

State Route 180 Two-Way Left-Turn Channelization

Between 0.4 mile east of George Smith Road and Elwood Road
along State Route 180 in Squaw Valley in Fresno County

06-FRE-180-PM 89.6-90.7

Project ID Number 0620000037

Initial Study with Proposed Mitigated Negative Declaration

Volume 1 of 2



Prepared by the
State of California Department of Transportation

April 2022



General Information About This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in Fresno County in California. The document explains why the project is being proposed, the alternatives being considered for the project, the existing environment that could be affected by the project, potential impacts of each of the alternatives, and proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read the document. Additional copies of the document and the related technical studies are available for review at the Caltrans district office at 1352 West Olive Avenue, Fresno, California 93728, and the Bear Mountain Library at 30733 East Kings Canyon Road, Squaw Valley, California 93675. The document can also be accessed electronically at <https://dot.ca.gov/caltrans-near-me/district-6>.
- Attend the public hearing on July 27, 2022.
- Tell us what you think. If you have any comments regarding the proposed project, please attend the public hearing, and/or send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to: Jennifer H. Taylor, District 6 Environmental Division, California Department of Transportation, 2015 East Shields Avenue, Suite 100, Fresno, California 93726. Submit comments via email to: jennifer.taylor@dot.ca.gov.
- Submit comments by the deadline: July 31, 2022.

What happens next:

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

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For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Jennifer H. Taylor, District 6 Environmental Division, 2015 East Shields Avenue, Suite 100, Fresno, California 93726; phone 559-287-9844 (Voice), or use the California Relay Service 1-800-735-2929 (Teletype to Voice), 1-800-735-2922 (Voice to Teletype), 1-800-855-3000 (Spanish Teletype to Voice and Voice to Teletype), 1-800-854-7784 (Spanish and English Speech-to-Speech), or 711.

Install a two-way left-turn lane on State Route 180
from post miles 89.6 to 90.7 in Fresno County

**INITIAL STUDY
with Proposed Mitigated Negative Declaration**

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

THE STATE OF CALIFORNIA
Department of Transportation

Jennifer H Taylor

Jennifer H. Taylor
Environmental Office Chief, District 6
California Department of Transportation
CEQA Lead Agency

04/12/2022

Date

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DRAFT

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number: pending

District-County-Route-Post Mile: 06-FRE-180-PM 89.6-90.7

EA/Project Number: EA 06-1A460 and Project ID Number 0620000037

Project Description

The California Department of Transportation (Caltrans) proposes to widen the south side of State Route 180 by 15 feet and install a two-way left-turn lane within the project limits. Other work would include upgrading drainage systems through the project limits and installing one traffic monitoring station system.

Determination

An Initial Study has been prepared by Caltrans, District 6.

On the basis of this study, it is determined that the proposed action will not have a significant effect on the environment for the following reasons:

The project would have no effect on agriculture and forest resources, air quality, cultural resources, energy, geology and soils, paleontological resources, 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 would have less than significant effects to greenhouse gases.

With the following mitigation measures incorporated, the project would have less than significant effects to aesthetics and biological resources:

- Replacement planting for vegetation removed or damaged by the project—The project would remove seven existing oak trees. Per Caltrans standards, trees removed for highway improvements must be replaced at a minimum 1-to-1 ratio. It is expected that replacement planting would deliver a 1-to-5 ratio or 35 new trees. To achieve this replanting ratio, additional trees would be planted within the suitable existing right-of-way. If necessary, additional planting can take place within Caltrans' right-of-way outside of the project limits or through partnerships with other organizations. The trees would be drought-tolerant California natives that use low amounts of water and attract pollinator species.

- The removal of a large, multi-boled (more than one trunk) blue oak tree with a diameter at breast height of 43 inches would be mitigated by onsite replanting at a 10-to-1 ratio.
- Mitigation via in-lieu fees for temporary and permanent impacts to less than 0.10 acre of U.S. Army Corps of Engineers jurisdictional waterways are expected.

Jennifer H. Taylor
Environmental Office Chief, District 6
California Department of Transportation

Date

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Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) proposes to widen the south side of State Route 180 by 15 feet and install a two-way left-turn lane between 0.4 mile east of George Smith Road and Elwood Road in Squaw Valley in Fresno County. The project would be from post mile 89.6 to post mile 90.7. A build alternative and a no-build (no-action) alternative are being considered. See Figure 1-1 for the project vicinity map and Figure 1-2 for the project location map.

The surrounding land use is mainly rural residential, general commercial, exclusive agricultural, with some heavy industrial, commercial, and light manufacturing. Within the project area, State Route 180 runs east and west through the rural community of Squaw Valley. At this location, State Route 180 is a two-lane undivided conventional highway with 12-foot lanes and 2-foot shoulders. Multiple paved and unpaved rural driveways on both sides of the highway provide access to residences and commercial businesses. Within the project limits, the existing right-of-way width is 120 feet and is bordered on both sides by fencing on private property near the right-of-way line.

The project's escalated 2023/2024 construction cost was estimated at \$2,700,000. The project is programmed in the 2023/2024 State Highway Operation and Protection Program.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the project is to improve safety and reduce collisions on State Route 180 in Squaw Valley.

1.2.2 Need

The project is needed to reduce the exposure of vehicles that are waiting to make left turns from State Route 180 and to provide refuge for vehicles that are turning onto State Route 180.

Traffic Investigation Report 184-00010 revealed there were 12 collisions within the project study limits between January 1, 2015, and December 31, 2017. Of the 12, two were rear-end collisions attributed to speeding, five were broadside collisions attributed to the failure to yield, speeding, and other violations, two collisions involved vehicles hitting an object, which were

attributed to speeding and other violations, one overturn collision attributed to speeding, and two other collisions attributed to reasons other than the driver. Four collisions resulted in injuries, and one resulted in a fatality. The fatal collision occurred when a vehicle traveling southbound made a left turn onto eastbound State Route 180 and was struck by a motorcycle traveling on westbound State Route 180. The motorcyclist was killed because the driver of the vehicle entering the highway failed to yield to traffic. The incident occurred during the day with clear weather conditions and a dry roadway surface.

The collision rates for the most recent three-year period (January 1, 2017, to December 31, 2019) for this section of State Route 180 are shown in Table 1.1 below: In Table 1.1, total collisions mean the total number of collisions that did not result in injuries or fatalities.

Table 1.1 Collision Rates in Collisions per Million Vehicles on State Route 180 From Post Mile 89.6 to Post Mile 90.7

State Route 180 (Post Mile 89.6 to Post Mile 90.7)	Fatal	Fatal and Injury	Total Collisions
Actual (Collisions per Million Vehicles)	0.198	0.79	1.38
Statewide Average (Collisions per Million Vehicles)	0.024	0.45	0.98

Source: Draft Project Report, 2022

The actual fatal, fatal and injury, and total collision rates for similar roadways with comparable traffic volumes are higher than the statewide average. The performance objective of this project is to reduce the severity and number of collisions for the life of the project. The project would achieve this objective by reducing 20 collisions over the next 20 years.

The proposed two-way left-turn lane would be a continuous turn lane located in the central business corridor of Squaw Valley that would create a refuge lane for vehicles and reduce the number of conflict points for potential collisions.

Rear-end collisions would be reduced because turning vehicles would use the two-way left-turn lane to get out of the way of through traffic. The area where the two-way left-turn lane is proposed has many establishments along State Route 180 that are accessed by the driveway. Currently, when motorists on State Route 180 need to make a left turn to enter the driveway of their destination, they may have to wait in the through lane for oncoming traffic to clear before proceeding to make their left turn. While waiting for oncoming traffic to clear, these motorists may be susceptible to rear-end collisions from motorists approaching from behind. The two-way left-turn lane is intended to provide a lane that separates left-turning vehicles from vehicles traveling on

the through lane, thus eliminating the potential for same-direction traffic conflicts.

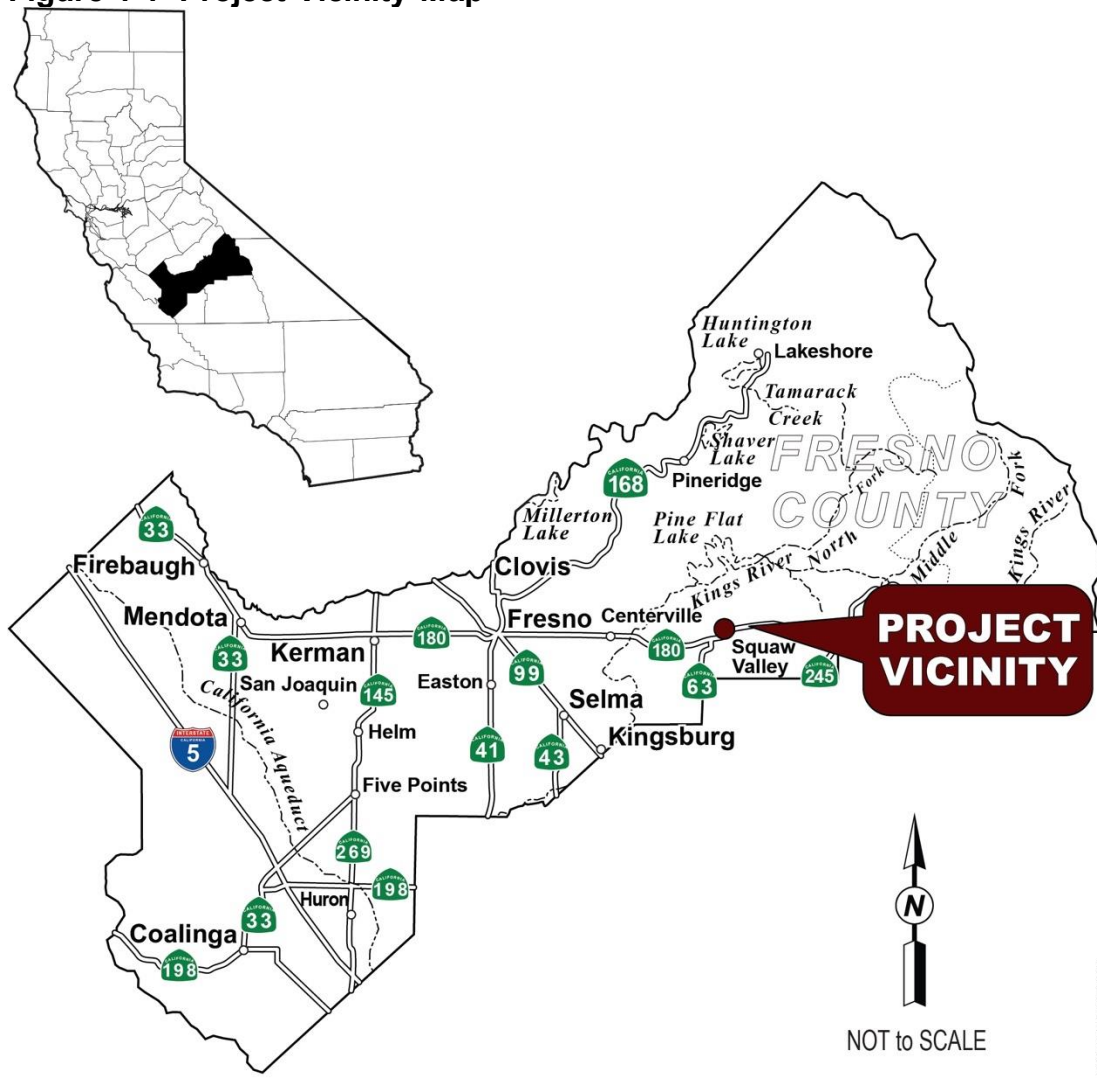
The potential for broadside collisions would be reduced because the two-way left-turn lane would provide a refuge lane that motorists can enter when turning left onto State Route 180 from a driveway. Motorists using the two-way left-turn lane as a refuge lane would not need to wait for a gap in traffic from both directions but would only need to wait for a gap from their left direction before entering the two-way left-turn lane. Left-turning motorists would also be able to use the two-way left-turn lane to accelerate before entering their destination lane.

Speeding collisions would be reduced because the two-way left-turn lane is expected to enhance the potential for through motorists to have a clear path on State Route 180 where the two-way left-turn lane would be located due to the separation of slower, left-turning vehicles from through traffic.

1.3 Project Description

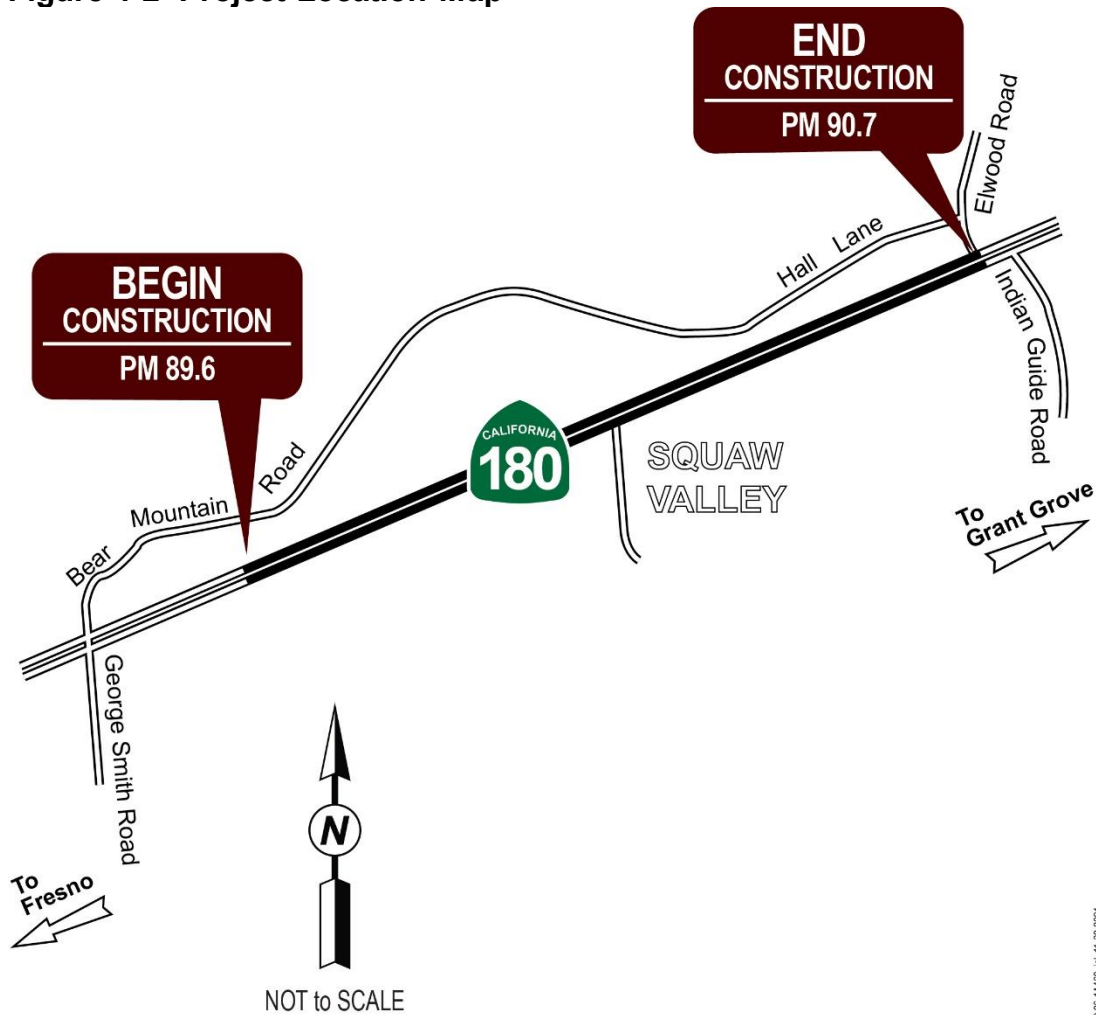
The project proposes to widen the south side of State Route 180 by 15 feet and install a two-way left-turn lane within the project limits. Culverts in the project limits would also be extended on the south side to accommodate the widening. Other work would include upgrading drainage systems through the project limits, repaving existing driveway connections to the southern side of State Route 180, and installing one traffic monitoring station system. Signs within the project limits may need to be relocated. Oak tree and vegetation removal would be required, and construction would occur at night. The project would occur within the existing right-of-way.

Figure 1-1 Project Vicinity Map



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Figure 1-2 Project Location Map



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1.4 Project Alternatives

1.4.1 Build Alternative

For the build alternative, the project proposes to widen the south side of State Route 180 by 15 feet and install a two-way left-turn lane within the project limits. Culverts in the project limits would be extended on the south side using similar materials as the existing culverts to accommodate the widening. Flared end sections and rock slope protection would be placed at the outlets, as recommended by the Caltrans Hydraulics Department. Three drainage systems would require the installation of headwalls to retain the project’s footprint within the existing state right-of-way.

Driveways that connect to State Route 180 would be paved from the edge of the shoulder to a minimum of 20 feet past the shoulder or to the edge of the Caltrans right-of-way. Mailboxes, signs, trash bins, and fences within the

project limits that pose as fixed objects would be removed, shielded, replaced with breakaway versions, or relocated outside the clear recovery zone. Existing signs would be relocated and upgraded to current Caltrans standards. Lastly, a traffic monitoring system would be placed at post mile 90.23 on the north side of State Route 180. Oak tree and vegetation removal would be required. No additional right-of-way would be acquired.

Daytime lane closures are expected during construction. Traffic would be shifted to the westbound lane with reversing traffic control and flaggers. Temporary K-Rail (precast concrete barriers) would be used to separate traffic from construction. Breaks in the K-Rail would be provided to maintain access to southern road connections and driveways. Sixty active construction days are expected to be needed to complete the project; night work is also expected. A detailed traffic management plan would be developed during the project design phase.

Nonstandard design features, including a nonstandard 4-foot-wide shoulder and a 2-to-1 side slope, are proposed for this project. The 4-foot-wide shoulder, which would be an incremental improvement from the existing 2-foot-wide shoulder, is proposed to keep the cost of the project within funding limits. The 2-to-1 side slope is proposed at culvert locations in the project limits to keep the project's footprint within the existing right-of-way. Without the nonstandard design feature, the need for additional right-of-way would delay the project's delivery schedule up to 18 months, and the construction cost to make the standard-sized shoulders would exceed available funding. A Design Standard Decision Document for the nonstandard features would be prepared and approved before project approval.

This project contains a number of standardized project measures that are used on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are listed later in this chapter under "Standard Measures and Best Management Practices Included in All Build Alternatives."

1.4.2 No-Build (No-Action) Alternative

The no-build (no-action) alternative would not meet the purpose and need statement and may result in additional collisions.

1.5 Standard Measures and Best Management Practices Included in All Build Alternatives

- Procedures pertaining to air pollution control and dust control would be addressed in Caltrans Standard Specifications, Section 14-9.02—Air Pollution Control and Section 10-5—Dust Control. These Standard Specifications would be included in the bid package.

- If unanticipated fossil discovery were to occur during construction, Specification Section 14-7.03 of the 2018 Caltrans Standard Specifications, which identifies the procedures required to protect the resource, would be implemented.
- A lead compliance plan developed by a certified industrial hygienist is required and would be addressed in Caltrans Standard Special Provisions Section 7-1.02K(6)(j)(iii)—Earth Material Containing Lead. This Standard Special Provision would be included in the bid package.
- If yellow striping is removed from the roadway separately, Caltrans Standard Special Provisions Section 14-11.12 would be included in the bid package. If striping is removed through grinding and cold-planing, Caltrans Standard Special Provisions Section 36-4 or Caltrans Standard Special Provisions Section 84-9.03B, or both, would be included in the bid package.
- Procedures to control erosion, sedimentation, and runoff would be included in the Stormwater Pollution Prevention Plan to be prepared before the start of project construction. The contractor, as required in Caltrans Standard Specifications Section 13-1, must abide by the Stormwater Pollution Prevention Plan and address all potential water quality impacts that may occur during construction operations.
- If the project disturbs 1 acre or more of soil, a Notice of Intent is to be submitted to the appropriate Regional Water Quality Control Board at least 30 days before the start of construction, a Stormwater Pollution Prevention Plan is to be prepared and implemented during construction to the satisfaction of the resident engineer, and a Notice of Termination shall be submitted to the Regional Board upon completion of construction and site stabilization. A project would be considered complete when the criteria for final stabilization in the Construction General Permit are met.
- If less than 1 acre of soil is disturbed, a Water Pollution Control Plan would be required to be prepared by the contractor per the 2018 Caltrans Standard Specifications Section 13-1—Water Pollution.
- During project construction, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction noise is regulated by Caltrans Standard Specifications Section 14-8.02—Noise Control. This Standard Specification states that construction noise resulting from work activities should not exceed 86 A-weighted decibels at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.

1.6 Discussion of the NEPA Categorical Exclusion

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

1.7 Permits and Approvals Needed

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

Agency	Permit/Approval	Status
U.S. Army Corps of Engineers	Clean Water Act Section 404 Nationwide Permit	The 404 permit would be obtained before the start of construction.
Regional Water Quality/Control Board	Clean Water Act Section 401 Water Quality Certification	The 401 certification (permit) would be obtained before the start of construction.
California Department of Fish and Wildlife	1600 Lake and Streambed Alteration Agreement	The 1600 permit would be obtained before the start of construction.
U.S. Fish and Wildlife Service	Letter of Concurrence	A Letter of Concurrence would be obtained before the final environmental document is completed.

Chapter 2 CEQA Evaluation

2.1 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant Impact With Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project will indicate that there are no impacts to a particular resource. A “No Impact” answer reflects this determination. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below.

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

2.1.1 Aesthetics

Considering the information in the Visual Impact Assessment dated March 2022, the following significance determinations have been made:

Except as provided in Public Resources Code Section 21099:

Question—Would the project:	CEQA Significance Determinations for Aesthetics
a) Have a substantial adverse effect on a scenic vista?	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?	Less Than Significant Impact With Mitigation Incorporated

Question—Would the project:	CEQA Significance Determinations for Aesthetics
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less Than Significant Impact With Mitigation Incorporated
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	No Impact

Affected Environment

The project is on State Route 180 between Elwood Road and George Smith Road in Squaw Valley in Fresno County, California. The landscape is characterized by rolling hills of oak woodland with the curving, winding highway.

The project is in the foothills of the Sequoia National Forest in Central California. The foothills are bordered on the west by the flat, expansive San Joaquin Valley area of California’s larger Central Valley; to the east is the Sierra Nevada, which is home to Yosemite National Park and Kings Canyon National Park. The land cover in the project corridor is mainly native oak trees, wildflowers, and grasses. Even though the project corridor has occasional buildings, most of the land is not developed. The native oak trees, wildflowers, and grasses highlight the sense of place and define the scenic value of the corridor.

State Route 180 is a designated State Scenic Highway from post mile 78.6 to post mile 137.9. The project falls within those limits. The native oak trees seen along the corridor meet the definition of a “scenic resource,” as defined by CEQA Statute Section 21084(c) and CEQA Guidelines Section 15300.2(d).

Environmental Consequences

Visual Resources and Resource Change

Visual resources are defined by assessing visual character and visual quality.

Visual Character

Visual character includes attributes such as form, line, color, and texture and is not considered good or bad. The existing visual character of the project corridor is defined by the small valley in which it lies. The surrounding foothills

are described by undulating lines. Also forming curving lines are trees, mostly oaks, which line the natural drainage channels. The oak woodland trees also form masses of dark color against the lighter vegetation covering the ground. This color contrast is found during all seasons. Trees that are close to the roadway provide much of the interest in the landscape. The trees hide views, which are then revealed as the traveler moves through the valley. The trees are a vertical element that contrasts the otherwise low vegetation. The varying patterns of the trees give diversity to the views. In the spring, native wildflowers are a colorful addition to the typical green or golden grassy landscape.

The change in visual character caused by this project would be the result of the proposed tree removal. The trees proposed for removal are next to the roadway. The loss of trees would remove some of the interest from the corridor, leaving the views less diverse and less interesting. The visual character of the project would be mostly compatible with the existing corridor. The change in visual character would be categorized as low.

Visual Quality

Visual quality is evaluated by identifying the vividness, intactness, and unity present in the project corridor. The project would minimally impact the visual quality of the existing corridor. The landscape in the project corridor is memorable. The trees contrast with the other vegetation in both color and form. The rural landscape is relatively intact. While the grazed lands are not “natural,” the open views and lack of urban elements contribute to the natural character. The residential and commercial properties retain a rural look. The roadway corridor has unity because there is very little to disrupt the visual patterns of the foothill landscape. The buildings are low and rural, making them cohesive with the rolling terrain. Other than the taller hills and mountains, the trees are the tallest element. The occasional windmill does not compete for attention. The removal of trees from the project corridor would have some harmful effects by leaving the landscape less intact. Nevertheless, the level of change in visual quality would be categorized as low.

Resource Change

The removal of seven trees from the project corridor would leave the landscape less diverse, less interesting, and less intact; consequently, the overall resource change would be moderate.

Viewers and Viewer Response

The population affected by the project is composed of viewers. There are two major types of viewer groups for highway projects: highway neighbors and highway users. The project has residential, retail, commercial, civic, and agricultural highway neighbors. The project has local and tourist highway users.

Viewer response is a measure or prediction of the viewer's reaction to changes in the visual environment and has two dimensions—viewer exposure and viewer sensitivity.

Viewer Exposure

Viewer exposure is a measure of the viewer's ability to see a particular object. Viewer exposure has three attributes: location, quantity, and duration. Highway neighbors with views to the road include residents, users of agricultural properties, and those using retail, commercial, and civic facilities; these neighbors have a close view of the roadway. The density of the neighbors along the route is low, and the area population is less than 4,000 people. Therefore, the quantity of neighbors viewing the roadway is low. Neighbor viewers to the route would have a long exposure to the views and many opportunities to see the views. Their view of the roadway is also a close view.

Roadway users have a close view of the roadway features with views of the Sierra Nevada foothills in the distance. For the location attribute of viewer exposure, most viewers would fall into the moderate to high exposure category. The views are equally divided between the immediate edges of the roadway and views farther off. State Route 180—the main road into the Sequoia National Forest and Kings Canyon National Park—is heavily traveled. The views from the roadway would be seen by many highway users. Overall, the quantity of viewer exposure would be moderate.

The overall exposure for viewers from the highway is moderate. The overall exposure for viewers to the highway is moderate.

Viewer Sensitivity

Viewer sensitivity is a measure of the viewer's recognition of a particular object; it has three attributes: activity, awareness, and local values. The viewers on this roadway are likely to be engaged in sightseeing. The larger volume of traffic would come from outside of the area as people travel to recreational areas. Residents of the area choose to live here partly for the scenery. Viewer awareness is moderate to high, with a narrow focus and specific view. Local values include the importance of open space preservation.

The activity and awareness of viewers both to and from the roadway would result in moderate to high sensitivity. The local value of open space preservation and the status of State Route 180 as a State Scenic Highway would create a high level of sensitivity.

The narrative descriptions of viewer exposure and viewer sensitivity for each viewer group were merged to establish the overall viewer response of each group. The overall sensitivity of viewers to the highway would be moderate, and the overall sensitivity of viewers from the highway would be moderate.

Visual Impact

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes.

Because it is not feasible to analyze all the views in which the project would be seen, three key views associated with visual assessment units that would most clearly demonstrate the change in the project's visual resources were chosen. Each of these key views can be found below in Figures 2-1, 2-2, and 2-3.

Figure 2-1 Key View 1, Post Mile 89.48



Key View 1, Post Mile 89.48—From near George Smith Road looking northeast. The expected level of change to this view would be low. Few to no trees would be removed, and the view would be relatively intact. Viewer exposure would be moderate, and viewer sensitivity would be moderate to high. The overall level of viewer response would be moderate to high.

Figure 2-2 Key View 2, Post Mile 90.21



Key View 2, Post Mile 90.21—Looking northeast. The expected level of change to this view would be low. The tree on the right-hand side of the view is proposed for removal, which can change the view. Viewer exposure would be moderate, and viewer sensitivity would be moderate to high. The overall level of viewer response would be moderate to high.

Figure 2-3 Key View 3, Post Mile 90.51



Key View 3, Post Mile 90.51—From near Elwood Road looking southwest. The expected level of change to this view would be low. No trees would be removed in this view, and the view would be intact. Viewer exposure would be moderate, and viewer sensitivity would be high. The overall level of viewer response would be moderate to high.

Project Visual Impact Summary

The overall visual impact of the project would be moderate.

Table 2.1 below summarizes and compares the narrative ratings for visual resource change, viewer response, and visual impacts between alternatives for each key view.

Table 2.1 Summary of Key View Narrative Ratings

Key View	Resource Change	Viewer Response	Visual Impact
Key View 1	Low	Moderate to High	Moderate
Key View 2	Low	Moderate to High	Moderate
Key View 3	Low	Moderate to High	Moderate

Resource change would be low, and the project improvements would be within local aesthetic values and goals. The overall viewer sensitivity of neighbors and users is expected to be moderate to high. Before mitigation, visual impacts caused by this project are expected to be moderate. Any trees removed for the project would be replaced with mitigation planting, which is in line with Caltrans policy. After mitigation, visual impacts caused by this project are expected to be low.

The project would have no impact on scenic vistas. The project would have no permanent impact on scenic resources within a State Scenic Highway. The project would have a low impact on the existing visual character of the site and its surroundings. The project would have no impact on the creation of a new source of light or glare.

Temporary Construction-Related Impacts

Temporary visual impacts may occur during project construction. Equipment and materials would need to be stored during construction. There may be a temporary increase in light and glare if night work is required. These visual impacts are expected to be temporary and have less than substantial impacts.

Avoidance, Minimization, and/or Mitigation Measures

The following measure to avoid or minimize visual impacts would be incorporated into the project:

- Minimize tree removal—Remove only those trees and shrubs required for the construction of the new roadway facilities. Avoid removing trees and shrubs for temporary uses, such as construction staging areas or temporary stormwater conveyance systems.

The following mitigation measure to offset visual impacts would be incorporated into the project:

- Replacement planting for vegetation removed or damaged by the project—The project would remove seven existing oak trees. Per Caltrans standards, trees removed for highway improvements must be replaced at a minimum 1-to-1 ratio. It is expected that replacement planting would deliver a 1-to-5 ratio or 35 new trees. To achieve this replanting ratio, additional trees would be planted within the suitable existing right-of-way.

If necessary, additional planting can take place within Caltrans’ right-of-way outside of the project limits or through partnerships with other organizations. The trees would be drought-tolerant California natives that use low amounts of water and attract pollinator species.

2.1.2 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.

The project would not acquire additional right-of-way and would not convert prime farmland, unique farmland, or farmland of statewide importance to nonagricultural use or conflict with existing zoning for agricultural use or a Williamson Act contract. There are no forest lands or timberlands within the project area that could be impacted. Considering the information available on the Fresno County Geographic Information System webpage accessed February 16, 2022, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Agriculture and Forest Resources
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 nonagricultural use?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact

Question—Would the project:	CEQA Significance Determinations for Agriculture and Forest Resources
c) Conflict with existing zoning, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to nonagricultural use or conversion of forest land to non-forest use?	No Impact

2.1.3 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.

Considering the information in the Air Quality Memorandum dated March 2022, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Air Quality
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	No Impact

2.1.4 Biological Resources

Considering the information in the Natural Environment Study (Minimal Impacts) dated February 2022, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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, U.S. Fish and Wildlife Service, or National Oceanic and Atmospheric Administration Fisheries?	No Impact
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 Impact With Mitigation Incorporated
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Less Than Significant Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact

Affected Environment

The Biological Study Area is defined as the action area. The action area is the area to be directly affected by the project plus the nearby areas to be indirectly affected by the project. Based on the disturbance footprint associated with the conversion of previously unpaved right-of-way to paved roadway, a 150-foot buffer on either side of the road from the centerline of the project was deemed appropriate. The action area studied for this project encompasses about 38 contiguous acres.

A list of federally endangered species and critical habitats that may be affected by the project was first requested from the U.S. Fish and Wildlife Service on November 18, 2020, and was updated on February 23, 2022. In-office research (California Native Plant Society, California Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service) and field surveys were conducted by Caltrans biologists for the project. A letter of concurrence from the U.S. Fish and Wildlife Service will be requested and included in the final environmental document.

Drainage, botanical, habitat, and general wildlife surveys were performed during four site visits on December 12, 2019, December 21, 2020, April 5, 2021, and May 7, 2021. No listed species were seen during the surveys.

Natural Communities

Habitats and natural communities of special concern that would potentially be affected by the implementation of the project include oak woodland and oak savanna.

Oak woodlands are described as a 5-acre circular area containing five or more oak trees per acre, containing blue oak (*Quercus douglasii*), Engelmann oak (*Quercus engelmannii*), valley oak (*Quercus lobata*), and interior live oak (*Quercus wislizenii*). Oak woodlands and savannas are differentiated by canopy cover, with oak woodlands having a moderately closed canopy and generally open understory, and oak savannas having a mostly open canopy, containing intermittent oaks and a predominantly grassland understory. Oak savannas can be found throughout most oak woodland habitats and are generally established and maintained through disturbances, poor soils, or precipitation patterns.

Disturbed oak savanna is the predominate undeveloped habitat type within the action area, including a small component of oak woodland edge habitat primarily composed of blue oak and interior live oak.

Wetlands and Other Waters

The action area has one drainage deemed a “blue line” by the National Wetlands Inventory. It is a seasonally flooded, intermittent streambed and only contains water during the wet, cool, rainy season. This unnamed

drainage runs under State Route 180 via a corrugated metal culvert near the Squaw Valley Motel.

The action area includes four potential jurisdictional drainages. The drainages proposed for extension under the project are expected to fall under the jurisdiction of the California Department of Fish and Wildlife, the U.S. Army Corps of Engineers, and the Regional Water Quality Control Board. The four drainages are ephemeral in nature, only containing water immediately following a rain event and while draining runoff from the nearby Bear Mountain.

Plant Species

Eight species of special concern identified in species queries were found to have historical records of occurrence or potentially suitable habitat within the action area. No special-status plants were seen within the action area during surveys. Given the age and distance of historical observations in the project vicinity, five of the eight species of special concern—forked hareleaf (*Lagophylla dichotoma*), King's River buckwheat (*Eriogonum nudum* var. *regirivum*), King's River monkeyflower (*Erythranthe acutidens*), Madera leptosiphon (*Leptosiphon serrulatus*), and Winter's sunflower (*Helianthus winteri*)—are not expected to occur within the action area or have a very low potential to occur within the action area. The remaining three species are discussed below.

Slender Clarkia

Slender clarkia (*Clarkia exilis*) is endemic to California's southern Sierra Nevada foothills and Tehachapi Mountains, ranging from Fresno to Kern Counties and typically occurring in cismontane foothill woodlands. The slender clarkia has a 4.3 California Rare Plant Rank, which means it has limited distribution but may be locally common and somewhat threatened in California.

Because it is ranked 4.3 and the fact that it has no federal or state listing status, observations of slender clarkia are not recorded in the California Natural Diversity Database. Observations are recorded on Calflora, primarily in the more southern Sierra Nevada foothills, with the closest observation recorded on a quadrant checklist (indicating the species occurred within the quadrant but without specific location information) for the Pine Flat Dam U.S. Geological Survey quadrant. Foothill oak woodlands are present within the action area; however, this species was not seen during botanical surveys. Due to the locally common nature of this species, a moderate potential exists for this species to occur on this project.

Spiny-Sepaled Button Celery

Spiny-sepaled button celery (*Eryngium spinosepalum*) is endemic to California's San Joaquin Valley and southern Sierra Nevada foothills, typically occurring in northern hardpan and claypan vernal pools, and, less commonly,

roadside ditches, depressions, and swales in annual grasslands. It is often associated with upland grasses and oak woodland. The spiny-sepaed button celery has a 1B.2 California Rare Plant Rank, which indicates that it is rare, threatened, or endangered in California and elsewhere with a moderate degree of threat or immediacy.

A historic (1937) observation with a 1-mile degree of accuracy was recorded overlapping the action area; however, subsequent surveys in 1992 failed to locate the species or high-quality habitat within the action area. The original observations were recorded only as “north of Tucker Mountain” and are likely located several miles south of the action area. Calflora reported two observations within the action area from 1937 at a location that has been subsequently developed into a residential parcel, as well as nonspecific observations within the quad in 2019. This species was not seen during botanical surveys, and low-lying drainages in the vicinity are outside of the project footprint. However, given the lack of rain during the survey year and roadside drainages that may retain more moisture during a heavy rain year, this species has low potential to occur within the action area.

Streambank Spring Beauty

Streambank spring beauty (*Claytonia parviflora* ssp. *grandiflora*) is distributed throughout California’s Sierra Nevada foothills, occurring in vernal moist, often disturbed sites in foothill woodland. Streambank spring beauty has a 4.2 California Rare Plant Rank, which means they have a limited distribution but may be locally common and are moderately threatened in California.

Because of its 4.2 rank and the fact that it has no federal or state listing status, observations of streambank spring beauty are not recorded in the California Natural Diversity Database. General checklist observations with less precise locational data are recorded on Calflora outside of the project limits and within nearby northern quads. While foothill woodland and seasonally, ephemeral wet drainages are present throughout the action area, this species was not seen during botanical surveys. Due to the lack of observations and the species’ affinity for disturbance, a moderate potential exists for this species to occur on this project.

Animal Species

Three species of special concern identified in species queries were found to have historic records of occurrence or potentially suitable habitat within the action area. No special-status species were seen within the action area during surveys. Given the age and distance of historic observations, as well as limited suitable habitat in the project vicinity, two of these species—Crotch’s bumblebee and western spadefoot toad—are not expected to occur within the action area. The remaining species—the California tiger salamander—is discussed below.

California Tiger Salamander

The California tiger salamander is a federally and state threatened species and is on the California Department of Fish and Wildlife's watch list. California tiger salamanders live in annual grasslands and open woodlands. They occupy burrows typically created by California ground squirrels and pocket gophers and require vernal pools or ponds for breeding within 1.2 miles of the burrows. California tiger salamanders use burrow systems year-round but mainly during the dry months when they enter estivation (a dormant state). Areas surrounding the breeding pools are usually dominated by grassland, oak savanna, or oak woodland.

No California tiger salamanders were seen during a reconnaissance level site visit; however, the visit occurred outside of rain events during a dry year, and salamanders would have likely remained below ground. Low-quality potential upland habitat is present within the action area. Potential breeding habitat is not present within the action area but may be present within 1.2 miles of the action area. There are several observations between 2.5 miles and 7.7 miles from the action area, but the observations are dated 1974 and 1992.

According to the California Natural Diversity Database, accessed 2021, the most recent observation is from 2017 and is about 7 miles from the action area. Given the disturbed nature of the action area, the ages and locations of sightings in the vicinity, and occasionally appropriate nature of stock ponds within the required distance, a low potential exists for the California tiger salamander to occur within the action area.

Environmental Consequences

Natural Communities

Expected impacts to oak savannas and woodlands would be minimal. Most vegetation disturbances would be limited to the ruderal and herbaceous annual species, which are typically present along road margins. Permanent impacts from paving of previously permeable surfaces would primarily occur on already compacted, disturbed road shoulders. Temporary impacts to annual herbaceous oak savanna understory from excavation and fill are expected to recover within one season.

The removal of seven blue oaks is expected, with potential root damage occurring to two additional blue oaks. Of these, two trees to be removed (measuring 70 total inches in diameter at breast height) fall within a jurisdictional channel. The remaining seven, about 12 inches to 20 inches in diameter at breast height, are upland and associated with regularly maintained disturbed grassland understory or regularly maintained and compacted driveways and developments.

Wetlands and Other Waters

The extension of the cross-roadway culverts serving jurisdictional drainages would be necessary to accommodate the widened road. Culvert extension

work would result in impacts to waterways due to soil disturbance and the excavation of the culvert trench. The project would not result in diminished streamflow capacity or altered flow patterns.

It is expected that mitigation credits and in-lieu fees for permanent impacts via conversion of previously permeable channel surfaces to roadway-covered culverts would be purchased for this project.

Permanent impacts to vegetation within the channel from the removal of one large, multi-boled blue oak (a blue oak with more than one trunk) with a diameter at breast height of about 43 inches within a jurisdictional channel are expected. It is expected that removing the tree would be mitigated by onsite replanting at a 10-to-1 ratio. If further permanent removal of woody vegetation within channels is identified during the project design phase or during construction, further replacement planting mitigation would be required for this project.

The project would require a 1602 Lake and Streambed Alteration Agreement, 404 Clean Water Act permit, and a 401 or Waste Discharge Requirement permit for waters of the U.S.

Plant Species

The southern expansion of the roadway is expected to result in relatively minor impacts to natural vegetation communities. Widening the roadway would require converting previously permeable surfaces to a paved roadway. This would primarily result in permanent impacts to the most disturbed and regularly compacted portions of the right-of-way that are unlikely to provide habitat or support special-status plant species. Temporarily impacted areas would be expected to recover ground vegetation within one to two seasons postconstruction. No special-status plants were seen during surveys. Given these factors, no direct or indirect impacts to special-status plant species are expected as a result of this project.

Vegetation impacts would be limited primarily to clearing herbaceous materials, removing seven trees, and potential root damage to two others. Mitigation for removing a blue oak in a jurisdictional channel via onsite replanting at a 10-to-1 ratio is expected, resulting in an overall increase in the number of blue oaks within the action area.

Animal Species

California Tiger Salamander

Impacts to California tiger salamander upland or aquatic habitats are not expected. Upland habitat is characterized as any potential area where small mammal burrows may occur and within range of potential breeding habitat. Although a limited number of small mammal burrows were seen onsite, the area is frequently disturbed. Overall permanent impacts to poor quality habitat are expected to be less than 1 acre and within 6 feet to 7 feet of existing

shoulder backing and road shoulders. Considering the quality of upland habitat, lack of recorded observations in the vicinity of the action area, and the implementation of avoidance and minimization measures, it was determined the project may affect but is not likely to adversely affect the California tiger salamander.

Migratory Birds

Caltrans Standard Specifications for bird protections (including active nesting bird buffers, seasonal restrictions, and preconstruction surveys) would be used to maintain compliance with the Migratory Bird Treaty Act. California Fish and Game Code Sections 3503, 3503.5 (protection of birds' nests), and 3513 (taking Migratory Bird Treaty Act birds) would be enforced throughout the project.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance, minimization, and/or mitigation measures are expected:

Natural Communities and Wetlands and Other Waters

- The removal of a large, multi-boled blue oak tree with a diameter at breast height of 43 inches would be mitigated by onsite replanting at a 10-to-1 ratio.
- Mitigation via in-lieu fees for temporary and permanent impacts to less than 0.10 acre of U.S. Army Corps of Engineers jurisdictional waterways are expected.

Plant Species

- Focused botanical preconstruction surveys would be performed the flowering season before work at all worksites where ground disturbance is expected and suitable habitat for listed species exists.
- If populations of special-status plants are discovered in proximity to worksites, populations would be delineated and protected by an environmentally sensitive area buffer, clearly designated by high visibility fencing or flagging.
- For any flowering populations of special-status perennial plants discovered within a worksite, a replanting plan would be established, and plants would be relocated as close to their original location as feasibly possible. Special-status annual plants would be avoided as feasible until seed set and senescence have occurred, then topsoil would be saved and replaced as described below. For state and federally listed plant species, Caltrans would coordinate further actions with the appropriate agency.
- For worksites where construction would begin after the flowering period, if special-status plant populations are discovered in the worksite, the topsoil would be removed and stored safely near the work area; it would be

replaced after construction is finished to maintain the existing seed bank and ensure the continued growth of that population.

Animal Species

- A qualified biologist would conduct worker environmental awareness training for all work personnel to inform them of the special-status species potentially within the work area, protective measures, reporting procedures, and consequences of violating environmental laws and permit requirements.
- A biological monitor would be present to monitor areas where small mammal burrows are present during initial groundbreaking activities.
- If significant rainfall occurs during a 24-hour period, all covered work activities would stop until it is no longer raining, and no further rain is forecast within 24 hours. A biological monitor would survey areas with standing water within the project footprint before resuming work. Exclusion fencing would be installed where potential habitat exists next to the right-of-way.
- Caltrans Standard Specifications requiring work lights to be directed only at the work area would be enforced throughout the project.
- For work conducted during the California tiger salamander migration season (November 1 to May 31), a qualified biologist would survey the active work areas (including access roads) in the mornings following measurable precipitation. Construction may start once the biologist has confirmed that no California tiger salamanders are in the work area.
- Seasonally appropriate preconstruction surveys would be performed to ensure that no Crotch’s bumblebee is present in the action area.

2.1.5 Cultural Resources

Considering the information in the Historic Property Survey Report dated January 2021, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	No Impact

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	No Impact

2.1.6 Energy

Considering the information in the Energy Memorandum dated February 2022, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Energy
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

2.1.7 Geology and Soils

Considering the information in the California Department of Conservation Map Data Viewer webpage accessed February 2022 and a Paleontological Identification Report dated December 2020, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 	No Impact
ii) Strong seismic ground shaking?	No Impact
iii) Seismic-related ground failure, including liquefaction?	No Impact
iv) Landslides?	No Impact

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
b) Result in substantial soil erosion or the loss of topsoil?	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	No Impact
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
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

2.1.8 Greenhouse Gas Emissions

Considering the information in the Caltrans Climate Change and Greenhouse Gas Emissions Memorandum dated March 2022, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Greenhouse Gas Emissions
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less Than Significant Impact

Affected Environment

The project is in a small, rural community. State Route 180 is the main transportation route to and through the area for both passenger and commercial vehicles. The nearest alternate route is State Route 63, 1.5 miles west of the project area.

The project is within the jurisdiction of the Fresno Council of Governments. The 2018 Regional Transportation Plan, Chapter 3—Sustainable Communities Strategy: People, Choices, Community, identifies that the plan will reduce greenhouse gas emissions by focusing growth in developed areas, moderately increasing residential densities, encouraging infill development, protecting open space and agricultural land, and providing transportation alternatives to the private automobile.

Environmental Consequences

Greenhouse gas emissions impacts of non-capacity-increasing projects like the State Route 180 Two-Way Left-Turn Channelization project are considered less than significant under CEQA because there would be no increase in operational emissions.

However, construction equipment, traffic delays, material processing, and delivery may generate short-term greenhouse gas emissions during construction. Carbon dioxide emissions generated from construction equipment were estimated using the Caltrans Construction Emissions Tool v1.1. The estimated emissions would be 89 tons of carbon dioxide per 60 working days.

While some construction greenhouse gas emissions would be unavoidable, implementing standard conditions or Best Management Practices designed to reduce or eliminate emissions as part of the project would reduce impacts to less than significant.

Avoidance, Minimization, and/or Mitigation Measures

Caltrans Standard Specifications Section 14.9.02, Air Pollution Control, requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Measures that reduce construction vehicle emissions also help reduce greenhouse gas emissions.

Project-Level Measures To Be Implemented To Reduce Greenhouse Gas Emissions Related to Construction Activities:

- Schedule truck trips outside of peak morning and evening commute hours. The project's Transportation Management Plan would address this during the design phase.
- Reduce construction waste. This would be a part of the project contract and would require a Solid Waste Disposal and Recycling Report and a Recycled Materials Report demonstrating efforts to minimize landfill material.
- Reduce the need for the transport of earthen materials by balancing cut and fill quantities. This would be addressed during the project's design phase.

- Construction scheduling: Lengthen lane closure duration to reduce necessary mobilization efforts. The project's Transportation Management Plan would address this during the design phase.

Project-Level Measures To Be Implemented To Reduce Operational Greenhouse Gas Emissions:

- Design and installation of long-life pavement structures to minimize life-cycle costs.
- Design that matches the existing grade as much as possible to reduce earthwork.
- Incorporation of native plants and vegetation (replacing more vegetation than was removed) to the project design to increase carbon sequestration.
- Avoid, through a combination of preservation and new planting, an ultimate loss of tree canopy within the project limits. Or, if the overall available planting area has been reduced, compensate for trees lost to the extent possible with trees, either onsite or offsite.
 - Minimize tree removal—Remove only those trees and shrubs required for the construction of the new roadway facilities. Avoid removing trees and shrubs for temporary uses, such as construction staging areas or temporary stormwater conveyance systems.
 - Replacement planting for vegetation removed or damaged by the project—The project would remove seven existing oak trees. Per Caltrans' standard, trees removed for highway improvements must be replaced at a minimum 1-to-1 ratio. It is expected that replacement planting would deliver a 1-to-5 ratio or 35 new trees. To achieve this replanting ratio, additional trees would be planted within the suitable existing right-of-way. If necessary, additional planting can take place within Caltrans' right-of-way outside of the project limits or through partnerships with other organizations. The trees would be drought-tolerant California natives that use low amounts of water and attract pollinator species.

2.1.9 Hazards and Hazardous Materials

Considering the information in the Hazardous Waste Compliance Memorandum dated February 2021, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 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
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

2.1.10 Hydrology and Water Quality

Considering the information in the Water Compliance Memorandum dated October 2021, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality?	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation onsite or offsite;	No Impact
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;	No Impact
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	No Impact
(iv) impede or redirect flood flows?	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

2.1.11 Land Use and Planning

The project would not physically divide an established community and would not conflict with the Fresno County General Plan or any other policy or regulation meant to avoid or mitigate an environmental effect. Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Land Use and Planning
a) Physically divide an established community?	No Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact

2.1.12 Mineral Resources

Considering the information on the California Department of Conservation Online Mineral Land Classification Interactive Map accessed February 2022, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Mineral Resources
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact

2.1.13 Noise

Considering the information in the Noise Compliance Memorandum dated November 2021, the following significance determinations have been made:

Question—Would the project result in:	CEQA Significance Determinations for Noise
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	No Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	No Impact

Question—Would the project result in:	CEQA Significance Determinations for Noise
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

2.1.14 Population and Housing

The project would add a safety improvement to an existing roadway and would not directly or indirectly induce substantial unplanned population growth in the area. The project would not acquire additional right-of-way, and no person or business would be relocated or displaced. Considering the scope and location of the project within a rural setting, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Population and Housing
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

2.1.15 Public Services

The project would add a safety improvement to an existing roadway and would not trigger the need for new or modified public services. Considering the scope and location of the project in a rural setting, the following significance determinations have been made:

Question:	CEQA Significance Determinations for Public Services
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection?	No Impact
Police protection?	No Impact
Schools?	No Impact
Parks?	No Impact
Other public facilities?	No Impact

2.1.16 Recreation

The project would add a safety improvement to an existing roadway. No parks or recreational facilities are within proximity of the project area. Furthermore, the project does not include recreational facilities or require the construction or expansion of recreational facilities. Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Recreation
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact

2.1.17 Transportation

The project would add a safety improvement to an existing roadway. The project would not conflict with any transportation program, plan, ordinance, or policy and would have no impact on vehicle miles traveled. The project would not increase hazards due to a geometric design feature or incompatible uses and would not result in inadequate emergency access. This project was exempt from vehicle miles traveled analysis under Senate Bill 743 because the project would not likely lead to a substantial or measurable increase in roadway capacity, according to the California Governor’s Office of Planning and Research, 2018 Technical Advisory. Considering this, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Transportation
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	No Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No Impact
d) Result in inadequate emergency access?	No Impact

2.1.18 Tribal Cultural Resources

Considering the information in the Historic Property Survey Report dated January 2022, the following significance determinations have been made:

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:

Question:	CEQA Significance Determinations for Tribal Cultural Resources
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	No Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	No Impact

2.1.19 Utilities and Service Systems

Considering the project would not create a demand for new or expanded utilities and service systems and have no impact on a utility or service system supply, or generate solid waste in excess as described in “d” below, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
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
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	No Impact

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

2.1.20 Wildfire

The project is not within or near areas or lands classified as very high fire hazard severity zones. Considering the information from the Fire Hazard Severity Zone map from the California Department of Forestry and Fire Protection accessed in February 2022, the following significance determinations have been made:

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones:

Question—Would the project:	CEQA Significance Determinations for Wildfire
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	No Impact

2.1.21 Mandatory Findings of Significance

Question:	CEQA Significance Determinations for Mandatory Findings of Significance
<p>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?</p>	<p>No Impact</p>
<p>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.)</p>	<p>No Impact</p>
<p>c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p>	<p>No Impact</p>

Appendix A Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Govin Newsom, Governor

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-6130
FAX (916) 653-5776
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Making Conservation
a California Way of Life.

September 2021

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a nondiscriminatory manner.

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page:
<https://dot.ca.gov/programs/civil-rights/title-vi>.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at 1823 14th Street, MS-79, Sacramento, CA 95811; PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

A blue ink signature of Toks Omishakin, consisting of stylized cursive letters.

Toks Omishakin
Director

"Provide a safe and reliable transportation network that serves all people and respects the environment."

List of Technical Studies Bound Separately (Volume 2)

Visual Impact Assessment, March 2022

Air Quality Compliance Memorandum, March 2022

Natural Environment Study (Minimal Impacts), February 2022

Historic Property Survey Report, January 2022

Energy Memorandum, February 2022

Paleontological Identification Report, December 2020

Climate Change Report, March 2022

Hazardous Waste Compliance Memorandum, February 2021

Water Compliance Memorandum, October 2021

Noise Compliance Memorandum, November 2021

To obtain a copy of one or more of these technical studies/reports or the Initial Study, please send your request to:

Jennifer H. Taylor
District 6 Environmental Division
California Department of Transportation
2015 East Shields Avenue, Suite 100, Fresno, California 93726

Or send your request via email to: jennifer.taylor@dot.ca.gov
Or call: 559-287-9844

Please provide the following information in your request:

Project title: State Route 180 Two-Way Left-Turn Channelization
General location information: On State Route 180 between 0.4 mile east of George Smith Road and Elwood Road
District number-county code-route-post mile: 06-FRE-180-PM 89.6 to 90.7
Project ID number: 0620000037