed in July 1999 (California Natural Diversity Database Element Occurrence Index Number 59748).
- The Biological Study Area occurs within California red-legged frog critical habitat Unit San Benito County-3; and,
- The Biological Study Area contains primary constituent elements three and four.

Considering these factors, California red-legged frog presence is inferred based on regional occurrence records and the presence of suitable habitat. Potential breeding habitat is present in ponds near the Biological Study Area, which occur within dispersal distance of the Biological Study Area. It is also possible that small mammal burrows in uplands within the Biological Study Area could be occupied by California red-legged frogs.

San Joaquin Kit Fox

The San Joaquin kit fox (*Vulpes macrotis mutica*) is a federally endangered and state threatened species. The kit fox is the smallest canid (dog family) species in North America. Kit foxes have a small, slim body, large ears set close together, a narrow nose, and a long, bushy, black-tipped tail tapering slightly toward the tip.

Prior to 1930, kit foxes inhabited most of the San Joaquin Valley from southern Kern County north to San Joaquin County; the current range has been reduced by more than half, with the largest portion of the range remaining in the southern and western parts of the San Joaquin Valley (USFWS 1998). From a regional context, kit foxes occur westward into the interior coastal ranges in Monterey, San Benito, and Santa Clara Counties (Pajaro River watershed).

San Joaquin kit foxes prefer loose-textured soils in grasslands and scrublands, but also are found in agricultural fields, orchards, vineyards,

grazed areas, petroleum fields, and urban areas. Kit foxes use dens for temperature regulation, shelter from adverse environmental conditions, reproduction, and escape from predators (USFWS 1998). Kit foxes dig their own dens or modify dens constructed by other animals. They also use human-made structures (for example, culverts, abandoned pipelines, and banks in sumps or roadbeds). Entrances are usually 8 to 10 inches in diameter and normally higher than wide (USFWS 1998), but entrances of smaller diameter may also be used. A total of 95 percent of hillsides where kit fox dens are found have a slope of less than 40 degrees. Natal dens typically have more openings than non-natal dens, and kit foxes often change dens and numerous dens may be used throughout the year.

Mating occurs between late December and March, and litters of two to six pups are born between February and late March (USFWS 1998). After four to five months, usually in August or September, the young begin to disperse. San Joaquin kit foxes are primarily active at night, where they forage mainly on small mammal species. Kit foxes are subject to predation or competition by other species, such as coyote (*Canis latrans*), non-native red foxes (*Vulpes vulpes*), bobcat (*Lynx rufus*), and domestic dog (*Canis familiaris*). Habitat loss is a major source of the subspecies' decline.

Survey Results

At the recommendation of the Ventura U.S. Fish and Wildlife Service Office (C. Diel 2011, personal communication), an Early Evaluation for San Joaquin Kit Fox (per USFWS 1999) was prepared for the original construction project and submitted to U.S. Fish and Wildlife Service on June 23, 2011.

Updated data on San Joaquin kit fox regional occurrences were examined for the current road restoration project. The Biological Study Area occurs within the range of the San Joaquin kit fox according to the latest California Wildlife Habitat Relationships Geographic Information System dataset (CWHR 2018). There are two California Natural Diversity Database occurrence reports within a 10-mile (16-kilometer) radius, with the nearest California Natural Diversity Database kit fox record located about 1.1 miles southeast of the Biological Study Area along State Route 25: "California Natural Diversity Database Element Occurrence Index Number 67349: one road kill collected and delivered to Cal Poly State University on 25 Nov 1987" (CNDDB 2020); the other California Natural Diversity Database record (California Natural Diversity Database Element Occurrence Index Number 68106) is from 1972 to 1975 and located just under 10 miles south of the Biological Study Area near Tannehill Ranch (CNDDB 2020).

The project site supports non-native annual grassland and blue oaks in hilly terrain. The remaining relative habitat suitability of the site for San Joaquin kit foxes can be characterized as poor to fair, influenced by the fragmented habitat within proximity of State Route 25, the terrain, and disturbances from vehicle traffic and agricultural operations.

No potential San Joaquin kit fox dens have been observed during recent survey transects of the Biological Study Area conducted in 2020. Some small mammal burrows have been observed, including a few California ground squirrel burrows; however, none had openings large enough to be used by San Joaquin kit foxes. No dirt ramps, canid tracks, canid scat, prey remains, or other signs of kit foxes have been observed at or near any of the ground squirrel burrows or within any other location within the project site. No San Joaquin kit foxes have been observed in the vicinity of the project area during numerous daytime and nighttime site visits from 2011 to 2020, including monitoring during construction for the original project throughout 2015.

Environmental Consequences

California Tiger Salamander

Annual grassland and disturbed land are considered suitable habitat for California tiger salamander in this region. Project construction has the potential to result in about 4.16 acres of permanent impact and 0.49 acres of temporary impact to suitable upland habitat. There would be no impacts to breeding habitat. Construction activity could result in the injury or mortality (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 adverse during rain events during the breeding season (typically from about November 1 to May 6) when adults could potentially disperse to ponds near the Biological Study Area to breed. California tiger salamanders could also be buried in small mammal burrows collapsed by construction activities, which could result in injury or mortality. Finally, the potential need to capture and relocate California tiger salamanders could subject these animals to stresses that could result in adverse effects.

The Federal Endangered Species Act Section 7 effects determination is that the proposed project may affect, and is likely to adversely affect, California tiger salamander. The basis for this determination is that California tiger salamander presence is inferred based on nearby historical occurrence records and the presence of suitable upland and dispersal habitat within the Biological Study Area. While California tiger salamanders have not been observed in or near the Biological Study Area during numerous (non-protocol) surveys, construction, and biological monitoring activities conducted from 2011 to 2020, it is unlikely, but possible, that small mammal burrows impacted by the road restoration could be occupied by California tiger salamanders. It is expected that potential for take in the form of mortality or injury is low.

A Section 2081 Incidental Take Permit No. 2081-2014-010-04 for California tiger salamander was issued for the original construction project that experienced slope failure in 2015. Because of the continued potential for take of the state threatened California tiger salamander with the new restoration

project, this Incidental Take Permit would either need to be renewed, amended, or a new Incidental Take Permit would need to be acquired.

California Red-Legged Frog and California Red-Legged Frog Critical Habitat

Similar to the impacts described previously for California tiger salamander, construction activities could result in the injury or mortality (via accidental crushing by equipment) of an unknown number of California red-legged frogs residing in small mammal burrows within upland habitat in the Biological Study Area. This could be particularly adverse during rain events during the breeding season (typically from about November 1 to May 6) when adults could potentially disperse to ponds near the Biological Study Area to breed. California red-legged frogs could also be buried in small mammal burrows collapsed by construction activities, which could result in injury or mortality. Finally, the potential need to capture and relocate California red-legged frogs could subject these animals to stresses that could result in adverse effects. There will be no impacts to breeding habitat.

The Federal Endangered Species Act Section 7 effects determination is the proposed project may affect, and is likely to adversely affect, California red-legged frog. The basis for this determination is that California red-legged frog presence is inferred based on nearby occurrence records and the presence of suitable upland habitat within the Biological Study Area. While red-legged frogs have not been observed in or near the Biological Study Area during survey and monitoring efforts conducted between 2011 and 2020, potential breeding habitat is present in ponds that are within dispersal distance of the Biological Study Area. It is unlikely, but possible, that small mammal burrows impacted by the road restoration could be occupied by California red-legged frogs. It is expected that potential for take in the form of mortality or injury is low.

About 4.16 acres of California red-legged frog critical habitat within the project Biological Study Area may be permanently impacted by the project, and about 0.49 acres may be temporarily impacted. Permanent impacts will primarily consist of the additional areas of cut/fill encompassing the road restoration project, which will result in loss of potential habitat in ruderal/disturbed areas. Temporary impacts include areas that will be filled with soil to create plantable space for oak trees, as well as areas with temporary erosion controls installed about 10 feet beyond the proposed cut/fill lines to stabilize cut-slopes.

Federal Endangered Species Act Section 7 effects determination is the proposed project may affect, but is not likely to adversely affect, California red-legged frog critical habitat, because the effects are so small as to be discountable.

San Joaquin Kit Fox

Permanent impacts would consist of grading, vegetation removal, ground disturbance, and removal of trees to accommodate the road restoration. If

present, denning kit foxes could accidentally be buried during grading or injured by construction equipment, resulting in the adverse effects of injury or mortality (in essence, “take”). Noise and disturbance associated with construction could adversely affect foraging and dispersal behaviors; however, this would be unlikely as construction activities would likely occur during daylight hours when kit foxes are typically inactive and residing in dens.

The potential habitat remaining within the project site has been characterized as poor to fair, and the potential for adverse effects to San Joaquin kit foxes are estimated to be discountable because:

- The nearest California Natural Diversity Database record for a San Joaquin kit fox is a roadkill observation over 30 years old;
- There have been no recent, nearby California Natural Diversity Database records for kit foxes in a region where California Natural Diversity Database occurrence submittals have been frequent for other special-status species observations;
- No potential dens or signs of kit foxes were observed during initial survey transects;
- The project site is subjected to routine disturbance; and,
- The proposed project would impact fragmented and hilly terrain located immediately next to State Route 25, where the potential for kit fox presence and denning activity is estimated to be low.

As a result, the Federal Endangered Species Act Section 7 effects determination is the proposed project may affect, but is not likely to adversely affect, the San Joaquin kit fox. This effects determination remains consistent with the U.S. Fish and Wildlife Service Biological Opinion issued for the original construction project (File Number 08EVEN00-2013-F-0077).

Table 2-3. Federal Endangered Species Act Effects Determinations

Common Name	Scientific Name	Status	Effect Finding	Effect Finding for Critical Habitat (if applicable)
California Tiger Salamander	Ambystoma californiense	Federal Threatened	May Affect, Likely to Adversely Affect	Not Applicable
California Red-Legged Frog	Rana draytonii	Federal Threatened	May Affect, Likely to Adversely Affect	May Affect, Not Likely to Adversely Affect
San Joaquin Kit Fox	Sylvilagus bachmani riparius	Federal Endangered	May Affect, Not Likely to Adversely Affect	Not Applicable

Avoidance, Minimization, and/or Mitigation Measures

California Tiger Salamander

Based on U.S. Fish and Wildlife Service Biological Opinion and California Department of Fish and Wildlife Section 2081 Incidental Take Permit terms and conditions for the original project (U.S. Fish and Wildlife Service File Number 08EVEN00-2013-F-0077 and California Department of Fish and Wildlife Number 2081-2014-010-04), the following avoidance and minimization measures are proposed for California tiger salamander for the current project:

- A U.S. Fish and Wildlife Service and California Department of Fish and Wildlife approved biologist (Designated Biologist) will be responsible for overseeing all construction activity to ensure that construction activity avoids the incidental take of individual California tiger salamander and minimizes disturbance to California tiger salamander habitat.
- Designated biological monitors that have experience with California tiger salamander may be assigned and approved by the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to conduct surveys and construction monitoring as well as assist the Designated Biologist during burrow excavation, capture, handling and relocation of California tiger salamander in the event that any individual(s) are discovered prior to or during construction.
- To ensure compliance with conditions of the Biological Opinion and Section 2081 Incidental Take Permit, the Designated Biologist(s) and Designated Monitor(s) shall have authority to immediately stop any activity that does not comply with these conditions, and/or to order any reasonable measure to avoid the unauthorized take of California tiger salamander.
- The Designated Biologist(s) shall conduct an education program for all persons employed or otherwise working on the project site prior to performing any work on-site. The program shall include a discussion of the biology of the California tiger salamander and project-specific avoidance and minimizations measures. A “kick-off” environmental training will be conducted prior to the first day of construction activities, followed by additional trainings on an as-needed basis.
- The Designated Biologist(s) shall prepare a California tiger salamander relocation plan (Relocation Plan) and submit it to California Department of Fish and Wildlife for approval prior to beginning of construction. The Relocation Plan shall include, but not be limited to, identification of capture methods, handling methods, relocation methods, identification of relocation areas, and identification of a wildlife rehabilitation center or veterinary facility. Construction may not proceed until California Department of Fish and Wildlife approves the relocation plan in writing.

- Prior to any ground disturbance, the Designated Biologist(s) shall flag all potential California tiger salamander burrows within 50 feet of the project area to alert biological and work crews to their presence. Where feasible, an avoidance buffer of 50 feet or greater around refugia shall be maintained.
- Prior to ground-disturbance activities, the Designated Biologist shall be present to perform pre-construction surveys for California tiger salamander and shall remain on-site until temporary exclusion fencing has been installed, clearance surveys have been completed, all burrows have been excavated, and any California tiger salamanders within the exclusion fence have been relocated pursuant to the Relocation Plan. The Designated Biologist(s) shall flag all potential California tiger salamander burrows within 50 feet of the project area Any observations of California tiger salamander or other special-status species shall be documented on California Natural Diversity Database forms and submitted to California Department of Fish and Wildlife.
- Prior to any surface disturbance, Caltrans shall install temporary exclusion fencing around the perimeter of all the project work area(s) to avoid California tiger salamander burrows, so that the burrows are isolated from the active work area when possible. The Designated Biologist shall accompany the exclusion fence construction crew to ensure that California tiger salamanders are not killed or injured during installation. Caltrans shall inspect the exclusion fence at least once weekly and maintain/repair the fence as necessary. All exclusion fencing shall be maintained for the duration of construction and removed on project completion.
- After conducting the clearance survey, all small mammal burrows present within the project area that cannot be avoided by 50 feet shall be fully excavated by hand in the presence of the Designated Biologist(s), and then collapsed. Any live California tiger salamanders salvaged during burrow excavation shall be relocated as per the Relocation Plan.
- The Designated Biologist shall be on-site daily during all initial surface-disturbing activities and shall conduct compliance inspections a minimum of once per week during periods of inactivity and after clearing, grubbing, and grading are completed. The Designated Biologist shall conduct compliance inspections to:
    - minimize incidental take of California tiger salamander;
    - prevent unlawful take of species;
    - check for compliance with all measures of the Biological Opinion and Section 2081 Incidental Take Permit;
    - check all exclusion zones; and,
    - ensure that signs, stakes, and fencing are intact, and that Covered Activities are restricted to the Project Area.

- If any California tiger salamanders are found in the project area during construction, all work that could potentially harm the California tiger salamander shall stop immediately until the Designated Biologist(s) can relocate the California tiger salamander following the Relocation Plan or it leaves the project area on its own accord.
- Construction shall be restricted to periods of low rainfall (less than 1/2 inch precipitation per 24-hour period). Permittee shall monitor the National Weather Service 72-hour forecast for the project area. If a 70 percent or greater chance of rainfall is predicted within 24 hours of project activity, a Designated Biologist shall survey the project site before construction begins each day rain is forecast. If Caltrans uses a Designated Monitor to conduct surveys, a Designated Biologist must still be available to capture and relocate any California tiger salamanders discovered during the surveys. If precipitation begins, then a Designated Biologist shall be at the Project site for the duration of the rain event in order for work to continue. If a Designated Monitor is used, then a Designated Biologist must still be on call and available to relocate any California tiger salamanders discovered. If rain exceeds 1/2 inch during a 24-hour period, construction shall cease until it is no longer raining and the next 24 hour forecast predicts less than 70 percent chance of rainfall.
- All construction activity shall terminate 30 minutes before sunset and shall not resume until 30 minutes after sunrise during the California tiger salamander migration/active season from November 1 to June 14. If night work cannot be avoided during this time period, a Designated Biologist shall survey the Project site before construction begins each night. If Caltrans uses a Designated Monitor to conduct surveys, a Designated Biologist must still be available to capture and relocate any California tiger salamanders discovered during surveys. Night work throughout the year shall be prohibited within potential California tiger salamander upland habitat when a 70 percent or greater chance of rainfall is predicted within 24 hours of project activity, until it is no longer raining and the next 24 hour forecast predicts less than 70 percent chance of rainfall.
- California tiger salamander trained workers shall inspect for California tiger salamanders under vehicles and equipment before the vehicles and equipment are moved. If a California tiger salamander is present, the worker shall notify the Designated Biologist and wait for the California tiger salamanders to move unimpeded to a safe location or the Designated Biologist shall move the California tiger salamanders out of harm's way outside of the project area and in compliance with the Relocation Plan.
- All trenches, holes or other excavations with sidewalls steeper than a 1:1 slope shall be covered when not actively being worked on, or shall have an escape ramp of earth of a non-slip material with a less than 1:1 slope. Either the Designated Biologist(s) or Designated Monitor(s) shall inspect all open trenches, auger holes, and other excavations that may trap California tiger salamanders prior to any work in or around them and

immediately prior to being backfilled. Only the Designated Biologist(s) is/are authorized to safely remove and relocate any California tiger salamanders found in accordance with the Relocation Plan.

- Caltrans shall contact U.S. Fish and Wildlife Service and California Department of Fish and Wildlife immediately if any California tiger salamanders are found dead or injured to determine if additional protective measures are needed. If a California tiger salamander is injured as a result of project-related activities, the Designated Biologist shall take it to a qualified wildlife rehabilitation or veterinary facility.
- Caltrans shall 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.
- Caltrans shall restore on-site 0.49 acres of temporarily impacted California tiger salamander habitat.

California Red-Legged Frog

Avoidance and minimization measures for the California tiger salamander also apply to the California red-legged frog. Caltrans expects the proposed project will qualify 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*, which includes the following applicable measures:

- Only U.S. Fish and Wildlife Service-approved biologists shall participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.
- Ground disturbance shall not begin until written approval is received from the U.S. Fish and Wildlife Service that the biologist is qualified to conduct the work.
- A U.S. Fish and Wildlife Service-approved biologist shall 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 shall be allowed sufficient time to move them from the site before work begins. The U.S. Fish and Wildlife Service-approved biologist shall 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 shall be in the same drainage to the extent practicable. Caltrans shall coordinate with U.S. Fish and Wildlife Service on the relocation site prior to the capture of any California red-legged frogs.

- Before any activities begin on a project, a U.S. Fish and Wildlife Service-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall 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.
- A U.S. Fish and Wildlife Service-approved biologist shall 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 shall designate a person to monitor on-site compliance with all minimization measures. The U.S. Fish and Wildlife Service-approved biologist shall ensure this monitor receives the training outlined in measure four 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 expected by Caltrans and U.S. Fish and Wildlife Service during review of the proposed action, they shall notify the resident engineer immediately. The resident engineer shall resolve the situation by requiring that all actions that are causing these effects be halted. When work is stopped, U.S. Fish and Wildlife Service shall be notified as soon as possible.
- During project activities, all trash that may attract predators or scavengers shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and debris shall be removed from work areas.
- Habitat contours shall be returned to a natural configuration at the end of the project activities. This measure shall be implemented in all areas disturbed by activities associated with the project, unless 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.
- The number of access routes, size of staging areas, and the total area of activity shall be limited to the minimum necessary to achieve the project. Environmentally Sensitive Areas shall 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.
- If Caltrans demonstrates that disturbed areas have been restored to conditions that allow them to function as habitat for the California red-legged frog, these areas will not be included in the amount of total habitat permanently disturbed.

- To ensure that diseases are not conveyed between work sites by the U.S. Fish and Wildlife Service-approved biologist, the fieldwork code of practice developed by the Declining Amphibian Task Force shall be followed at all times.
- Project sites shall be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials shall be used to the extent practicable. Invasive, exotic plants shall be controlled to the maximum extent practicable. This measure shall be implemented in all areas disturbed by activities associated with the project, unless U.S. Fish and Wildlife Service and Caltrans determine that it is not feasible or practical.
- Caltrans shall not use herbicides as the primary method to control invasive, exotic plants. However, if it is determined that the use of herbicides is the only feasible method for controlling invasive plants at a specific project site; it will implement the following additional protective measures for the California red-legged frog:
    - Caltrans shall not use herbicides during the breeding season for the California red-legged frog;
    - Caltrans shall conduct surveys for the California red-legged frog immediately prior to the start of herbicide use. If found, California red-legged frogs shall be relocated to suitable habitat far enough from the project area that no direct contact with herbicide would occur;
    - Giant reed and other invasive plants shall be cut and hauled out by hand and painted with glyphosate-based products, such as Aquamaster® or Rodeo®;
    - Licensed and experienced Caltrans staff or a licensed and experienced contractor shall use a hand-held sprayer for foliar application of Aquamaster® or Rodeo® where large monoculture stands occur at an individual project site;
    - Foliar applications of herbicide shall not occur when wind speeds are in excess of 3 miles per hour;
    - No herbicides shall be applied within 24 hours of forecasted rain;
    - Application of all herbicides shall be done by qualified Caltrans staff or contractors to ensure that overspray is minimized, that all applications is made in accordance with the label recommendations, and with implementation of all required and reasonable safety measures. A safe dye shall be added to the mixture to visually denote treated sites. Application of herbicides shall be consistent with the U.S Environmental Protection Agency's Office of Pesticide Programs, Endangered Species Protection Program county bulletins;
    - All herbicides, fuels, lubricants, and equipment shall be stored, poured, or refilled at least 60 feet from riparian habitat or water

bodies in a location where a spill would not drain directly toward aquatic habitat, unless otherwise preapproved by the necessary agencies. Prior to the onset of work, Caltrans shall ensure that a plan is in place for a prompt and effective response to accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

San Joaquin Kit Fox

Caltrans proposes to implement conservation/mitigation measures adapted from the U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS 2011b):

- A preconstruction survey will be conducted for San Joaquin kit fox no less than 14 days and no more than 30 days prior to any construction activities or any project activity likely to impact the San Joaquin kit fox. The survey will identify San Joaquin kit fox habitat features on the project site, evaluate use by San Joaquin kit fox, and, if possible, assess the potential impacts to San Joaquin kit fox by the proposed activity. The status of all dens should be determined and mapped. Known dens, if found occurring within the footprint of the activity, will be monitored for three days with a tracking medium to determine the current use. If San Joaquin kit fox activity is observed at the den during this period, the den will be monitored for at least five consecutive days from the time of the observation to allow any resident animals to move to another den during its normal activity.
- Caltrans will submit to the U.S. Fish and Wildlife Service written results of the preconstruction survey within five days after survey completion and prior to the start of ground disturbance and/or construction activities. Caltrans will immediately notify the U.S. Fish and Wildlife Service if the preconstruction/preactivity survey reveals an active natal pupping den or new information regarding kit fox presence within 200 feet of the project boundary.
- Prior to ground breaking, a U.S. Fish and Wildlife Service-approved biologist will conduct an environmental education and training session for all construction personnel.
- Project employees will be directed to exercise caution when driving within the project area. A 20-mile-per-hour speed limit will be strongly encouraged within the project site. Cross-country travel by vehicles will be prohibited outside of the proposed areas of disturbance, unless authorized by U.S. Fish and Wildlife Service. Project employees shall be provided with written guidance governing vehicle use, speed limits on unpaved roads, fire prevention, and other hazards. Construction activity will be confined within the project site, which may include temporary access roads and staging areas specifically designated and marked for these purposes.

- A litter control program shall be instituted at each project site. No canine or feline pets or firearms (except for law enforcement officers and security personnel) will be permitted on construction sites in order to avoid harassment, killing, or injuring of San Joaquin kit foxes.
- Maintenance and construction excavations greater than 2-feet deep will be covered (for example, with plywood, sturdy plastic, steel plates, or equivalent), filled in at the end of each working day, or have earthen escape ramps no greater than 200 feet apart to prevent trapping kit foxes.
- The resident engineer or their designee will be responsible for implementing these conservation measures and shall be the point of contact.
- All grindings and asphaltic-concrete waste will be stored within previously disturbed areas absent of habitat and at a minimum of 150 feet from any culvert, wash, pond, vernal pool, or stream crossing.
- Restoration and revegetation work associated with temporary impacts will be done using California endemic plants appropriate for the location. To the maximum extent practicable, topsoil shall be removed, cached, and returned to the site according to successful restoration protocols. Loss of soil from run-off or erosion will be prevented with straw bales, straw wattles, or similar means provided they do not entangle or block escape or dispersal routes of kit foxes.
- The project construction area will be delineated with high visibility temporary fencing, flagging, or other barrier to prevent encroachment of construction personnel and equipment onto any sensitive areas during project work activities. Such fencing will be inspected and maintained daily until completion of the project and will be removed only when all construction equipment is removed from the site. No project activities will occur outside the delineated project area.

2.3.4 Invasive Species

Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order Element Occurrence 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration guidance issued August 10, 1999 directs the use of the State’s invasive species list, maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

Affected Environment

The Natural Environment Study prepared in September 2018, and the Natural Environment Study Addendum, prepared in June 2019, were the primary sources of information used in the preparation of this section.

A total of 20 invasive plant species included in the online California Invasive Plant Council Database (2018) were observed within the Biological Study Area (Table 2-4). Two exotic plant species with an invasiveness rating of "High" were observed in the Biological Study Area: red brome (*Bromus madritensis* ssp. *rubens*) and yellow star-thistle (*Centaurea solstitialis*). Ten plant species were observed within the Biological Study Area with a California Invasive Plant Council invasiveness rating of "Moderate" and eight species were observed with an invasiveness rating of "Limited." The distribution of invasive plant species is most common in ruderal/disturbed areas, with no notable dense concentrations of invasive species. Species with moderate density distributed throughout the Biological Study Area are primarily Mediterranean annual grasses and associated forbs, which are characteristic of the non-native annual grasslands found throughout California.

Table 2-4. Plants Observed in the Biological Study Area Included in the California Invasive Plant Council's Invasive Plant Inventory

Scientific Name	Common Name	California Invasive Plant Council Invasiveness Rating	Relative Density within the Biological Study Area
Avena barbata	slender wild oat	Moderate	Moderate
Brassica nigra	black mustard	Moderate	Moderate
Bromus diandrus	ripgut brome	Moderate	Low/Sparse
Bromus hordeaceus	soft chess brome	Limited	Low/Sparse
Bromus madritensis ssp. *rubens*	red brome	High	Low/Sparse
Carduus pycnocephalus	Italian thistle	Moderate	Low/Sparse
Centaurea melitensis	tocalote	Moderate	Low/Sparse
Centaurea solstitialis	yellow star-thistle	High	Low/Sparse
Erodium cicutarium	redstem filaree	Limited	Low/Sparse
Festuca myuros	rattail sixweeks grass	Moderate	Low/Sparse
Festuca perennis	Italian ryegrass	Moderate	Low/Sparse
Hirschfeldia incana	summer mustard	Moderate	Moderate
Hordeum murinum ssp. *leporinum*	foxtail barley	Moderate	Low/Sparse
Lepidium draba	heart-podded hoary cress	Moderate	Low/Sparse
Medicago polymorpha	burclover	Limited	Low/Sparse
Polypogon monspeliensis	rabbitsfoot grass	Limited	Low/Sparse
Rumex crispus	curly dock	Limited	Low/Sparse
Salsola tragus	Russian thistle	Limited	Low/Sparse
Silybum marianum	milk thistle	Limited	Low/Sparse
Trifolium hirtum	rose clover	Limited	Low/Sparse

Environmental Consequences

Ground disturbance and other aspects of project construction (for example, erosion control) could potentially spread or introduce invasive species within the Biological Study Area. The distribution of most invasive plant species is most common in ruderal/disturbed areas along the edges of State Route 25.

In compliance with the Executive Order on Invasive Species, Element Occurrence 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 the Department for erosion control or landscaping. 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 are proposed to 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. Construction equipment shall be inspected before entering the construction site. If necessary, wash stations onsite shall 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.

3. Invasive plants in the project site removed during construction shall be properly disposed offsite. No species on the California Invasive Plant Council Invasive Plant Inventory shall be included in the erosion control seed mix or landscaping plans for the project.

2.4 Cumulative Impacts

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, 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 (CEQA) 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 CEQA can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under the National Environmental Policy Act (NEPA) can be found in 40 Code of Federal Regulations Section 1508.7.

The cumulative impact analysis prepared for this project was done so in conformance with Caltrans Guidance for Preparers of Cumulative Impact Analysis and follows an eight-step approach that serve as guidelines for identifying and assessing cumulative impacts. The results of this assessment concluded the following:

- With avoidance/minimization measures and tree replacement, the project would not contribute to the cumulative loss or degradation of oak trees in southern San Benito County;
- The potential for cumulative effects for western spadefoot is estimated to be very low considering the avoidance of impacts to breeding habitat, the small amount of potential habitat that would be affected in relation to the total amount of habitat that occurs in the region, and the low amount of injury and/or mortality to western spadefoot toads that would likely occur;
- The proposed project is not expected to substantially contribute to the cumulative critical habitat impacts that are occurring, beyond the continuing effects of present land uses that occurred and are likely to occur into the future. The impacts to California red-legged frog critical habitat associated with the project will be small in scale and temporarily impacted areas will be restored. Permanently impacted areas will be mitigated through compensatory mitigation required for California tiger salamanders;
- While construction activities could contribute to cumulative effects (for example, injury and/or mortality, disturbance and/or habitat loss) that could adversely affect California tiger salamanders, the potential for cumulative effects are estimated to be very low considering the avoidance of impacts to breeding habitat, the small amount of potential habitat that

would be affected in relation to the overall amount of habitat that occurs in the region, and the low amount of take (for example, injury and/or mortality to California tiger salamanders) that would likely occur.

Chapter 3 CEQA Evaluation

3.1 Determining Significance under CEQA

The proposed project is a joint project by the California Department of Transportation (Caltrans) and the Federal Highway Administration and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The Federal Highway Administration's responsibility for environmental review, consultation, and any other actions required by applicable federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 U.S. Code Section 327 and the Memorandum of Understanding dated December 23, 2016 and executed by the Federal Highway Administration and Caltrans. Caltrans is the lead agency under CEQA and NEPA.

One of the main differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an Environmental Impact Statement, 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. Each and 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 proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant With Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project will indicate that there are no impacts to a particular resource. A No Impact answer reflects this determination. The words “significant” and “significance” used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 to provide you with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

3.2.1 Aesthetics

CEQA Significance Determinations for Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact – For most viewers, the cut slopes on both sides would appear as a logical continuation of the pattern of cut slopes and would not detract from the overall viewing experience for the highway user. The cut slopes would result in no noticeable reduction in views to the distant hills. Because of the short duration of the affected view and the abundance of vistas along the corridor, the overall effect on the scenic vista would be minimal.

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

Less Than Significant Impact – The project would not remove or alter any historic buildings or rock outcroppings. Construction of the project would remove up to 17 blue oak trees and 1 valley oak tree. Tree removal would result in a minor alteration of the roadside views. The proposed tree planting combined with several remaining mature trees in the immediate area would help maintain the natural appearance of the corridor. The project would not detract from the overall viewing experience for the highway user and would result in only a minor effect on the existing visual character and quality of the site and its surroundings.

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?

No Impact

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?

No Impact

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

No Impact

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?

No Impact

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 western spadefoot, bird species, bat species, American badger, kit fox, California red-legged frog or critical habitat, or California tiger salamander. In addition, American badgers and kit foxes are not expected to be present in the Biological Study Area. 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. Caltrans shall also restore on-site 0.49 acres of temporarily impacted California tiger salamander habitat. Avoidance, minimization, and mitigation measures proposed for California tiger salamander would also apply to western spadefoot and California red-legged frog. With these measures incorporated, 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 – There are no riparian or sensitive natural communities of concern within the Biological Study Area. However, construction of the project would remove up to 17 blue oak trees and 1 valley oak tree. Impacts to trees will be offset by replacement planting within the project limits. Oaks with a diameter-at-breast-height between 4 and 23 inches that require removal will be replaced using a 3:1 ratio. A 10:1 replacement planting ratio will be implemented for each removed oak tree greater than 24 inches in diameter-at-breast-height. With the proposed replacement planting, impacts to oak trees 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?

No Impact

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 Section15064.5?

No Impact

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

Less than Significant – There is one archaeological resource within the project limits. However, environmentally sensitive fencing will be placed around AC-SBN-275 to avoid any impacts to the resource. With the proposed fencing incorporated into the project, impacts would be less than significant.

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:

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 on- or off-site 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?

No Impact

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

No Impact

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 on- or off-site;

No Impact

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

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

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 (for example, sharp curves or dangerous intersections) or incompatible uses (for example, 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

Less than Significant – Archaeological site CA-SBN-275 is within the Area of Potential Effects and was determined to be eligible for the National Register of Historic Places under Criteria A, and C, and was also determined to be a 4(f) resource to be protected. Caltrans has determined a “finding of no significant adverse effect with standard conditions – environmentally sensitive area”. With the minimization and avoidance measure proposed in this Initial Study, the impacts to the cultural resource would be less than significant.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant – Caltrans conducted consultation with the Amah Mutsun Tribal Band regarding the site CA-SBN-275. Cultural studies, including the Archaeological Evaluation Report, were provided to the Amah Mutsun Tribal Band and their comments were solicited and considered in the project development. With the avoidance and minimization measure proposed in this Initial Study, the impacts to the cultural resource would be less than significant.

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?

No Impact

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 – With the proposed avoidance, minimization, and mitigation measures incorporated, the project does not have the potential to substantially degrade the quality of the environment. The project has the potential to affect California tiger salamander, California red-legged frog, western spadefoot, and nesting bird and bat species. However, the project would implement appropriate measures to avoid and minimize the impacts to wildlife species and their associated habitats. In addition, mitigation for the California tiger salamander will be conducted and will include the purchase of upland habitat from a mitigation bank at a ratio of 10:1. Caltrans will also restore 0.49 acres of upland habitat on site.

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.)

No Impact

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

No Impact

3.3 Greenhouse Gas Emissions

Considering the information included in the Climate Change technical memo dated May of 2020, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Greenhouse Gas Emissions
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	**Less Than Significant Impact**
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	**No Impact**

3.3.1 Affected Environment

The project sits along State Route 25 in rural San Benito County within an area designated as rangeland, which is intended to maintain open space for grazing on hills, mountains, and remote areas of the county (San Benito County 2035 General Plan, July 2015). The project area is surrounded on both the north and the south by four privately owned properties but is otherwise sparsely populated and traffic counts are low.

The Air Resources Board sets regional targets for California's 18 Metropolitan Planning Organizations to use in their Regional Transportation Plan/Sustainable Communities Strategies to plan future projects that will cumulatively achieve greenhouse gas reduction goals. Targets are set at a percent reduction of passenger vehicle greenhouse gas emissions per person from 2005 levels. The Regional Transportation Plan of the Council of San Benito County Governments applies to the project area. The San Benito Regional Transportation Plan was consolidated under and aligns with the goals of the Association of Monterey Bay Area Governments' Regional Transportation Plan/Sustainable Communities Strategies. The Air Resources Board's greenhouse gas reduction targets for Association of Monterey Bay Area Governments are 3 percent by 2020 and 6 percent by 2035. San Benito County also participates in the Monterey Bay Regional Climate Action Compact, a consortium that works to address global climate change through local initiatives such as electric-vehicle charging stations and efforts to reduce vehicle miles traveled (Monterey Bay Regional Climate Action Compact 2016).

3.3.2 Environmental Consequences

Operational Emissions

The proposed project would not increase the capacity of the highway since it would maintain the same number of lanes as the existing roadway. The project would not increase capacity, vehicle miles traveled, or vehicle hours traveled.

While some greenhouse gas emissions during the construction period would be unavoidable, the proposed 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 will be produced at different levels throughout the construction phase; their frequency and occurrence would, where possible, 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 would be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Carbon dioxide emissions generated from construction equipment were estimated using the Caltrans Construction Emissions Tool. The estimated emissions would be 338 tons of carbon dioxide over the estimated 4.5-month project construction period.

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 71.02C, 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 Air Resources Board emission reduction regulations; and 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 will 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.

During construction, the existing roadway would be left in place for continuous flow of traffic while the project is being constructed, therefore there would be minimal traffic delays due to construction.

This project will require removal of large quantities of debris. In the previous project, the contactor located a nearby land owner that needed fill material, minimizing transport of excess soil. While Caltrans cannot mandate disposal on private property, there are two commercial mineral mining sites near the project that has the potential to accept excess soil, which would minimize the vehicle miles traveled for debris removal

Although the project would cause greenhouse gas emissions during construction, the project is not expected to cause an 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 the implementation of construction greenhouse gas emissions reduction measures, the impact would be less than significant.

3.3.3 Avoidance, Minimization, and/or Mitigation Measures

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

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 contractor would be required to:

- Incorporate measures to reduce the use of potable water.
- Operate construction equipment with improved fuel efficiency by:
    - Properly tuning and maintaining equipment.
    - Limiting equipment idling time.
    - Using the right-size equipment for the job.
- Caltrans Standard Specification 14-9.02, Air Pollution Control requires contractors to comply with all air-pollution control rules, regulations, ordinances, and statutes. Measures that reduce construction vehicle emissions also help reduce greenhouse gas emissions.
- The project will replace native oaks at ratios determined by Caltrans Landscape Architecture in conjunction with the Caltrans Biologist. Trees reduce surface warming and through photosynthesis, remove carbon dioxide from the atmosphere.
- The implementation of compost for erosion control will help to off-set greenhouse gases by capturing carbon from the atmosphere. Compost applied to the roadside increases the rate at which carbon dioxide is removed from the atmosphere and converted to plant material and soil organic matter.

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

In December 2017 District 5 Archaeologist Christiana McDonald started Native American consultation with the Amah Mustsun and Salinan communities. The first step was initiated by conducting a Native American Heritage Commission Sacred Lands Records Search and requesting a list of individuals and tribes to contact. The records search revealed no known resources within the study area. After receiving the results, the list of consultants and tribes were contacted to initiate the Section 106 process and provide AB 52 notification. In March 2018 Christiana McDonald responded to questions raised by consultation members via email and provided them with copies of the archaeological survey report. In June 2018 a draft copy of the CA-SBN-275 Phased Identification Plan and Extended Phase I Proposal to the consultation group. Many of the consultation members voiced concerns over the protection of the bedrock mortar associated with site CA-SBN-275.

In May 2019 District 5 Native American Coordinator Terry Joslin contacted the consultation group to notify them of a new design considering multiple avoidance measures. On 23 July 2020 Val Lopez – Amah Mutsun Tribal Band – met with Terry Joslin at the study site to discuss concerns regarding the bedrock mortar. As part of the consultation process, in January 2019 a draft proposal for extended Phase 1/Phase 2 studies at CA-SBN-275 were provided to the consultation group for comment. No comments were received. In March 2019, evaluation testing was conducted at site CA-SBN-275 with Marcella Lund-Amah Mutsun Tribal Band present to monitor the fieldwork. The post-field summary letter was provided to all members of the tribal group ten days after the testing. In January 2020, the draft archaeological report was sent to all members to the consultation group. No comments were received, and in March 2020 Joslin called members of the Amah Mutsun Tribal Band to insure they had their comments incorporated.

In April of 2020, Caltrans, as assigned by the Federal Highway Administration initiated consultation with the State Historic Preservation Officer seeking

concurrence that CA-SBN-275 is eligible for the National Register under Criteria A and C, and a Finding of No Adverse Effect with Standard Conditions – Environmentally Sensitive Area. Concurrence was received by the State Historic Preservation Office in May of 2020.

4.1.1 Biological Resource Coordination

Federal Endangered Species Act Consultation Summary

On January 17, 2017, Caltrans submitted an online request through the USFWS IPaC website for an official USFWS species list for the project area.

On January 17, 2017, Caltrans submitted an email request to nmfswcrca.specieslist@noaa.gov to approve a generated NMFS species list for the project area. NMFS responded with email confirmation the same day that the list was considered approved.

On January 18, 2018, Caltrans received an official USFWS species list via email for the project area.

On April 27, 2020 Caltrans submitted an email request to nmfswcrca.specieslist@noaa.gov to approve a generated NMFS species list for the project area. NMFS responded with email confirmation the same day that the list was considered approved.

On April 27, 2020 Caltrans received an official USFWS species list via email for the project area.

California Endangered Species Act Consultation Summary

A Section 2081 Incidental Take Permit (Number 2081-2014-010-04) for California tiger salamander was issued for the original construction project that experienced slope failure in 2015; a Section 2081 Incidental Take Permit Amendment will be obtained for the new road restoration project.

Chapter 5 List of Preparers

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

Katherine Brown. Landscape Architect. B.A., Landscape Architecture; 29 years of landscape architecture experience. Contribution: Landscape Architect.

Robert Carr, Associate Landscape Architect. B.S., Landscape Architecture, California Polytechnic State University, San Luis Obispo; 29 years of experience preparing Visual Impact Assessments. Contribution: Visual Impact Assessment.

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.

Geoff Hoetker, Consultant Associate Environmental Planner/Biologist. M.S., Biological Sciences, California Polytechnic State University, San Luis Obispo; B.S., Biology, California State University, Bakersfield; more than 20 years of environmental planning and biological sciences experience. Contribution: Field studies, documentation, regulatory permitting, mitigation planning, monitoring, and reporting.

Terry L. Joslin, Associate Environmental Planner (Arch). PhD, Archaeology, University of California, Santa Barbara; M.A., Anthropology, University of California, Santa Barbara; B.S., Anthropology/Geography, California Polytechnic State University, San Luis Obispo; more than 28 years of archaeology experience. Contribution: Archaeology, Native American Consultation.

Krista Kiaha, Senior Environmental Planner. M.S., Anthropology, Idaho State University; B.A., Anthropology, University of California, Santa Cruz; more than 20 years of cultural resources experience. Contribution: Senior oversight for cultural studies.

Joel Kloth, Engineering Geologist. B.S., Geology, California Lutheran University; more than 30 years of experience in petroleum geology, geotechnical geology, and environmental engineering/geology-hazardous waste. Contribution: Hazardous Waste Memorandum

Rajvi Koradia, Environmental Engineer. B.S., Environmental Engineering, L.D. College of Engineering, Ahmedabad, India; M.S., Civil and Environmental Engineering, San Jose State University; 2 years of

environmental engineering experience. Contribution: Air and Noise Studies.

Isaac Leyva, Engineering Geologist. B.S., Geology; 29 years of experience in petroleum geology, environmental geology, geotechnical engineering. Contribution: Paleontology Review Memorandum, Water Quality Assessment Memorandum.

Christina MacDonald, Associate Environmental Planner (Arch). M.A., Cultural Resources Management, Sonoma State University; B.A., Anthropology, University of California, Los Angeles; 16 years of experience in California prehistoric and historical archaeology. Contribution: Archaeologist

Sunny McBride, Associate Environmental Planner. B.S., Biological Sciences, Utah State University; 10 years of experience in environmental analysis. Contribution: Preparation of Initial Study/Mitigated Negative Declaration.

Jason Wilkinson, Senior Environmental Planner. B.S., Natural Resource Management, Minor in Geographical Information System (GIS), California Polytechnic State University, San Luis Obispo; 12 years of environmental planning experience. Contribution: Supervised the preparation of the Mitigated Negative Declaration/Initial Study.

Pete Riegelhuth CPESC Number 5336, National Pollutant Discharge Elimination System/Stormwater Coordinator, Landscape Associate. Bachelor of Landscape Architecture, California Polytechnic State University, San Luis Obispo; 5 years of experience as District Construction Stormwater Coordinator and 12 years as National Pollutant Discharge Elimination System/Stormwater Coordinator. Contribution: Stormwater

Ed Schefter, Senior Transportation Surveyor. B.S., Surveying, California State University, Fresno; more than 20 years of GPS/GIS experience. Contribution: Map preparation.

Chapter 6 Distribution List

The distribution list is not a full list of those who will receive a copy of this Draft Initial Study/Proposed Mitigated Negative Declaration. A Notice of Completion and copies of this Draft Initial Study/Proposed Mitigated Negative Declaration have been sent to the State Clearing House for distribution to various public agencies who may have an interest in the proposed project.

California Department of Forestry and Fire Protection
San Benito Monterey Unit—Hollister
1979 Fairview Road
Hollister, California 95023

California Highway Patrol
Hollister-Gilroy Office
740 Renz Lane
Gilroy, California 95020-9584

Hollister Building Department
420 Hill Street
Hollister, California 95023

Hollister Planning Department
420 Hill Street
Hollister, California 95023

Native American Heritage Commission
1560 Harbor Boulevard, Room 100
West Sacramento, California 95691

San Benito County Sheriff
2301 Technology Parkway
Hollister, California 95023

San Benito Planning Department
3220 Southside Road
Hollister, California 95023

Stephen P. Henry
Field Supervisor
U.S. Fish and Wildlife Service
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93009

Steven Hulbert
Senior Environmental Scientist, Specialist
California Department of Fish and Wildlife
Region 4—Central, Habitat Conservation
1234 East Shaw Avenue
Fresno, California 9371

Appendix A Section 4(f) *De Minimis* Determination

This section of the document discusses *de minimis* impact determinations under Section 4(f). Section 6009(a) of Safe, Accountable, Flexible, Efficient Transportation Equity Act amended Section 4(f) legislation at 23 U.S. Code 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This amendment provides that once the U.S. Department of Transportation determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. The Federal Highway Administration's final rule on Section 4(f) *de minimis* findings is codified in 23 Code of Federal Regulations 774.3 and Code of Federal Regulations 774.17.

Responsibility for compliance with Section 4(f) has been assigned to the Department pursuant to 23 USC 326 and 327, including *de minimis* impact determinations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

The only potential Section 4(f) resource present within the Area of Potential Effects is archaeological site CA-SBN-275, which is a large bedrock outcrop measuring seven meters long by five meters wide. It contains two moderately developed saucer-type mortar cupules. No other archaeological materials were observed associated with the bedrock mortar feature within the Area of Potential Effects.

According to 23 Code of Federal Regulations 774, significance for historic sites under Section 4(f) means the site is listed in or eligible for listing in the National Register of Historic Places (National Register) and for archaeological sites, warrants preservation in place. Archaeological studies conducted for CA-SBN-275 concluded that the site is eligible for the National Register based on its association with a network of similar sites that make up a broad ethnographic landscape. The State Historic Preservation Office has concurred with this determination and CA-SBN-275 is considered a Section 4(f) resource.

A 'use' of a Section 4(f) property as defined by 23 Code of Federal Regulations 774.17 occurs when any of the following apply:

- Land is permanently incorporated into a transportation facility (permanent acquisition or permanent easement), or

- There is a temporary occupancy of land that is adverse in terms of the statute's preservationist purpose, or
- There are proximity impacts that substantially impair the purpose of the land (constructive use).

CA-SBN-275 is currently located on private property, and acquisition of the property is being proposed in order to construct the project. Because there will be a change in land ownership, a 'use' will occur. However, the project would not result in any expected temporary or permanent adverse physical impacts to the resource. In addition, an Environmentally Sensitive Area action plan is being proposed to completely avoid and preserve the resource in place.

Caltrans has determined that the proposed project results in a *de minimis* finding for CA-SBN-275 under 23 Code of Federal Regulations 774.17 since there is a Section 106 finding of "no adverse effect" or "no historic properties affected." The following avoidance and minimization measure is proposed: Prior to any construction activities, Environmentally Sensitive Area fencing will be installed around archaeological site CA-SBN-275.

Appendix B 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.

November 2019

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.*"

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/business-and-economic-opportunity/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 Business and Economic Opportunity, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Toks Omishakin
Director

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

Appendix C 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 articulated on 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.

Visual/Aesthetics

- Impacts to native oak trees should be minimized to the greatest extent possible. Trees to be preserved should be identified on the plans and in the field with the use of Environmentally Sensitive Area fencing installed around the driplines.
- Any limb or root pruning of trees should be minimized and where required done under the supervision of a Certified Arborist.
- Native oaks shall be restored a ratio determined by Caltrans Landscape Architecture in conjunction with the Caltrans Biologist. The new planting should include a minimum three-year plant establishment period.
- Slope-rounding, slope-warping and landform grading should be implemented where it would not result in the removal of additional oak trees.

Cultural Resources

Prior to any construction activities, Environmentally Sensitive Area fencing will be installed around archaeological site CA-SBN-275.

Natural Communities

The following avoidance and minimization measures for oak trees are recommended:

- Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing will be installed around the dripline of trees to be protected within project limits.
- Impacts to native oak trees greater than 4 inches diameter-at-breast-height would be offset by replacement planting within the project limits. Replacement plantings would be achieved using a minimum 3:1 ratio for each removed oak tree between 4 to 23 inches diameter-at-breast-height and a minimum 10:1 ratio for each removed oak tree greater than 24 inches diameter-at-breast-height. A portion of the original State Route 25 (for example, the old alignment) would be removed and rehabilitated to allow for revegetation with oak trees. Replacement plantings will be detailed in Caltrans' Landscape Architecture Landscape Planting Plan, in coordination with a biologist, with developed planting specifications to assure survival of the replacement trees.
- The 13 blue oak trees that were removed during construction of the original State Route 25 Curve Correction Project will also be replaced.

Western Spadefoot

The following measures applying specifically to the western spadefoot are proposed:

- Prior to construction, Caltrans shall conduct an informal worker environmental training program including a description of western spadefoot along with their legal/protected status, proximity to the project site, and avoidance/minimization measures to be implemented during the project.
- Prior to construction, a qualified biologist shall survey the project area and, if present, capture and relocate any western spadefoot to suitable habitat outside of the project area. Observations of the western spadefoot toad shall be documented on California Natural Diversity Database forms and submitted to California Department of Fish and Wildlife.
- Implementation of proposed mitigation measures for the protection of the federal and state threatened California tiger salamander will also serve to avoid and minimize impacts to the western spadefoot toad.

Cooper's Hawk, Sharp-shinned Hawk, Golden Eagle, White-tailed Kite, and Other Nesting Birds

Caltrans proposes to implement the following measure to protect nesting birds:

If feasible, tree removal shall be scheduled to occur from October 1 to January 31, outside of the typical nesting bird season, to avoid potential

impacts to nesting birds. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat during the nesting season (February 1 to September 30) or the golden eagle wintering season (December 1 to February 14), a nesting/wintering bird survey shall be conducted by a biologist determined qualified by Caltrans no more than three (3) days prior to construction. If an active nest or winter roost is found, a qualified biologist shall determine an appropriate buffer or monitoring strategy based on the habits and needs of the species. The buffer area shall be avoided or monitoring shall continue until a qualified biologist has determined that juveniles have fledged or wintering golden eagles have left the roost.

Pallid Bat, Townsend's Big-eared Bat, Western Mastiff Bat, Western Red Bat, Hoary Bat, Western Small-footed Myotis, Long-eared Myotis, Fringed Myotis, and Yuma Myotis

Caltrans has proposed to implement the following measures to protect roosting bats:

If tree removal is required during the bat maternity roosting season (February 1 to September 30), a bat roost survey shall be conducted by a qualified biologist within three (3) days prior to removal. If an active bat roost is found, a qualified biologist shall determine an appropriate buffer or monitoring strategy based on the habits and needs of the species. The buffer area shall be avoided or monitoring shall continue until a qualified biologist has determined that roosting activity has ceased. Active bat maternity roosts shall not be disturbed or destroyed at any time.

American Badger

The avoidance and minimization measures proposed previously for San Joaquin kit fox will also be applicable to American badgers, except any observations of occupied badger dens or American badgers will be reported to California Department of Fish and Wildlife instead of U.S. Fish and Wildlife Service, because this species is protected by the State of California/California Department of Fish and Wildlife and is not a federally listed species.

California Tiger Salamander

Based on U.S. Fish and Wildlife Service Biological Opinion and U.S. Fish and Wildlife Service Section 2081 Incidental Take Permit terms and conditions for the original project (U.S. Fish and Wildlife Service File Number 08EVEN00-2013-F-0077 and California Department of Fish and Wildlife Number 2081-2014-010-04), the following avoidance and minimization measures are proposed for California tiger salamander for the current project:

- A U.S. Fish and Wildlife Service and California Department of Fish and Wildlife approved biologist (Designated Biologist) will be responsible for overseeing all construction activity to ensure that construction activity

avoids the incidental take of individual California tiger salamanders and minimizes disturbance to California tiger salamander habitat.

- Designated biological monitors that have experience with California tiger salamander may be assigned and approved by the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to conduct surveys and construction monitoring as well as assist the Designated Biologist during burrow excavation, capture, handling and relocation of California tiger salamander in the event that any individual(s) are discovered prior to or during construction.
- To ensure compliance with conditions of the Biological Opinion and Section 2081 Incidental Take Permit, the Designated Biologist(s) and Designated Monitor(s) shall have authority to immediately stop any activity that does not comply with these conditions, and/or to order any reasonable measure to avoid the unauthorized take of California tiger salamander.
- The Designated Biologist(s) shall conduct an education program for all persons employed or otherwise working on the project site prior to performing any work on-site. The program shall include a discussion of the biology of the California tiger salamander and project-specific avoidance and minimizations measures. A “kick-off” environmental training will be conducted prior to the first day of construction activities, followed by additional trainings on an as-needed basis.
- The Designated Biologist(s) shall prepare a California tiger salamander relocation plan (Relocation Plan) and submit it to California Department of Fish and Wildlife for approval prior to beginning of construction. The Relocation Plan shall include, but not be limited to, identification of capture methods, handling methods, relocation methods, identification of relocation areas, and identification of a wildlife rehabilitation center or veterinary facility. Construction may not proceed until California Department of Fish and Wildlife approves the relocation plan in writing.
- Prior to any ground disturbance, the Designated Biologist(s) shall flag all potential California tiger salamander burrows within 50 feet of the project area to alert biological and work crews to their presence. Where feasible, an avoidance buffer of 50 feet or greater around refugia shall be maintained.
- Prior to ground-disturbance activities, the Designated Biologist shall be present to perform pre-construction surveys for California tiger salamander and shall remain on-site until temporary exclusion fencing has been installed, clearance surveys have been completed, all burrows have been excavated, and any California tiger salamanders within the exclusion fence have been relocated pursuant to the Relocation Plan. The Designated Biologist(s) shall flag all potential California tiger salamander burrows within 50 feet of the project area Any observations of California tiger salamander or other special-status species shall be documented on

California Natural Diversity Database forms and submitted to California Department of Fish and Wildlife.

- Prior to any surface disturbance, Caltrans shall install temporary exclusion fencing (exclusion fence) around the perimeter of all the project work area(s) to avoid California tiger salamander burrows, so that the burrows are isolated from the active work area when possible. The Designated Biologist shall accompany the exclusion fence construction crew to ensure that California tiger salamanders are not killed or injured during installation. Caltrans shall inspect the exclusion fence at least once weekly and maintain/repair the fence as necessary. All exclusion fencing shall be maintained for the duration of construction and removed on project completion.
- After conducting the clearance survey, all small mammal burrows present within the project area that cannot be avoided by 50 feet shall be fully excavated by hand in the presence of the Designated Biologist(s), and then collapsed. Any live California tiger salamanders salvaged during burrow excavation shall be relocated as per the Relocation Plan.
- The Designated Biologist shall be on-site daily during all initial surface-disturbing activities and shall conduct compliance inspections a minimum of once per week during periods of inactivity and after clearing, grubbing, and grading are completed. The Designated Biologist shall conduct compliance inspections to:
    - minimize incidental take of California tiger salamander;
    - prevent unlawful take of species;
    - check for compliance with all measures of the Biological Opinion and Section 2081 Incidental Take Permit;
    - check all exclusion zones; and,
    - ensure that signs, stakes, and fencing are intact, and that Covered Activities are restricted to the Project Area.
- If any California tiger salamanders are found in the project area during construction, all work that could potentially harm the California tiger salamander shall stop immediately until the Designated Biologist(s) can relocate the California tiger salamander following the Relocation Plan or it leaves the project area on its own accord.
- Construction shall be restricted to periods of low rainfall (less than 1/2 inch precipitation per 24-hour period). Permittee shall monitor the National Weather Service (NWS) 72-hour forecast for the project area.

If a 70 percent or greater chance of rainfall is predicted within 24 hours of project activity, a Designated Biologist shall survey the project site before construction begins each day rain is forecast. If Caltrans uses a Designated Monitor to conduct surveys, a Designated Biologist must still be available to

capture and relocate any California tiger salamanders discovered during the surveys.

If precipitation begins, then a Designated Biologist shall be at the Project site for the duration of the rain event in order for work to continue. If a Designated Monitor is used, then a Designated Biologist must still be on call and available to relocate any California tiger salamanders discovered.

If rain exceeds 1/2 inch during a 24-hour period, construction shall cease until it is no longer raining and the next 24 hour forecast predicts less than 70 percent chance of rainfall.

- All construction activity shall terminate 30 minutes before sunset and shall not resume until 30 minutes after sunrise during the California tiger salamander migration/active season from November 1 to June 14. If night work cannot be avoided during this time period, a Designated Biologist shall survey the Project site before construction begins each night. If Caltrans uses a Designated Monitor to conduct surveys, a Designated Biologist must still be available to capture and relocate any California tiger salamanders discovered during surveys. Night work throughout the year shall be prohibited within potential California tiger salamander upland habitat when a 70 percent or greater chance of rainfall is predicted within 24 hours of project activity, until it is no longer raining and the next 24 hour forecast predicts less than 70 percent chance of rainfall.
- California Tiger Salamander-trained workers shall inspect for California tiger salamanders under vehicles and equipment before the vehicles and equipment are moved. If a California tiger salamander is present, the worker shall notify the Designated Biologist and wait for the California tiger salamanders to move unimpeded to a safe location or the Designated Biologist shall move the California tiger salamanders out of harm's way outside of the project area and in compliance with the Relocation Plan.
- All trenches, holes or other excavations with sidewalls steeper than a 1:1 slope shall be covered when not actively being worked on, or shall have an escape ramp of earth of a non-slip material with a less than 1:1 slope. Either the Designated Biologist(s) or Designated Monitor(s) shall inspect all open trenches, auger holes, and other excavations that may trap California tiger salamanders prior to any work in or around them and immediately prior to being backfilled. Only the Designated Biologist(s) is/are authorized to safely remove and relocate any California tiger salamanders found in accordance with the Relocation Plan.
- Caltrans shall contact U.S. Fish and Wildlife Service and California Department of Fish and Wildlife immediately if any California tiger salamanders are found dead or injured to determine if additional protective measures are needed. If a California tiger salamander is injured as a result of project-related activities, the Designated Biologist shall take it to a qualified wildlife rehabilitation or veterinary facility.

- Caltrans shall 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.
- Caltrans shall restore on-site 0.49 acres of temporarily impacted California tiger salamander habitat.

California Red-legged Frog

Caltrans anticipates the proposed project will qualify 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* (USFWS 2011a), which includes the following applicable measures:

- Only U.S. Fish and Wildlife Service-approved biologists shall participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.
- Ground disturbance shall not begin until written approval is received from the U.S. Fish and Wildlife Service that the biologist is qualified to conduct the work.
- A U.S. Fish and Wildlife Service-approved biologist shall 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 shall be allowed sufficient time to move them from the site before work begins. The U.S. Fish and Wildlife Service-approved biologist shall 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 shall be in the same drainage to the extent practicable. Caltrans shall coordinate with U.S. Fish and Wildlife Service on the relocation site prior to the capture of any California red-legged frogs.
- Before any activities begin on a project, a U.S. Fish and Wildlife Service-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall 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.
- A U.S. Fish and Wildlife Service-approved biologist shall 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 shall designate a person to monitor on-site compliance with all minimization measures. The U.S. Fish and Wildlife Service-approved biologist shall 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 expected by Caltrans and U.S. Fish and Wildlife Service during review of the proposed action, they shall notify the resident engineer immediately. The resident engineer shall resolve the situation by requiring that all actions that are causing these effects be halted. When work is stopped, U.S. Fish and Wildlife Service shall be notified as soon as possible.

- During project activities, all trash that may attract predators or scavengers shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and debris shall be removed from work areas..
- Habitat contours shall be returned to a natural configuration at the end of the project activities. This measure shall be implemented in all areas disturbed by activities associated with the project, unless 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.
- The number of access routes, size of staging areas, and the total area of activity shall be limited to the minimum necessary to achieve the project. Environmentally Sensitive Areas shall 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.
- If Caltrans demonstrates that disturbed areas have been restored to conditions that allow them to function as habitat for the California red-legged frog, these areas will not be included in the amount of total habitat permanently disturbed.
- To ensure that diseases are not conveyed between work sites by the U.S. Fish and Wildlife Service-approved biologist, the fieldwork code of practice developed by the Declining Amphibian Task Force shall be followed at all times.
- Project sites shall be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials shall be used to the extent practicable. Invasive, exotic plants shall be controlled to the maximum extent practicable. This measure shall be implemented in all areas disturbed by activities associated with the project, unless U.S. Fish and Wildlife Service and Caltrans determine that it is not feasible or practical.

- Caltrans shall not use herbicides as the primary method to control invasive, exotic plants. However, if it is determined that the use of herbicides is the only feasible method for controlling invasive plants at a specific project site; it will implement the following additional protective measures for the California red-legged frog:
    - Caltrans shall not use herbicides during the breeding season for the California red-legged frog;
    - Caltrans shall conduct surveys for the California red-legged frog immediately prior to the start of herbicide use. If found, California red-legged frogs shall be relocated to suitable habitat far enough from the project area that no direct contact with herbicide would occur;
    - Giant reed and other invasive plants shall be cut and hauled out by hand and painted with glyphosate-based products, such as Aquamaster® or Rodeo®;
    - Licensed and experienced Caltrans staff or a licensed and experienced contractor shall use a hand-held sprayer for foliar application of Aquamaster® or Rodeo® where large monoculture stands occur at an individual project site;
    - All precautions shall be taken to ensure that no herbicide is applied to native vegetation;
    - Herbicides shall not be applied on or near open water surfaces (no closer than 60 feet from open water);
    - Foliar applications of herbicide shall not occur when wind speeds are in excess of three miles per hour;
    - No herbicides shall be applied within 24 hours of forecasted rain;
    - Application of all herbicides shall be done by qualified Caltrans staff or contractors to ensure that overspray is minimized, that all applications is made in accordance with the label recommendations, and with implementation of all required and reasonable safety measures. A safe dye shall be added to the mixture to visually denote treated sites. Application of herbicides shall be consistent with the U.S Environmental Protection Agency's Office of Pesticide Programs, Endangered Species Protection Program county bulletins;

San Joaquin Kit Fox

Caltrans proposes to implement conservation/mitigation measures adapted from the U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS 2011b):

- A preconstruction survey will be conducted for San Joaquin kit foxes no less than 14 days and no more than 30 days prior to any construction

activities or any project activity likely to impact the San Joaquin kit fox. The survey will identify San Joaquin kit fox habitat features on the project site, evaluate use by San Joaquin kit foxes, and, if possible, assess the potential impacts to San Joaquin kit fox by the proposed activity. The status of all dens should be determined and mapped. Known dens, if found occurring within the footprint of the activity, will be monitored for three days with tracking medium to determine the current use. If San Joaquin kit fox activity is observed at the den during this period, the den will be monitored for at least five consecutive days from the time of the observation to allow any resident animals to move to another den during its normal activity.

- Caltrans will submit to the U.S. Fish and Wildlife Service written results of the preconstruction survey within five days after survey completion and prior to the start of ground disturbance and/or construction activities. Caltrans will immediately notify the U.S. Fish and Wildlife Service if the preconstruction/preactivity survey reveals an active natal pupping den or new information regarding kit fox presence within 200 feet of the project boundary.
- Prior to ground breaking, a U.S. Fish and Wildlife Service-approved biologist will conduct an environmental education and training session for all construction personnel.
- Project employees will be directed to exercise caution when driving within the project area. A 20-mile-per-hour speed limit will be strongly encouraged within the project site. Cross-country travel by vehicles will be prohibited outside of the proposed areas of disturbance, unless authorized by U.S. Fish and Wildlife Service. Project employees shall be provided with written guidance governing vehicle use, speed limits on unpaved roads, fire prevention, and other hazards. Construction activity will be confined within the project site, which may include temporary access roads and staging areas specifically designated and marked for these purposes.
- A litter control program shall be instituted at each project site. No canine or feline pets or firearms (except for law enforcement officers and security personnel) will be permitted on construction sites in order to avoid harassment, killing, or injuring of San Joaquin kit fox.
- Maintenance and construction excavations greater than 2 feet deep will be covered (for example, with plywood, sturdy plastic, steel plates, or equivalent), filled in at the end of each working day, or have earthen escape ramps no greater than 200 feet apart to prevent trapping kit fox.
- The resident engineer or their designee will be responsible for implementing these conservation measures and shall be the point of contact.

- All grindings and asphaltic-concrete waste will be stored within previously disturbed areas absent of habitat and at a minimum of 150 feet from any culvert, wash, pond, vernal pool, or stream crossing.
- Restoration and revegetation work associated with temporary impacts will be done using California endemic plants appropriate for the location. To the maximum extent practicable, topsoil shall be removed, cached, and returned to the site according to successful restoration protocols. Loss of soil from run-off or erosion will be prevented with straw bales, straw wattles, or similar means provided they do not entangle or block escape or dispersal routes of kit foxes.
- The project construction area will be delineated with high visibility temporary fencing, flagging, or other barrier to prevent encroachment of construction personnel and equipment onto any sensitive areas during project work activities. Such fencing will be inspected and maintained daily until completion of the project and will be removed only when all construction equipment is removed from the site. No project activities will occur outside the delineated project area.

Invasive Species

- During construction, Caltrans will ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.
- Construction equipment shall be inspected before entering the construction site. If necessary, wash stations onsite shall be established for construction equipment to avoid/minimize the spread of invasive plants and/or seed within the construction area.
- Invasive plants in the project site removed during construction shall be properly disposed offsite. No species on the California Invasive Plant Council Invasive Plant Inventory shall be included in the erosion control seed mix or landscaping plans for the project.

List of Technical Studies

Air and Noise Studies Memorandum—March 2018

Water Quality Assessment Memorandum—March 2018

Hazardous Waste Memorandum—July 2016

Paleontology Assessment Memorandum—March 2018

Natural Environment Study—April 2020

Visual Impact Assessment—May 2018

Historical Property Survey Report—April 2020

Cumulative Impacts Assessment – March 2020

Climate Change Memorandum – May 2020

To obtain a copy of one or more of these technical studies/reports or the Initial Study/Environmental Assessment, please send your request to the following email address: d5.public.info@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).