Metal Beam Guardrail Upgrades

Along State Routes 108, 120, and 49
within Stanislaus and Tuolumne Counties
10-STA-108/120-PM 28.5-33.4, 12.22
10-TUO-108/120/49-PM R0.97-53.03, 6.01-11.29, 17.6
EA 10-1C400 and Project ID 1017000025
State Clearinghouse Number 2020070118

Initial Study
with Mitigated Negative Declaration

Prepared by the
State of California Department of Transportation

September 2020

Caltrans

General Information About This Document

This section has been updated since the circulation of the draft environmental document. The California Department of Transportation (Caltrans) has prepared this Initial Study with Mitigated Negative Declaration for the project in Stanislaus County and Tuolumne County in California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, what alternatives have been considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

The Initial Study circulated to the public for 30 days from July 8, 2020, to August 7, 2020. Comments received during that period are included in Appendix C. Language has been added to indicate where a change has been made since the circulation of the draft environmental document. Minor editorial changes and clarifications have not been so indicated.

Please contact C. Scott Guidi at 209-990-5719 or by email at Scott.Guidi@dot.ca.gov if you would like a printed version or compact disc of this document or related technical studies to be sent to your home address. This document may be downloaded at the following website: https://dot.ca.gov/caltrans-near-me/district-10.

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Scott Guidi, 1976 East Charter Way, Stockton, California 95205; 209-990-5719 (Voice), or use the California Relay Service 1-800-735-2929 (TTY), 1-800-735-2929 (Voice), or 711.

SCH Number 2020070118
10-STA-108/120-28.5-33.4, 12.22
10-TUO-108/120/49-R0.97-53.03, 6.01-11.29, 17.6
EA 10-1C400 and Project ID Number 1017000025

Upgrade metal beam guardrails along State Routes 108 and 120 in Stanislaus County and State Routes 108, 120, and 49 within Tuolumne County

INITIAL STUDY
with Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation

Philip Vallejo

Philip Vallejo
Environmental Office Chief, North
California Department of Transportation
CEQA Lead Agency

9/16/2020
Date

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

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Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) will upgrade the existing metal beam guardrails to the Midwest Guardrail System to meet the current standards. Upgrades will occur in Stanislaus County along State Route 108 from post mile 28.5 to post mile 33.4 and State Route 120 at post mile 12.22 and within Tuolumne County along State Route 108 from post mile R0.97 to post mile 53.03, State Route 120 from post mile 6.01 to post mile 11.29, and State Route 49 at post mile 17.6.

Determination

The following paragraph was updated after the circulation of the draft environmental document. Caltrans has prepared an Initial Study for this project and, following public review, has determined from this study that the project will not have a significant effect on the environment for the following reasons:

- The project will have no effect on: aesthetics, agriculture and forest resources, air quality, cultural resources, energy, geology and soils, emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, or wildfire.
- The project will have no significant effect on greenhouse gas emissions.
- The project will have no significantly adverse effect on biological resources such as riparian habitat and valley elderberry longhorn beetle habitat because the following avoidance, minimization, and mitigation measures will reduce potential effects to insignificance:
    - Various avoidance and minimization measures such as surveys, erosion control measures, and pre-construction training will be implemented for threatened and endangered species.
    - The purchase of offsite mitigation credits and perform an onsite or offsite restoration.

Philip Vallejo

Philip Vallejo
Environmental Office Chief, North
California Department of Transportation

9/16/2020

Date

Section 1 Project Description and Background

1.1 Project Title

Metal Beam Guardrail Upgrades within Stanislaus County and Tuolumne County along State Routes 108, 120, and 49.

1.2 Project Locations

The project will take place in Stanislaus County along State Route 108 from post mile 28.5 to post mile 33.4 and State Route 120 at post mile 12.22 and Tuolumne County along State Route 108 from post mile R0.97 to post mile 53.03, State Route 120 from post mile 6.01 to post mile 11.29, and State Route 49 in Tuolumne County at post mile 17.6. See Figure 1 for the project vicinity map and Figure 2 for the project location map.

Figure 1 Project Vicinity Map

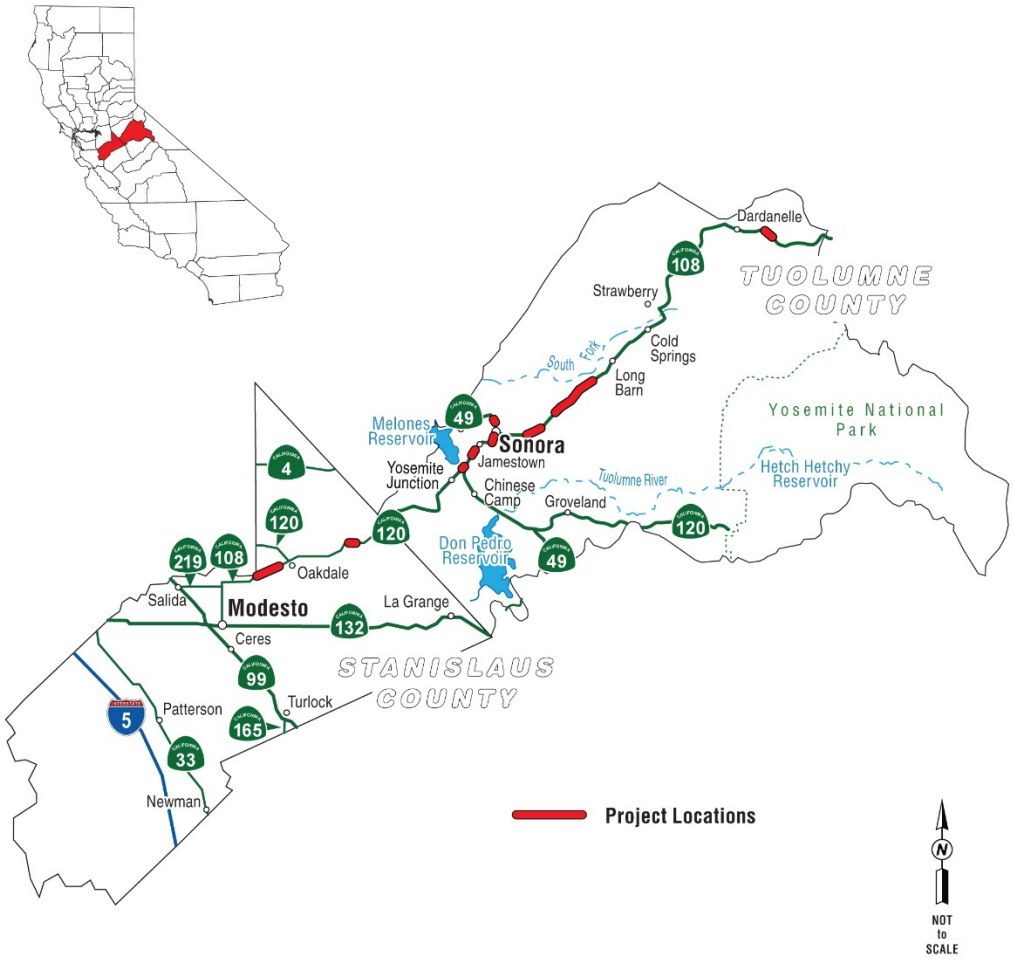
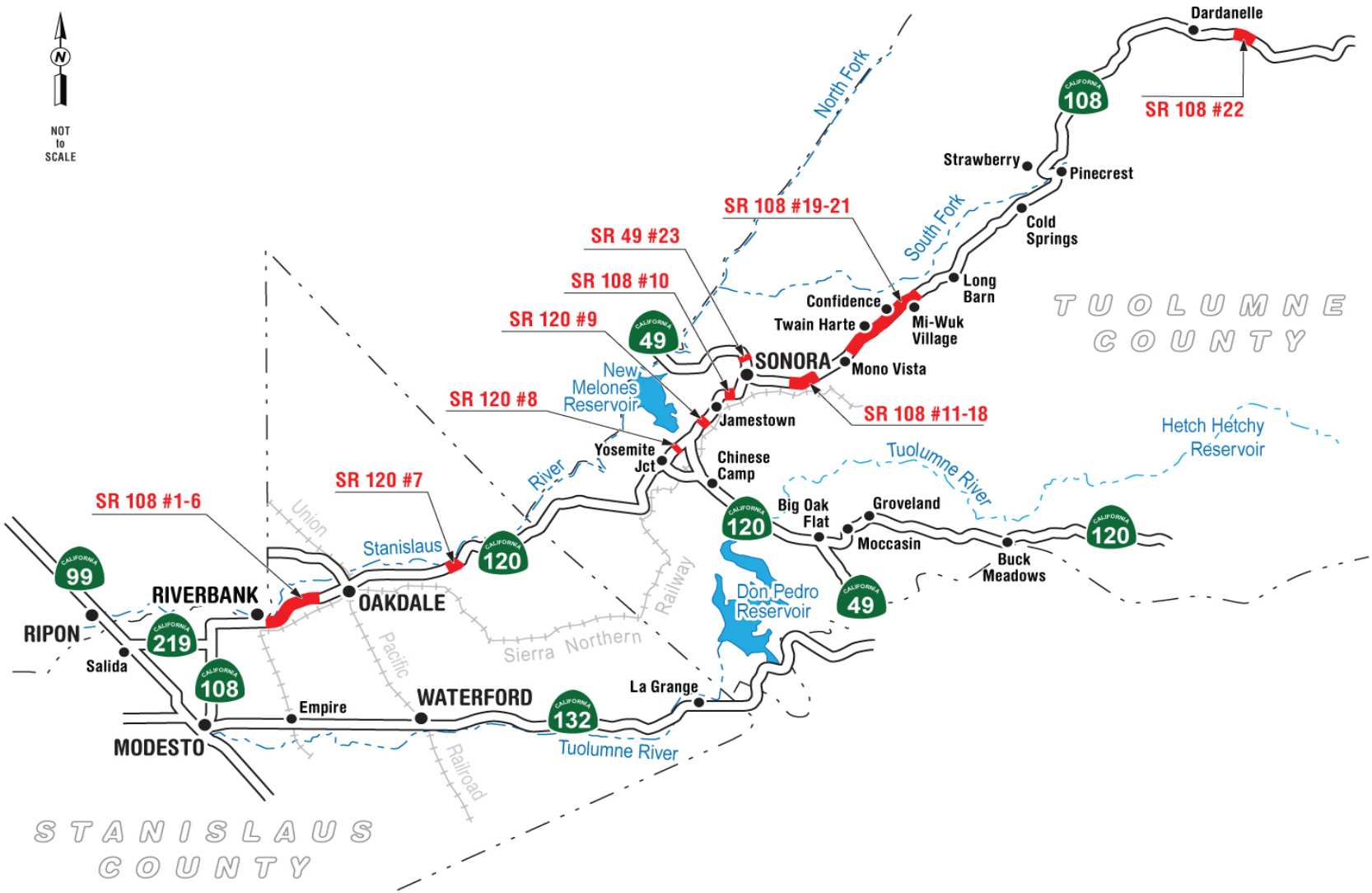


Figure 2 Project Location Map



1.3 Description of Project

The California Department of Transportation (Caltrans) will upgrade the existing metal beam guardrails to the Midwest Guardrail System to meet the current standards. The project aligns and meets the objectives of the Caltrans Highway Safety Implementation Program guidelines. The upgrades will be built in various locations in Stanislaus County along State Route 108 from post mile 28.5 to post mile 33.4 and State Route 120 at post mile 12.22 and Tuolumne County along State Route 108 from post mile R0.97 to post mile 53.03, State Route 120 from post mile 6.01 to post mile 11.29, and State Route 49 at post mile 17.6. The project is needed to reduce the severity of collisions and roadway departure crashes.

Construction activities will be limited to the disturbed road shoulders and pullouts within Caltrans' right-of-way. After completion of construction activities, temporarily disturbed areas will be restored to pre-project conditions. The following summarizes the planned work for each location:

Location 1: Stanislaus County State Route 108 Post Mile 28.5

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 2: Stanislaus County State Route 108 Post Mile 29.9

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 3: Stanislaus County State Route 108 Post Mile 30.5

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 4: Stanislaus County State Route 108 Post Mile 32.1

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 5: Stanislaus County State Route 108 Post Mile 33.3

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.

- Drilling or pile driving equipment will be used.

Location 6: Stanislaus County State Route 108 Post Mile 33.4

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 7: Stanislaus County State Route 120 Post Mile 12.22

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 8: Tuolumne County State Route 120 Post Mile 6.01

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 9: Tuolumne County State Route 120 Post Mile 11.29

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 10: Tuolumne County State Route 108 Post Mile L1.28

- Replacing flared Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 11: Tuolumne County State Route 108 Post Mile R0.97

- Replacing two flared terminal systems with two in-line terminal systems.
- Drilling or pile driving equipment will be used.

Location 12: Tuolumne County State Route 108 Post Mile R2.02

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 13: Tuolumne County State Route 108 Post Mile R2.20

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.

- Drilling or pile driving equipment will be used.

Location 14: Tuolumne County State Route 108 Post Mile R2.78

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 15: Tuolumne County State Route 108 Post Mile R3.45

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 16: Tuolumne County State Route 108 Post Mile R4.50

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 17: Tuolumne County State Route 108 Post Mile R5.07

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 18: Tuolumne County State Route 108 Post Mile 7.81

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 19: Tuolumne County State Route 108 Post Mile R11.3

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 20: Tuolumne County State Route 108 Post Mile R11.8

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 21: Tuolumne County State Route 108 Post Mile 15.5

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

Location 22: Tuolumne County State Route 108 Post Mile 53.03

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.
- Building a standard end block extension to connect the Midwest Guardrail System to the bridge rail.

Location 23: Tuolumne County State Route 49 Post Mile 17.6

- Removing existing metal beam guardrail.
- Replacing with Midwest Guardrail System.
- Drilling or pile driving equipment will be used.

1.3.1 Build Alternative

The existing metal beam guardrails will be removed at 23 identified locations in Stanislaus County and Tuolumne County along State Routes 108, 120, and 49. Twenty-one locations will have the existing metal beam guardrail system replaced with the Midwest Guardrail System. The flared Midwest Guardrail System will be replaced at Location 10, and two flared terminal systems will be replaced with two in-line terminal systems at Location 11.

1.3.2 No-Build (No-Action) Alternative

If no action is taken and the project is not built, the metal beam guardrails at each project location will continue to be obsolete and not meet the Midwest Guardrail System's current standards.

1.3.3 Identification of a Preferred Alternative

Section 1.3.3 was added after the circulation of the draft environmental document. The draft environmental document was circulated for public review and comment. All comments have been considered, and Caltrans has identified the Build Alternative as the preferred alternative. The No-Build (No-Action) Alternative was not chosen because it does not meet the purpose and need of the project.

1.4 Surrounding Land Uses and Setting

The project locations range from the town of McHenry in Stanislaus County to the town of Dardanelle in Tuolumne County. The project area is mostly rural

and consists of native and non-native plant species, dirt, and pavement, as well as several ephemeral and intermittent drainages flowing through cross culverts under the paved way. Project Locations 1 through 7 are within the Central Valley, project Locations 8 through 18, and 23 are in the Sierra foothills, and project Locations 19 through 22 are in the Sierra Nevada Mountains. The project area's physical conditions vary greatly based on their geographic locations. The description of physical conditions is divided into the valley, foothill, and mountain regions. Nearby habitats consist of woody riparian vegetation, native and non-native grasslands, and wetlands. (Natural Environment Study, July 2020)

1.5 Other Public Agencies Whose Approval is Required

Agency	Permit/Approval	Status
California Department of Fish and Wildlife	California Fish and Game Code Section 1600: Lake or Streambed Alteration Agreement	An application for the 1600 permit will be submitted during the Plans, Specifications, and Estimates phase of the project.
U.S. Fish and Wildlife Service	Endangered Species Act Section 7: Biological Opinion or Letter of Concurrence	Formal consultation began on February 11, 2020, for a "not likely to adversely affect" determination. A letter of concurrence was received on July 15, 2020.
Central Valley Regional Water Quality Control Board	Clean Water Act Section 402: National Pollutant Discharge Elimination System Permit	An application for the permit will be submitted during the Plans, Specifications, and Estimates phase of the project.

Section 2 CEQA Environmental Checklist

2.1 CEQA Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the 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.

2.1.1 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?

No Impact—The project work areas are not eligible as scenic highway resources per the database of listed eligible California State Scenic Highways. The project work will not result in substantial adverse impacts to scenic resources. (Scenic Resource Evaluation, 2019)

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

No Impact—The project will not substantially damage scenic resources, including trees, rock outcroppings, and historic buildings within a state scenic highway. (Scenic Resource Evaluation, 2019)

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—The project will not substantially degrade the existing visual character or quality of public views and will not conflict with applicable zoning and other regulations governing scenic quality. (Scenic Resource Evaluation, 2019)

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

No Impact—The project will not create a new source of substantial light or glare that will adversely affect daytime or nighttime views.

2.1.2 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—The project locations are not on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). All project locations are within a Caltrans right-of-way.

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

No Impact—Land directly next to the highways at all 23 project locations is not in conflict with existing zoning for agricultural use and is not under a Williamson Act contract.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined

by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact—No right-of-way is being acquired for this project; therefore, the project will not conflict with existing zoning regulations.

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

No Impact—The project will not result in the loss of forest land or convert any forest land to non-forest use.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact—The project will only improve or upgrade existing facilities, which will not encourage additional land conversion or rezoning of agricultural or forest land.

2.1.3 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—The project will not conflict with or obstruct the implementation of any applicable air quality plan. Construction emissions, including construction equipment exhaust and windblown dust, will be managed in the construction contract per the provisions of Caltrans Standard Specifications, Section 14-9.02, “Air Pollution Control” and Section 10-5, “Dust Control.” (Air Study, November 2019)

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—The project will not result in cumulatively considerable net increases of any criteria pollutants because the project is not capacity-increasing and temporary construction emissions will be minimized per Caltrans’ Standard Specifications. (Air Study, November 2019)

c) Expose sensitive receptors to substantial pollutant concentrations?

No Impact—The project will not expose sensitive receptors to substantial pollutant concentrations. Construction-related impacts will be minimized per Caltrans Standard Specifications, Section 14-9.02, “Air Pollution Control” and 10-5, “Dust Control” and Best Management Practices. (Air Study, November 2019)

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

No Impact—The project will not produce emissions that will adversely affect a substantial number of people. Construction-related impacts will be minimized with Caltrans Standard Specifications, Section 14-9.02, “Air Pollution Control,” and 10-5, “Dust Control.” (Air Study, November 2019)

2.1.4 Biological Resources

This section has been updated since the draft environmental document completed circulation to include updated avoidance, minimization, and mitigation measures. In July 2020, the U.S. Fish and Wildlife Service requested that Caltrans provide more specificity to the avoidance, minimization, and mitigation measures presented in the 2019 Natural Environment Study. As requested, the 2019 Natural Environment Study was updated (2020 Natural Environment Study) with more precise measures, which were reorganized to reflect the guidance and suggestions from the U.S. Fish and Wildlife Service’s response letter. The updated measures have been added below. (Note: These revisions did not change the significance determinations discussed in the draft environmental document.)

CEQA Significance Determinations for Biological Resources

A detailed discussion on the impacts to biological resources caused by project construction is provided in the 2020 Natural Environment Study. Please refer to Appendix B for further information on the avoidance, minimization, and/or mitigation measures.

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?

Valley Elderberry Longhorn Beetle

Less Than Significant with Mitigation Incorporated—The valley elderberry longhorn beetle may occur in the project vicinity. Biologists surveyed for the valley elderberry longhorn beetle and identified potential habitat at Locations 5, 6, 7, and 10. There are no California Natural Diversity Database occurrences for the valley elderberry longhorn beetle within the project area.

The implementation of avoidance, minimization, and mitigation measures identified in the 2020 Natural Environment Study will ensure construction activities will avoid, minimize, and mitigate impacts to valley elderberry longhorn beetles and their habitat to a less than significant impact. These measures include the following:

- **Measure 1:** Conduct environmental awareness training for construction personnel.
- **Measure 2:** Install fencing and/or flagging to protect sensitive biological resources.
- **Measure 3:** Retain an agency-approved biologist to conduct pre-construction clearance surveys. The biologist will also conduct periodic monitoring during construction in sensitive habitats.
- **Measure 9:** Conduct a pre-construction elderberry shrub survey.
- **Measure 10:** Flag elderberry shrubs within 20 feet of project construction.
- **Measure 11:** Maintain a 20-foot avoidance buffer from the dripline of elderberry shrubs to be avoided.
- **Measure 12:** Restrict construction activities near elderberry shrubs to the non-flight period (August through February), as feasible.
- **Measure 13:** Conduct elderberry shrub trimming during the dormant period (November through February), as feasible.
- **Measure 14:** Avoid using herbicides and insecticides within 100 feet of elderberry shrubs.
- **Measure 15:** Restrict mechanical weed removal around elderberry shrubs.
- **Measure 16.** Revegetate disturbed areas around elderberry shrubs.
- **Measure 17:** Compensate for permanent impacts to valley elderberry longhorn beetle habitat.

A detailed discussion of the avoidance, minimization, and mitigation measures mentioned above is provided in Appendix B.

Burrowing Owl, Swainson's Hawk, Northern Goshawk, Bald Eagle, Great Gray Owl, and California Spotted Owl

Less Than Significant Impact—A biologist surveyed for the burrowing owl, Swainson's hawk, northern goshawk, bald eagle, great gray owl, and California spotted owl, which may occur in the project vicinity.

Burrowing owl—The project falls within the range of the burrowing owl. Burrowing owl surveys were conducted between April and October 2019. No burrowing owls were seen during these field surveys. However, to ensure that the project will have no significant adverse effect on burrowing owls, Caltrans

will include avoidance and minimization measures identified in the 2020 Natural Environment Study in the construction contract. These measures include the following:

- **Measure 1:** Conduct worker environmental awareness training for construction personnel.
- **Measure 2:** Install fencing and/or flagging to protect sensitive biological resources.
- **Measure 3:** Retain an agency-approved biologist to conduct pre-construction clearance surveys. The biologist will also conduct periodic monitoring during construction in sensitive habitats.
- **Measure 25:** Conduct pre-construction surveys for burrowing owls and establish exclusion zones, if necessary.

A detailed discussion of these avoidance and minimization measures is provided in Appendix B.

Swainson's hawk—Project activities are not expected to remove or disturb potential nest sites because nesting habitat is not present within the permanent and temporary impact area. If nests were to occur within 0.5 mile of the project, construction disturbances, such as increased noise or human activity and presence during the breeding season, may result in nest abandonment and loss of eggs or young Swainson's hawks.

To ensure that the project will have no significant adverse effect on Swainson's hawks, Caltrans will include avoidance and minimization measures identified in the 2020 Natural Environment Study in the construction contract. These include the following:

- **Measure 1:** Conduct worker environmental awareness training for construction personnel.
- **Measure 2:** Install fencing and/or flagging to protect sensitive biological resources.
- **Measure 3:** Retain an agency-approved biologist to conduct pre-construction clearance surveys. The biologist will also conduct periodic monitoring during construction in sensitive habitats.
- **Measure 26:** Conduct pre-construction surveys for nesting migratory birds and raptors, including special-status species, and establish protective buffers.

A detailed discussion of these avoidance and minimization measures is provided in Appendix B.

Northern goshawk—Project Locations 21 and 22 may support suitable nesting and foraging habitat for the northern goshawk. The California Natural Diversity Database identifies northern goshawk occurrences about 1 mile

north of Location 21, and 1.5 miles southeast from Location 22. All remaining locations were determined to be unsuitable for nesting and foraging habitat. Field surveys for northern goshawks were conducted from April to October 2019. No northern goshawks were seen at any location.

To ensure that the project will have no significant adverse effect on the northern goshawk, Caltrans will include avoidance and minimization measures identified in the 2020 Natural Environment Study in the construction contract. These measures include the following:

- **Measure 1:** Conduct worker environmental awareness training for construction personnel.
- **Measure 2**: Install fencing and/or flagging to protect sensitive biological resources.
- **Measure 3:** Retain an agency-approved biologist to conduct pre-construction clearance surveys. The biologist will also conduct periodic monitoring during construction in sensitive habitats.
- **Measure 26:** Conduct pre-construction surveys for nesting migratory birds and raptors, including special-status species, and establish protective buffers.

A detailed discussion of these avoidance and minimization measures is provided in Appendix B.

Bald eagle—The project area is within the current nesting range for the bald eagle. Per the California Department of Fish and Wildlife's California Natural Diversity Database, the closest bald eagle nesting territory is 2.5 miles east of project Location 10. Bald eagles were not seen during the field surveys conducted between April and October 2019.

To ensure that the project will have no significant adverse effect on the bald eagle, Caltrans will include avoidance and minimization measures identified in the 2020 Natural Environment Study in the construction contract. These measures include the following:

- **Measure 1:** Conduct worker environmental awareness training for construction personnel.
- **Measure 2**: Install fencing and/or flagging to protect sensitive biological resources.
- **Measure 3:** Retain an agency-approved biologist to conduct pre-construction clearance surveys. The biologist will also conduct periodic monitoring during construction in sensitive habitats.
- **Measure 26:** Conduct pre-construction surveys for nesting migratory birds and raptors, including special-status species, and establish protective buffers.

A detailed discussion of these avoidance and minimization measures is provided in Appendix B.

Great gray owl—Locations 16 through 22 are within the great gray owl's elevational range in the Sierra Nevada foothills. No focused great gray owl surveys were conducted for this project, and when performing raptor surveys, no large stick nests were seen in trees within or with the line of sight from the project location areas.

To ensure that the project will have no significant adverse effect on the great gray owl, Caltrans will include avoidance and minimization measures identified in the 2020 Natural Environment Study in the construction contract. These measures include the following:

- **Measure 1:** Conduct worker environmental awareness training for construction personnel.
- **Measure 2**: Install fencing and/or flagging to protect sensitive biological resources.
- **Measure 3:** Retain an agency-approved biologist to conduct pre-construction clearance surveys. The biologist will also conduct periodic monitoring during construction in sensitive habitats.
- **Measure 26:** Conduct pre-construction surveys for nesting migratory birds and raptors, including special-status species, and establish protective buffers.

A detailed discussion of these avoidance and minimization measures is provided in Appendix B.

California spotted owl—All locations are within the current range of the California spotted owl. None of the locations overlap with any known California spotted owl protected activity centers. Trees within the locations do not provide a suitable nesting structure for California spotted owls; however, forested habitats next to the locations may support suitable nesting and foraging habitat.

To ensure that the project will have no significant adverse effect on the California spotted owl, Caltrans will include avoidance and minimization measures identified in the 2020 Natural Environment Study in the construction contract. These measures include the following:

- **Measure 1:** Conduct worker environmental awareness training for construction personnel.
- **Measure 2**: Install fencing and/or flagging to protect sensitive biological resources.
- **Measure 3:** Retain an agency-approved biologist to conduct pre-construction clearance surveys. The biologist will also conduct periodic monitoring during construction in sensitive habitats.

- **Measure 26:** Conduct pre-construction surveys for nesting migratory birds and raptors, including special-status species, and establish protective buffers.

A detailed discussion of these avoidance and minimization measures is provided in Appendix B.

California Tiger Salamander, California Red-Legged Frog, Foothill Yellow-Legged Frog, and Sierra Nevada Yellow-Legged Frog

Less Than Significant Impact—A biologist surveyed for California tiger salamanders, California red-legged frogs, foothill yellow-legged frogs, and Sierra Nevada yellow-legged frogs, which may occur in the project vicinity.

California tiger salamander—The project will not impact suitable upland habitat for California tiger salamanders because guardrail replacement activities will occur within disturbed roadside grassland and ruderal areas that do not contain mammal burrows suitable for California tiger salamanders. Direct impacts on potential aquatic breeding habitat for California tiger salamanders are not expected because there is no suitable habitat in the project area, and project activities will be more than 50 feet away from any potential aquatic breeding habitat.

To ensure that the project will have no significant adverse effect on the California tiger salamander, Caltrans will include avoidance and minimization measures identified in the 2020 Natural Environment Study in the construction contract. These measures include the following:

- **Measure 1:** Conduct worker environmental awareness training for construction personnel.
- **Measure 2:** Install fencing and/or flagging to protect sensitive biological resources.
- **Measure 3:** Retain an agency-approved biologist to conduct pre-construction clearance surveys. The biologist will also conduct periodic monitoring during construction in sensitive habitats.
- **Measure 18:** Properly dispose of food-related trash items and remove them from the project site daily.
- **Measure 19:** Prohibit pets and firearms from being brought into the project site.
- **Measure 20:** Submit biologist resumes to the U.S. Fish and Wildlife Service.
- **Measure 21:** Retain a U.S. Fish and Wildlife Service-approved biologist to conduct pre-construction surveys for California red-legged frogs and California tiger salamanders.

- **Measure 22:** Check for animals underneath construction equipment and vehicles before moving to another location.
- **Measure 23:** Install escape ramps in holes or trenches measuring more than 6 feet deep.
- **Measure 24:** Limit the use of artificial lighting.

A detailed discussion of these avoidance and minimization measures is provided in Appendix B.

California red-legged frog—The project will not impact suitable upland habitat for the California red-legged frog because guardrail replacement activities will occur within disturbed roadside grassland and ruderal areas that do not contain mammal burrows suitable for California red-legged frogs. Direct impacts to potential aquatic breeding habitat for California red-legged frogs are not expected because there is no suitable habitat in the project area, and project activities will be more than 50 feet away from any potential aquatic breeding habitat.

To ensure that the project will have no significant adverse effect on the California red-legged frog, Caltrans will include avoidance and minimization measures identified in the 2020 Natural Environment Study in the construction contract. These measures include the following:

- **Measure 1:** Conduct worker environmental awareness training for construction personnel.
- **Measure 2:** Install fencing and/or flagging to protect sensitive biological resources.
- **Measure 3:** Retain an agency-approved biologist to conduct pre-construction clearance surveys. The biologist will also conduct periodic monitoring during construction in sensitive habitats.
- **Measure 4:** Protect water quality and prevent erosion and sedimentation from occurring in aquatic habitat.
- **Measure 18:** Properly dispose of food-related trash items and remove them from the project site daily.
- **Measure 19:** Prohibit pets and firearms from being brought into the project site.
- **Measure 20:** Submit biologist resumes to the U.S. Fish and Wildlife Service.
- **Measure 21:** Retain a U.S. Fish and Wildlife Service-approved biologist to conduct pre-construction surveys for California red-legged frogs and California tiger salamanders.
- **Measure 22:** Check for animals underneath construction equipment and vehicles before moving to another location.

- **Measure 23:** Install escape ramps in holes or trenches measuring more than 6 feet deep.
- **Measure 24:** Limit the use of artificial lighting.

A detailed discussion of these avoidance and minimization measures is provided in Appendix B.

Foothill yellow-legged frog—The project will not impact suitable upland habitat for the foothill yellow-legged frog because guardrail replacement activities will occur within disturbed roadside grassland and ruderal areas that do not contain mammal burrows suitable for foothill yellow-legged frogs. Direct impacts to potential aquatic breeding habitat for foothill yellow-legged frogs are not expected because no impacts to Mountain Pass Creek at Location 9 and Eagle Creek at Location 22 are proposed within the project areas.

To ensure that the project will have no significant adverse effect on the foothill yellow-legged frog, Caltrans will include avoidance and minimization measures identified in the 2020 Natural Environment Study in the construction contract. These measures include the following:

- **Measure 1:** Conduct worker environmental awareness training for construction personnel.
- **Measure 2:** Install fencing and/or flagging to protect sensitive biological resources.
- **Measure 3:** Retain an agency-approved biologist to conduct pre-construction clearance surveys. The biologist will also conduct periodic monitoring during construction in sensitive habitats.
- **Measure 4:** Protect water quality and prevent erosion and sedimentation from occurring in aquatic habitat.
- **Measure 18:** Properly dispose of food-related trash items and remove them from the project site daily.
- **Measure 19:** Prohibit pets and firearms from being brought into the project site.
- **Measure 20:** Submit biologist resumes to the U.S. Fish and Wildlife Service.
- **Measure 22:** Check for animals underneath construction equipment and vehicles before moving to another location.
- **Measure 23:** Install escape ramps in holes or trenches measuring more than 6 feet deep.

A detailed discussion of these avoidance and minimization measures is provided in Appendix B.

Sierra Nevada Yellow-Legged Frog

Sierra Nevada yellow-legged frog—The project will not impact the Sierra Nevada yellow-legged frog because none of the locations support suitable habitat for the species. (2020 Natural Environment Study)

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated—Riparian habitat in the project area occurs along the banks, above the ordinary high-water mark of the Stanislaus River, Blitz Creek, Mountain Pass Creek, Eagle Creek, and Sonora Creek. The project area's riparian habitat primarily supports a vegetation community of valley oak, interior live oak, ponderosa pine, and willows. Implementation of the project may require pruning or removing small trees within the riparian habitat to access temporary work areas and to remove and install 23 metal beam guardrails.

To ensure that the project will have no significant adverse effect on riparian habitat or other natural communities identified by a regulating agency, Caltrans will include avoidance, minimization, and mitigation measures identified in the 2020 Natural Environment Study in the construction contract. These measures include the following:

- **Measure 1:** Conduct worker environmental awareness training for construction personnel.
- **Measure 2:** Install fencing and/or flagging to protect sensitive biological resources.
- **Measure 3:** Retain an agency-approved biologist to conduct pre-construction clearance surveys. The biologist will also conduct periodic monitoring during construction in sensitive habitats.
- **Measure 7:** Avoid and minimize potential disturbance of woody vegetation.
- **Measure 8:** Compensate for loss of riparian woodland.

A detailed discussion of the avoidance, minimization, and mitigation measures mentioned above is provided in Appendix B.

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—There were no federally protected wetlands identified within the project area. A survey of the project area identified two perennial streams, one intermittent stream, five ephemeral drainages, and three irrigation canals,

which were mapped as potential non-wetland waters of the U.S. under the U.S. Army Corps of Engineers' jurisdiction. Construction activities associated with the replacement of existing guardrails are not expected to impact non-wetland waters of the U.S. because all ground-disturbing activities will occur outside the ordinary high-water mark of the aquatic resources. No impacts to non-wetland waters of the U.S. are expected.

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—The project area does not contain any Essential Fish Habitat, and the project will not build or impose any new barriers to wildlife or fish movement. Work will be performed during the dry or low-flow period when the ephemeral or intermittent creeks will be inaccessible to fish for movement or nursery sites. There will be minimal vegetation and ground disturbance due to the nature of the work, and no impacts are expected to wildlife corridors. (2020 Natural Environment Study)

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

No Impact—The project will not violate local policies or ordinances because no significant impacts are expected to sensitive wildlife, fish, or plant species, and vegetation and tree removal will be kept to a minimum per Caltrans' Best Management Practices. Disturbed areas will be restored or revegetated onsite per the construction contract, which will be prepared in compliance with the goals and policies related to biological resources in local plans. (2020 Natural Environment Study)

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—The project will not conflict with any applicable habitat or natural community conservation plans because all avoidance and minimization measures included in the construction contract will comply with local and regional resource plans. (2020 Natural Environment Study)

2.1.5 Cultural Resources

CEQA Significance Determinations for Cultural Resources

Would the project:

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

No Impact—All project locations were assessed, and no cultural resources were identified within or immediately next to the 23 site-specific project locations per Section 106. (Section 106 Compliance Memorandum, 2019)

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

No Impact—All project locations were assessed, and no cultural resources were identified within or immediately next to the 23 site-specific project locations per Section 106. (Section 106 Compliance Memorandum, 2019)

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

No Impact—All project locations were assessed, and no cultural resources were identified within or immediately next to the 23 site-specific project locations per Section 106. (Section 106 Compliance Memorandum, 2019)

2.1.6 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—Caltrans' standard conditions and Best Management Practices to avoid wasteful use of energy will be implemented during construction. This includes measures to avoid fuel waste by scheduling truck trips outside of peak morning and evening commute hours, avoiding equipment idling for more than 5 minutes where feasible, and maintaining equipment in proper working condition. (Climate Change and Greenhouse Gas Analysis, January 2020)

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

No Impact—The project will not conflict with or obstruct any state or local plans for renewable energy or energy efficiency because the work will not involve installing new facilities that consume energy. Construction activities will be conducted in a manner to conserve energy and avoid fuel waste per Caltrans' Best Management Practices. (Climate Change and Greenhouse Gas Analysis, January 2020)

2.1.7 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—The project is not near any fault zones; ground-disturbing activities will not be conducted more than 6 feet deep. (Alquist-Priolo Earthquake Fault Zoning Map, December 2019)

ii) Strong seismic ground shaking?

No Impact—The project will involve only minimal ground disturbance to replace existing guardrails in previously disturbed soil.

iii) Seismic-related ground failure, including liquefaction?

No Impact—The project will not cause enough ground shaking to cause liquefaction or seismic-related ground failure.

iv) Landslides?

No Impact—The project will not involve heavy ground disturbance or shaking on steeply sloped surfaces that will cause landslides.

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

No Impact—Because the project will improve existing facilities at or near surface level, no substantial soil erosion or loss of topsoil is expected. No excess soil will be generated, and all soil will be kept onsite.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact—The project is not on unstable soils and will not cause onsite or offsite soil disturbance because the project will replace and improve existing features.

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—The project is not on expansive soil and will involve improvements only to existing facilities on previously disturbed soil.

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

No Impact—The project will not produce wastewater because it will only improve and rehabilitate existing facilities.

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

No Impact—The project will involve only minor soil disturbance and will not disturb the original ground for most of the project length. While some soil disturbance will be necessary to replace or install guardrail posts, no unique paleontological or geologic features were on record. (Paleontological Resource Memorandum, December 2019)

2.1.8 Greenhouse Gas Emissions

CEQA Significance Determinations for Greenhouse Gas Emissions

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact—The project is non-capacity increasing and is not expected to change highway usage patterns. As such, the project will not produce any operational greenhouse gas emissions. Project construction will produce an estimated 77 U.S. tons of carbon dioxide over a three-month work period. To minimize the impacts from these temporary emissions, Caltrans' standard conditions and Best Management Practices will be implemented. This will include measures to avoid idling construction equipment for more than 5 minutes when feasible, schedule truck trips outside of peak commute hours, reduce construction waste and maximize the use of recycled materials, and encourage construction personnel to improve the fuel efficiency of construction equipment. (Climate Change and Greenhouse Gas Analysis, January 2020)

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

Less Than Significant Impact—The project is not expected to conflict with any applicable greenhouse gas reduction plan, policy, or regulation. The project complies with Caltrans policy and Executive Order B-30-15 and will incorporate the above-listed measures to reduce greenhouse gas emissions from the project in pursuit of statewide and agency goals. (Climate Change and Greenhouse Gas Analysis, January 2020)

2.1.9 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—The project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (Initial Site Assessment, November 2019)

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—The project is unlikely to disturb any hazardous materials. The construction contract will include Caltrans' Standard Special Provisions to manage lead and wood waste, as well as a lead compliance plan to minimize any risk of an accidental release of hazardous materials into the environment. (Initial Site Assessment, November 2019)

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—The project will not emit hazardous materials within one-quarter mile of an existing or proposed school because no excess soil will be generated, and all hazardous materials will be managed securely per the lead compliance plan included in the construction contract. (Initial Site Assessment, November 2019)

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—The project area does not include any leaking underground storage tanks or hazardous materials sites. (Initial Site Assessment, November 2019)

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact—The project area is not managed under an airport land use plan, and the work will not result in a safety hazard or excessive noise impacts for residents within 2 miles of a public airport.

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

No Impact—The project will not impair emergency response or emergency evacuation plans in the project vicinity, and any road closures or detours will be coordinated with emergency response personnel to ensure minimal interruption to services.

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

No Impact—The project area is within the moderate to high fire hazard severity zones as cataloged in the 2007 California Department of Forestry and Fire Protection Fire Hazard Severity Zones in the State Responsibility Area map for Mariposa County. However, the construction contract will include Caltrans' Best Management Practices to ensure that the work will minimize any fire risks during construction, including measures to prevent smoking and other potential fire risks onsite.

2.1.10 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 water or groundwater quality?

No Impact—The project will not violate water quality or waste discharge requirements. Any waste produced during construction will be safely stored and managed per Caltrans' standard conditions and Best Management Practices. Clean Water Act Sections 401 and 404 permit consultation will be performed with the U.S. Army Corps of Engineers and California Regional Water Quality Control Board to ensure compliance with water quality standards during construction. (Water Quality Study, November 2019)

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—The project is not expected to have any long-term impact on water quality or interfere with groundwater recharge. (Water Quality Study, November 2019)

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation onsite or offsite;

No Impact—Because the project will upgrade the existing metal beam guardrails, it will not result in substantial erosion or siltation onsite or offsite. (Water Quality Study, November 2019)

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

No Impact—The project will upgrade the existing metal beam guardrails and will not increase the flood risk from surface runoff. (Water Quality Study, November 2019)

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—Because the project does not involve building new facilities that will serve as sources or contributors to runoff, no adverse effects on drainage capacity are expected. (Water Quality Study, November 2019)

iv) Impede or redirect flood flows?

No Impact—Because the project will upgrade the existing metal beam guardrails, it will not impede or redirect flood flows. (Water Quality Study, November 2019)

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

No Impact—The project will not risk the release of pollutants if inundated because it will rehabilitate existing infrastructure in the area. No hazardous materials or pollutants will be introduced during construction that will constitute a pollution risk in the event of a flood. (Initial Site Assessment, November 2019)

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

No Impact—The project will not conflict with or obstruct implementation of any water quality control plans or groundwater management plans because it will not cause any increase in demand for water. The work will improve existing infrastructure and will not build new facilities or pavement that may prevent groundwater recharge. (Water Quality Study, November 2019)

2.1.11 Land Use and Planning

CEQA Significance Determinations for Land Use and Planning

Would the project:

a) Physically divide an established community?

No Impact—The project will not physically divide an established community because it will only improve and rehabilitate existing facilities. One-way traffic control will also be implemented to minimize barriers to traffic during the construction period. (Stanislaus County General Plan August 2016, and Tuolumne County General Plan December 2018)

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—The project will not cause significant environmental impacts due to conflicts with existing land use plans, policies, or regulations.

2.1.12 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—There are no known valuable mineral resources in the project area that the project will potentially make unavailable. (Department of Conservation Maps: Minerals and Resources 2019)

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—The project is on a Caltrans right-of-way and, therefore, will not impact any important mineral resource recovery site.

2.1.13 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—The project will generate only short-term, intermittent construction noise in the area. Caltrans Standard Specifications Section 14-8.02, “Noise Control,” will be included in the construction contract to minimize noise to comply with local, state, and federal regulations. (Noise Study, November 2019)

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

No Impact—Project construction will not generate excessive groundborne vibration or groundborne noise levels.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact—The project is not within 2 miles of an airport or an area with an applicable airport land use plan.

2.1.14 Population and Housing

CEQA Significance Determinations for Population and Housing

Would the project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact—The project is not expected to have any substantial impact on local population growth.

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

No Impact—Because the project will involve only improving existing infrastructure, it will not involve acquiring housing or displacing residents.

2.1.15 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?

Police protection?

Schools?

Parks?

Other public facilities?

No Impact—The project will not significantly impede or impact public services in the project area. Construction area signs will be posted to alert the public in advance of any lane closures, and one-way traffic control will be used to avoid full road closures. Emergency service providers such as firefighters and police officers will also be notified in advance of Caltrans' traffic control plans to ensure they can plan routes and avoid interruptions to their response times.

2.1.16 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—The project is not expected to significantly affect demand for or use of recreational facilities in the surrounding area because it will only improve existing infrastructure. (Section 4(f) No Effect Memorandum, December 2019)

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—Because the project does not include building or expanding recreational facilities, it is not expected to impact the environment in this regard. (Section 4(f) No Effect Memorandum, December 2019)

2.1.17 Transportation

CEQA Significance Determinations for Transportation

Would the project:

a) Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

No Impact—The project will not conflict with Stanislaus County's or Tuolumne County's program plans, ordinances, or policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. (Stanislaus County General Plan August 2016, and Tuolumne County General Plan December 2018)

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

No Impact—The project will not increase vehicle miles traveled or auto trips and will not conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b).

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact—The project will not substantially increase hazards due to a geometric design feature or incompatible uses because the project involves rehabilitation and improvements to existing guardrails.

d) Result in inadequate emergency access?

No Impact—The project will not result in inadequate emergency access. During construction, traffic could be reduced to one lane, with traffic control, using a temporary traffic signal.

2.1.18 Tribal Cultural Resources

CEQA Significance Determinations for Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

No Impact—Native American consultation was performed and included a Sacred Lands File Search request with the California Native American Heritage Commission. Results indicated negative findings of cultural sensitivity for the project limits and areas. (Section 106 Compliance Memorandum, 2019)

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

No Impact—Within each of the 23 project locations, there were no identifiable archaeological sites. (Section 106 Compliance Memorandum, 2019)

2.1.19 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 stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No Impact—The project will involve upgrading metal beam guardrails to the Midwest Guardrail System for all 23 project locations. The project will not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, and will not cause significant environmental effects.

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

No Impact—The project will not require the use of water outside of existing entitlements.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact—The project is not expected to increase the demand for wastewater treatment because no new facilities are being installed that will produce additional wastewater.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact—The project is not expected to generate solid waste that exceeds state or local standards, or the capacity of local infrastructure. Caltrans' Best Management Practices for waste management will be included in the construction contract.

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

No Impact—The project will comply with all applicable laws and regulations regarding solid waste because Caltrans' Best Management Practices will be used to guide all waste management.

2.1.20 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—Because emergency service providers will be consulted regarding Caltrans' traffic control plans before construction to ensure minimal interruptions to emergency services, the project is not expected to substantially impair any adopted emergency plans.

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—Because the project scope primarily includes work on the roadway or nearby roadway, the project is not expected to pose a significant wildfire risk. Caltrans' Best Management Practices will be implemented to minimize the risk of wildfires starting or spreading. (California Fire Hazard Severity Zones Map, December 2019)

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—The project will not require installing or maintaining associated infrastructure that will exacerbate fire risk, or that may result in temporary or ongoing impacts to the environment.

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—The project will not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Ground disturbance will be minimal for this project because most of the work will be conducted in paved areas or previously disturbed soil. Negative impacts due to runoff, drainage changes, or slope stability are not expected.

2.1.21 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?

No Impact—With the implementation of avoidance and minimization measures that include Caltrans' Best Management Practices, Standard Specifications, Standard Special Provisions, Non-Standard Special Provisions, and mitigation measures, the project will not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species or cause a fish or wildlife population to drop below self-sustaining levels. The project will also not threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

No Impact—No cumulatively considerable impacts were identified for this project because the scope of work is to improve, rehabilitate, and replace existing infrastructure with no visible effect on future projects.

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

No Impact—The project will not have environmental effects that will cause substantial adverse effects on human beings. All impacts will be minimized to insignificance and will not significantly impact the environment or people in the surrounding area.

Appendix A Title VI Policy Statement

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

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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 B Avoidance, Minimization and Mitigation Measures

This section has been updated since the draft environmental document completed circulation to include updated avoidance, minimization, and mitigation measures. In July 2020, the U.S. Fish and Wildlife Service requested that Caltrans provide more specificity to the avoidance, minimization, and mitigation measures that are presented in the 2019 Natural Environment Study. As requested, the 2019 Natural Environment Study was updated (2020 Natural Environment Study) with more precise measures, which were reorganized to reflect the guidance and suggestions from the U.S. Fish and Wildlife Service's response letter. The updated measures have been added below. (Note: These revisions did not change the significance determinations discussed in the draft environmental document.)

Measure 1: Conduct worker environmental awareness training for construction personnel.

Before work starts, a U.S. Fish and Wildlife Service-approved biologist will conduct a worker environmental awareness training program for all construction personnel, including contractors, subcontractors, and contractors' representatives. The training program will cover the status of all listed species, how to identify these species and their habitats (including the valley elderberry longhorn beetle host plant), how to avoid impacts to the species (and to the host plant for the valley elderberry longhorn beetle), what to do if these species are encountered during construction activities and the laws that protect them. New construction personnel who are added to the project after the training is first conducted will also be required to take the training. Documentation of the training, including sign-in sheets, will be kept on file.

Measure 2: Install fencing and/or flagging to protect sensitive biological resources.

Before construction starts, high-visibility temporary fencing and/or flagging will be installed along the perimeter of the work area next to environmentally sensitive areas (e.g., riparian vegetation, downslope aquatic features, active bird nests). Caltrans will ensure that the final construction plans show the locations where the fencing and/or flagging will be installed and define the installation procedures. The U.S. Fish and Wildlife Service-approved biologist(s) will ensure that the fencing and/or flagging is maintained throughout construction and will be repaired or replaced if necessary. Fencing will be of an appropriate material that will not risk entangling the California tiger salamander, California red-legged frog, or other wildlife. All temporary fencing and/or flagging will be removed after construction is complete.

Measure 3: Retain an agency-approved biologist to conduct pre-construction clearance surveys. The biologist will also conduct periodic monitoring during construction in sensitive habitats.

Immediately before the start of groundbreaking at each guardrail location, the agency-approved biologist(s) will perform a clearance survey and demarcate where sensitive habitats are to be avoided. The biologist(s) will also conduct periodic monitoring during ground-disturbing activities that occur within, or next to, sensitive habitats (e.g., vegetation removal/trimming, grading, excavation). Additionally, the agency-approved biologist(s) will determine the appropriate timing and frequency of this monitoring in coordination with Caltrans (and with California Department of Fish and Wildlife Service, if necessary).

Measure 4: Protect water quality and prevent erosion and sedimentation from occurring in aquatic habitat.

Construction Site Best Management Practices that are consistent with the most recent Caltrans manuals (including the Construction Site Best Management Practices Manual and the Stormwater Pollution Prevention Plan and Water Pollution Control Program manuals) will be developed for the project and will be implemented throughout construction to avoid or reduce adverse effects to water quality.

Construction Site Best Management Practices associated with an erosion control plan will be prepared for avoiding discharge of pollutants from vehicle/equipment cleaning into aquatic and other sensitive habitats. Caltrans personnel and the contractor will perform routine inspections of the construction areas to verify that the Construction Site Best Management Practices are being properly implemented and maintained and are operating effectively as designed. A water quality inspector will inspect sites before and after a rain event to ensure that stormwater best practices are adequate.

a) Vehicle and equipment fueling, and maintenance operations will occur at least 50 feet away from water features, except at established commercial gas stations or vehicle maintenance facilities. All equipment will be maintained such that there will be no leaks of automotive fluids such as gasoline, oils, or solvents.

b) Water trucks and dust palliatives will be used to control dust in excavation and fill areas, and for covering temporary stockpiles of dirt or other loose construction materials when weather conditions require.

Measure 7: Avoid and minimize potential disturbances to woody vegetation.

Caltrans will avoid and minimize potential disturbances to woody vegetation in riparian and oak woodland communities by implementing the following measures:

a) The need for tree removal will be reduced, to the most feasible extent, by adjustment of guardrail locations, within the preestablished permanent impact area to avoid trees and their root systems.

b) The potential for long-term loss of woody vegetation will be minimized by trimming vegetation rather than removing entire trees or shrubs in areas where complete removal is not required. Trees or shrubs that need to be trimmed will be cut at least 1 foot above ground level to leave the root systems intact and allow for more rapid regeneration. Cutting will be limited to the minimum area necessary within the construction zone. To protect nesting birds, Caltrans will not allow pruning or removal of woody vegetation between February 1 and September 30 without pre-construction surveys. An arborist will be retained to monitor any necessary pruning or root cutting of retained trees, as necessary.

c) The areas that undergo vegetative pruning and tree removal will be inspected immediately before construction, immediately after construction, and 1 year after construction to determine the amount of existing vegetative cover, cover that has been removed, and cover that resprouts. After 1 year, if these areas have not resprouted sufficiently to return the cover to the pre-project level, Caltrans will replant the areas with appropriate native species to reestablish the cover to the pre-project condition.

Measure 8: Compensate for the loss of riparian woodland.

Caltrans will compensate for construction-related effects and loss of riparian habitat at a minimum ratio of 1 to 1—1 acre of mitigation for every 1 acre of riparian habitat removed. Final compensation ratios will be based on site-specific information and determined through coordination with the appropriate agencies during the permitting process.

Caltrans will implement onsite and, if necessary, offsite restoration measures and/or purchase mitigation bank credits to compensate for temporary and permanent losses of riparian habitat. Onsite restoration will be used to the maximum extent practicable. If onsite or offsite restoration/enhancement is not feasible, Caltrans will purchase mitigation bank credits at a locally approved bank, if one is available.

a) **Onsite and/or Offsite Restoration.** For onsite and/or offsite replacement plantings, Caltrans will employ a qualified restoration biologist to prepare a riparian restoration and monitoring plan that involves

restoring or enhancing riparian habitat in the Biological Study Area or elsewhere along the river channel. The restoration plan will include a site-specific plant and seed palette, planting locations, and maintenance requirements. The number of plantings will be adequate to ensure that the required mitigation ratio will be reached by the end of the monitoring period and that canopy cover and species composition requirements are met. Plant species composition will be based on native species that occur in and near the Biological Study Area and will be included in the plan. Plantings will consist of cuttings taken from local plants or plants grown from local seeds. As feasible, existing native vegetation from the affected sites should be harvested and maintained for replanting after construction.

Caltrans will implement the restoration plan and maintain plantings for up to 3 years or until established (including weed removal, irrigation, and herbivory protection). Plantings will be monitored annually for 3 years or as required in the project permits. Project-specific performance standards and success criteria (e.g., plant survival, vegetation cover) will be developed in coordination with resource agencies. If the success criteria are not met at the end of the monitoring period, the site will be evaluated to determine the cause, remedial measures will be implemented, and the monitoring period will be extended.

b) **Mitigation Bank Credit Purchase.** If this option is used, Caltrans will provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits. The amount to be paid will be the fee that is in effect at the time the fee is paid. The California Department of Fish and Wildlife will approve the mitigation, which may change during the permitting process. The California Department of Fish and Wildlife will also approve the final compensation ratio of restored or created riparian habitat for each acre of riparian habitat removed to result in no net loss of riparian habitat.

Measure 9: Conduct a pre-construction elderberry shrub survey.

Before the start of groundbreaking at guardrail Locations 1 through 10, within the range of the valley elderberry longhorn beetle, a U.S. Fish and Wildlife Service-approved biologist will conduct a pre-construction survey for elderberry shrubs within 165 feet of the project footprint of each site. If the surveys document the presence of any elderberry shrubs with stem diameters measuring greater than, or equal to, 1 inch that were not identified during the most recent previous surveys, Caltrans will update the Service with this information, and if necessary, will adjust its proposed compensatory mitigation accordingly (see Measure 17 below).

Measure 10: Flag elderberry shrubs within 20 feet of project construction.

All areas supporting elderberry shrubs that can be avoided will be fenced and/or flagged as close to the limits of the construction zone as possible. Elderberry shrubs that are situated up to 20 feet out from the limits of the project footprint will be flagged with a designated color, and their locations will be communicated to construction crews during the worker environmental awareness training.

Measure 11: Maintain a 20-foot avoidance buffer from the dripline of elderberry shrubs to be avoided.

Activities that may damage an elderberry shrub (e.g., trenching, removing guardrail) will maintain an avoidance area of at least 20 feet from the dripline of an elderberry shrub.

Measure 12: Restrict construction activities near elderberry shrubs to the non-flight period (August through February), as feasible.

To the extent feasible, activities that occur within 165 feet of an elderberry shrub will be conducted outside of the flight season of the valley elderberry longhorn beetle (flight season is about March through July).

Measure 13: Conduct elderberry shrub trimming during the dormant period (November through February) as feasible.

To reduce adverse effects to the valley elderberry longhorn beetle when trimming elderberry shrubs, trimming activities (particularly those at Locations 5 and 7) will occur between November and February when the shrub is dormant and will avoid removing any stems that are greater than, or equal to, 1 inch in diameter, to the extent possible. The U.S. Fish and Wildlife Service-approved biologist(s) will be present onsite to oversee all trimming activities.

Measure 14: Avoid using herbicides and insecticides within 100 feet of elderberry shrubs.

Herbicides will not be used within the dripline of an elderberry shrub and, insecticides will not be used within 100 feet of an elderberry shrub. If chemicals need to be applied to the right-of-way during construction, they will be applied using a backpack sprayer or a similar method of direct application.

Measure 15: Restrict mechanical weed removal around elderberry shrubs.

Mechanical weed removal within the dripline of an elderberry shrub will be restricted to the season when adult valley elderberry longhorn beetles are not

active (August through February), and will avoid damaging the elderberry shrub.

Measure 16: Revegetate disturbed areas around elderberry shrubs.

Disturbed areas around elderberry shrubs will be revegetated with appropriate native plants or grasses based on pre-project conditions.

Measure 17: Compensate for permanent impacts to valley elderberry longhorn beetle habitat.

Caltrans proposes to provide compensatory mitigation for the permanent disturbance of 0.11 acre of riparian habitat that supports elderberry shrubs within the range of valley elderberry longhorn beetles. Compensation will be accomplished by purchasing a total of 8.05 valley elderberry longhorn beetle credits at a U.S. Fish and Wildlife Service-approved conservation bank whose service area covers the project area, consistent with the U.S. Fish and Wildlife Service's 2017 Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle.

Measure 18: Properly dispose of food-related trash items and remove them from the project site daily.

All food-related trash items such as wrappers, cans, bottles, and food scraps generated by project-related activities and personnel will be disposed of in closed containers and removed daily from the project site to reduce the potential for attracting predator species.

Measure 19: Prohibit pets and firearms from being brought into the project site.

To eliminate the potential for disturbance or injury to, or death of, any species resulting from the presence of pets and firearms, neither (except for firearms carried by authorized law enforcement officials) will be allowed on the project site.

Measure 20: Submit biologist resumes to the U.S. Fish and Wildlife Service.

Before starting ground-disturbing activities and/or construction, Caltrans will submit to the service the names and qualifications of suitable individuals (e.g., resumes) for the service's approval to work as biologists and/or monitors on the project.

Measure 21: Retain a U.S. Fish and Wildlife Service-approved biologist to conduct pre-construction surveys for California red-legged frogs and California tiger salamanders.

No more than 14 days before the start of groundbreaking at guardrail Locations 8, 9, 15, and 17, within proximity to suitable aquatic habitat, service-approved biologist(s) will conduct a visual encounter pre-construction survey of each site for the California tiger salamander and California red-legged frog. The survey will pay particular attention to detecting any burrows, crevices, and other cover sites that could be used as refugia by the species. If any burrows are discovered, they will be flagged or otherwise marked and avoided.

Measure 22: Check for animals underneath construction equipment and vehicles before moving to another location.

Before being moved, vehicles and equipment will be checked for any California tiger salamanders, California red-legged frogs, or other sensitive wildlife sheltering underneath them. If an animal is seen, the vehicles and/or equipment will not be moved until the individual has left the area of its own accord.

Measure 23: Install escape ramps in holes or trenches measuring more than 6 feet deep.

To prevent the inadvertent entrapment of California tiger salamanders, California red-legged frogs, or other animals during construction, any excavated, steep-walled holes or trenches measuring more than 6 inches deep will either be covered at the close of each working day using plywood or similar materials (without openings) or will be provided with one or more escape ramps built out of earth fill or wooden planks if the holes/trenches cannot be fully covered. All holes or trenches will be checked daily for trapped wildlife; they will also be thoroughly inspected before being filled. If at any time a trapped animal is discovered, the U.S. Fish and Wildlife Service-approved biologist(s) will install escape ramps or other appropriate structures (if not already in place) to enable the individual the opportunity to escape on its own.

Measure 24: Limit the use of artificial lighting.

The use of temporary artificial lighting onsite will be limited, except when necessary for construction, or driver and pedestrian safety. Any artificial lighting used during construction will be confined to areas within the construction footprint and directed away from surrounding sensitive habitat. Caltrans will limit the nontarget casting of light by installing shields around the light source to further confine the illumination to minimize its effects on species.

Measure 25: Conduct pre-construction surveys for burrowing owls and establish exclusion zones, if necessary.

A qualified biologist will conduct two separate pre-construction surveys for burrowing owls. One will occur no less than 14 days before, and the other will occur within 48 hours of starting, ground-disturbing activities within suitable habitat. The pre-construction survey area will cover the designated work area (including permanent and temporary impact areas) and a 500-foot buffer around the area where access is allowed. Areas inaccessible by foot will be surveyed using binoculars. To the maximum extent feasible (i.e., where the construction footprint can be modified), construction activities within 500 feet of active burrowing owl burrows will be avoided during the nesting season (February 1 to August 31).

If an active burrow is identified near a proposed work area and work cannot be conducted outside of the nesting season (February 1 to August 31), a qualified biologist will establish a no-activity zone that extends a minimum of 250 feet around the burrow. If burrowing owls are present at the site during the non-breeding season (September 1 through January 31), a qualified biologist will establish a no-activity zone that extends a minimum of 150 feet around the burrow.

If a designated no-activity zone for breeding or non-breeding burrowing owls cannot be established, a wildlife biologist experienced in burrowing owl behavior will evaluate site-specific conditions and, in coordination with the California Department of Fish and Wildlife, recommend a smaller buffer (if possible) that still minimizes the potential to disturb burrowing owls (and is deemed to still allow reproductive success during the breeding season). The site-specific buffer will consider the type and extent of the proposed activity occurring near the occupied burrow, the duration and timing of the activity, the sensitivity and habituation of the burrowing owls, and the difference between the proposed activity and background activities.

If burrowing owls are present within the direct disturbance area and cannot be avoided during the non-breeding season (September 1 through January 31), passive relocation techniques (e.g., installing one-way doors at burrow entrances) will be used instead of trapping. Passive relocation techniques may also be used during the breeding season (February 1 through August 30) if a qualified biologist, in coordination with the California Department of Fish and Wildlife, determines through site surveillance that the burrow is not occupied by burrowing owl adults and/or young. Passive relocation will be accomplished by installing one-way doors (e.g., modified dryer vents or other California Department of Fish and Wildlife-approved methods). The one-way doors will be left in place for a minimum of 1 week and will be monitored daily to ensure that burrowing owls have left the burrow. The burrow will be excavated using hand tools, and a section of flexible plastic pipe (at least 3 inches in diameter) will be inserted into the burrow tunnel to maintain an

escape route for any animals that may be inside the burrow during burrow excavation.

Measure 26: Conduct pre-construction surveys for nesting migratory birds and raptors, including special-status species, and establish protective buffers.

Caltrans will retain a qualified wildlife biologist to conduct nesting bird surveys if construction occurs between February 1 and September 30. These nesting bird surveys will include a minimum of two separate surveys to look for active nests of migratory birds, including raptors. Surveys will include a search of all trees, shrubs, and ruderal areas that provide suitable nesting habitat for birds within 100 feet of construction disturbances. Additionally, a 0.5-mile area from the Biological Study Area will be surveyed for nesting raptors to identify raptors that might be affected by construction disturbances, particularly special-status raptors (i.e., Swainson's hawks, northern goshawks, great gray owls, bald eagles, and California spotted owls). The biologists conducting the surveys should have experience with all special-status birds that could potentially nest within the survey area. In areas where access is not allowed, the surveyors will use binoculars and spotting scopes to inspect any potential nest trees, particularly large trees and snags. Surveys should occur during the height of the breeding season (March 1 to June 1), with one survey occurring within 1 week before construction starts.

As Caltrans deems necessary, additional surveys may be conducted during the appropriate period to document special-status raptors. These surveys would include vocalization playback calls according to established survey protocols for great gray owls (Beck and Winter 2000), northern goshawks (U.S. Forest Service 2002), and California spotted owls (U.S. Fish and Wildlife Service 2012). The need for these types of surveys would be determined by the Caltrans biologist in coordination with the California Department of Fish and Wildlife during the spring/summer before construction starts to inform workers of the potential for these species to be present in or near guardrail locations. Full protocol surveys may not be warranted, and focused surveys may include a variation of the full protocol surveys. Positive detections may necessitate additional nest search surveys as determined by Caltrans.

If no special-status raptor species or active nests are detected during these surveys, no additional measures are required. If an active nest is found in the survey area, a non-disturbance buffer will be established to avoid disturbance or destruction of the nest site until the end of the breeding season (September 30) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the construction area (this date varies by species). The extent of these buffers will be determined by the Caltrans designated biologist in coordination with any applicable agencies (as determined by species) and will depend on the level of noise or construction

disturbance taking place, the line of sight between the nest and the disturbance, ambient levels of noise and other non-project disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species; however, a minimum of 50 feet for songbirds and 300 feet for raptors is typical.

Appendix C Comment Letters and Responses

This appendix was added after the draft environmental document completed circulation. This appendix contains the comments received during the public circulation and comment period from July 7, 2020, to August 8, 2020, retyped for readability. (Note: The comment letters are stated verbatim, with acronyms, abbreviations and any original grammatical or typographical errors.) A Caltrans response follows each comment presented.

Copies of the original comment letters and documents can be found in Volume 2 of this document.

On July 1, 2020, a Notice of Intent to Adopt a Mitigated Negative Declaration was published in five newspapers: *The Modesto Bee, Oakdale Leader, The Union Democrat, The Riverbank News, and The Escalon Times*.

Comment from: California Department of Fish and Wildlife

Comment 1:

August 4, 2020

Scott Guidi
California Department of Transportation, District 10
1976 East Dr. Martin Luther King Jr. Boulevard
Stockton, California 95205
scott.guidi@dot.ca.gov

Subject: Metal Beam Guardrail Upgrades Within Stanislaus and Tuolumne Counties Along State Route (SR) 108, SR 120, and SR 49 (Project) Initial Study with proposed Mitigated Negative Declaration State Clearinghouse No. 2020070118

Dear Mr. Guidi:

The California Department of Fish and Wildlife (CDFW) received a proposed Mitigated Negative Declaration (MND) and its supporting Initial Study (IS) prepared by the California Department of Transportation (Caltrans) for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines. [CEQA is codified in the California Public Resources Code in Section 21000 et seq. The “CEQA Guidelines” are found in Title 14 of the California Code of Regulations, commencing with section 15000].

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife.

Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code.

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statue for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

PROJECT DESCRIPTION SUMMARY

Proponent: Caltrans

Objective: Caltrans proposes to upgrade the existing guardrails at 23 identified locations in Stanislaus and Tuolumne Counties along SR 108, SR 120, and SR 49. All Project-related activities would be limited to the disturbed road shoulders and pullouts within Caltrans right-of-way. After completion of construction activities, temporarily disturbed areas would be restored to pre-project conditions.

The guardrail upgrade work would include 21 locations where the existing metal beam guardrail system will be replaced with the Midwest guardrail system. Location 10 will have the existing flared Midwest guardrail system replaced in kind, and Location 11 will have the two existing flared terminal systems replaced with two in-line terminal systems. At Location 22, a standard end block extension will be constructed to connect the Midwest Guardrail System to the bridge rail.

Location: The Project site exists in Stanislaus County along SR 108 between post mile 28.5 and post mile 33.4, and along SR 120 at post mile 12.22; and in Tuolumne County along SR 108 between post mile 1.28 and post mile 53.03, along SR 120 at post mile 6.01 and at post mile 11.29, and along SR 49 at post mile 17.6.

Timeframe: Unspecified.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments to assist Caltrans in adequately identifying and sufficiently reducing to less-than-significant the potentially significant, direct and indirect Project-related impacts to fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

Currently, the proposed MND indicates that the Project-related impacts to Biological Resources would be less-than-significant with implementation of specific avoidance and minimization efforts. In particular, Caltrans concludes there will be less-than-significant impacts to the State threatened Swainson's hawk (Buteo swainsoni), the State endangered and State fully protected bald eagle (Haliaeetus leucocephalus), the State endangered great gray owl (Strix nebulosa), and migratory birds in general with implementation of proposed avoidance and minimization measures.

However, as currently drafted, it is unclear whether some of the species-specific and general migratory bird measures proposed in the IS sufficiently reduce, to less-than-significant, the potential Project-related impacts to those species. Therefore, CDFW does not agree with these conclusions and will herein suggest measures to survey for and avoid Project-related impacts to these species, thereby reducing to less-than-significant the Project-related impacts. CDFW also recommends that Caltrans identify a path forward in the event avoidance of two of the three species is not feasible.

I. Environmental Setting and Related Impact

Would the Project have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or the United States Fish and Wildlife Service (USFWS)?

COMMENT 1: Migratory Birds including Swainson's Hawk (SWHA), Bald Eagle (BAEA), and Great Gray Owl (GGOW)

Issue: Migratory birds, including SWHA, BAEA, and GGOW, could potentially nest in the vicinity of the Project. The Project activities will involve drilling or piledriving within the right-of-way and CDFW considers it possible that the

Project-related activities would represent a novel stimulus which could result in nest abandonment to migratory birds and to SWHA, BAEA, and GGOW specifically if they occur within ½-mile of an active nest. This nest failure of the State threatened SWHA, the State endangered and State fully protected BAEA, and the State endangered GGOW would represent a significant impact to SWHA, BAEA, and GGOW and possibly take as it is defined in section 86 of Fish and Game Code.

Specific Impacts: In the IS, Caltrans addresses migratory birds in general, but does not specifically address the potential presence and/or Project-related impacts to SWHA, BAEA, and GGOW. Further, while Caltrans proposes maintaining no-disturbance buffers around active nests, Caltrans does not assign numeric parameters for these buffers in the event active nests occur near the Project site.

Evidence impact would be significant: Adoption of the MND as it is written will allow Project-related activities that will involve drilling or pile driving employing heavy equipment and work crews outside unquantified "no-work buffers" around nests.

These activities occurring within ½-mile of active SWHA, BAEA, and GGOW nests have the potential to result in nest abandonment, significantly impacting nesting SWHA, BAEA, and GGOW.

Recommended Potentially Feasible Avoidance and Mitigation Measure(s) Because the Project-related activities represent novel stimuli and threaten nest abandonment, CDFW recommends Caltrans propose a ½-mile no-disturbance buffer around active SWHA, BAEA, and GGOW nests in order to reduce to less-than-significant the Project-related impacts to the species. CDFW recommends edits to the Migratory Bird avoidance and minimization measures in the IS. Further, CDFW recommends these edited measures be made quantifiable and enforceable conditions of Project approval.

Recommended Edits to Migratory Bird Avoidance and Minimization Measures to specifically address SWHA, BAEA, and GGOW on page 33 of the IS/MND.

Currently, under the Migratory Bird avoidance and minimization measures section of the IS, Caltrans proposes a no-disturbance buffer around active migratory bird nests detected during preconstruction surveys. CDFW recommends Caltrans edit this measure to propose numeric no-work buffers for unlisted passerine, raptors, and listed raptors (including SWHA, BAEA, and GGOW). Alternatively, the species-specific measures for SWHA, BAEA, and GGOW could be focused and discussed outside the Migratory Bird section.

CDFW recommends Caltrans propose a minimum no-disturbance buffer of

250 feet around active nests of non-listed passerine bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. CDFW recommends that a qualified biologist advise on any variance from these buffers and consult with CDFW in advance of implementing a variance.

For SWHA, BAEA, and GGOW specifically, CDFW recommends Caltrans require focused surveys for active nests and ½-mile no-disturbance buffers around any active nests until the young have fledged and are no longer reliant upon the nest or parental care for survival. If the ½-mile no-disturbance buffer is not feasible, CDFW recommends Caltrans propose obtaining take authorization for SWHA and GGOW through the acquisition of an Incidental Take Permit pursuant to section 2081(b) of Fish and Game Code and add this as a mitigation measure to the IS. CDFW cannot authorize Project-related take of BAEA due to its fully protected status. Therefore, take of the species must be completely avoided and the IS is advised to include measures for full species avoidance.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to CNDDB. The CNDDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting- Data. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CDFW appreciates the opportunity to comment on the Project to assist Caltrans in identifying and avoiding the Project's impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (https://www.wildlife.ca.gov/Conservation/Survey-Protocols). If you have any questions, please contact Mr. Javier Mendez, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 243-8145, or by electronic mail at javier.mendez@wildlife.ca.gov.

Sincerely,

Gerald Hatler
For Julie A. Vance Regional Manager

Attachment 1: Recommended Mitigation Monitoring and Reporting Program c

cc: United States Fish and Wildlife Service 2800 Cottage Way, Suite W-2605 Sacramento, California 95825

ec: Office of Planning and Research, State Clearinghouse state.clearinghouse@opr.ca.gov

California Department of Fish and Wildlife Ferranti, Tomlinson, Hulbert, Mendez

Attachment 1

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PROJECT: Metal Beam Guardrail Upgrades Within Stanislaus and Tuolumne Counties Along State Route (SR) 108, SR 120, and SR 49 Project

SCH No.: 2020070118

[Caltrans Note: Double slashes around text in the table below indicate elements that were added to the original table to meet Americans with Disabilities Act compliance for publishing documents on the internet.]

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
Before Disturbing Soil or Vegetation	//left blank//
Mitigation Measure 1: SWHA, BAEA, GGOW Avoidance	//left blank//
Mitigation Measure 2: SWHA Take Authorization (if avoidance is not feasible)	//left blank//
Mitigation Measure 3: BAEA Avoidance	//left blank//
Mitigation Measure 4: GGOW Avoidance	//left blank//
Mitigation Measure 5: GGOW Take Authorization (if avoidance is not feasible)	//left blank//
During Soil or Vegetation Disturbance	//left blank//
Mitigation Measure 6: BAEA Avoidance	//left blank//

1 Rev. 2013.1.1

Caltrans Response to Comment from: California Department of Fish and Wildlife

Response to Comment 1: Swainson's hawk, bald eagle, and great gray owl species were addressed in section 2.1.4 of the Initial Study. Additional information related to the potential presence of these species in the project vicinity and project impacts is provided in sections 4.3.7.2, 4.3.9.2, and 4.3.10.2 of the Natural Environment Study prepared for the project.

Per the recommendation of the U.S. Fish and Wildlife Service, Avoidance Measure 26 has been added to procedures to require pre-construction surveys for nesting migratory birds and raptors, including special-status species, and establish protective buffers. Surveys will occur within 0.5-mile of the project's delineated Biological Study Area (Natural Environment Study, 2020) and will establish buffers for any identified active nests. The size of the buffers will be determined by a qualified biologist who will consider factors such as existing noise levels, construction activities, line of sight, barriers, etc.

In general, project activities are not expected to have significant effects on nesting birds in the vicinity because they will last only three days or less at each location. Also, all but one of the locations are close to existing development, such as homes, businesses, and camping areas. Location 23 is more remote but is also within a large burn area with very few trees suitable for raptors. While some post driving may be needed to build the new guardrails, which would be considered a novel noise-generating activity, noise levels for guardrail post (wood post of H-pile posts) installation are typically lower than general pile driving noise levels. Typical noise levels from guardrail installation measured 50 feet from the source range from maximum sound level 74 A-weighted decibels to maximum sound level 98 A-weighted decibels. Typical pile driving noise levels range from maximum sound level 93 A-weighted decibels to maximum sound level 105 A-weighted decibels (*Guardrail Installation Noise Level Evaluation Final Report,* Oregon Department of Transportation and Federal Highway Administration 1999). Also, post driving would be completed within one day.

Overall, the potential for Swainson's hawks, bald eagles, and great gray owls to nest close to the project area is low, and surveys would be adequate to identify nests that could be affected. The nesting bird measure indicates that if these species are detected, Caltrans will coordinate with applicable wildlife agencies to ensure buffers are adequate.

Regarding the enforceability of the buffers, the nesting bird protection measure is a Caltrans Standard Specification that will be included in the final plans and specifications for the project that the contractor will receive and must follow. Also, Measure 3 and Measure 26 in the Natural Environment Study includes periodic biological monitoring to ensure that any established buffers are maintained during construction.

List of Technical Studies

Air Study (November 2019)

Air Quality Conformity Checklist (November 2019)

Climate Change/Greenhouse Gas Analysis (January 2020)

Cultural—Section 106 Compliance Memorandum (November 2019)

Hazardous Waste—Initial Site Assessment (November 2019)

Natural Environment Study (July 2020)

Noise Study (November 2019)

Paleontological Screening Memorandum (December 2019)

Section 4(f) No Effect Memorandum (December 2019)

Scenic Resource Evaluation (September 2019)

Water Quality Study (November 2019)

To obtain a copy of one or more of these technical studies/reports or the Initial Study, please send your request to the following email address: district10publicaffairs@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).