Madera 99/233 Chowchilla Interchange Improvement

State Route 99/State Route 233 Interchange
in Chowchilla in Madera County
06-MAD-99-PM 26.3-26.8
Project ID 0612000307

Initial Study with Proposed Mitigated Negative Declaration

Volume 1 of 2

Prepared by the
State of California Department of Transportation

April 2023

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 Madera 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, weekdays from 8:00 a.m. to 4:00 p.m., the Chowchilla Branch Library, 300 King Avenue, Chowchilla, California 93610, Tuesday 11:00 a.m. to 6:00 p.m., Wednesday and Thursday 11:00 a.m. to 5:00 p.m., Friday and Saturday 11:00 a.m. to 3:00 p.m.

- Tell us what you think. If you have any comments regarding the proposed project, send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to: Javier Almaguer, District 6 Environmental Division, California Department of Transportation, 2015 East Shields Avenue, Suite 100, Fresno, California 93726. Submit comments via email to: javier.almaguer@dot.ca.gov.

- Submit comments by the deadline: May 28, 2023.

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.

Printing this document: To save paper, this document has been set up for two-sided printing (to print the front and back of a page). Blank pages occur where needed throughout the document to maintain proper layout of the chapters and appendices.

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: Javier Almaguer, District 6 Environmental Division, 2015 East Shields Avenue, Suite 100 Fresno, California 93726.; phone number 559-287-9320 (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.

06-MAD-99/233-26.3/26.8
Project ID 0612000307

Improve the State Route 99/233 interchange
from post miles 26.3 to 26.8 in the City of Chowchilla in Madera 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
and
Local Agency
Cooperating Agencies: Madera County Transportation Commission
Responsible Agency: California Transportation Commission

Javier Almaguer
San Joaquin Valley Branch Chief, Environmental
California Department of Transportation
CEQA Lead Agency

4/25/2023
Date

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

Javier Almaguer, 2015 East Shields Avenue, Suite 100, Fresno, California 93726; phone: (559) 287-9320; email: javier.almaguer@dot.ca.gov

DRAFT
Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number: Pending

District-County-Route-Post Mile: 06-MAD-99/233-26.3/26.8

EA/Project Number: 06-0P910/0612000307

Project Description

The California Department of Transportation (Caltrans) proposes to modify the existing State Route 99/State Route 233 interchange by constructing two roundabouts at the ramp intersections in the City of Chowchilla. Each roundabout will be constructed with two circulating lanes on the eastbound and westbound directions. The existing State Route 233 bridge over State Route 99 will remain in place to accommodate the eastbound traffic. A new separate concrete bridge will be constructed for westbound traffic. This new bridge will be constructed north of the existing structure and will have a 10-foot-wide sidewalk, 8-foot-wide outside shoulder, two 12-foot-wide lanes, and a 5-foot-wide inside shoulder.

Determination

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

The project would have no effect on recreational facilities, agriculture and forest resources, geology and soils, hazardous waste and materials, land use, mineral resources, energy, cultural resources, tribal cultural resources, population and housing, and wildfire.

The project would have less than significant effect on aesthetics, hydrology and floodplains, water quality, paleontology resources, hazardous waste/materials, noise, utilities and public services, greenhouse gas emissions.

The project would have less than significant effect with mitigation on vehicle miles traveled by subsidizing the addition of one vanpool (15-passenger van) to the existing CalVans program for a 20-year period.

_____

Javier Almaguer
San Joaquin Valley Branch Chief, Environmental
California Department of Transportation

_____

Date

Table of Contents

Chapter 1 Proposed Project

1.1 Introduction

State Route 99 is an important local and regional roadway and transportation corridor through the San Joaquin Valley. It is a major truck route that provides critical access for the shipment of agricultural goods to markets outside of the valley. It also serves as a significant travel route when motorists head to recreational areas and vacation spots throughout the state and beyond. State Route 99 is a four-lane facility through the City of Chowchilla.

State Route 233, also called Robertson Boulevard, is a northeast-running roadway that bisects the City of Chowchilla. State Route 233 begins at State Route 152 and extends through the downtown area before ending at State Route 99. State Route 233 is a two-lane undivided highway within the project area.

The configuration of the State Route 99/State Route 233 interchange is currently a partial cloverleaf spread-diamond design. The off-ramp intersections are controlled by stop signs for ramp traffic.

Commercial, residential, industrial land uses, and vacant lots are within the project area. These include restaurants, hotels, gas stations, retail and convenience stores and single-family residence on acreage.

1.2 Purpose and Need

State Route 99 is an important local and regional roadway and transportation corridor through the San Joaquin Valley. State Route 233 serves as an alternate route between State Route 152 and State Route 99 in Madera County, running along Robertson Boulevard through the center of Chowchilla. The State Route 99/State Route 233 interchange currently has a partial cloverleaf spread-diamond configuration. Roadway operations and safety for all users are expected to continue to deteriorate with future growth. State Route 99 acts as a barrier to east-west pedestrian and bicycle movements, with the access point being the State Route 233 overcrossing roadway.

1.2.1 Purpose

The purpose of the project is to provide multimodal accessibility/connectivity by providing safe bicycle and pedestrian access through the State Route 99/State Route 233 interchange. The project will also improve operations of the interchange, improving access to the businesses and services in the area.

1.2.2 Need

The existing ramp ends are currently operating under stop control using stop signs. State Route 99 acts as a barrier to east-west pedestrian and bicycle movements, with the access point being the State Route 233 overcrossing roadway. The current overcrossing is not wide enough to accommodate cyclists, with no shoulders and a 4-foot-wide sidewalk. It lacks connectivity to the adjacent local streets on State Route 233. Since this is the only interchange that directly serves the City of Chowchilla, there are no other viable options for the cyclists and pedestrians to cross State Route 99 from one side of Chowchilla to the other.

Approximately 16 accidents were recorded from April 2019 to March 2022 within the project limits at the following locations:

- Five accidents were reported within the State Route 99 northbound off-ramp at State Route 233. The total accident rate of 1.73 accidents per million-vehicle-miles is above average of 0.45 accidents per million-vehicle-miles for similar highways statewide.

- Two accidents were reported within the State Route 99 northbound on-ramp at State Route 233. The total accident rate of 0.90 accidents per million-vehicle-miles is above average of 0.50 accidents per million-vehicle-miles for similar highways statewide.

- One accident was reported within the State Route 99 southbound on-ramp at State Route 233. The total accident rate of 0.31 accidents per million-vehicle-miles is below average of 0.48 accidents per million-vehicle-miles for similar highways statewide.

- Eight accidents were reported within the State Route 99 southbound off-ramp at State Route 233. The total accident rate of 7.72 accidents per million-vehicle-miles is above average of 0.82 accidents per million-vehicle-miles for similar highways statewide.

- Accident rates were also reported for northbound State Route 99 within the project limits. The total accident rate of 0.70 accidents per million-vehicle-miles is below average of 0.81 accidents per million-vehicle-miles for similar highways statewide.

- Accident rates were also reported for southbound State Route 99 within the project limits. The total accident rate of 0.94 accidents per million-vehicle-miles is above average of 0.81 accidents per million-vehicle-miles for similar highways statewide.

- Accident rates were also reported for State Route 233 from post mile 3.6 to post mile 3.8, at the west end of the State Route 233 Overcrossing. The total accident rate of 0.34 accidents per million-vehicle-miles is below

average of 1.07 accidents per million-vehicle-miles for similar highways statewide.

State Route 233 intersects with Chowchilla Boulevard, and traffic movement is controlled by a signal. The State Route 99 off-ramp intersections with State Route 233 (southbound and northbound) are stop-controlled. The southbound and northbound off-ramps currently operate at a level of service D and level of service F, respectively, during peak travel hours. Planned development adjacent to the Madera 99/233 interchange improvement project could result in the construction of up to 2,042 residential units and approximately 945,000 square feet of commercial building space. Without the project, roadway operations and safety for all users are expected to deteriorate with future growth.

1.3 Project Description

The California Department of Transportation (Caltrans) proposes to make operational improvements at the existing State Route 99/State Route 233 interchange by constructing two roundabouts at the ramp intersections in the City of Chowchilla. The existing State Route 233 bridge over State Route 99 will remain in place to accommodate eastbound traffic. A new separate concrete bridge will be constructed for westbound traffic. A 10-foot-wide sidewalk will be placed along the westbound lanes on the new bridge to provide pedestrians and bicyclists a connection between the west and east side of the city. Other work includes the widening of the Ash Slough bridge on State Route 99, drainage improvements and access road construction.

New right-of-way will be required for construction of the project. Approximately 4.1 acres of land will be needed. This acreage represents partial land acquisition adjacent to the roadway.

See Figures 1-1 and 1-2 for the project vicinity map and project location map showing where the project will occur. See additional project mapping in Appendix B.

A build alternative and a no-build alternative are being evaluated for this project. The current estimated project cost is $33,262,000.

Figure 1-1 Project Vicinity Map

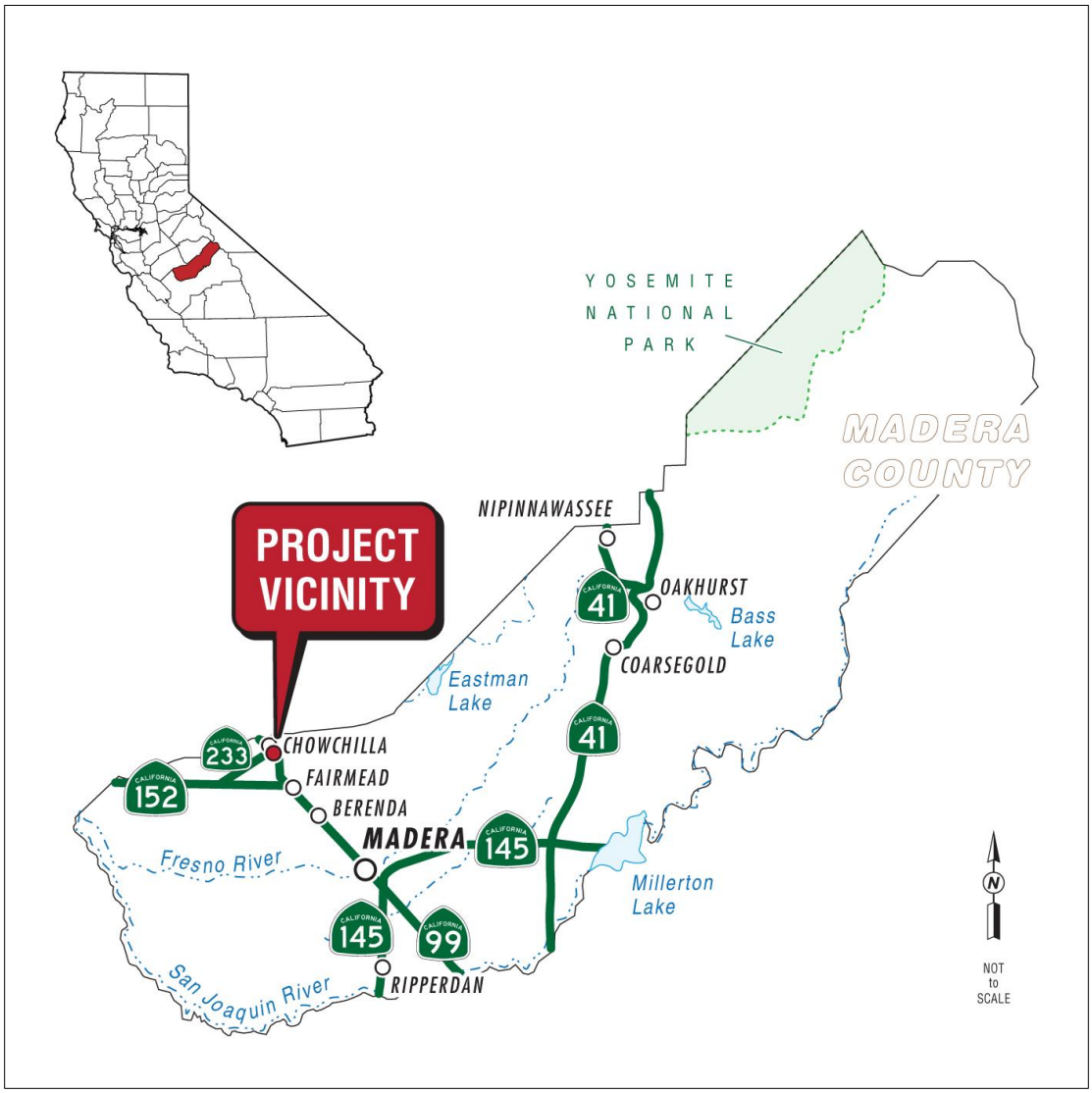
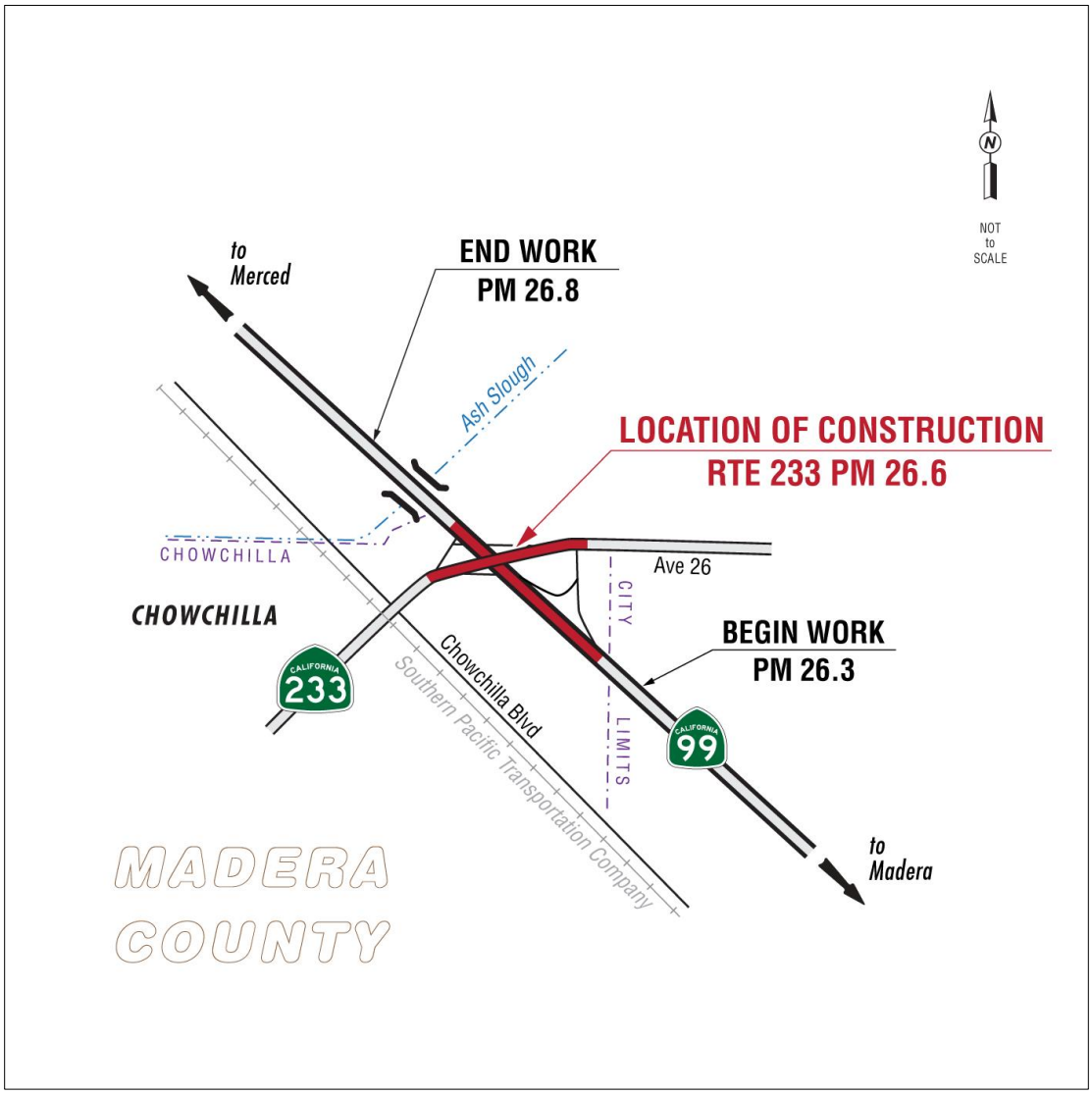


Figure 1-2 Project Location Map



1.4 Project Alternatives

A build alternative and a no-build alternative are being considered for this project.

1.4.1 Build Alternative

This project contains standardized project measures that are used on most Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures

are listed in this chapter under “Standard Measures and Best Management Practices Included in All Build Alternatives.”

Caltrans proposes to modify the existing State Route 99/State Route 233 interchange by constructing two roundabouts at the ramp intersections in the City of Chowchilla.

Under the build alternative, the Chowchilla Boulevard/State Route 233 intersection would continue to be controlled by signal. The stop signs at the ramp intersections of both the northbound and southbound ramps will be replaced with roundabouts. Each roundabout will be constructed with two circulating lanes on the eastbound and westbound directions.

The northbound off-ramp from State Route 99 will increase from one lane to two lanes to enter the eastern roundabout. The northbound on-ramp to State Route 99 from the eastern roundabout will involve two lanes exiting the roundabout and decreasing to one lane to enter the freeway. A drainage basin will be constructed on the southeastern quadrant of the State Route 99/State Route 233 interchange. See Appendix B Project Mapping, page 70 for the location of the proposed drainage basin. An access road will be constructed northwest of the eastern roundabout to accommodate the residents living nearby.

The southbound on-ramp to State Route 99 will involve two lanes decreasing to one lane to enter the freeway. The southbound off-ramp from State Route 99 will increase from one lane to two lanes to enter the western roundabout. The southbound off-ramp realignment will require the widening of the Ash Slough Bridge.

The existing State Route 233 bridge over State Route 99 will remain in place to accommodate the eastbound traffic; the bridge rails will be upgraded. A new separate concrete bridge will be constructed for westbound traffic. The new bridge will be constructed north of the existing structure and will have a 10-foot-wide sidewalk, an 8-foot-wide outside shoulder, two 12-foot-wide lanes, and a 5-foot-wide inside shoulder. A Class II bike lane will also be constructed in the project.

After construction, there will be a total of two separate bridges spanning over State Route 99. The 10-foot-wide sidewalk will be placed along the westbound lanes on the new bridge to provide pedestrians and bicyclists a connection between the west and east side of the city. To accommodate the new bridge, two columns will be built in the median of State Route 99, and earthen material will be needed at the abutments.

The project will be constructed in two stages. The first stage will consist of the following: the widening of the Ash Slough bridge on State Route 99, roughly northwest of the State Route 99/State Route 233 interchange; construction of

the southbound off-ramp; construction of the northern portion of the State Roue 233 mainline, which includes the westbound State Route 233 bridge and the northern portions of the two roundabouts; partial construction of the northbound and southbound on-ramps. The second stage will consist of the following: shifting the State Route 233 traffic to the newly built roadway that was completed in stage 1; construction of the southern portions of the State Route 233 mainline, which includes the southern portions of the roundabouts and the reconstruction of the existing State Route 233 bridge; construction of the remaining portions of the southbound ramps and the northbound ramps.

1.4.2 No-Build (No-Action) Alternative

The State Route 99/State Route 233 interchange would remain as it currently exists under the no-build alternative. There would be no improvements to State Route 99 or State Route 233 or to the interchange.

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

14-1.02 Environmentally Sensitive Area: Pertains to environmentally sensitive areas marked on the ground. Do not enter an environmentally sensitive area unless authorized. If breached, immediately stop all work within 60 feet of the boundary, secure the area, and notify the engineer.

14-2.03 Unanticipated Discovery of Archaeological Resources: Pertains to archaeological resources discovered within or near construction limits. Do not disturb the resources and immediately stop all work within a 60-foot radius of discovery, secure the area, and notify the engineer. Do not move archaeological resources or take them from the job site. Do not resume work within the radius of discovery until authorized. Archaeological mitigation may include monitoring.

14-6.03 Species Protection: Pertains to protecting regulated species and their habitat that occur within or near the job site. Upon discovery of a regulated species, immediately stop all work within a 100-foot radius of the discovery and notify the engineer.

14-6.03B Bird Protection: Pertains to protecting migratory and nongame birds, their occupied nests, and their eggs. Upon discovery of an injured or dead bird or migratory or nongame bird nests that may be adversely affected by construction activities, immediately stop all work within a 100-foot radius of the discovery and notify the engineer. Exclusion devices, nesting-prevention measures, and removing constructed and unoccupied nests may be applied.

14-7.03 Discovery of Unanticipated Paleontological Resources: If paleontological resources are discovered at the job site, do not disturb the

resources, and immediately stop all work within a 60-foot radius of the discovery, secure the area, and notify the engineer. Do not move paleontological resources or take them from the job site.

14-8.02 Noise Control: Pertains to controlling and monitoring noise resulting from work activities. Noise levels are not to exceed 86 decibels at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.

14-9.02 Air Pollution Control: Comply with air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the construction contract.

14-11 Hazardous Waste and Contamination: Includes specifications relating to hazardous waste and contamination.

14-11.02 Discovery of Unanticipated Asbestos and Hazardous Substances: Upon discovery of unanticipated asbestos or a hazardous substance, immediately stop work and notify the engineer.

14-11.04 Dust Control: Excavation, transportation, and handling of material containing hazardous waste or contamination must result in no visible dust migration. When clearing, grubbing, and performing earthwork operations in areas containing hazardous waste or contamination, provide a water truck or tank on the job site.

14-11.12 Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue: Includes specifications for removing, handling, and disposing of yellow thermoplastic and yellow-painted traffic stripe and pavement marking. The residue from the removal of this material is a generated hazardous waste (lead chromate). Removal of existing yellow thermoplastic and yellow-painted traffic stripe and pavement marking exposes workers to health hazards that must be addressed in a lead compliance plan.

14-11.13C Safety and Health Protection Measures: Applies to worker protective measures for potential lead exposure.

14-11.14 Treated Wood Waste: Includes specifications for handling, storing, transporting, and disposing of treated wood waste.

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
California Department of Fish and Wildlife	1602 Streambed Alteration Agreement	To be obtained prior to construction
Regional Water Quality Control Board	401 Waste Water Discharge Permit	To be obtained prior to construction
Central Valley Flood Protection Board	Encroachment Permit	To be obtained prior to construction
U.S. Fish and Wildlife Service	Letter of Concurrence	Received March 10, 2023

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 Scenic Resource Evaluation/Visual Assessment dated March 3, 2023, 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**

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?	**No Impact**
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	**Less Than Significant Impact**

b, d) Affected Environment

Surrounding land uses in the project area are agricultural, commercial, and residential. The roadsides consist mostly of bare soil, scattered grasses, and landscape trees and shrubs. Within the Caltrans right-of-way, the most notable landcover consists of eucalyptus trees and oleander shrubs.

The visual character of the project will be compatible with the existing visual character of the corridor. The existing lines in the project area, on both State Route 99 and State Route 233, are mostly straight and flat, with the overcrossing structure gently sloping. Oleander plants in the State Route 99 median lend to the linear quality and altogether present a feeling of continuity.

Color in the existing project area is typical of California's Central Valley. Springtime green grasses give way to golden hues when the rains end. Eucalyptus and oleander planting are evergreen and provide color year-round. From spring to fall, the oleanders are in bloom, and the bright flowers add diversity to the otherwise bland scene. The eucalyptus trees introduce a diversity of form to the views in this area. The trees are also bigger in scale than the people and cars that pass through the interchange, helping to blend in the large scale of the overcrossing.

Environmental Consequences

Elements of the project that will cause the most change in the visual environment are the removal of 56 eucalyptus trees and the construction of two roundabouts under the build alternative. With the removal of the trees, there is a loss of large-scale elements that help blend the bridge structures into the environment. The new roundabouts will be somewhat exposed to view and will increase the urban character of the interchange. The visual quality of the existing corridor will be somewhat altered by the proposed

project. While the views in the project area will change, the quality of those views will remain relatively intact. Regular users of State Route 233 and State Route 99 who exit to access services will be the most sensitive to the changes made by the project.

No tree removal and no visual changes will occur under the no-build alternative.

Avoidance, Minimization, and/or Mitigation Measures

Existing trees will remain at the perimeter of the two quadrants where the western roundabout will be placed. They will visually buffer the roundabout and soften the harshness of new construction. The oleanders in the median of State Route 99 will not be impacted, so the vividness of their blooms will remain a feature in the spring, summer, and fall.

This area is zoned for future commercial development, so an increase in the urban character of the environment is compatible with community expectations. The addition of a second bridge oriented parallel to the existing structure will be compatible with the project area's visual character.

The following measures to offset visual impacts are recommended for 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 storm water conveyance systems.
- Provide replacement planting.
- Add aesthetic elements to the overcrossing bridge structures to provide color, texture, and visual interest to the landscape.
- Add aesthetic paving to roundabouts, sidewalks, and median islands to provide color, texture, and visual interest to the landscape.

Avoidance, minimization, and mitigation measures are not required for the no-build alternative.

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.

Considering the information in the 2040 City of Chowchilla General Plan accessed on October 18, 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 non-agricultural use?	**No Impact**
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	**No Impact**
c) Conflict with existing zoning, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	**No Impact**
d) Result in the loss of forest land or conversion of forest land to non-forest use?	**No Impact**
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use?	**No Impact**

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 Report dated March 2023, 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?	**Less Than Significant Impact**
c) Expose sensitive receptors to substantial pollutant concentrations?	**Less Than Significant Impact**
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	**No Impact**

b, c) Affected Environment

The project is in the San Joaquin Valley Air Basin.

Climate and topography affect air quality. The climate of the project area is characterized with cool winters (average 60 degrees Fahrenheit in January) and warm, dry summers (average 90 degrees Fahrenheit in July). Temperature inversions are common, affecting localized pollutant concentrations in the winter and enhancing ozone formation in the summer. Annual average rainfall is 24 inches, mainly falling during the winter.

Prevailing westerly winds of California are the result of the North Pacific high-pressure cell, low-level wind flow of the Eastern North Pacific Ocean and its land masses in the middle latitudes. During the summer months, the Pacific high-pressure cell produces a predominantly northwesterly flow of marine air over California's coastal waters. During the winter months, the Pacific high-pressure cell is somewhat weakened and moves south, so that weaker and less persistent wind conditions are the norm. This circulation pattern is affected by differential heating between the ocean and the land. As the air approaches the California coastline, up-valley air flow is enhanced during the warmer months, and down-valley flow dominates during colder months.

Air flow is channeled by mountain ranges, with the predominant wind direction coinciding with the valley's longitudinal axis in one direction. The second most prevalent wind follows this pattern but in the opposite direction. California's

coastal mountain ranges limit the inflow of marine air into the interior of California.

Limited airflow allows an escape of some air over the Tehachapi Mountains. Cooler drainage winds at the Tehachapi Mountains force the air back northwards, in a circular air pattern known as the Fresno eddy. The pollutants swirl in a counterclockwise pattern and return the air back to the polluted urban areas, where more pollutants are added the next day. Pollutants transported to higher altitudes due to daytime heating settle downwards due to the drainage winds.

The San Joaquin Valley Air Basin is a closed basin surrounded by the coastal ranges on the west, the Tehachapi Mountains to the south, and the Sierra Nevada range to the east. These conditions result in poor horizontal dispersion of pollutants, while high pressure events also cause limited vertical pollutant dispersal, leading to pollutant accumulation.

Criteria Pollutants, Attainment and Conformity Status

The Madera Avenue 14 air monitoring station is approximately 18 miles southeast of the State Route 99/233 Chowchilla interchange improvement project. The monitoring station is maintained by the San Joaquin Valley Air Pollution Control District.

Madera County is in attainment status for both the state and federal carbon monoxide ambient air standards.

The project is in an area that is in attainment-maintenance for the federal particulate matter 10-micron standard and in nonattainment for the federal particulate matter 2.5-micron standard. It is in nonattainment for both particulate matter 10-micron and particulate matter 2.5-micron state standards.

Under 40 Code of Federal Regulation Section 9.109, a project-level hot-spot analysis for conformity is required. The project was submitted for interagency consultation for consideration as a project that is deemed “Not a Project of Air Quality Concern.”

The Madera County Transportation Commission is currently working to formally amend the Regional Transportation Plan/Federal Transportation Improvement Program (approved by the Federal Transit Administration and Federal Highway Administration on December 16, 2022) to reflect changes in the project description and funding.

Environmental Consequences

For the build alternative, the project falls under the category of Low Potential Mobile Source of Air Toxics effects. The amount of mobile source air toxics emitted would be proportional to the vehicle miles traveled, which is equal to

the annual average daily traffic multiplied by miles length of project multiplied by 365 days.

The vehicle miles traveled estimated for the build alternative would be slightly higher than for current conditions because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. This increase in vehicle miles traveled would lead to slightly higher mobile source air toxics emissions along the new alignment; however, the emissions increase is offset by lower mobile source air toxics emission rates due to increased speeds. There would be a decrease in mobile source air toxics emissions along the parallel routes.

A conformity analysis for the project as “Not a Project of Air Quality Concern” was conducted and submitted to the Interagency Consultation Group on December 13, 2022. Concurrence that the State Route 99/State Route 233 Chowchilla Interchange Improvement project is “Not a Project of Air Quality Concern,” was received from the Environmental Protection Agency on December 14, 2022. The Federal Highway Administration concurred on December 27, 2022.

During construction, the project will generate air pollutants. Exhaust from construction equipment contains hydrocarbons, oxides of nitrogen, carbon monoxide, suspended particulate matter, and odors. However, most of the pollutants would be windblown dust generated during excavation, grading, hauling, and various other activities. The impacts of these activities would vary each day as construction progresses.

Avoidance, Minimization, and/or Mitigation Measures

The following minimization measures are recommended for project construction:

- Measures to reduce fugitive dust are required by the California Air Resources Board and San Joaquin Valley Air Pollution Control District. The construction contractor must comply with the Caltrans’ Standard Specifications in Section 14-9 (2015) and Section 14-9-02, which specifically require compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.

- Water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a “no visible dust” criterion either at the point of emissions or at the right-of-way line depending on local regulations.

- Soil binder will be spread on any unpaved roads used for construction purposes, and on all project construction parking areas.

- Trucks will be washed as they leave the right-of-way as necessary to control fugitive dust emissions.
- Construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by California Code of Regulations Title 17, Section 93114.
- A dust control plan will be developed documenting sprinkling, temporary paving, speed limits, and timely re-vegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- Equipment and materials storage sites will be located as far away from residential areas and park uses as practicable. Construction areas will be kept clean and orderly.
- Environmentally sensitive areas will be established near sensitive air receptors. Within these areas, construction activities involving the extended idling of diesel equipment or vehicles will be prohibited, to the extent feasible.
- Track-out reduction measures, such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic, will be used.
- All transported loads of soils and wet materials will be covered before transport, or adequate freeboard (space from the top of the material to the top of the truck) will be provided to minimize emission of dust during transportation.
- Dust and mud that are deposited on paved, public roads due to construction activity and traffic will be promptly and regularly removed to reduce particulate matter emissions.
- To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.
- Mulch will be installed, or vegetation planted as soon as practical after grading to reduce windblown particulate matter in the area.

Avoidance, minimization, and mitigation measures are not required for the no-build alternative.

2.1.4 Biological Resources

Considering the information in the Natural Environment Study dated September 2022 and the Letter of Concurrence from the U.S. Fish and

Wildlife Service dated March 2023, 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?	**Less Than Significant 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**
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	**No Impact**
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	**No Impact**
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	**No Impact**
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	**No Impact**

a, b) Affected Environment

Physical Environment

The elevation above mean sea level at the project site ranges from approximately 236 feet within the stream channel of Ash Slough to

approximately 243 feet in the regions within the off-ramps of State Route 99 and the State Route 99/State Route 233 interchange.

Six soil types are present within the project area: Atwater Loamy Sand, Delhi Sand, Hanford Sandy Loam, Madera Fine Sandy Loam, Pachappa Fine Sandy Loam, and Riverwash.

Ash Slough originates northeast of the project area where it receives water from the Chowchilla River. The slough flows southwest through the northwest portion of the project area within the 500-foot buffer and then meets with the Eastside Canal approximately 12.4 miles southwest of the project area.

Biological Environment

Natural Communities

Two natural communities—Annual Grassland and Valley Foothill Riparian—were identified within the project area.

Five vegetation communities were documented: Annual Grassland, Cropland, Riverine, Urban, and Valley Foothill Riparian. During the January 2020 onsite survey, 37 common plant species were found, with the most dominant species consisting mostly of annual grasses. A significant amount of miner's lettuce and red gum (*Eucalyptus camaldulensis*) was present as the dominant species.

Special-Status Plant Species

The California Native Plant Society database and California Natural Diversity Database listed historical occurrences of 26 special-status plant species. Eight of the 26 species were listed as state or federally threatened or endangered (and were also listed as California Native Plant Society sensitive species), and 18 were listed as California Native Plant Society sensitive but with no federal or state status.

Invasive Plant Species

Fourteen invasive species were identified within the project area: giant reed (*Arundo donax*), wild oats, black mustard (*Brassica nigra*), ripgut brome, poison hemlock, Bermuda grass (*Cynodon dactylon*), redstem filaree (*Erodium cicutarium*), red gum, short-pod mustard (*Hirschfeldia incana*), English plantain (*Plantago lanceolata*), rabbitsfoot grass (*Polypogon monspeliensis*), Himalayan blackberry, curly dock (*Rumex crispus*), and milk thistle (*Silybum marianum*).

Common Animal Species

Six common wildlife species were found during field surveys in 2020: California scrub jay *(Aphelocoma californica)*, red-tailed hawk *(Buteo jamaicensis)*, red-shouldered hawk *(Buteo lineatus)*, Anna's hummingbird *(Calypte anna)*, American crow *(Corvus brachyrhynchos)* and killdear *(Charadrius vociferous)*. Botta's pocket gopher (*Thomomys bottae*) and

California ground squirrel (*Otospermophilus beecheyi*) were also present in the portion of the project area north of State Route 233 based on the presence of their burrows. Two raptors—the red-tailed hawk (*Buteo jamaicensis*) and the red- shouldered hawk (*Buteo lineatus*)—were overflying the project area.

Nine stick nests were found within the project area, but none were occupied during the time of the survey. Two red-tailed hawks were seen sitting in and overflying a nest, indicating that it was a potentially active nest.

Special-Status Wildlife

Habitat capable of supporting eight special-status wildlife species listed as state and/or federally threatened or endangered, state species of special concern, or fully protected species occurs within the project area.

Special-status wildlife species that could potentially be present are the western spadefoot toad (*Spea hammondii*), western pond turtle (*Emys marmorata*), tricolored blackbird (*Agelaius tricolor*), burrowing owl (*Athene cunicularia*), Swainson's hawk, northern harrier (*Circus cyaneus*), American badger (*Taxidea taxus*), and San Joaquin kit fox (*Vulpes macrotis mutica*). Habitat that could support the hoary bat and Yuma myotis (*Myotis yumanensis*) occurs within the area.

Environmental Consequences

Biological Environment

Natural Communities

Project construction activities would potentially result in up to 0.06 acre of permanent impacts to riparian habitat contained within the project area. No mature riparian tree species would be impacted by the project.

Special-Status Plant Species

No special-status plant species were observed during the field survey, and none are likely to occur because of the absence of habitat that could support these species.

Special-Status Wildlife

Potential impacts to special-status wildlife species may include direct mortality to individuals from vehicle strikes, ground disturbance, emergent vegetation or other riparian vegetation removal, habitat loss, and poisoning. Potential indirect impacts may include degradation of breeding habitat, change in water quality due to runoff from construction, loss of shelter resulting in increased predation, exposure, or stress.

Caltrans received a Letter of Concurrence dated March 2023 from the U.S. Fish and Wildlife Service concurring with Caltrans' determination that the project may affect but is not likely to adversely affect the San Joaquin kit fox.

Avoidance, Minimization, and/or Mitigation Measures

Biological Environment

Natural Communities

To protect riparian habitat to the maximum extent practicable, the following measures are recommended:

Exclusion fencing should be placed around the perimeters of the project footprint that are within, or nearest to, the riparian corridors.

A biological monitor should oversee all clearing and grubbing activities to ensure that impacts to riparian habitat are avoided and/or minimized.

California Department of Fish and Wildlife regulatory authority encompasses the riparian habitat, as well as bed and bank of all water features. A Streambed Alteration Agreement should be procured from the California Department of Fish and Wildlife prior to initiating ground disturbance activities.

All areas of impacted vegetation should be revegetated with a mix of at least three locally common native herbaceous species, or as directed by the California Department of Fish and Wildlife. Seed suppliers typically offer basic native erosion control seed palettes formulated for this purpose. An annual monitoring schedule should include at least three-monthly examinations: one in March, one in May, and one in July. These examinations should occur each year for a minimum of three consecutive years. Revegetation should be considered successful when at least 50 percent of the groundcover has become established, or as otherwise directed by the California Department of Fish and Wildlife in a Streambed Alteration Agreement. Planting within the project area or associated roadway easement is recommended to restore and maintain the viability of the affected habitat. Offsite compensatory planting shall only be permitted if onsite planting is not feasible.

Special-Status Plant Species

No special-status plant species were observed during the field survey, and none are likely to occur because of the absence of habitat that could support these species. Therefore, no avoidance or minimization measures are proposed.

Western Spadefoot Toad

To ensure that construction activities do not result in degradation of potential breeding sites that are near construction sites, reconnaissance-level surveys should be performed no more than 14 calendar days before the beginning of construction. Pre-construction surveys should be conducted by a qualified biologist within 250 feet of Ash Slough and ditch DD_1 within areas where construction activities would occur. The habitat in those areas should be avoided to the maximum extent possible. Where feasible, Environmentally Sensitive Area fencing capable of precluding western spadefoot toads from entering construction areas should be installed, based on findings obtained

during the pre-construction surveys. Fencing should consist of 16-inch metal flashing or an equivalent material and should be buried 6 inches below the ground surface, extending at least 8 inches above the ground.

Western Pond Turtle

A pre-construction survey should be performed within 14 days of construction for western pond turtles in areas of the project that occur in Ash Slough and in surrounding upland habitat within 400 feet of Ash Slough. During the construction period when Ash Slough is inundated, weekly examinations of Ash Slough should occur to determine presence of western pond turtles. If western pond turtles are found in Ash Slough within the Project Impact Area, barrier fencing should be installed between the stream and upland habitat to prevent entrance into work areas along the banks of the slough. Fencing should consist of 16-inch metal flashing or an equivalent material and should be buried 6 inches below the ground surface, extending at least 8 inches above the ground. If western pond turtles are found in upland habitat within the work area, a 100-foot buffer should be set up around nearby construction zones to prohibit turtles from entering work areas, and turtles should be relocated to similar habitat in which they are found or in other suitable habitat (e.g., downstream) outside the 100-foot buffer.

Tricolored Blackbird

To protect the tricolored blackbird, a pre-construction survey should be conducted if construction is scheduled to begin within the breeding season (February 1 to September 30). Surveys should be conducted within 14 days of construction and monthly while construction is occurring within 250 feet of Ash Slough. All habitat that could support this species including riparian trees, shrubs, and cattails that are located within 250 feet of construction should be examined. If the tricolored blackbird is found nesting within the survey area, construction activities should be conducted so that the nest would be avoided by 250 feet until young have fledged, unless it can be documented that a reduction in this buffer area would not result in nest abandonment or reduced reproductive success. Take of this species as defined by Fish and Game Code Section 86 would require a permit from the California Department of Fish and Wildlife.

Western Burrowing Owl

No more than 30 days prior to the start of any project-related activity, pre-construction surveys should be conducted by a qualified biologist for burrowing owl according to the *Staff Report on Burrowing Owl Mitigation and Burrowing Owl Survey Protocol and Mitigation Guidelines* (California Burrowing Owl Consortium 1993). Pre-activity surveys of an activity area and a 500- foot perimeter of the activity area should be conducted. If burrowing owls are present within 250 feet of the activity site during the breeding season (February 1 through August 31), a buffer around the active burrow shall be established according to the *Staff Report on Burrowing Owl Mitigation and*

Burrowing Owl Survey Protocol and Mitigation Guidelines. This buffer may be removed once it is determined by the qualified biologist that the young have fledged and are no longer dependent on the nest or burrow for survival. Typically, the young fledge by August 31. Actual fledging dates may be earlier or later and shall be determined by the qualified biologist. Buffer distances may be reduced on an activity-by-activity basis approved by a qualified biologist that would document that the reduction in the buffer area would not result in nest abandonment or loss of reproductive success.

Swainson's Hawk

Swainson's hawk nesting and potential foraging habitat is present within and near the Project Impact Area. Protocol-level pre-activity surveys for the Swainson's hawk should be conducted prior to construction following the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000) and the *Staff Report Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* (CDFG 1994). To reduce project-related impacts to active bird nests and to reduce the potential for construction activities to interrupt breeding and rearing behaviors of birds, the following measures shall be implemented prior to and during construction activities scheduled to occur within the nesting season (February 1 to September 30) to reduce direct and indirect impacts:

- A pre-construction survey should be conducted within a 0.5-mile radius of all project activities. A "windshield survey" at approximately 5 miles per hour is preferable when an adequate roadway is available. Walking surveys are useful in locating a nest after a nest territory is identified, or when driving is not an option. Surveys would be performed by a qualified biologist to verify the presence or absence of nesting birds.

- If potential Swainson's hawk nests or nesting substrates are found within 0.5-mile of the project, then those nests or substrates must be monitored for activity on a routine and repeating basis throughout the breeding season, or until Swainson's hawks or other raptor species are verified to be using them.

  The protocol recommends that up to 10 visits be made to each nest or nesting site: one during January 1 to March 20 to identify potential nest sites, three during March 20 to April 5, three during April 5 to April 20, and three during June 10 to July 30 to locate hawks preparing to nest. Known nest sites shall be monitored from April 21 through June 10, and post-fledging activity should be monitored from June 10 to July 30. To meet the minimum level of protection for the species, surveys should be completed for at least the two survey periods immediately prior to project-related ground disturbance activities.

If Swainson's hawks are not found to nest within the survey area, then no further action is warranted.

If Swainson's hawks are found to nest within the survey area, then the following measure should be implemented:

- A 2,500-foot (approximately 0.5-mile) radius no-construction zone should be installed around each active Swainson's hawk nesting site if construction is to occur within the breeding period for Swainson's hawks (February 1 to September 30). The no-construction zone may be reduced in size if it can be determined that construction activities would have no take. If it is determined that construction activities could result in take, then the California Department of Fish and Wildlife must be consulted.

Northern Harrier

Any vegetation removal required for the project should occur, when feasible, during the avian non-breeding season of approximately October 1 to January 31. If vegetation clearing is conducted between February 1 and September 30, a pre-construction survey for active nests should be conducted by a qualified biologist no more than 14 days prior to the start of construction. Surveys should be timed (phased) to coincide with the start of construction activities. If nests are found, nests should be avoided by 500 feet until a qualified biologist has determined that the young have fledged and are no longer reliant upon the nest or parental care for survival. The avoidance buffer may be reduced in size if it can be determined that construction activities would not disrupt breeding behaviors or have the potential to result in nest abandonment or nest failure.

Migratory Birds

Any vegetation removal required for the project should occur outside the avian nesting season (i.e., approximately October 1 to January 31), if possible. If vegetation clearing must be conducted during the avian nesting season (i.e., between February 1 and September 30), a pre-construction survey for active migratory bird and raptor nests should be conducted by a qualified biologist no more than 14 days prior to the start of construction. If any active raptor nests or migratory bird nests are observed on or near the project site, avoidance buffers should be established. Raptor nests should be avoided by 500 feet, and other migratory bird nests should be avoided by 250 feet until a qualified biologist has determined that the young have fledged and are no longer reliant upon the nest or parental care for survival. The avoidance buffer may be reduced in size if it can be determined that construction activities would not disrupt breeding behaviors or have the potential to result in nest abandonment or nest failure.

Cliff swallows may begin nest building at the start of the nesting season and may start laying eggs as early as April. Once a nest is complete, it cannot be removed or damaged without consultation with the California Department of

Fish and Wildlife and U.S. Fish and Wildlife Service. Swallows are best managed by nest removal and exclusion techniques, but those must be implemented prior to the nesting season. If found during surveys, old nests or nests under construction may be washed down with water or knocked down with a pole. Swallows are strongly attracted to old nests or remnants of deteriorated nests, and, as such, all traces of mud should be removed. Nest removal may require several days because cliff swallows will persistently rebuild nests. Exclusion is a relatively permanent, long-term solution. Exclusion should be used only before the swallows arrive and before nest building activities have begun. Using nets with mesh size between half-inch to three-quarter-inch can provide a physical barrier between the birds and the nest site. If a plastic net is used, it should be attached to the bridge and pulled taut. The net should not have any loose pockets or wrinkles that could entrap or entangle birds. A qualified biologist should monitor nest removal and/or installation of exclusion devices.

Special Concern Bats

Construction activities that would disturb a maternity roost or seasonal roost for bats would require the implementation of avoidance and/or minimization measures. Within 14 days prior to construction activities, surveys for bats would be needed to identify where bats might be present within the project area. The timing of surveys would need to be phased to accommodate the timing of bridge work and the removal or trimming of trees and the removal of any buildings. The surveys would include a visual examination of the bridge, trees, and buildings and flyout surveys to assess the presence of bat species. Currently, the bridge is not being used as a maternity roost, but it could be used as a temporary roost site at any time. If bats are determined to be present at the bridge on buildings, bats will be excluded by installing exclusion devices while bats are away from those structures during nightly foraging bouts. Bats may not be excluded if they are present as a maternity colony and non-volant young are present. Bat exclusion devices consisting of plywood caps, Styrofoam inserts, or exclusion netting may need to be installed to prevent bats from occupying roosts, and one-way doors may need to be installed in some locations to exclude bats. Exclusionary devices would be removed upon construction completion, and roosts would be restored to original condition.

American Badger

No more than 30 days prior to the start of any project-related activity throughout the entire construction period, pre-construction surveys shall be conducted by a qualified biologist. Surveys may need to be phased to conform with activities as they begin within the project area. If a potential badger den is found, the monitoring of that den shall be conducted to determine whether the den is occupied. Tracking medium (diatomaceous earth) shall be spread around the opening to 3 feet to gather signs of occupation. Tracking medium shall be examined daily for a minimum of 3 consecutive days. If no signs of

badgers are found, then the den may be hand-excavated. If presence of the badger is verified, then a 100-foot avoidance buffer should be established by the biologist and construction activities should avoid the den until it has been determined that the den is no longer occupied. A one-way door to exclude a badger from an occupied den may be installed with concurrence from the California Department of Fish and Wildlife.

The following measures should be implemented throughout the duration of project activities to reduce impacts to the American badger:

- All construction equipment shall be maintained properly to ensure that it is all in good working order.
- Construction-related leaks and spills shall be promptly repaired and cleaned up.
- Vehicle access and storage of vehicles, equipment, and materials shall be limited to existing dirt roads and previously disturbed areas.
- Project-related vehicles shall observe a speed limit of 20 miles per hour for unpaved roads and 25 miles per hour for paved roads in an activity area, except on county roads and state and federal highways. Nighttime construction traffic shall be limited to emergency traffic only.
- Dogs and other pets shall not be allowed within the activity area.
- All materials staged on an activity site shall be inspected thoroughly prior to being moved to ensure no presence of special-status species or sheltering within the materials.
- To prevent inadvertent entrapment of animals during the construction phase of an activity, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials or be provided with escape ramps at a rate of one ramp every 100 feet. Escape ramps may be constructed of earth fill or wooden planks with a slope no steeper than 45 degrees. If wooden planks are used, perpendicular groves or rungs shall be proved to aid in traction. All holes and trenches, whether covered or uncovered, more than 2 feet deep shall be inspected daily for trapped animals regardless of whether work is occurring in that area. Before holes or trenches are filled, they shall be thoroughly inspected for trapped animals.
- Species may be attracted to den-like structures such as pipes, culverts, pallets, wire bales, and construction equipment. All pipes 4 inches in diameter or greater that are stored on an activity site shall be securely capped or covered to prevent use by species. Materials and equipment shall be thoroughly inspected for the presence of special-status species before being buried, capped, or otherwise used or moved in any way. If species are

discovered within staged materials or equipment, all activity in the immediate area shall stop until the species has vacated the area on its own accord.

- Use of rodenticides and herbicides in an activity area shall be restricted. This is necessary to prevent impacts to special-status species and the species that may be affected secondarily. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation, as well as additional activity-related restrictions deemed necessary by the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife. If rodent control must be conducted, zinc phosphide shall be used because of a proven lower risk to secondary carnivores.

- All food-related trash such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from an activity site.

San Joaquin Kit Fox

To avoid and minimize impacts to the San Joaquin kit fox, follow the *U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance*. The measures that are listed below have been excerpted from those guidelines and would protect San Joaquin kit foxes from direct and indirect impacts.

- Pre-construction surveys should be conducted no fewer than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities, or any project activity likely to impact the San Joaquin kit fox. Surveys may need to be phased to coincide with the start of construction activities at any specific area.

- Project-related vehicles should observe a daytime speed limit of 20 miles per hour throughout the site in all project areas, except on county roads and state and federal highways; this is particularly important at night when kit foxes are most active. Although not anticipated for this project, night-time construction should be minimized to the extent possible. However, if night construction should occur, then the speed limit should be reduced to 10 miles per hour. Off-road traffic outside of designated project areas should be prohibited.

- To prevent inadvertent entrapment of kit foxes or other animals during construction activities, all excavated, steep-walled holes or trenches more than 2 feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly examined for trapped animals.

- San Joaquin kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way.

- All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from a construction or project site.

- No pets, such as dogs or cats, should be permitted on the project site to prevent harassment, mortality of kit fox, or destruction of dens.

- Use of rodenticides and herbicides in project areas should be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation, as well as additional project-related restrictions deemed necessary by the Service. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to kit foxes.

- A representative should be appointed by the project proponent who would be the contact source for any employee or contractor who might observe a kit fox. The representative would be identified during the employee education program and that person's name and telephone number shall be provided to the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service.

- An employee education program should be prepared and implemented. The program should consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and/or agency personnel involved in the project. The program should include the following: a description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information should be prepared for distribution to the previously referenced people and anyone else who may enter the project site.

- Upon completion of the project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc. should be re-contoured if necessary, and

revegetated to promote restoration of the area to pre-project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the project, but after project completion would not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas should be determined on a site-specific basis.

- In the case of trapped animals, escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service should be contacted for guidance.

- New sightings of a kit fox shall be reported to the California Natural Diversity Database. A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the U.S. Fish and Wildlife Service.

Western Spadefoot Toad

To ensure that construction activities do not result in degradation of potential breeding sites that are near construction sites, reconnaissance-level surveys should be performed no more than 14 calendar days before the beginning of construction. Pre-construction surveys should be conducted by a qualified biologist within 250 feet of Ash Slough and the ditch within areas where construction activities would occur. The habitat in those areas should be avoided to the maximum extent possible. Where feasible, Environmentally Sensitive Area fencing capable of precluding western spadefoot toads from entering construction areas should be installed, based on findings obtained during the pre-construction surveys. Fencing should consist of 16-inch metal flashing or an equivalent material and should be buried 6 inches below the ground surface, extending at least 8 inches above the ground. No insecticides, herbicides, fertilizers, or other chemicals that might harm the western spadefoot toad should be used in the buffer zone.

2.1.5 Cultural Resources

Considering the information in the Supplemental Historic Property Survey Report dated December 12, 2022, 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**

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	**No Impact**
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	**No Impact**

2.1.6 Energy

Considering the information in the Energy section of the Caltrans Standard Environmental Reference dated January 2020, 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 Earthquake Zone Map, accessed September 29, 2022, the California Department of Conservation Landslide Map, accessed September 29, 2022, the Preliminary Paleontological Evaluation Report and Paleontological Mitigation Plan for the Chowchilla Interchange Improvement Project dated November 15, 2015, and the Supplemental Preliminary Paleontological Evaluation Report/Paleontological Mitigation Plan Madera 99/233 Chowchilla Interchange Improvement, dated September 30, 2022, 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: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	**No Impact**
ii) Strong seismic ground shaking?	**No Impact**
iii) Seismic-related ground failure, including liquefaction?	**No Impact**
iv) Landslides?	**No Impact**
b) Result in substantial soil erosion or the loss of topsoil?	**No Impact**
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	**No Impact**
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial 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?	**Less Than Significant Impact**

f) Affected Environment

Most of the project sediments come from the Modesto Formation with a small extent of Riverbank Formation and Holocene River terrace deposits. Both the Modesto and Riverbank formations have the potential to yield fossils meeting significance criteria based on other finds in the Merced-Madera area.

Environmental Consequences

Build Alternative

The greatest planned vertical impacts are to the Modesto Formation where construction of a drainage basin is proposed at the southeast corner of the interchange where the proposed cut is 12 feet deep.

No-Build Alternative

No impacts to paleontological resources are expected under the no-build alternative.

Avoidance, Minimization, and/or Mitigation Measures

Build Alternative

Native sediments of the Modesto Formation should be monitored full-time for all open (grading, trenching, but not drilling) excavations more than 5 feet deep. The Riverbank Formation should be spot checked during grading. A preliminary paleontological mitigation plan was prepared in 2015 by Cogstone Resource Management to address the potential to encounter paleontological resources during the proposed improvements for the Madera State Route 99/State Route 233 interchange project.

No-Build Alternative

Avoidance, minimization and mitigation measures are not required under the no-build alternative.

2.1.8 Greenhouse Gas Emissions

Considering the information in the Climate Change Memo dated March 2023 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 With Mitigation Incorporated**
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	**Less Than Significant Impact**

a,b Affected Environment

Improvements to the State Route 99/State Route 233 intersection are included in the Madera County Transportation Commission 2018 Regional Transportation Plan/Sustainable Communities Strategies, including achieving Senate Bill 375

greenhouse gas reduction goals, which reflects the region's strong commitment to build a more sustainable transportation system through long-range planning efforts. The project meets the Madera County Transportation Commission's performance measures for listing as a capacity-increasing project in the Regional Transportation Plan. It is also consistent with the Regional Transportation Plan/Sustainable Communities Strategy goals of improving goods movement along the regionally important State Route 99.

Improvements to the State Route 99/State Route 233 interchange are consistent with the City of Chowchilla 2040 General Plan, Open Space and Conservation Element policy OS 23 to implement state and regional regulations pertaining to greenhouse gas emissions and climate change.

The project location is identified as a major corridor needing interchange operational improvement to improve the level of service and air quality.

Environmental Consequences

The following discussion applies to both the build alternative and the no-build alternative.

A quantitative carbon dioxide emissions analysis comparing the build alternative and no-build alternative was completed for the following locations: Chowchilla State Route 233, southbound State Route 233/State Route 99 and southbound State Route 99/State Route 233. The results are detailed below.

Chowchilla State Route 233, build alternative: Carbon dioxide emissions for 2022 are 221 tons per year. Carbon dioxide emissions for opening year 2024 are 246 tons per year. Carbon dioxide emissions for design year 2044 are 313 tons per year.

Chowchilla State Route 233, no-build alternative: Carbon dioxide emissions at this location for 2024 are 209 tons per year and for 2044 are 215 tons per year. The no-build alternative carbon dioxide emissions are lower than the build alternative.

Southbound State Route 99/State Route 233, build alternative: Carbon dioxide emissions for 2022 are 98 tons per year. Carbon dioxide emissions for opening year 2024 are 67 tons per year. Carbon dioxide emissions for design year 2044 are 64 tons per year.

Southbound State Route 99/State Route 233, no-build alternative: Carbon dioxide emissions for 2024 are 104 tons per year and for 2044 are 98 tons per year. The no-build alternative carbon dioxide emissions are higher than the build alternative.

Northbound State Route 99/State Route 233, build alternative: Carbon dioxide emissions for 2022 are 134 tons per year. Carbon dioxide emissions

for opening 2024 are 74 tons per year. Carbon dioxide emissions for design year 2044 are 72 tons per year.

Northbound State Route 99/State Route 233, no-build alternative: Carbon dioxide emissions for the no-build alternative at this location for 2024 are 104 tons per year and for 2044 are 98 tons per year. The no-build alternative carbon dioxide emissions are higher than the build alternative.

The increase in emissions would mainly come from population growth because traffic volumes on State Route 233 will increase over time due to several planned housing developments in the area. Also, the amount of 2024 and 2044 build alternative carbon dioxide emissions compared to the no-build alternative carbon dioxide emissions reflects the anticipated operational shortfalls stemming from the current freeway system (for example, no added lanes to existing State Route 99 in this area to date).

The conversion of the existing stop-controlled intersections to two-lane roundabouts reduces emissions. This is seen in the comparisons of the 2024 and 2044 build to no-build alternative carbon dioxide emissions. With stop-controlled intersections (both signals and signage), motorists are required to come to a complete stop, idle while they await the opportunity to navigate their movements and accelerate from the complete stop and attain speed. A roundabout eliminates the need to stop and maintains a constant speed through the roundabout. Roundabouts also calm traffic by forcing slower speeds, making it easier to avoid accidents with other vehicles and non-vehicular traffic.

The minor changes to traffic flow will not have any measurable impact on carbon dioxide greenhouse gas emissions when comparing the build alternative to the no-build alternative. However, based on vehicle trends with additional electric cars and cleaner fuels on the roadway, carbon dioxide emissions will inevitably reduce as years progress.

Construction greenhouse gas emissions would result from material processing, onsite construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase.

Avoidance, Minimization, and/or Mitigation Measures

Build Alternative

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

- To the extent feasible, limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment (with some exceptions).

- To the extent feasible, schedule longer-duration lane closures to reduce the number of equipment mobilization efforts (combine with public information efforts for congested areas).
- To the extent feasible, reduce the need for transport of earthen materials by balancing cut and fill quantities.
- Supplement existing construction environmental training with information on methods to reduce greenhouse gas emissions related to construction.
- To the extent feasible, reduce construction waste by reusing or recycling construction and demolition waste.
- To the extent feasible, use recycled water and reduce consumption of potable water for construction.
- To the extent feasible, include mulch and compost applications and reduce organic waste.
- To the extent feasible, include mulch around new and existing plants to retain moisture.
- Caltrans in coordination with City of Chowchilla would work with CalVans to provide funding in the amount of $360,000 to subsidize the addition of 1 vanpool to the existing CalVans program for a 20-year period. The proposed vanpool would carry passengers to and from the State Route 99/Herndon Avenue junction in Fresno County to the Valley State Prison and the Central California Women's Facility. During final engineering, proposals providing an equal or greater benefit may be approved.

No-Build Alternative

Avoidance, minimization, and mitigation measures are not required under the no-build alternative.

2.1.9 Hazards and Hazardous Materials

Considering the information in the Madera 99/233 Chowchilla Interchange Improvement Hazardous Waste Initial Site Assessment dated September 26, 2022, 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?	**Less Than Significant Impact**

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

d) Affected Environment

The Initial Site Assessment included site reconnaissance, review of historic topographic maps, aerial photographs, regulatory databases, facility-related documents, and other site-related record sources. Residential, commercial, and agricultural land uses are found within the project limits. The project area also includes some vacant and undeveloped land.

Environmental Consequences

Build Alternative

The Initial Site Assessment identified the following facilities at or adjacent to the project area as a potential risk for hazardous materials/waste:

- The former Chowchilla Tire and Wheel at 235 West Robertson Boulevard, Chowchilla, California, 93610. This Leaking Underground Storage Tank case was listed as an open remediation as of January 14, 2022.

- Exxon Mini Mart at 130 East Robertson, Chowchilla, California 93610. This Leaking Underground Storage Tank case received closure on April 9, 2014, following the completion of assessment and remediation work.

- Aquino's Texaco at 125 South Chowchilla Boulevard, Chowchilla, California, 93610. This Leaking Underground Storage Tank case received closure on September 14, 1992. However, no case closure letter or case closure summary was found in the Fresno office's case file.

- Hollister Trucking at 128 Chowchilla Boulevard, Chowchilla, California 93610. This Leaking Underground Storage Tank case received closure on October 31, 1996, following the completion of assessment and remediation work.

- Chowchilla Water District Shop, 321 South Chowchilla Boulevard, Chowchilla, California 93610. This Leaking Underground Storage Tank case received closure on October 20, 1987. However, no case closure letter or case closure summary was found in the Fresno office's case file.

- The former Wilbur-Ellis facility, Assessor's Parcel Number 014-020-013, This facility was used as an agricultural chemical sales business. At least eight underground storage tanks and one waste sump were located on the property according to the State Water Resources Control Board Hazardous Substance Storage Container Information for Madera County list. A review of files at the Madera County Environmental Health Division indicated that two plastic sumps were used to collect rinse water from empty chemical containers and spray equipment prior to being pumped into an aboveground plastic containment tank. The State Water Resources Control Board Hazardous Substance Storage Container Information for Madera County list for Wilbur-Ellis listed eight tanks and one sump; no information was found in the regulatory record as to whether the tanks and sumps have been properly removed. Also, soil staining was observed in the vacant field between the former Wilber-Ellis office and Robertson Boulevard.

  Site assessment of the high-risk Wilbur-Ellis property (Assessor's Parcel Number 014-020-013) would be required to confirm if the potentially hazardous material site could impact right-of-way/temporary construction easement areas of the project. The preliminary site investigation/evaluation of finding may take up to 8 months to complete.

Aerially Deposited Lead

An aerially deposited lead study was done within the project area at the State Route 99/State Route 233 interchange. Soil samples were collected and

analyzed from 23 direct push borings and one hang auger boring along the interchange within Caltrans' right-of-way. A total of 72 soil samples were collected and submitted for lab analysis. Results indicate that aerially deposited lead in surface soils from 0.0 to 0.5 feet within the proposed construction zone would be classified as a California hazardous waste due to higher lead concentrations. The soils excavated from 0.5 to 2.0 feet of the project area in any combination of layers qualify as unregulated, non-hazardous material and may therefore be reused within the Caltrans right-of-way, relinquished to the contractor, or disposed of as a non-hazardous/non-regulated material.

Asbestos-Containing Materials and Lead-Containing Paint

An asbestos-containing materials and lead-containing paint survey was done within the project area at the State Route 99/State Route 233 interchange. A total of 16 bulk asbestos samples representing seven suspect components were collected. No suspect lead-containing paint was found on structural members of the bridges. Consequently, no paint samples were collected. Asbestos was not detected in suspect samples collected during the survey.

No-Build Alternative

There are no hazardous waste/material concerns with the no-build alternative.

Avoidance, Minimization, and/or Mitigation Measures

Build Alternative

Construction activities involving ground disturbance could expose workers and/or the public to lead. A lead compliance plan developed by a certified industrial hygienist is required. Caltrans' standard special provision for earth material containing lead requires a lead compliance plan when lead concentrations are non-hazardous or whenever soil excavation that could result in lead exposure will occur and disposal in a permitted landfill is not required. Also:

- Include Standard Special Provision 36-4 for work involving residue from grinding and cold-planing that contains lead from paint and thermoplastic.
- Include Caltrans' Standard Special Provision 84-9.03C and/or Standard Special Provision 14-11.12, respectively for the removal of white and/or yellow striping/paint/markings separate from roadway grindings in the bid package for construction.
- If guardrails, signposts, or other sources of treated wood waste are to be removed during construction, include standard special provision 14-11.14 for treated wood waste in the bid package for construction.

No-Build Alternative

Avoidance, minimization and mitigation measures are not required under the no-build alternative.

2.1.10 Hydrology and Water Quality

Considering the information in the Water Quality Report State Route 99/233 Chowchilla Interchange Improvement Project dated June 2022 and the Location Hydraulic Study dated September 12, 2022, 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;	**Less Than Significant 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**

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
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**

c) Affected Environment

The Chowchilla subbasin includes lands in Madera and Merced counties. The subbasin is bounded on the west by the San Joaquin River and the eastern boundary of the Columbia Canal Company Service Area and on the north by the southern boundary of the Merced Subbasin. The area includes the Chowchilla Water District, Berenda Slough and Ash Slough to the Chowchilla River. Major rivers in the subbasin are the Fresno and Chowchilla rivers. The Berenda and Ash sloughs are the main hydraulic features in this region. The project lies within the San Joaquin Valley Floor, Berenda Creek Hydraulic unit and the Madera Hydraulic unit.

The Federal Emergency Management Agency has identified Ash Slough, Berenda Slough, and the Chowchilla River as floodways. Federally designated flood zones are limited to the defined bank and channels of Ash Slough, Berenda Slough, and Chowchilla River.

The project is in the Chowchilla groundwater subbasin. Groundwater provides almost the entire urban and rural water supply and about 75 percent of the agricultural water supply on the valley floor. Groundwater is pumped from the Madera, Chowchilla, and Delta-Mendota groundwater subbasins.

Environmental Consequences

Build Alternative

The two roundabouts and new separate concrete bridge constructed for westbound traffic will increase the impervious area within the project limits. Project-induced long-term impacts on water quality would mainly be associated with the addition of new impervious surfaces. These additional impervious areas would increase the volume and velocity of the stormwater flow, which can potentially contribute to carrying additional pollutants and cause increased erosion effects. The new roadway drainage system is expected to create or modify existing ditches and detention basins.

Construction activities could result in temporary surface water and groundwater quality impacts. Temporary impacts on the nearby Ash Slough would be associated with the input of sediment loads that exceed water

quality objectives, or chemical spills into a storm drain or groundwater aquifers if proper minimization measures are not implemented. Land-disturbing activities and the placement of stockpiles in proximity to storm drain inlets or nearby surface waters may result in a temporary increase in sediment loads in surface waters.

The project does not consist of a longitudinal encroachment or a significant encroachment on the base floodplain. Most of the project is in areas determined to be outside the 0.2 percent annual chance floodplain. Locations from post mile 26.8 to end of construction at post mile 26.8 are in areas subject to inundation by the 1 percent annual chance flood. The project work will not impact the floodplain because the work will not cause an increase in roadway elevation and will not alter the natural flow of the floodplain.

No-Build Alternative

There would be no impacts to water quality under the no-build alternative.

Avoidance, Minimization, and/or Mitigation Measures

Build Alternative

Two general strategies are recommended to prevent construction sediment from entering local storm drains and waterways:

- Erosion control procedures should be implemented for those areas that must be exposed.
- The area should be secured to control the offsite movement of pollutants.

This project will disturb 1 or more acres of soil, and the following will be required:

- A Notification of Intent is to be submitted to the appropriate Regional Water Quality Control Board at least 30 days prior to the start of construction.
- A Stormwater Pollution Prevention Plan is to be prepared and implemented during construction to the satisfaction of the resident engineer.
- A Notice of Termination is to be submitted to the Regional Water Quality Control Board upon completion of construction and site stabilization. A project will be considered complete when the criteria for final stabilization in the Construction General Permit are met.

By incorporating proper and accepted engineering practices and Best Management Practices, the project will minimize erosion or siltation onsite or offsite during construction and its operation.

Key management measures include the following:

- Protect areas that provide important water quality benefits or are particularly susceptible to erosion or sediment loss.
- Minimize the potential for erosion via limiting land disturbances such as clearing and grading and cut/fill.
- Preserve any existing terrain providing desirable drainage courses or effective filtration.
- Limit disturbance of natural drainage features and vegetation.
- Ensure proper storage and disposal of potentially hazardous material.
- Incorporate pollution prevention into operation and maintenance procedures to reduce pollutant loadings to surface runoff.
- Direct and discharge existing runoff to roadside drainage ditches and basins. Stormwater would be captured by a combination of new and existing pipes, drainage inlets, and other storm drain facilities once construction is completed for this project.

No-Build Alternative

Avoidance, minimization, and/or mitigation measures are not required for the no-build alternative.

2.1.11 Land Use and Planning

Considering the information in the City of Chowchilla 2040 General Plan—Land Use Element accessed on October 18, 2022, 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 in the City of Chowchilla General Plan 2040—Open Space and Conservation Element accessed on September 29, 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 State Route 99/233 Interchange Project Noise Study Report dated August 2022, 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?	**Less Than Significant Impact**
b) Generation of excessive groundborne vibration or groundborne noise levels?	**Less Than Significant Impact**
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	**No Impact**

a, b) Affected Environment

The project is in an urban/industrial setting. Land uses within the designated post miles of the project are composed of a few small businesses such as gas stations and retail stores, taco restaurant, transitional hotel/motel (Days Inn Hotel) and a single-family residence on the north side of State Route 233 and set back approximately 450 feet from the edge of the travelled way.

A field noise analysis was conducted to identify land uses within the project limits and to identify frequent human outdoor use areas in residential receptors that could be subject to traffic noise impacts and to consider the physical setting of the freeway alignment relative to those areas. The noise study analyzed noise levels at six studied receivers within the project limits:

- Receiver 1: Adjacent to Robertson Boulevard (State Route 233) between Chowchilla Boulevard and the State Route 99 southbound off-ramp (vacant land).
- Receiver 2: Adjacent to the frontage road (private driveway) north of Avenue 26 (State Route 233).
- Receiver 3: Adjacent to Avenue 26 (State Route 233) between the State Route 99 northbound ramps and Carlyle Way.
- Receiver 4: Agricultural residence, single-family residence.
- Receiver 5: Restaurant (Taco El Grullense).
- Receiver 6: Motel (Days Inn Hotel).

Environmental Consequences

The noise study determined the future traffic noise impacts at receivers in the vicinity of the project. The receivers represent traffic noise levels for the existing (2018) and the design-year (2040) no-build alternative condition as well as for the design-year (2040) build alternative. Potential long-term noise impacts associated with project operations are solely from traffic noise. Traffic noise was evaluated for the worst-case traffic condition.

Noise abatement is considered only for areas of frequent human use that would benefit from a lowered noise level. The impact analysis focused on locations of areas of frequent human use. Receivers 1, 2, and 3 were not considered since they are areas with no frequent use.

Build Alternative

Receiver 4 farmhouse residence: The existing noise level is 53 decibels. The design-year build noise level at this receiver is 55 decibels. This noise level is not substantial and does not exceed or approach the noise abatement criteria of 67 A-weighted decibels for this land use; therefore, noise abatement is not considered at this location.

Receiver 5 and Receiver 6 restaurant and hotel: The existing noise level for Receiver 5 is 66 decibels. The existing noise level for Receiver 6 is 63 decibels. The design-year build noise levels at Receivers 5 and 6 are 69 decibels and 66 decibels, respectively. These noise levels are not substantial and do not exceed or

approach the noise abatement criteria of 72 decibels for these land uses; therefore, noise abatement is not considered at these locations.

It is possible that certain construction activities could cause intermittent localized concern from vibration in the project area. During certain construction phases, processes such as earth moving with bulldozers, the use of vibratory compaction rollers, demolitions, or pavement braking may cause construction-related vibration impacts such as human annoyance or, in some cases, building damages. There are cases where it may be necessary to use this type of equipment in close proximity to residential buildings.

No-Build Alternative

Noise impacts are not expected for the no-build alternative.

Avoidance, Minimization, and/or Noise Abatement Measures

Build Alternative

Construction noise control will conform to the provisions in Section 14-8.02 "Noise Control" of the Caltrans Standard Specifications. The noise level from the contractor's operations, between the hours of 9:00 p.m. and 6:00 a.m., shall not exceed 86 decibels at 50 feet from job site. All equipment must be fitted with adequate mufflers and operated according to the manufacturers' specifications.

Construction noise varies greatly depending on the construction process, type and condition of equipment used, as well as layout of the construction site. Temporary construction noise impacts would be unavoidable in areas immediately adjacent to the proposed project alignment.

Compliance with the construction hours per Caltrans' Standard Special Provisions will be required, during night hours (between 9:00 p.m. and 6:00 a.m.), to minimize construction noise impacts on sensitive land uses adjacent to the project site.

The following are procedures that can be used to minimize the potential impacts from construction vibration:

- Restrict the hours of vibration-intensive equipment or activities such as vibratory rollers so that impacts to residents are minimal (e.g., weekdays during daytime hours only when as many residents as possible are away from home).

- The owner of a building close enough to a construction vibration source that damage to that structure due to vibration is possible would be entitled to a pre-construction building inspection to document the pre-construction condition of that structure.

- Conduct vibration monitoring during vibration-intensive activities.

No-Build Alternative

Avoidance, minimization, and/or mitigation measures are not required for the no-build alternative.

2.1.14 Population and Housing

Considering the information in the updated project description dated October 20, 2022, project mapping received September 29, 2022, and Relocation Impact Memo dated September 30, 2022, 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

Considering the information in the City of Chowchilla 2040 General Plan—Public Safety Element accessed on October 19, 2022, 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?	**Less Than Significant Impact**

Question:	CEQA Significance Determinations for Public Services
Police protection?	**Less Than Significant Impact**
Schools?	**No Impact**
Parks?	**No Impact**
Other public facilities?	**No Impact**

a) Affected Environment

Emergency Services

The City of Chowchilla Volunteer Fire Department serves the City of Chowchilla and its surrounding unincorporated area. It is a volunteer unit with a paid full-time Fire Chief operating from Station 1. Station 1 is centrally located on North First Street. Fire dispatch is handled through the City of Chowchilla Police Department. Cal Fire provides services to the unincorporated area surrounding the City of Chowchilla through a contract with Madera County. Madera County also contracts with Cal Fire for prevention and suppression services in the unincorporated areas of Madera County.

Madera County Fire Department Station 2 is also located on North First Street in Chowchilla. Other County Fire Department stations may also respond to a fire depending on the location and ability to commit equipment. Fire dispatch for Madera County Fire Department is handled by Cal Fire. There are also cooperative agreements with the California Department of Corrections for fire protection services.

Law enforcement services for the City of Chowchilla are provided by the Chowchilla Police Department. The Public Safety Element of the City of Chowchilla 2040 General Plan mentions evaluating alternatives to meet the needs of law enforcement. The Madera County Sheriff's Department is responsible for law enforcement in the unincorporated areas of Madera County. The County's Sheriff's headquarters building is on Road 28 in the City of Madera. The California Highway Patrol is the main law enforcement agency providing traffic safety and management as well as law enforcement in the unincorporated areas of Madera County. The "Madera Area" California Highway Patrol office is located on Airport Drive in the City of Madera.

Environmental Consequences

Build Alternative

Impacts on response times for emergency services would be negligible with the implementation of the Caltrans Traffic Incident Management Plan described in the avoidance, minimization, and/or mitigation measures section.

No-Build Alternative

Emergency services would not be affected under the no-build alternative.

Avoidance, Minimization, and/or Mitigation Measures

Build Alternative

Night work during construction is expected for this project due to existing traffic conditions and potential lane closures. Typically, a flagger on either side of the construction work zone will control the flow of traffic intermittently with one direction closed and the other direction open to traffic.

A detailed traffic management plan would be developed during the Plans, Specifications, and Estimates phase of the project to minimize delays due to lane closures and maximize safety for the traveling public and emergency service providers during construction. The traffic management plan may include the following:

- Information from brochures and mailers, press releases and media alerts, and planned lane closure notices from the Caltrans website.
- Use of portable changeable message signs.
- Use of California Highway Patrol officers for traffic control.

Caltrans coordinates and manages road user information and highway advisory radio on the state highway system that would be used during construction.

Construction is not expected to occur during peak traffic periods.

No-Build Alternative

Emergency services would not be affected under the no-build alternative.

2.1.16 Recreation

Considering the information in the City of Chowchilla General Plan 2040—Public Facilities and Services Element accessed on September 29, 2022, 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**

Question—Would the project:	CEQA Significance Determinations for Recreation
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

Considering the information in the Caltrans Project Study Report and Project Development Report dated October 2013, Air Quality Report dated March 2023, Climate Change Memo dated March 2023, City of Chowchilla Area Transit accessed on March 13, 2023 at https://cityofchowchilla.org/223/Chowchilla-Area-Transit-CATX, Madera County Connection website accessed on March 13, 2023 at https://mcctransit.com/wp-content/uploads/2016/05/MCC-System-Map-b-4.pdf, and the Vehicle Miles Traveled Mitigation Plan dated March 2023, 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?	**Less Than Significant Impact**
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)? (The portion of Section 15064.3(b) of the CEQA Guidelines pertaining to transportation projects provides for roadway capacity projects.)	**Less Than Significant Impact With Mitigation Incorporated**
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**

a, b) Affected Environment

State Route 99 is an important local and regional roadway and transportation corridor through the San Joaquin Valley. It is a major truck route, providing critical access for the shipment of agricultural goods to markets outside of the valley. It also serves as a significant travel route when motorists head to recreational areas and vacation spots throughout the state and beyond.

State Route 99 is a four-lane facility throughout the City of Chowchilla. In the project area, the travel lanes are 12 feet wide with 5-foot-wide left and 10-foot-wide right paved shoulders. The northbound and southbound travel lanes are separated by a 46-foot-wide median.

State Route 233 (Robertson Boulevard) is a northeast-running roadway that goes through the City of Chowchilla. Within the project area, State Route 233 is a two-lane undivided highway with 12-foot-wide lanes and 8-foot-wide shoulders. The width of the existing right-of-way varies from 50 feet within the interchange area to 100 feet on the east and west sides of the interchange. In the downtown area, the highway is a four-lane roadway with a center median two-way left-turn lane.

The State Route 99/State Route 233 interchange currently has a partial cloverleaf spread-diamond configuration. The off-ramp intersections are controlled by stop signs for ramp traffic. The bridge connector consists of two spans at 71 feet. The minimum vertical clearance of the bridge is 15 feet, 4 inches; the horizontal clearance is 54 feet, 5 inches.

Traffic Volumes and Level of Service

A traffic analysis was performed for the project and is discussed in the air quality report completed in March 2023. Traffic volumes and quality of traffic flow were used to evaluate highway operations and related congestion issues.

Traffic volume is identified as the annual average daily traffic count. Annual average daily traffic count is the average number of vehicles that pass a given point within a 24-hour period. The quality of traffic flow is identified as level of service. Level of service ranges from A to F, with level of service “A” representing free-flowing traffic, and level of service “F” representing gridlock and stop-and-go conditions. The results for existing traffic conditions (2022) at the following locations are detailed below.

- Chowchilla State Route 99, existing year 2022. Average annual daily traffic volume is 47,500 vehicles, and truck average annual daily traffic volume is 9,975. Trucks make up 21 percent of the traffic volume.

- Chowchilla State Route 233, existing year 2022. Average annual daily traffic volume is 13,400 vehicles, and truck average annual daily traffic volume is 2,814. Trucks make up 8 percent of the traffic volume.

- Southbound State Route 99/State Route 233 ramps, existing year 2022. Traffic volume for morning hours is 1,464 vehicles, and the evening hours traffic volume is 1,387 vehicles. The level of service in this location is D for morning and evening hours.

- Northbound State Route 99/State Route 233 ramps, existing year 2022. Traffic volume for morning hours is 1,242 vehicles, and evening hours

traffic volume is 1,176 vehicles. The level of service in this location is F for the morning hours and E for the evening hours.

- The southbound and northbound off-ramps with one-way stop control operated at level of service ranging from D to level of service F and E (congested conditions) respectfully, during peak travel hours. This overall decline will continue as the City of Chowchilla approves residential and commercial development east of the interchange.

Public Transportation, Bike Lanes and Pedestrian Facilities

The City of Chowchilla operates a local curb-to-curb, demand-response dial-a-ride bus transit service, commonly called “The City BUS,” in the city limits of Chowchilla through the Chowchilla Area Transit. Depending on scheduling, service is available for work, medical appointments, school, meetings, senior services, shopping, and more. The Chowchilla Area Transit buses are wheelchair-lift equipped. The service operates on weekdays, except on official holidays.

The Madera County Connection transit system provides service along State Route 99 from Madera to State Route 99/State Route 233 in Chowchilla, identified as the Chowchilla Fairmead Madera Route.

Established in 2012, the California Vanpool Authority, known as CalVans, is a Joint Powers Agency made up of many California agencies. CalVans board members are appointed from each member agency. They add vanpools to the public transit options provided to the residents and businesses in the board member’s jurisdiction. The Madera County Transportation Commission and the Fresno Area Council of Governments are members; therefore, vans that begin in, end in or travel through Madera County and Fresno County are eligible to apply for a CalVans vanpool.

There are no bike lanes and pedestrian facilities along State Route 233 and State Route 99 within the project area.

Vehicles Miles Traveled

The Madera 99/233 Interchange Improvement project is considered a capacity-increasing project and requires an induced vehicle miles traveled analysis and evaluation for potential mitigation measures. The Madera County Transportation Commission Regional Travel Demand Model was used for the vehicle miles traveled analysis.

Environmental Consequences

Build Alternative and No-Build Alternative

The Chowchilla Boulevard/State Route 233 intersection would continue to be controlled by signal, and the ramp intersections currently controlled by stop signs would be replaced with roundabouts under the build alternative. Traffic conditions and level of service for the opening year (2027) and the future year

(2047) are detailed below in Tables 2.1, 2.2 and 2.3. Traffic volumes are defined as number of vehicles.

Table 2.1 Traffic Volumes for the Build and No-Build Alternatives

Location Build and No-Build	Existing Year 2022 Morning Traffic Volumes	Existing Year 2022 Evening Traffic Volumes	Open Year 2027 Morning Traffic Volumes	Open Year 2027 Evening Traffic Volumes	Design Year 2047 Morning Traffic Volumes	Design Year 2047 Evening Traffic Volumes
Chowchilla Boulevard/State Route 233	1,634	1,555	1,943	1,845	2,925	3,220
Southbound State Route 99/State Route 233	1,464	1,387	935	799	2,840	3,105
Northbound State Route 99/State Route 233	1,242	1,176	1,605	1,474	2,865	3,470

Source: Air Quality Report March 2023

Traffic volumes for both morning and evening hours increase from year 2022 to 2027 and 2047 at the Chowchilla Boulevard/State Route 233 and northbound State Route 99/State Route 233 locations under the build and no-build alternatives.

Table 2.2 Level of Service for the Build Alternative

Location	Existing Year 2022 Level of Service Morning	Existing Year 2022 Level of Service Evening	Open Year 2027 Level of Service Morning	Open Year 2027 Level of Service Evening	Design Year 2047 Level of Service Morning	Design Year 2047 Level of Service Evening
Chowchilla Boulevard/State Route 233	B	C	B	B	C	C
Southbound State Route 99/State Route 233 ramps	D	D	A	B	A	B
Northbound State Route 99/State Route ramps	F	E	A	A	A	B

Source: Air Quality Report March 2023

The level of service for years 2027 and 2047 decline to a level of service F under the no-build alternative for northbound and southbound State Route 99/State Route 233 ramp locations. The level of service for 2027 and 2047 at the northbound and southbound State Route 99/State Route 233 ramp locations improves to A and B with construction of the roundabouts. Roundabouts generally provide traffic calming, resulting in reduced speeds, reduced vehicle idling and improved traffic flow. Even with the increase in

traffic volumes from 2022 to 2047 (see Table 2.1), level of service improved considerably with construction of the project (see Tables 2.2 and 2.3).

Table 2.3 Level of Service for the No-Build Alternative

Location	Existing Year 2022 Level of Service Morning	Existing Year 2022 Level of Service Evening	Open Year 2027 Level of Service Morning	Open Year 2027 Level of Service Evening	Design Year 2047 Level of Service Morning	Design Year 2047 Level of Service Evening
Chowchilla Boulevard/State Route 233	B	C	B	C	C	C
Southbound State Route 99/State Route 233 ramps	D	D	F	F	F	F
Northbound State Route 99/State Route 233 ramps	F	E	F	F	F	F

Source: Air Quality Report March 2023

The Madera County Transportation Commission Travel Demand Model estimates the following values of induced vehicle miles traveled for the project alternative: 252 vehicle miles traveled daily and 91,867 vehicle miles traveled annually. The vehicle miles traveled estimated for the build alternative would be slightly higher than that for the no-build alternative because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. Vehicle miles traveled equals the annual average daily traffic multiplied by miles length of project multiplied by 365 days.

Night work during construction is expected for this project due to existing traffic conditions and potential lane closures. Intermittent traffic detours are anticipated for building the westbound State Route 233 bridge. Temporary lane closures may be necessary for small sections of the project.

Avoidance, Minimization, and/or Mitigation Measures

Build Alternative

A traffic management plan will be developed to minimize delays and maximize safety for motorists. The traffic management plan may include, but is not limited to, the following:

- Release of information through brochures and mailers, press releases, and advertisements managed by the public information office.
- Use of fixed and portable changeable message signs.
- Incident management through the Construction Zone Enhancement Enforcement Program and the transportation management center.

During construction, a flagger will be present on either side of the construction work zone to control the flow of traffic, intermittently with one direction closed and the other direction open to traffic. When construction work is being done along the eastbound section of the roadway, the traffic flow will be in the westbound direction and vice versa.

Class II bike lanes and sidewalks will be constructed for this project.

Vehicles Miles Traveled

Based on the Madera County Transportation Commission Travel Demand Model, the project will increase vehicle miles traveled by 91,867. Vehicle miles traveled mitigation can be achieved through modification of the project to reduce the amount of vehicle miles traveled generated or by providing transportation improvements via on-system or off-system measures.

On-system mitigation measures are measures that can be implemented within the Caltrans right-of-way. On-system mitigation may include mitigation within or outside the initial project limits of any given capacity-increasing project. Caltrans, as owner and operator of the state highway system and associated right-of-way, exercises more direct authority over on-system measures as opposed to off-system measures. However, on-site mitigation can be very limited in reducing the amount of vehicle miles traveled. For example, bike lanes or walking paths could be added to the project scope, but the benefit to vehicle miles traveled reduction may be almost zero at the project level.

Off-system mitigation, outside Caltrans' right-of-way, requires cooperation with those jurisdictions that have influence over land use and transportation systems outside of Caltrans' direct control. The Caltrans Division of Transportation Planning recently completed a literature review and assessment of vehicle miles traveled reduction strategies and found that measures that resulted in the largest decreases in vehicle miles traveled are generally off-system and not under Caltrans' direct control. Similarly, the most cost-effective measures identified in the literature review also tended to be outside of Caltrans' direct control (such as transit-oriented development, transportation demand management).

The following are proposed mitigation strategies. After public comment and during final engineering, the final mitigation strategies would be incorporated into the project using cooperative agreements with local partners. The cooperative agreements would be finalized before project construction.

City of Chowchilla Vanpool Program

Caltrans in coordination with City of Chowchilla would work with CalVans to provide funding in the amount of $360,000 to subsidize the addition of one vanpool to the existing CalVans program for a 20-year period. The proposed vanpool would carry passengers to and from the State Route 99/Herndon

Avenue junction in Fresno County to Valley State Prison and the Central California Women's Facility. Assumptions include those 10 passengers (driver not included) would use the 15-passenger van, which would result in an average annual vehicle miles traveled reduction of 172,800.

The City of Chowchilla would manage the mitigation funding and be responsible for distributing funds to CalVans. CalVans would apply the monthly subsidy toward the cost of the vanpool. CalVans indicated there is capacity for more ridership. CalVans would be responsible for all logistics with regard to coordination and tracking names, number of riders, and miles traveled. Ridership data would be made available.

State Route 233/Robertson Boulevard Corridor Planning Study and Downtown Master Plan (Active Transportation Alternative 6: Two-Way Bike Track)

A mitigation proposal to fund an active transportation element identified as Alternative 6 in the State Route 233/Robertson Boulevard Corridor Planning Study and Downtown Master Plan is under consideration. If determined feasible, the mitigation funding would go to an existing project (Chowchilla Capital Maintenance project, EA 06-0W860), and the construction of the two-way bike track would be added to the scope. The cost to fully fund the construction of a Two-Way Bike Track would be about $4,000,000; without this additional funding, the Chowchilla Capital Maintenance project would not include the additional scope of work.

Assumptions include that the Two-Way Bike Track feature would result in an average annual vehicle miles traveled reduction of 24,933.

No-Build Alternative

Avoidance, minimization, and mitigation measures are not required for the no-build alternative.

2.1.18 Tribal Cultural Resources

Considering the information in the Supplemental Historic Property Survey Report dated December 12, 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 information in the City of Chowchilla General Plan 2040—Public Facilities and Services Element accessed on September 29, 2022, 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 storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	**Less Than Significant Impact**
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**

a) Affected Environment

Three utility companies operate within the project limits: Pacific Gas and Electric Company, Southern California Gas, and American Telephone and Telegraph. The affected utilities include but are not limited to electricity, gas, water, fiber optics and telephone.

Chowchilla Irrigation District has jurisdiction within the area, and its nearest facility would be Ash Slough. Chowchilla Public Works is responsible for water and sewer service, and storm water management.

Environmental Consequences

Utilities within the project area would have to be relocated under the build alternative. Electricity, gas, water, and fiber optics would be relocated within or adjacent to the project limits.

Existing Pacific Gas and Electric power poles within the project site will have to be relocated, which will require easements outside the right-of-way. In addition, existing underground electrical and telephone facilities cross State Route 99 north of the existing State Route 233 overcrossing. These underground lines may conflict with the abutments of the proposed overcrossing. If the line conflicts with the new overcrossing, they will have to be relocated through the structure. Caltrans would work with the affected companies to determine where the utilities would be relocated.

Utility relocation would not occur under the no-build alternative.

Avoidance, Minimization, and/or Mitigation Measures

The utility companies would do all utility relocation work prior to construction of the build alternative. Utility users would be informed of the date and time in advance of any service disruptions.

Utility relocation will not be required under the no-build alternative.

2.1.20 Wildfire

Considering the information in the Fire Hazard Severity Zone Maps accessed September 26, 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
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	**Less Than Significant Impact**

Question:	CEQA Significance Determinations for Mandatory Findings of Significance
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	**Less Than Significant Impact**
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	**No Impact**

a) Affected Environment

Biology

Two natural communities—Annual Grassland and Valley Foothill Riparian—were identified within the project area.

Six common wildlife species were found during field surveys in 2020: Six common wildlife species were found during field surveys in 2020: California scrub jay *(Aphelocoma californica)*, red-tailed hawk *(Buteo jamaicensis)*, red-shouldered hawk *(Buteo lineatus)*, Anna's hummingbird *(Calypte anna)*, American crow *(Corvus brachyrhynchos)* and killdear *(Charadrius vociferous).* Botta's pocket gopher (*Thomomys bottae*) and the California ground squirrel (*Otospermophilus beecheyi*) were also present in the portion of the project area north of State Route 233, based on the presence of their burrows. Two raptors—red-tailed hawk (*Buteo jamaicensis*) and red-shouldered hawk (*Buteo lineatus*)—were overflying the project area.

Nine stick nests were found within the project area, but none were occupied during the time of the survey. Two red-tailed hawks were seen sitting in and overflying a nest, indicating that it was a potentially active nest.

Special-status wildlife species that could potentially be present are the western spadefoot toad (*Spea hammondii*), western pond turtle (*Emys marmorata*), tricolored blackbird (*Agelaius tricolor*), burrowing owl (*Athene cunicularia*), Swainson's hawk, northern harrier (*Circus cyaneus*), American badger (*Taxidea taxus*), and San Joaquin kit fox (*Vulpes macrotis* mutica). Habitat that could support the hoary bat and Yuma myotis (*Myotis yumanensis*) occurs within the area.

Environmental Consequences

Build Alternative

Biology

Project construction activities would result in permanent and temporary impacts to riparian habitat in the project area. Approximately 0.06 acre of riparian habitat will be permanently impacted.

Potential impacts to special-status wildlife species may include direct mortality to individuals from vehicle strikes, ground disturbance, emergent vegetation or other riparian vegetation removal, habitat loss, and poisoning. Potential indirect impacts may include degradation of breeding habitat, change in water quality due to runoff from construction, and loss of shelter resulting into increased predation, exposure, or stress.

Impacts are not expected under the no-build alternative.

Avoidance, Minimization, and/or Mitigation Measures

Build Alternative

Aesthetics

The following measures to offset visual impacts are recommended for 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 storm water conveyance systems.
- Provide replacement planting.
- Add aesthetic elements to the overcrossing bridge structures to provide color, texture, and visual interest to the landscape.
- Add aesthetic paving to roundabouts, sidewalks, and median islands to provide color, texture, and visual interest to the landscape.

Biology

- Caltrans and the contractor will follow Best Management Practices during construction. Standard measures discussed in Section 2.1.4 Biological Resources and conservation measures would be implemented.
- Exclusion fencing should be placed around the perimeters of the project footprint that are within, or nearest to, the riparian corridors.
- A biological monitor should oversee all clearing and grubbing activities to ensure that impacts to riparian habitat are avoided and/or minimized.

- California Department of Fish and Wildlife regulatory authority encompasses the riparian habitat, as well as bed and bank of all water features. A Streambed Alteration Agreement should be procured from California Department of Fish and Wildlife prior to initiating ground disturbance activities.

- Replacement planting would be done after construction is completed. Plant type and planting ratio would be determined before construction starts. Annual monitoring will be scheduled to ensure that revegetation is successful.

- Land use development consistent with the general plans, and Sustainable Communities Strategy and greenhouse gas reduction policies set forth by the Madera County Transportation Commission and City of Chowchilla 2040 General Plan would help to lessen the effects of cumulative impacts on air quality.

No-Build Alternative

Avoidance, minimization, and mitigation measures are not required under the no-build alternative.

b) Affected Environment

Cumulative impacts identified for the project are those impacts that result from past, present, and reasonably foreseeable future actions occurring in the project area. This section includes a discussion of past, current, and reasonably foreseeable future projects, including highway projects and approved development, considered for cumulative impact analysis. Projects next to and near the project were identified through the City of Chowchilla 2040 General Plan and Caltrans District 6.

Existing and Future Land Development

Existing commercial business established near the project area include locally owned restaurants and retail businesses, national chain hotels, restaurants and gas stations/convenience and large-chain retail stores.

The Rancho Calera Specific Plan Area is in the northeastern portion of the current city limits and has been planned as part of a previous Greenhills Estates and Golf Club Specific Plan. The planned Rancho Calera development is north of Robertson Boulevard and east of State Route 99 and is adjacent to the proposed project.

The Rancho Calera Specific Plan is a proposed 576-acre master plan project that includes residential, commercial, and public land uses. It also includes two human-made lakes and an open space corridor along Ash Slough, neighborhood parks, a community park, an elementary school, and a public safety center. The Rancho Calera Specific Plan Area is northeast of the State

Route 99/East Robertson Boulevard interchange, directly south of Ash Slough and north of East Robertson Boulevard and the Greenhills Estates and Pheasant Run Golf Course. The western boundary is formed by State Route 99, and the eastern boundary is formed by Chowchilla's easterly most city limits. Implementation of the Rancho Calera Specific Plan could result in the construction of up to 2,042 residential units and approximately 945,000 square feet of commercial building space.

The Greenhills Estates and Golf Club Specific Plan was adopted by the City of Chowchilla in 1990. Since its adoption in 1990, implementation of the Greenhills Estates and Golf Club Specific Plan has been limited to the area south of East Robertson Boulevard and has included the construction of a private golf course and country club, gated residential neighborhoods consisting of no more than 1,800 single- and multi-family units, and a retail commercial center. The Rancho Calera Specific Plan would expand and substitute the northern portion (approximately 440 acres) of the 1,115-acre Greenhills Estates and Golf Club Specific Plan.

Transportation Projects

An overcrossing at State Route 99 near Ash Slough (Penny Lane) will be required to relieve traffic congestion at the State Route 99/Robertson Boulevard interchange. Improvements to the State Route 99/Robertson Boulevard interchange are also mentioned in the 2040 City of Chowchilla General Plan.

The 2021 Madera County Federal Transportation Improvement Project identified a City of Chowchilla alley pavement project for Robertson Boulevard/Kings Avenue and Robertson Boulevard/Trinity Avenue.

Caltrans projects for the area include the following:

- A two-lane addition on State Route 99 in Madera County from post mile 7.5 to post mile 15.1. Construction was completed in 2022.
- A proposed two-lane addition on State Route 99 in Madera County from post mile 15 to post mile 19. Project to begin once funding is available.
- A bridge deck rehabilitation project on State Route 99 and State Route 152 at post mile 24.78 in Madera County. Construction was completed in 2022.
- A Clean California Corridor Enhancement project on State Route 99 in Madera County from post mile 10.54 to post mile 10.7. Project not yet in construction.
- A roadway pavement overlay project on State Route 99 in Fresno and Madera counties from post mile 30.2 to post mile 1.0. Construction was completed in 2022.

Environmental Consequences

Build Alternative

This section discusses the direct and indirect impacts on each resource that could occur due to the proposed project when combined with other projects described in the affected environment section. These resources include aesthetics, land use, and biological resources.

Project construction activities for the Madera State Route 99/State Route 233 interchange improvement project would potentially result in up to 0.06 acre of permanent impacts to riparian habitat in the project area. The greatest change in the visual environment is the removal of 56 eucalyptus trees and the construction of two roundabouts. With the removal of the trees, there is a loss of large-scale elements that help blend the bridge structures into the environment. Approximately 4.1 acres will be converted from vacant land and commercial uses to transportation use. That includes eight partial property acquisitions. The partial acquisitions will not displace people or personal property.

Farmland, aesthetics, land use and biological resources were affected by the Caltrans projects mentioned in the previous section.

Development proposals have been planned for more than 20 years in the City of Chowchilla. Multiple plans and policies govern land use decisions in the project area. The Rancho Calera Specific Plan is a 576-acre master plan project on vacant land near the project area that includes residential, commercial, and public land uses, with up to 2,042 residential units and approximately 945,000 square feet of commercial building space. According to a CEQAnet search, potential impacts include aesthetics, farmland, air quality, special-status species habitat, wetland and riparian habitat, cultural resources, water quality, and public services to include sewer, solid waste and utilities. The project will contribute to future traffic along the State Route 99/State Route 233 interchange.

The project area is expected to grow and develop, with or without the project. By 2040, Chowchilla is projected to have a population of 27,837. The projected population is based on growth in cities that will bring Chowchilla from about 7.4 percent in 2009 to 8.67 percent in 2016, and to about 16.3 percent of Madera County’s total population in 2040. The project aims to accommodate the expected growth by providing improved operations along State Route 233 and State Route 99, and providing an access road to the proposed development, but it does not influence growth in the study area. Cumulative impacts are considered negligible under the Madera State Route 99/State Route 233 Interchange Improvement project.

No-Build Alternative

Cumulative impacts are not expected under the no-build alternative.

Avoidance, Minimization, and/or Mitigation Measures

Build Alternative

Caltrans projects include minimization measures for land use conversions, by incorporating a design that would require the smallest possible project footprint necessary to improve safety and operations.

Conducting pre-construction surveys, onsite biological monitoring, and establishing Environmentally Sensitive Areas within the project limits would be implemented as needed. The project will remove only those trees and shrubs required for the construction of the new roadway facilities. The project will avoid removing trees and shrubs for temporary uses such as construction staging areas or temporary storm water conveyance systems. Included will be replacement planting and the addition of aesthetic elements to provide color, texture, and visual interest to the landscape.

No-Build Alternative

Avoidance, minimization, and mitigation measures are not required under the no-build alternative.

Appendix A Title VI Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

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

September 2022

NON-DISCRIMINATION POLICY STATEMENT

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

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

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

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 639-6392 or visit the following web page: https://dot.ca.gov/programs/civil-rights/title-vi.

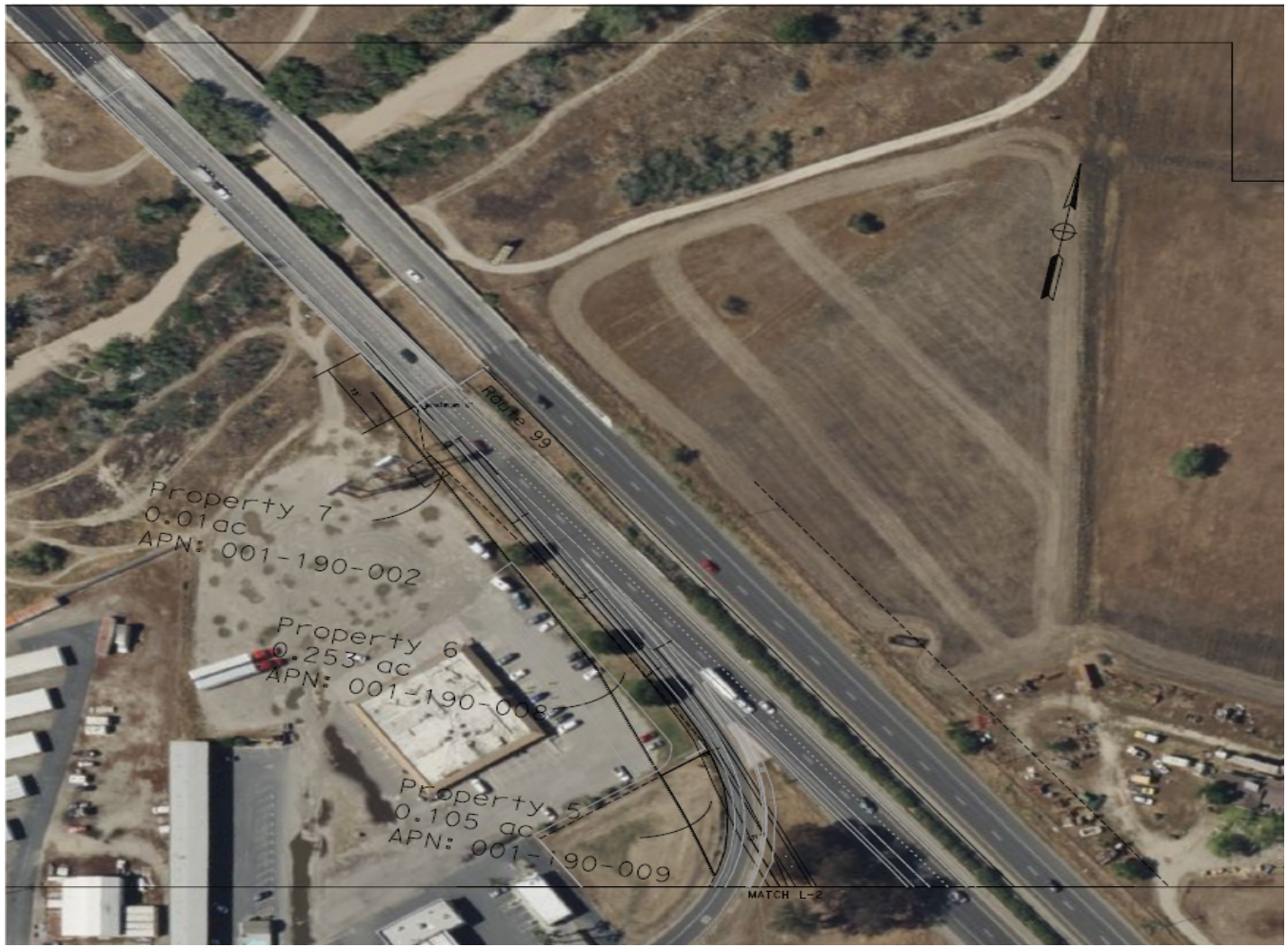
To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at Title.VI@dot.ca.gov.

TONY TAVARES
Director

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

Appendix B Project Mapping


Access Road
Property 4
0.25 ac
APN: 014-270-002
Property 3
1.59 ac
APN: 014-270-003
Property 2
0.84 ac
APN: 014-270-004
Location of
Poetential Basin
PROPERTY 1
2.095 ACRES
APN 014-020-013
LAYOUT
L-2
SCALE: 1"=50'


Route 99
Property 7
0.01ac
APN: 001-190-002
Property 6
0.253 ac
APN: 001-190-008
Property 5
0.105 ac
APN: 001-190-009
MATCH L-2

List of Technical Studies Bound Separately (Volume 2)

Draft Relocation Statement

Air Quality Report

Noise Study Report

Water Quality Report

Natural Environment Study

Location Hydraulic Study

Historical Property Survey Report

- Historic Resource Evaluation Report
- Historic Architectural Survey Report
- Archaeological Survey Report

Hazardous Waste Reports

- Initial Site Assessment

Scenic Resource Evaluation/Visual Assessment

Initial Paleontology Study

To obtain a copy of one or more of these technical studies/reports or the Initial Study, write to:

Javier Almaguer
District 6 Environmental Division
California Department of Transportation
2015 East Shields Avenue, Suite 100, Fresno, CA 93726

Or send your request via email to: Javier.almaguer@dot.ca.gov

Or call: 559-287-9320

Please provide the following information in your request:

Project title: Madera 99/233 Chowchilla Interchange Improvement Project

General location information: State Route 99/State Route 233 Interchange in Chowchilla in Madera County

District number-county code-route-post mile: 06-Madera-99/233-26.3-26.8

EA/Project ID number: 06-0P910/0612000307