

Nevada 174 Highway Realignment

Nevada County

03-NEV-174-PM: 2.7-4.6

EA: 03-4F370

EFIS: 03-1400-0152

Initial Study with Proposed Mitigated Negative Declaration



Prepared by the
State of California Department of Transportation

May 2016



General Information about This Document

What's in this document?

The California Department of Transportation (Caltrans) has prepared this Initial Study (IS), which examines the potential environmental impacts for the proposed project. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, how the existing environment could be affected by the project, the potential impacts of the project, and the proposed avoidance, minimization, and/or mitigation measures.

What should you do?

- Please read the document.
- Additional copies of this document and related technical studies are available for review at the Caltrans District 3 office at 703 B Street, Marysville, CA 95901. Copies of the Initial Study are available for review at the Grass Valley Library – Royce Branch located at 207 Mill Street, Grass Valley, CA 95945.
- This document has also been made online at the following website:
<http://www.dot.ca.gov/dist3/departments/envinternet/envdoc.htm>
- Attend the open house listed below:
Thursday, June 9, 2016
Chicago Park Elementary School, 15725 Mt. Olive Road, Grass Valley, CA 95945
Time: 5:00PM -7:00PM
- We'd like to hear what you think. If you have any comments regarding the proposed project, please attend the open house and/or send your written comments to Caltrans by the deadline.
- Submit comments via post mail to:
Mundeep Purewal, Environmental Coordinator
Attn: Mundeep Purewal
Department of Transportation, District 3 Environmental Planning
703 B Street,
Marysville, CA 95901
- Submit comments via email to: mundeep.purewal@dot.ca.gov
- Please submit your comments by the deadline: July 1, 2016

What happens next?

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

For individuals with sensory disabilities, this document can be made available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, District 3, Attn: Deanna Shoopman, 703 B Street, Marysville, CA, 95901, 530-741-4572, or use the California Relay Service TTY number, 1-800-735-2929.

SCH: TBD
03-Nev-174-2.7/4.6
EA: 03-4F370
EFIS: 03-1400-0152

Nev-174 Highway Realignment
03-Nev-174-PM: 2.7/4.6
EA 03-4F370

INITIAL STUDY with Proposed Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation

5/26/16
Date of Approval

Susan D. Bauer
Susan D. Bauer, Acting Chief
North Region Environmental Services, South

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to improve safety along State Route (SR) 174 in Nevada County from Maple Way to You Bet Road, post mile 2.74 to 4.63. The project is located approximately 5.7 miles southeast of Grass Valley. The project would include realigning the highway, widening the shoulders, and adding a clear recovery zone.

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is the Caltrans' intent to adopt an MND for this project. This does not mean that Caltrans' decision regarding the project is final. This MND is subject to change based on comments received by 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 proposed project would have no effect on coastal zones, public services, wild and scenic rivers, parks and recreation facilities, growth, community character and cohesion, environmental justice, geology/soils, floodplains, and paleontology.

In addition, the project would have no significant effect on existing and future land use, consistency with state, regional, and local plans and programs, relocations and real property acquisition, farmlands/timberlands, utilities/emergency services, traffic and transportation/pedestrian and bicycle facilities, visual/aesthetics, water quality, hazardous waste, animal species, cultural resources, air quality, and noise.

The proposed project would have less than significant effects on biological resources because the following mitigation measures would reduce potential effects to less than significant:

Wetlands and Other Waters

- The permanent loss of 0.08 acres of jurisdictional wetlands and 0.03 acres of potentially jurisdictional waters of the United States will be mitigated by the purchase of credits at an approved mitigation bank or through "in-lieu-fee" mitigation. Temporary impacts for 0.01 acres of potentially jurisdictional waters of the United States will be mitigated through on-site restoration.

Natural Communities

- The permanent loss of 0.02 acres of riparian habitat and temporary impacts of 0.09 acres will be mitigated through on-site restoration.

Susan D. Bauer, Acting Chief
North Region Environmental Services, South

Date

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Chapter 1 Proposed Project

1.1 Introduction

Caltrans proposes to improve safety along SR 174 in Nevada County from Maple Way to You Bet Road, post mile 2.74 to 4.63 by realigning and widening the highway and providing a clear recovery zone. The project is located approximately 5.7 miles southeast of Grass Valley.

Caltrans is the lead agency under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). This Initial Study with Proposed Mitigated Negative Declaration has been prepared in compliance with CEQA. A Categorical Exclusion will be prepared pursuant to NEPA.

1.2 Purpose and Need

The purpose of this project is to improve safety and operations for all users of the highway. This 1.9 mile segment of roadway experienced a total of 30 collisions during the three year period from April 1, 2010 to March 31, 2013 (summarized in table below), including two collisions involving fatalities. The observed total accident rate is almost 1.65 times higher than the statewide average for a similar type facility and the observed fatal accident rate is 7 times higher than the statewide average for a similar type facility.

Table 1 Collision Analysis:

| | <i>Actual</i> | <i>Statewide Average</i> |
|---|---------------|--------------------------|
| <i>Total Accident Rate (acc/mvm)</i> | <i>2.02</i> | <i>1.22</i> |
| <i>Fatal + Injury Accident Rate (acc/mvm)</i> | <i>1.35</i> | <i>0.56</i> |
| <i>Fatal Accident Rate (acc/mvm)</i> | <i>0.14</i> | <i>0.02</i> |

**acc/mvm= accidents/million vehicle miles*

The proposed project will increase curve radii, widen shoulders, and improve the clear recovery area. This will provide several benefits to traveler safety. First and foremost, the increased curve radii will reduce the potential for a vehicle to lose control. The wider shoulders will not only provide more room for pedestrians and bicycles to travel the corridor, but they also provide room for an errant vehicle to regain control without leaving the roadway. The removal of fixed objects such as trees and embankments from the clear recovery area will reduce the severity of a run off road collision. Lastly, the improved curve radii, wider shoulders, and removal of fixed objects along with roadway will improve sight distances for roadway users, which will allow more time to identify and react to potential hazards along the highway.

1.3 Project Description

SR 174, within the project limits, is a winding, rural 2-lane highway with 0 to 2 foot shoulders with low radius curves and limited sight distances. Trees and embankments line the roadway along with numerous properties with private driveways that connect to the highway. The project work would include realigning the highway, widening the shoulders, and creating a clear recovery zone. See Figure 2 for project layout map.

1.4 Alternatives

The project has one build alternative and the no-build alternative.

Build Alternative

This alternative would include:

- Widen shoulders from 0 feet to 8 feet along with new excavation (cut) and embankment (fill) slopes
- Tree removal to provide a 20-foot wide Clear Recovery Zone (CRZ)
- Remove vegetation out to new gutters/ditches
- Utility relocation
- Add a left-turn pocket in the southbound direction at the intersection of SR 174 and Greenhorn Access Road
- Realign several horizontal curves and adjusting several vertical curve lengths
- Reconstruct entire roadbed at most or at all vertical curve adjustment locations
- New or relocated gutters/ditches, culvert replacement and/or culvert extensions
- Construct retaining walls, about 4 to 14 feet in height
- Reconstruct private driveways, remove and replace fencing
- Add a southbound turnout at PM 4.2 and a northbound turnout at PM 4.5
- Add permanent intersection lighting at SR 174 and Greenhorn Access Road
- Relocate roadside mailbox cluster on Greenhorn Access south and across the road to a new turnout

No Build Alternative

This alternative would leave the roadway in its current state and would have no effect on the environment. This alternative would not improve the safety of the roadway at this location and would not meet the purpose and need of the project.

1.5 Permits and Approvals Needed

The following permits, reviews, and approvals would be required for project construction:

| Agency | Permit/Approval | Status |
|---|--|--|
| United States Army Corps of Engineers | Section 404 Permit for filling or dredging waters of the Unites States | Permits will be obtained prior to approving the project for construction |
| California Department of Fish and Wildlife | 1602 Streambed Alteration Agreement | Permits will be obtained prior to approving the project for construction |
| California Regional Water Quality Control Board | Section 401 Permit Certification | Permits will be obtained prior to approving the project for construction |

Figure 1: Project Location Map

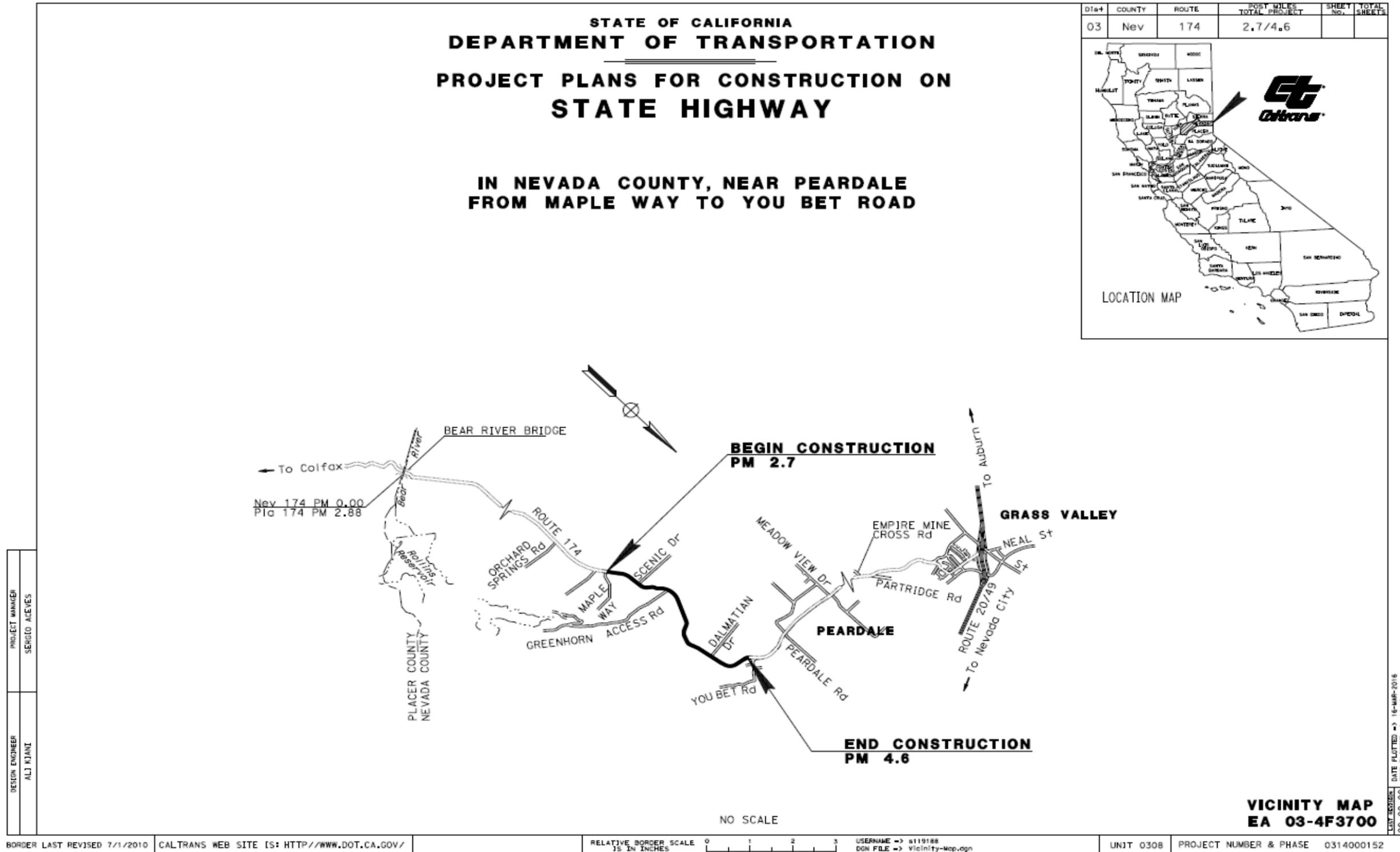
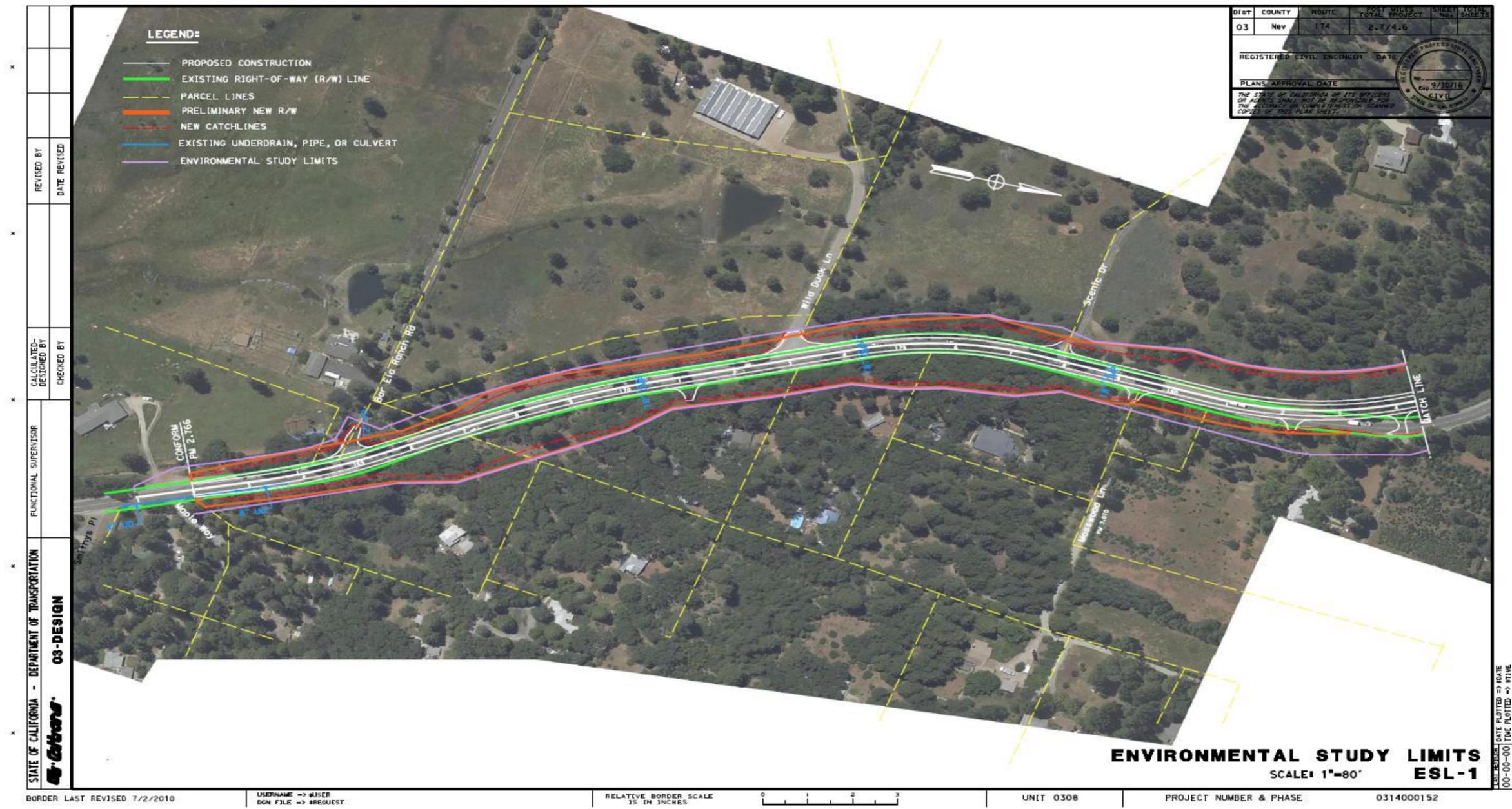
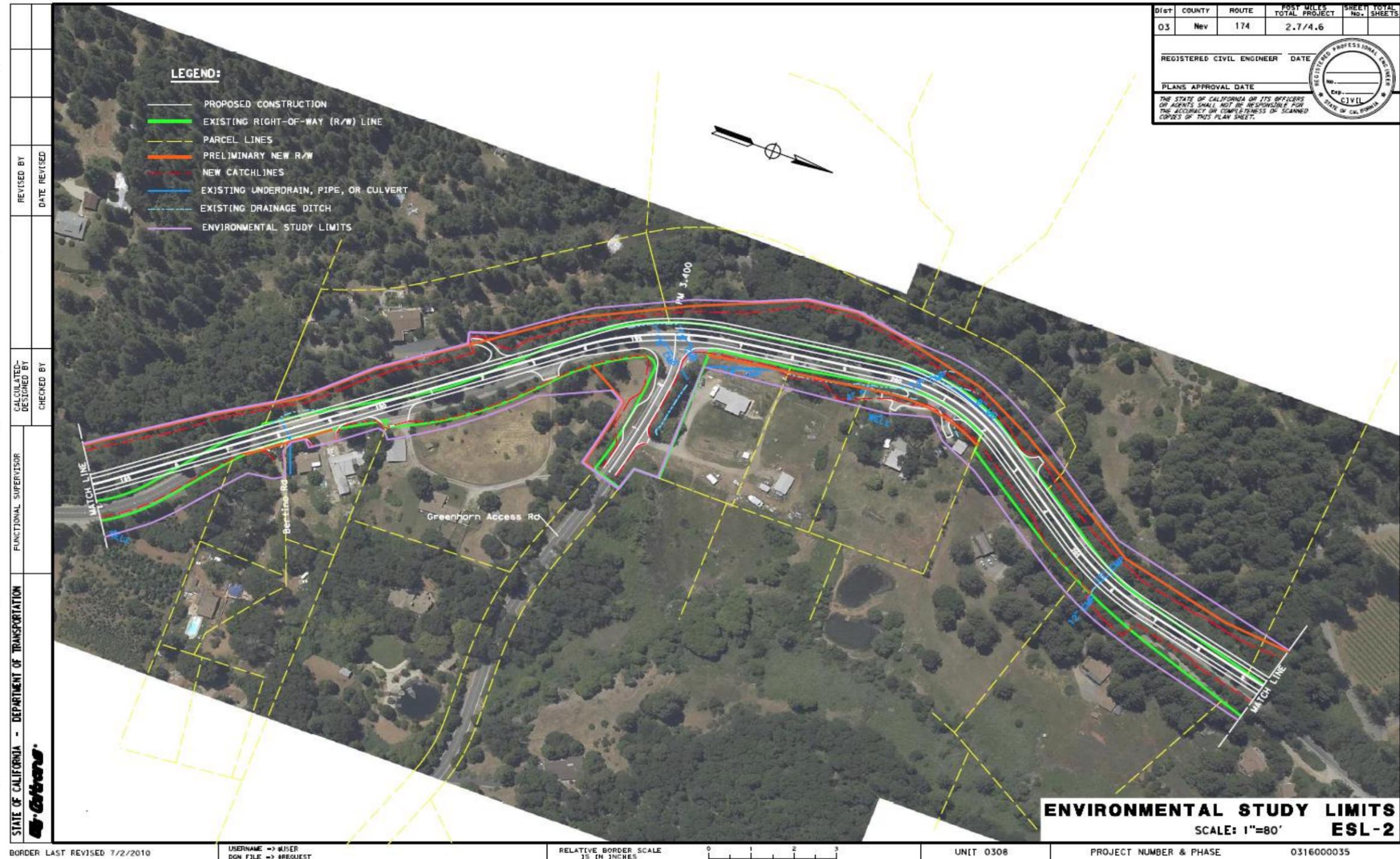


Figure 2: Project Layout Map





BORDER LAST REVISED 7/2/2010 USERNAME -> MJSER RELATIVE BORDER SCALE 1/8 IN INCHES 0 1 2 3 UNIT 0308 PROJECT NUMBER & PHASE 0316000035

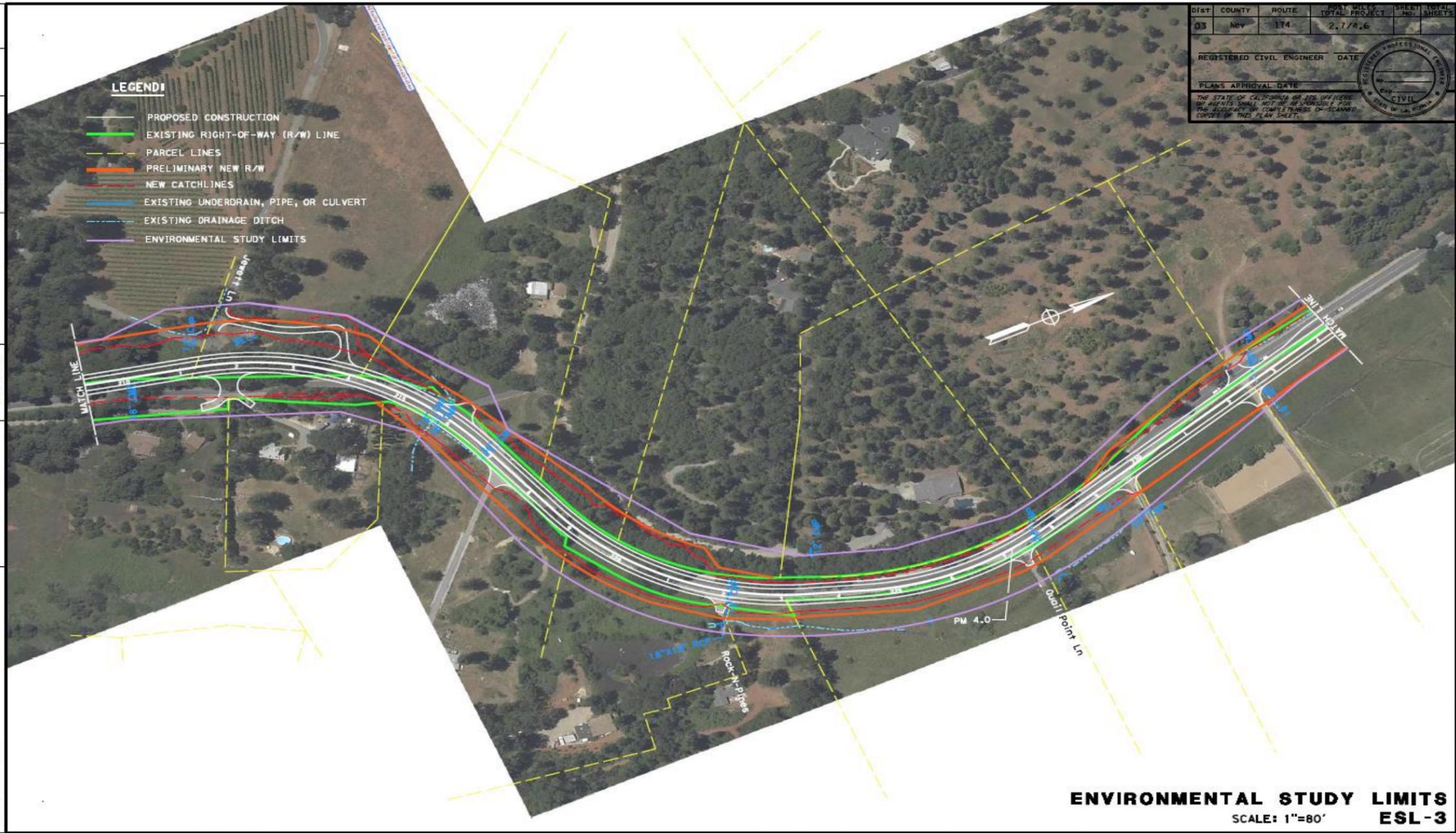
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
|------|--------|-------|--------------------------|-----------|--------------|
| 03 | NEV | 174 | 2,774.6 | | |

| | |
|---------------------------|------|
| REGISTERED CIVIL ENGINEER | DATE |
| PLANS APPROVAL DATE | |

THE STATE OF CALIFORNIA OR ITS OFFICERS OR EMPLOYEES SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LEGEND

- PROPOSED CONSTRUCTION
- EXISTING RIGHT-OF-WAY (R/W) LINE
- PARCEL LINES
- PRELIMINARY NEW R/W
- NEW CATCHLINES
- EXISTING UNDERDRAIN, PIPE, OR CULVERT
- EXISTING DRAINAGE DITCH
- ENVIRONMENTAL STUDY LIMITS



ENVIRONMENTAL STUDY LIMITS
SCALE: 1"=80'
ESL-3

| | | | |
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| STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | FUNCTIONAL SUPERVISOR | CALCULATED-DESIGNED BY | REVISOR BY |
| | | CHECKED BY | DATE REVISED |

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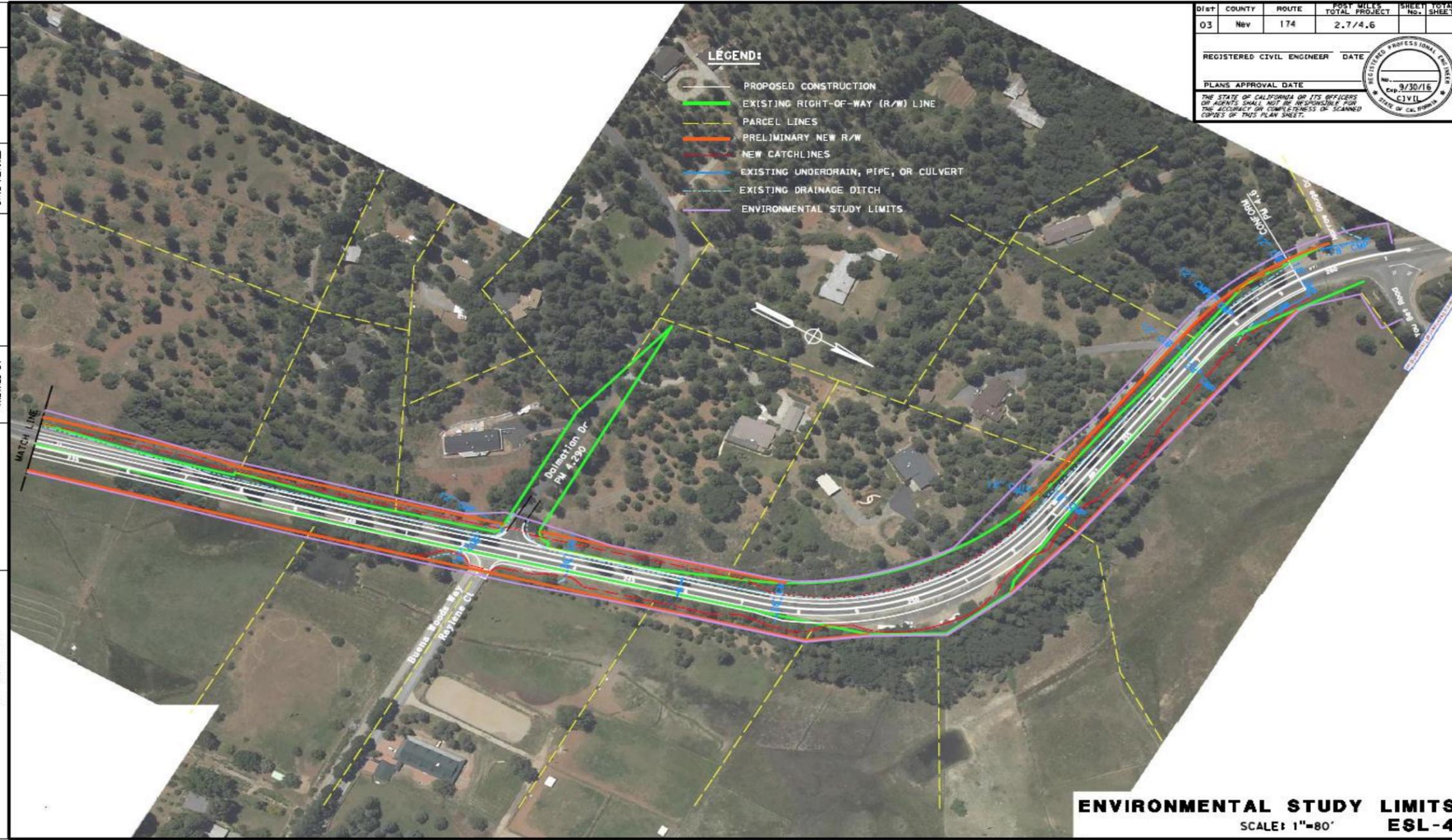
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TIME PLOTTED => #TIME

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|------|--------|-------|--------------------------|-----------|--------------|
| 03 | Nev | 174 | 2.7/4.6 | | |

| | |
|---------------------------|---------|
| REGISTERED CIVIL ENGINEER | DATE |
| | 9/30/16 |
| PLANS APPROVAL DATE | |

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- LEGEND:**
- PROPOSED CONSTRUCTION
 - EXISTING RIGHT-OF-WAY (R/W) LINE
 - PARCEL LINES
 - PRELIMINARY NEW R/W
 - NEW CATCHLINES
 - EXISTING UNDERDRAIN, PIPE, OR CULVERT
 - EXISTING DRAINAGE DITCH
 - ENVIRONMENTAL STUDY LIMITS



ENVIRONMENTAL STUDY LIMITS
SCALE: 1"=80'
ESL-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
03-DESIGN
ALJ KIANZ
FUNCTIONAL SUPERVISOR
CHECKED BY
CALCULATED-DESIGNED BY
DATE REVISION

| | | | | | | |
|------------------------------|---|---------------------------------------|---------|-----------|------------------------|------------|
| BORDER LAST REVISED 7/2/2010 | USERNAME --> MUSER DGN FILE --> #REQUEST | RELATIVE BORDER SCALE 35 IN INCHES | 0 1 2 3 | UNIT 0308 | PROJECT NUMBER & PHASE | 0314000152 |
|------------------------------|---|---------------------------------------|---------|-----------|------------------------|------------|

DATE PLOTTED --> 8/16/16
TIME PLOTTED --> 8:16 AM

Chapter 2 Affected Environment, Environmental Consequences, & Mitigation Measures

As part of the scoping and environmental analysis conducted for the project, the following environmental issues were considered but no impacts were identified. As a result, there is no further discussion about these issues in this document.

- Coastal Zones
- Community Character and Cohesion
- Environmental Justice
- Floodplains
- Geology/Soils
- Growth
- Paleontology
- Parks and Recreation Facilities
- Wild and Scenic Rivers

After construction, the proposed project will not result in air quality or noise impacts; however, temporary impacts for these issues are discussed in the Construction Impacts section.

2.1 Human Environment

2.1.1 Land use

Existing and Future Land Use

Affected Environment

The project area is located in rural Nevada County, approximately 5.7 miles southeast of Grass Valley. Land use and development within Nevada County is guided by the Nevada County General Plan. The Land Use section of the plan was amended in January 2014. The Nevada County General Plan serves as a long term guide for orderly growth and development for Nevada County. It also forms the basis for zoning, subdivision regulation, and other planning decisions on the location, intensity, and design of public facilities and land use.

Land use in the project area is classified as either Rural or Estate. In the Nevada County General Plan, Rural is zoned as General Agriculture, while Estate is zoned as Residential Agriculture.

Environmental Consequences

The acquisition of land needed to construct the proposed safety project is not expected to substantially affect existing or future land uses. Less than significant impacts to land use pursuant to the California Environmental Quality Act (CEQA) are anticipated.

Avoidance and Minimization Measures

No avoidance, minimization, or mitigation measures are proposed.

Consistency with State, Regional, and Local Plans and Programs

Affected Environment

The Nevada County General Plan is the long-term policy guide for the physical, economic, and environmental future of the County. It is comprised of goals, objectives, policies, and implementation measures. These are based upon assessments of current and future needs and available resources, which are intended to carry out the four central themes which are critical to the future of Nevada County and its quality of life.

Environmental Consequences

The Nevada County General Plan has established four central themes which articulate the vision for the development of the County:

- Fostering a rural quality of life
- Sustaining a quality environment
- Development of a strong diversified, sustainable economy
- Planned land use patterns will determine the level of public services appropriate to the character, economy, and environment of each region

The proposed project would be consistent with these central themes. The primary purpose of the proposed project is to improve safety along SR 174. Therefore, the project would contribute to a roadway system that is safe and efficient. This will help in sustaining a quality environment and the development of a strong diversified, sustainable economy. The project would require the acquisition of only small strips of land adjacent to SR 174 and not have a significant impact to the rural quality of life.

Less than significant impacts are anticipated due to the Consistency with State, Regional, and Local Plans and Programs.

Avoidance and Minimization Measures

No avoidance, minimization, or mitigation measures are proposed.

2.1.2 Farmlands/Timberlands

Regulatory Setting

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

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

Affected Environment

Farmland

Sixteen (16) of the 53 parcels adjacent to SR 174 within the project limits are classified as Unique Farmland, Prime Farmland, or Farmland of Local Importance. The remaining parcels are not classified as farmland. None of the parcels within the project limits are under Williamson Act Contracts. Please see Table 1 below for farmland impacts.

The Natural Resources Conservation Service (NRCS) was consulted about the proposed project and its potential impacts to farmland in April 2016. Please Refer to Appendix F for the completed Farmland Conversion Impact Rating Form.

Table 1 Farmland Impacts:

| APN # | EXISTING PARCEL AREA (ACRES) | PROPOSED RIGHT OF WAY ACQUISITION (ACRES) | Famland Classification |
|----------------|------------------------------|---|---|
| 28-060-15 | 2.57 | 0.519 | Urban and Built Up Land |
| 28-060-16 | 1.03 | 0 | Urban and Built Up Land |
| 28-060-25 | 1.02 | 0 | Urban and Built Up Land |
| 28-060-01 | 2.23 | 0.718 | Urban and Built Up Land |
| 28-050-31 | 2.01 | 0.306 | Urban and Built Up Land |
| 28-050-29 | 2 | 0.498 | Urban and Built Up Land |
| 28-050-07 | 0.41 | 0.667 | Other Land, Urban and Built Up Land |
| 28-050-01 | 6.37 | 0.082 | Other Land, Urban and Built Up Land |
| 12-261-43 | 0.69 | 0.007 | Other Land |
| 12-261-44 | 0.78 | 0.009 | Other Land |
| 12-261-46 | 3.01 | 0.241 | Other Land |
| 12-261-63 | 0.9 | 0.042 | Other Land |
| 12-261-62 | 0.91 | 0.041 | Other Land |
| 12-261-60 | 1.8 | 0.111 | Other Land |
| 12-261-10 | 3.01 | 0 | Other Land |
| 12-261-11 | 3 | 0 | Other Land |
| 12-261-16 | 3.08 | 0 | Other Land |
| 12-261-17 | 1.74 | 0.001 | Other Land |
| 12-261-18 | 4.63 | 0.382 | Other Land |
| 12-261-19 | 3 | 0.158 | Other Land |
| 12-261-20 | 5.01 | 0.04 | Other Land |
| 12-250-38 | 5.84 | 0.362 | Other Land |
| 12-250-47 | 5.87 | 0.164 | Prime Farmland, Farmland of Local Importance, Other Land |
| 12-250-05 | 12.92 | 0.362 | Prime Farmland, Farmland of Local Importance, Other Land |
| 12-241-21 | 25.11 | 0.759 | Prime Farmland, Farmland of Local Importance, Other Land |
| 12-241-19 | 6.09 | 0.229 | Prime Farmland, Farmland of Local Importance, Other Land |
| 12-241-42 | 5.24 | 0.242 | Prime Farmland, Other Land |
| 12-241-43 | 8.76 | 0.231 | Prime Farmland, Farmland of Local Importance, Other Land |
| 12-241-08 | 9.94 | 0.04 | Prime Farmland, Farmland of Local Importance, Other Land |
| 12-241-39 | 9.53 | 0.081 | Prime Farmland, Farmland of Local Importance, Other Land |
| 12-241-10 | 18.2 | 0.614 | Prime Farmland, Farmland of Local Importance, Other Land |
| 12-241-12 | 3.12 | 0.063 | Other Land |
| 12-241-14 | 3 | 0.113 | Other Land |
| 12-241-16 | 3 | 0.041 | Other Land |
| 12-241-17 | 3.98 | 0.188 | Other Land |
| 12-241-23 | 1.88 | 0.081 | Other Land |
| 12-241-22 | 1.84 | 0.114 | Other Land |
| 12-250-41 | 4.51 | 0.203 | Other Land |
| 12-250-42 | 4.5 | 0.037 | Other Land |
| 12-250-27 | 3.48 | 0 | Other Land |
| 12-250-26 | 4.41 | 0.212 | Other Land |
| 12-250-25 | 5.36 | 0.2 | Other Land |
| 12-250-24 | 3.24 | 0.261 | Other Land |
| 12-250-46 | 4.81 | 0.715 | Other Land, Unique Farmland |
| 12-250-19 | 12.38 | 0.513 | Other Land, Unique Farmland |
| 12-261-06 | 17.68 | 0.564 | Other Land |
| 12-261-48 | 2.83 | 0.923 | Other Land |
| 12-261-47 | 3.06 | 0.853 | Other Land |
| 28-030-15 | 20.73 | 1.697 | Farmland of Local Importance, Other Land |
| 28-030-04 | 30.73 | 0.396 | Farmland of Local Importance, Other Land |
| 28-060-33 | 1 | 0.467 | Farmland of Local Importance, Urban and Built Up Land |
| 28-040-06 | 20.21 | 0.039 | Prime Farmland, Farmland of Local Importance, Urban and Built Up Land |
| 28-040-25 | 4.63 | 0.135 | Farmland of Local Importance, Urban and Built Up Land |
| TOTAL = | 317.08 | 14.721 | |

*The Proposed Right of Way Acquisition amounts are approximate and may change based on final design.

Environmental Consequences

The proposed project would require the acquisition of slivers of land along SR-174 with a total of approximately 14.7 acres acquired from 53 parcels. The zoning for these parcels consist of prime farmland, farmland of local importance, urban and build up land, unique farmland, other land, and urban/built up land. The project is not expected to result in an impact to an extent that prevents the landowner from continuing production.

Avoidance and Minimization Measures

- Any farmland take will be minimized as much as possible.

2.1.3 Community Impacts

Relocations and Real Property Acquisition

Regulatory Setting

Caltrans' Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 United States Code [USC] 2000d, et seq.). Please see Appendix B a copy of Caltrans' Title VI Policy Statement.

Affected Environment

New right-of-way will be required to construct this project. Portions of the existing parcels will need to be acquired prior to construction.

Environmental Consequences

The proposed project would require the partial acquisition of parcels. These parcel acquisitions come from residential parcels of land. No full parcel takes are anticipated. No business or residential displacements are proposed for this project.

The exact number and size of partial acquisitions will occur after the final environmental document and project have been approved. Approximate proposed right of way lines can be seen on Figure 2, Project Layout Map.

Avoidance and Minimization Measures

With the implementation of the below avoidance and minimization measures, less than significant impacts from real property acquisition pursuant to CEQA are anticipated.

- Following project approval, Caltrans Right of Way staff will coordinate with affected property owners
- Property acquisition will be minimized as much as possible.

2.1.4 Utilities/Emergency Services

Affected Environment

Twenty (20) joint Utility Poles for Overhead PG&E Electric and AT&T Telephone lines will need to be relocated for the proposed project. It is anticipated that in two locations, overhead lines will need to be raised to meet minimum vertical clearances due to the proposed raised profile of the roadway at these locations.

Nevada Irrigation District (NID) Water Main Lines run longitudinally to and cross SR 174 at various locations. Potholes will be dug to positively locate the lines, and it is anticipated that they will need to be relocated.

Environmental Consequences

There are no expected long term impacts to utilities. Temporary impacts will be due to relocation efforts by NID, PG&E and AT&T. No service interruptions are expected outside of the relocation.

Under post construction conditions, the proposed project could benefit the public services in the area, including law enforcement, fire, and emergency services. Any existing emergency services provider routes would be enhanced by project improvements, including safety, circulation, and drainage improvements.

CEQA Considerations

With the implementation of the below avoidance and minimization measures, less than significant impacts to utilities and emergency services pursuant to CEQA are anticipated.

Avoidance and Minimization Measures

- It is anticipated that the Overhead PG&E and AT&T utility relocations will be minor in nature and short term. Typically the new poles are installed while the existing poles are still active. This limits the amount of time the utilities are shut off because they can be moved immediately onto the new poles. No disruption is expected for homeowners.

- Once potholing data is received, relocation or protect-in-place efforts will be coordinated between NID and Caltrans. If a disruption in service is anticipated all parties involved such as homeowners will be notified via letters, fliers, and door to door contact.

2.1.5 Traffic and Transportation/Pedestrian and Bicycle Facilities

Regulatory Setting

Caltrans, as assigned by FHWA, directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 Code of Federal Regulations [CFR] 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

In July 1999, the U.S. Department of Transportation (USDOT) issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally-assisted programs is governed by the USDOT regulations (49 CFR Part 27) implementing Section 504 of the Rehabilitation Act (29 United States Code [USC] 794). FHWA has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the ADA requirements to federal-aid projects, including Transportation Enhancement Activities.

Affected Environment

As of 2014, the segment of SR-174 within the project limits had an average daily peak hour volume of 950 vehicles for both directions of travel. The average number of vehicles per day is about 8,100 with about 7.2% of those being trucks. The roadway currently has very narrow shoulders that provide limited recovery space for errant vehicles. This project was initiated by the Caltrans District 3 Traffic Safety Branch in August 2013 after determining that the highway segment had a high concentration of run-off road collisions. These run-off road collisions include drivers losing control of their vehicle and either hitting a fixed object or overturning.

This 1.9 mile segment of roadway experienced a total of 30 collisions during the three year period April 1, 2010 to March 31, 2013 (summarized in table below), including two collisions involving fatalities. The observed total accident rate is almost 1.65 times higher than the statewide average for a similar type facility and the observed fatal accident rate is 7 times higher than the statewide average for a similar type facility.

Collisions Analysis Table:

| | <i>Actual</i> | <i>Statewide Average</i> |
|---|---------------|--------------------------|
| <i>Total Accident Rate (acc/mvm)</i> | <i>2.02</i> | <i>1.22</i> |
| <i>Fatal + Injury Accident Rate (acc/mvm)</i> | <i>1.35</i> | <i>0.56</i> |
| <i>Fatal Accident Rate (acc/mvm)</i> | <i>0.14</i> | <i>0.02</i> |

**acc/mvm= accidents/million vehicle miles*

Bicycle and Pedestrian Facilities

There are currently no designated bicycle or pedestrian facilities within the project limits. Although no new bicycle facilities will be provided with this project, the addition of shoulders within the project limits will better accommodate bicycles using SR 174.

Environmental Consequences

Traffic and Transportation

Realignment of the roadway, along with wide shoulders and a clear recovery area, will offer more recovery room for errant drivers. The wider shoulders and clear recovery area will also offer greater sight distances along the corridor and provide a better condition for drivers to react to unexpected situations related to other vehicles and pedestrians.

The proposed project does not add additional vehicular capacity and is not expected to noticeably affect traffic volumes. No permanent negative impacts to traffic are anticipated. The project does not contain design elements, such as additional travel lanes, which would provide additional highway capacity.

Construction Related Impacts

The project is scheduled to take two seasons to complete and will be constructed under one-way traffic control. A minimum of one paved traffic lane, not less than 11 feet wide, shall be open for use by public traffic at all time. No closures will be necessary. Night work will be required.

Bicycle and Pedestrian Facilities

Although no new bicycle and pedestrian facilities will be provided with this project, the addition of shoulders within the project limits will better accommodate bicycle riders using SR 174.

CEQA Considerations

Less than significant impacts to traffic and transportation and bicycle and pedestrian facilities pursuant to CEQA are anticipated.

Avoidance and Minimization Measures

Traffic handling charts and specifications will be incorporated into the project during the design phase that will be included as part of the Contractor's specification package in order to manage temporary construction delays. Elements that should be considered in the Transportation Management Plan (TMP) are:

- Restrictions on when lanes may be closed
- A Construction Zone Enhanced Enforcement Plan (COZEED) with the CHP during major construction that affects traffic, such as stage changes and traffic shifts

2.1.6 Visual

Regulatory Setting

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

Affected Environment

A Visual Impact Assessment (VIA) was completed in January 2016. The native vegetation at the elevation in the project area consists of Ponderosa Pines, Blue Oak, California Black Oak, manzanita, and grasslands. Most portions of SR 174 within the project limits are framed with large Ponderosa Pines and understory that line the highway and develop the visual resource for the area. There are some middle ground views of pastureland and a few distant mountain views in the background. Overall, there is minimal intrusion on the rolling foothills and pasturelands by human development. The region's visual quality is moderate in vividness, intactness, and unity.

SR 174 is eligible for the State Scenic Highway System; however it is not located on an officially designated California State Scenic Highway.

The proposed project would include two curve corrections, where center line of the road shifts 30 and 45 feet to the west side of the highway. These curve corrections would require a steep cut slope and retaining walls are recommended at these locations. One retaining wall is located at around PM 3.6 to 3.8, with the height of this wall ranging from 4 to 14 feet tall. The second wall is located at around PM 3.8 to 4.0, with the height ranging from 2 to 6 feet tall.

Viewers and Viewer Response

Two major viewer groups identified are roadway users and residents for the project area.

Roadway Users

The largest viewer group affected would be commuters to Grass Valley, local cities, and weekend drivers destined for recreation both locally and in the Sierra Nevada Mountains. The proposed project will not result in an increase in speed limit. The Annual Average Daily Traffic (AADT) was 8,100 in 2012. In the limited time frame that drivers view the area within the project limits, they are concentrating on maneuvering the car around windy and hilly roads. Views are seen in short duration, because of the changes in road alignment and the close proximity of foothills layered behind.

Residents

Homes are located throughout the project, some set far and blocked by hills and some in close proximity to the highway. Many homes that are set close to the road have screening shrubs and pine trees along the property line.

Environmental Consequences

The project area does not have any scenic vistas. Based on the proposed scope, the project is also not expected to result in light or glare which could adversely affect day or nighttime views.

Visual Impacts

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

Road

The proposed project will widen the existing shoulder to standard dimensions, several new cut and fill slopes will be introduced reducing the visual quality in the foreground view. The existing vegetation is set in thick pine forest. With the establishment of a 20 foot clear recovery zone (CRZ), many pine trees will be removed. From the driver's perspective, there are thick forests behind the clear recovery zone and the visual quality will not be reduced.

Residents

For homes that are in close proximity to the road, a single line of mature pines and screen vegetation will be eliminated by creation of the CRZ. In addition, all the new slopes will be cleared and grubbed to 5 feet beyond the edge of cut and fill slopes. Existing screening will be eliminated thus the visual quality will be reduced, having more exposed views of traffic. However, the replanting of vegetation after construction will reduce these impacts over time.

Retaining Walls

There are no existing structures along the highway corridor within the project limits. The two proposed retaining walls will increase man-made structures for the corridor and may reduce the visual quality of the area. Therefore, it is recommended to design the retaining walls with materials that would help blend a new structure into the area.

CEQA Considerations

With the implementation of the below avoidance and minimization measures, less than significant impacts from Visual/Aesthetics pursuant to CEQA are anticipated.

Avoidance and Minimization Measures

- During the design stage of project, modify the alignment where possible to avoid taking out vegetation screen from homes that are in close proximity to route 174.
- If a retaining wall is needed, the surface shall be textured and colored to fit in context of the surrounding environment.
- Protect as many trees and as much screening vegetation as possible
- Minimize the gentle slopes and curve correction areas, re-vegetate where possible.
- All areas disturbed during construction shall receive permanent erosion control measures. All finished slopes and contour graded areas shall be hydroseeded with a permanent seed mix composed of native plant species indigenous to the areas. A Landscape Architect will prepare the erosion control plans and specifications.

2.1.7 Cultural Resources

Regulatory Setting

Cultural resources as used in this document refers to all “built environment” resources (structures, bridges, railroads, water conveyance systems, etc.), culturally important resources, and archaeological resources (both prehistoric and historic), regardless of significance. Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act (NHPA) of 1966 , as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation [36 Code of Federal Regulations (CFR) 800]. On January 1, 2004, a Section 106 Programmatic Agreement (PA) between the Advisory Council, the Federal Highway Administration (FHWA), State Historic Preservation Officer (SHPO), and the Department went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the Advisory Council’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to the Department. The FHWA’s responsibilities under the PA have been assigned to the Department as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

Historical resources are considered under the California Environmental Quality Act (CEQA), as well as CA Public Resources Code (PRC) Section 5024.1, which established the California

Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet the National Register of Historic Places listing criteria. It further specifically requires the Department to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

Affected Environment

An Historic Property Survey Report (HPSR) was completed in December 2015 due to the potential for cultural resources within the project area. An Area of Potential Effects (APE) for the project was established in consultation with Caltrans staff on November 11, 2015. The APE was established to encompass the maximum limits of all potential ground disturbing construction activities associated with the proposed scope of work, including but not limited to, all existing and proposed new right-of-way, temporary construction easements, utility relocations, and/or equipment staging areas.

An archaeological identification of the project's APE was conducted between April and October 2015. The identification effort consisted of a literature and records review, consultation with the Native American community, as well as local historic preservation organizations. A field survey by a professionally qualified archaeologist and an architectural historian was also conducted. The survey did not result in the identification of any new cultural resources within the project's APE. Previous projects had identified three cultural resources in the general vicinity. However, only one, the Nevada County Narrow Gauge Railroad (NCNGRR), still remains within the APE.

Historical properties such as the NCNGRR may be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the "use" of land from historic properties. Historical resources are considered under the California Environmental Quality Act (CEQA), as well as CA Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet the National Register of Historic Places listing criteria. It further specifically requires state agencies to inventory such structures. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

A literature and records search revealed the NCNGRR was first examined by Caltrans in 1983 for a project on State Route 174 between PMs 1.8 and 4.3. The segment identified in the current project's APE was included in that examination. At that time, Caltrans determined that what remained of the railroad between PMs 1.8 and 4.3 was not eligible for the National Register of Historic Places (NRHP) because it lacked integrity. In 1987, Caltrans examined an

adjoining portion of the railroad between PMs 4.3 and 8.5. Caltrans found that portion of the railroad also lacked integrity. However, formal consultation from SHPO was not sought when either of those determinations were made.

Under the terms of the 2014 Amended Section 106 PA, the resource appears exempt from evaluation due to lack of integrity. But after public outreach, Caltrans determined that reexamination of the NCNGRR segment within the APE was the best course of action. After another examination, Caltrans concluded that the NCNGRR segment itself lacks integrity to its likely period of significance, 1872 to 1942, and does not retain the ability to convey that potential significance. As a result, the NCNGRR Segment between approximately PMs 3.2 to 3.8 does not meet the criteria for listing in the NRHP individually or as a contributor to a district, nor is it a historical resource for the purposes of CEQA. Please see Appendix G for SHPO concurrence.

Environmental Consequences

Caltrans has determined that this proposed project would have no adverse effect to state-owned archaeological sites, landscapes, and non-structural resources within the APE that meet the National Register and/or California Historical Landmarks Register eligibility criteria. The NCNGRR segment within the project limits does not meet the criteria for listing in the NRHP and the proposed project will not have any impacts to Section 4(f) resources.

Avoidance and Minimization Measures

- If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.
- If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to CA Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), which will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Caltrans District 3 Environmental cultural staff so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

2.2 Physical Environment

2.2.1 Water Quality and Storm Water Runoff

Regulatory Setting

Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source¹ unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act. Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCB) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and Municipal Separate Storm Sewer Systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The goal of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

The USACE issues two types of 404 permits: General and Standard permits. There are two types of General permits: Regional permits and Nationwide permits. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

¹ A point source is any discrete conveyance such as a pipe or a man-made ditch.

Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of the USACE's Standard permits. There are two types of Standard permits: Individual permits and Letters of Permission. For Standard permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency's Section 404 (b)(1) Guidelines (U.S. EPA Code of Federal Regulations [CFR] 40 Part 230), and whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent² standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in the Wetlands and Other Waters section.

State Requirements: Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined, and this definition is broader than the CWA definition of "pollutant." Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their

² The U.S. EPA defines "effluent" as "wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall."

jurisdictions and then set criteria necessary to protect these uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB administers water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

National Pollutant Discharge Elimination System (NPDES) Program Municipal Separate Storm Sewer Systems (MS4) Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water discharges, including Municipal Separate Storm Sewer Systems (MS4s). An MS4 is defined as “any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that is designed or used for collecting or conveying storm water.” The SWRCB has identified Caltrans as an owner/operator of an MS4 under federal regulations. The Department’s MS4 permit covers all Caltrans rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

Caltrans’ MS4 Permit (Order No. 2012-0011-DWQ) was adopted on September 19, 2012 and became effective on July 1, 2013. The permit has three basic requirements:

1. Caltrans must comply with the requirements of the Construction General Permit (see below);
2. Caltrans must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and
3. Caltrans storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs), to the Maximum Extent Practicable, and other measures as the SWRCB determines to be necessary to meet the water quality standards.

To comply with the permit, Caltrans developed the Statewide Storm Water Management Plan (SWMP) to address storm water pollution controls related to highway planning,

design, construction, and maintenance activities throughout California. The SWMP assigns responsibilities within Caltrans for implementing storm water management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices Caltrans uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of Best Management Practices (BMPs). The proposed project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

Construction General Permit

Construction General Permit (Order No. 2009-009-DWQ), adopted on September 2, 2009, became effective on July 1, 2010. The permit regulates storm water discharges from construction sites that result in soil disturbance of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation result in soil disturbance of at least one acre must comply with the provisions of the General Construction Permit. Construction activity that results in soil disturbances of less than one acre is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop storm water pollution prevention plans; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The 2009 Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective Storm Water Pollution Prevention Plan (SWPPP). In accordance with Caltrans' Standard Specifications, a Water Pollution Control Program (WPCP) is necessary for projects with soil disturbance of less than one acre.

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the United States must obtain a Section 401 Water Quality Certification, which certifies that the project will be in compliance with state water quality standards. The most common federal permits triggering a 401 Water Quality Certification are CWA Section 404 permits issued by the USACE. The 401 Water Quality Certification is

obtained from the appropriate RWQCB, dependent on the project location, and are required before the USACE issues a 404 permit.

In some cases, the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as Waste Discharge Requirements (WDRs) under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

Affected Environment

A Water Quality Assessment was completed in November 2015. Storm water runoff from the northbound (NB) direction of travel, between PM 2.7 and PM 3.2, is captured by the roadside gutters and conveyed beneath the highway in a southwesterly direction. The storm water runoff from the southbound (SB) direction of travel sheet flows off the right of way in the similar direction. The surface runoff from the area then flows overland to an unnamed tributary, which joins Chicago Park Ditch near Powerline Road. The unnamed tributary and Chicago Park Ditch flow in a southwesterly direction and join the Bear River downstream from Rollins Reservoir. These water bodies all lie in the Lake Combie Hydrologic Sub-Area.

From PM 3.2 to approximately PM 4.3 (Dalmation Drive/Buena Wood Way), the offsite runoff west of the highway and the surface runoff from the SB direction of travel, is captured by the roadside gutters; and conveyed beneath the highway at multiple locations. These discharges and the surface runoff from the NB travel way, flow easterly to an unnamed tributary of Rollins Reservoir. This water body lies within the Rollins Reservoir Hydrologic Sub-Area.

Between Dalmation Drive/Buena Woods Way and You Bet Road, the offsite and onsite surface runoff are conveyed to the east side of the highway; towards an unnamed tributary. This water body flows in a northeasterly direction to join Little Greenhorn Creek, Greenhorn Creek, and Rollins Reservoir. All of these water bodies lie in the Rollins Reservoir Hydrologic Sub-Area.

Environmental Consequences

It is estimated that the project will disturb 15.47 acres of soil. Projects with soil disturbance to or exceeding 1 acre will require a Storm Water Pollution Prevention Plan and will be subject to additional permit requirements.

There are no “Drinking Water Reservoirs and Recharge Facilities” where spills from the Caltrans’ owned right of way, activities, or facilities could discharge directly to municipal or domestic water supply reservoirs or ground water percolation facilities.

The project is not located within a municipal separate storm sewer system (MS4) permitted area, so no additional requirements apply. Less than significant impacts to water quality are anticipated.

Avoidance & Minimization Measures

In order to prevent erosion during construction activities and/or operations related to this project, the following actions are recommended:

- Follow all applicable guidelines and requirements in the 2015 Caltrans Standard Specifications (2015 CSS), Section 13, regarding water pollution control and general specifications for preventing, controlling, and abating water pollution in streams, waterways, and other bodies of water.
- The Contractor prepared Storm Water Pollution Prevention Plan (SWPPP) shall incorporate appropriate temporary construction site BMPs to implement effective handling, storage, use and disposal practices during construction activities.
- Consideration should be given to 2015 CSS, Section 13-4 (Job Site Management), to control potential sources of water pollution before it encounters any storm water system or watercourse. It requires the Contractor to control material pollution, manage waste and non-storm water at the construction site.
- Existing drainage facilities should be identified and protected by the application of appropriate Construction Site BMPs.
- The disposal of non-storm water discharges from dewatering activities should be considered. The Central Valley Regional Water Quality Control Board has specific waste discharge requirements for specific types of low threat discharge to land. Resolution R5-2013-0145, "Waiver Of Reports Of Waste Discharge And Waste Discharge Requirements For Specific Types Of Discharge Within Central Valley Region" and Water Quality Order No. 2003-003-DWQ, "Statewide General Waste Discharge Requirements (WDRs) For Discharge To Land With A Low Threat to Water Quality (General WDRs)".
- The Caltrans' Storm Water Management Plan (SWMP), the Project Planning and Design Guide (PPDG) Section 4, and the Evaluation Documentation Form (EDF) provide detailed guidance in determining if a specific project requires the consideration of permanent Treatment BMPs.
- Caltrans NPDES Unit will participate in early project design consultation with Central Valley RWQCB if the project entails one or more acre of total soil disturbance.

- If Caltrans determines that all or any portion of on-site treatment for a project is infeasible on-site, the Project Engineer in consultation with the Design Storm Water Coordinator, shall prepare a proposal for Alternative Compliance for approval by the Regional Water Board Executive Officer or his designee until such time as a statewide process is approved by the Executive Director of the State Water Board. The proposal shall include documentation supporting the determination of infeasibility. Alternative Compliance may be achieved outside project limits within the Department's right of way, including within another Department project. Alternative Compliance to be achieved outside project limits shall include provisions for the long-term maintenance of such treatment facilities. Guidance for Alternative Compliance can be found in the Statewide Storm Water Management Plan and in the Storm Water Quality Handbook, Project Planning and Design Guide.

2.2.2 Hazardous Waste/Materials

Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Resource Conservation and Recovery Act of 1976 (RCRA). The purpose of CERCLA, often referred to as "Superfund," is to identify and clean up abandoned contaminated sites so that public health and welfare are not compromised. The RCRA provides for "cradle to grave" regulation of hazardous waste generated by operating entities. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order (EO) 12088, *Federal Compliance with Pollution Control Standards*, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

California regulates hazardous materials, waste, and substances under the authority of the CA Health and Safety Code and is also authorized by the federal government to implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires clean-up of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and clean up contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

Affected Environment

An Initial Site Assessment was prepared by Caltrans North Region Environmental Engineering staff in June 2015. The purpose of this assessment was to identify any hazardous waste issues within and adjacent to the proposed project area which could affect the design, constructability, feasibility, and/or cost of the proposed project.

Environmental Consequences

The following conclusions and recommendations were made:

Petroleum Hydrocarbons

Petroleum Hydrocarbons contamination is not expected within the project study limits.

Aerially Deposited Lead (ADL)

Lead-contaminated soil is not expected at hazardous concentrations. However, an ADL survey will be required prior to final project design.

Right of Way/Structures/Properties

Asbestos Containing Materials (ACMs) and lead-based paint survey is required for any structure proposed to be demolished and/or disturbed. The survey will be required prior to final project design.

Treated Wood Waste

Treated wood waste (TWW) can occur as posts along metal beam guard railing (MBGR), thrie beam barrier, or roadside signs. These wood products are typically treated with preserving chemicals that may be hazardous (carcinogenic) and include but not limited to arsenic, chromium, copper, creosote, and pentachlorophenol. The Department of Toxics Substances Control (DTSC) requires that TWW either be disposed as a hazardous waste, or if not tested, the generator may presume that TWW is a hazardous waste.

Avoidance and Minimization Measures

Aerially Deposited Lead

The Contractor must implement a project specific Lead Compliance Plan prepared by a Certified Industrial Hygienist (CIH) as required by the California Occupational Safety and Health Administration (Cal/OSHA). The plan will detail the correct procedures for handling, removing, and disposing of earth materials containing lead and waste from removing traffic stripes and pavement markings.

All materials containing lead will be handled in accordance with all applicable laws, rules, and regulations, including those of the following agencies: Cal/OSHA, Central Valley RWQCB, and California Department of Toxic Substances Control (CA DTC).

All workers, including Caltrans staff, will receive lead compliance training before beginning any work that could potentially expose them to lead containing substances.

Asbestos

To prevent worker exposure to asbestos, Caltrans will require that the contractor submit an Asbestos Compliance Plan that will detail the correct procedures for handling, removing, and disposing of materials containing asbestos.

Treated Wood Waste

During the proposed project, any workers that have the potential to come in contact or handle TWW will be given training on the proper handling procedures and applicable laws, including procedures for identifying and segregating TWW, and proper disposal methods.

TWW will be properly labeled for easy identification, and stored within the project area in a secured lockable enclosure to prevent unauthorized access. The TWW will also be stored so that it is protected from precipitation, or any other sources of water, to prevent contaminating any water that could leave the site. All TWW that leaves the site will be documented and disposed of at an approved TWW facility.

2.3 Biological Environment

2.3.1 Natural Communities

Regulatory Setting

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also

includes information on wildlife corridors. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration.

Biological Communities

Affected Environment

Sierra Nevada Mixed Conifer

The Sierran Mixed Conifer Habitat is an assemblage of conifer and hardwood species that form a multilayered forest. The Sierran Mixed Conifer Habitat generally forms a vegetation band ranging from approximately 2,500 to 4,000 feet in the north and from approximately 4,000 to 10,000 feet in the southern Sierra Nevada.

Valley-Foothill Riparian

Valley-Foothill Riparian vegetation occurs on relatively fine-textured alluvium adjacent to active stream channels. These sites usually experience over-bank flooding with abundant alluvial deposition and groundwater recharge.

Environmental Consequences

Sierra Nevada Mixed Conifer

The project is mainly located within a Sierran Mixed Conifer Habitat. Trees line each side of the highway in most locations except where tree removal has occurred due to residences and pasturing. These trees provide nesting habitat to migratory and resident birds along with tree roosting bats. Approximately 1,700 Sierran Mixed Conifer trees will be removed as a result of the project. Given the avoidance and minimization measures that are incorporated into the project, there will be no impacts to bird or bat species from tree removal. The project has trees behind the trees slated for removal that still provide habitat for wildlife.

Valley-Foothill Riparian

An area of riparian vegetation occurs adjacent to the perennial stream that crosses SR 174 near the intersection of Greenhorn Access Road and on the west and east sides of SR 174 near the intersection of Behr Mountain Road. Riparian vegetation also occurs sporadically along Butterfly Creek. Riparian vegetation along Butterfly Creek appears to be limited by both livestock grazing and moving/clearing by adjacent landowners. The proposed project would result in the permanent loss of 0.02 acres of riparian habitat and temporary impacts of 0.09 acres. Refer to Appendix E for maps that illustrate potential impacts to riparian habitat.

Avoidance and Minimization Measures

Sierra Nevada Mixed Conifer

- Tree removal will be avoided wherever possible
- Removal of any trees should be done outside of the bird nesting and bat roosting season (February 15 to September 1). Trees should be removed between September 2 and February 14.

- Exclusionary fencing shall be installed along the boundaries of the ESL to ensure that impacts outside of the construction zone are minimized.

Mitigation Measures

Valley-Foothill Riparian

The permanent loss of 0.02 acres of riparian habitat and temporary impacts of 0.09 acres will be mitigated through on-site restoration.

Wildlife Corridors

Affected Environment

The Valley-Foothill Riparian Vegetation is an essential habitat to a wide range of species in the Central Valley. Riparian habitats provide food, water, migration corridors, escape, nesting, and thermal cover. Periodic flooding provides these corridors nutrients that allows for density and structural diversity that support upland and aquatic species. The riparian areas along the tributaries within the ESL form a corridor for the daily movements of deer and mid-sized mammals.

Environmental Consequences

The width of the highway through shoulder widening and removal of trees for the clear recovery zone will increase the distance wildlife must travel to cross SR 174. However, the speed along the highway will not change as a result of the project (speed posted from 30-45 miles per hour). This increased distance may also provide an improved sight distance for wildlife allowing them to make more rational crossing decisions. Additionally, the curve radius within the project will decrease providing more sight distance for drivers to react to wildlife that may attempt to cross the roadway. Since the speed traveled on SR 174 will not increase and there will be increased sight distances, the potential of risk, injury, or death from animal/vehicle collisions would remain the same on SR 174, or potentially decrease.

Mitigation Measures

No avoidance, minimization, or mitigation measures are proposed for wildlife corridors.

2.3.2 Wetlands and Other Waters

Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [USC] 1344) is the primary law regulating wetlands and surface waters. One purpose of the CWA is to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland

hydrology, and hydric soils (soils formed during saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army of Engineers (USACE) with oversight by the United States Environmental Protection Agency (U.S. EPA).

USACE issues two types of 404 permits: Standard and General Permits. There are two types of General permits, Regional permits and Nationwide permits. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to authorize a variety of minor project activities with no more than minimal effects.

There are two types of Standard permits: Individual permits and Letters of Permission. Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of USACE's Standard permits. For Standard permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (U.S. EPA 40 Code of Federal Regulations [CFR] Part 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines were developed by the U.S. EPA in conjunction with USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this EO states that a federal agency, such as the FHWA and/or Caltrans, as assigned, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, wetlands and waters are regulated primarily by the California Department of Fish and Wildlife (CDFW), the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCB). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before

beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFW.

The RWQCBs were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications for impacts to wetlands and waters in compliance with Section 401 of the CWA. Please see the Water Quality section for additional details.

Affected Environment

An NES and a Wetland Delineation were completed in February 2016. Jurisdictional wetlands and waters are present within and adjacent to the project. The term “jurisdictional wetlands” refers to areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Jurisdictional wetlands generally include swamps, marshes, bogs, natural drainage channels, and seasonal wetlands.

Jurisdictional waters of the United States (WOTUS) are defined as those waters that are currently used, or were used in the past, or may be susceptible to use in interstate commerce, including all waters subject to the ebb and flow of the tide and all interstate waters including interstate wetlands. This definition also includes interstate lakes, rivers, streams (including intermittent and ephemeral), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds where the use, degradation or destruction of which could affect interstate or foreign commerce.

Environmental Consequences

The proposed project would permanently impact 0.08 acres of a jurisdictional wetland located at Greenhorn Access Road and SR 174. The proposed project would permanently impact 0.03 acres of potentially jurisdictional waters of the United States through the extension of culverts. Temporary impacts include 0.01 acres of potentially jurisdictional waters of the United States. Refer to Appendix E for maps that illustrate all potential impacts to wetlands and waters.

Avoidance, Minimization, and Mitigation Measures

Best management practices will be implemented to guarantee the smallest practical footprint to minimize temporary, and permanent impacts to jurisdictional waters of the United States. Work will be limited to when tributaries are dry. Wetlands not impacted by the project will be fenced with environmentally sensitive area fencing to prevent encroachment and impacts from the proposed project.

The permanent loss of 0.08 acres of jurisdictional wetlands and 0.03 acres of potentially jurisdictional waters of the United States will be mitigated by the purchase of credits at an approved mitigation bank or through “in-lieu-fee” mitigation. Temporary impacts for 0.01 acres of potentially jurisdictional waters of the United States will be mitigated through on-site restoration.

2.3.3 Plant Species

Regulatory Setting

The U.S Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Please see the Threatened and Endangered Species section in this document for detailed information about these species.

This section of the document discusses all the other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Caltrans projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and CEQA, CA Public Resources Code, Sections 2100-21177.

Affected Environment

Calysegia stebbinsii

Calystegia stebbinsii, a dicot, is a perennial herb (rhizomatous) that is native to California and is endemic (limited) to California. It is included in the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants on list 1B.1 (rare, threatened, or endangered in CA and elsewhere). It is listed by the State of California and Federally as Endangered. The plant blooms from April to July.

The plant was not found during surveys of the BSA. The species nearest observed occurrence is approximately 7 miles west of the BSA. The survey was conducted at the appropriate dates typical of *Calysegia stebbinsii* blooming period.

Pine Hill flannelbush

Pine Hill flannelbush, a dicot, is a shrub that is native to California and is endemic to California. It is included in the CNPS Inventory of Rare and Endangered Plants on list 1B.2 (rare, threatened, or endangered in California and elsewhere). It is listed by the State of California as rare and by the Federal Government as endangered. It blooms from April to July.

The plant was not found during surveys of the BSA. The survey was conducted at the appropriate dates typical of Pine Hill flannelbush blooming period.

Sidalcea stipularis

Sidalcea stipularis, a dicot, is a perennial herb (rhizomatous) that is native to California and is endemic to California. It is included in the CNPS Inventory of Rare and Endangered Plants on list 1B.1 (rare, threatened, or endangered in California and elsewhere). It is listed by the State of California as endangered and blooms July and August. It occurs almost always under natural conditions in freshwater wetlands and riparian areas.

The plant was not found during botanical surveys of the BSA. The surveys were conducted at the appropriate dates typical of the *Sidalcea stipularis* blooming period.

Environmental Consequences

Calystegia stebbinsii, Pine Hill flannelbush, and *Sidalcea stipularis* are not present in the BSA; therefore, no impacts are expected.

Avoidance and Minimization Measures

No avoidance, minimization, or mitigation measures are proposed for any of these plant species.

2.3.4 Animal Species

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The US Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section below. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations pertaining to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act

- Fish and Wildlife Coordination Act

State laws and regulations pertaining to wildlife include the following:

- California Environmental Quality Act
- Sections 1600 – 1603 of the California Fish and Game Code
- Section 4150 and 4152 of the California Fish and Game Code

Affected Environment

Foothill Yellow Legged Frog

The Foothill yellow-legged frog (FYLF) is a California State Species of Special Concern. FYLF are not federally listed nor do they have federally designated critical habitat. FYLFs inhabit shallow, slow, gravelly streams and rivers with sunny banks, in forests, chaparral, and woodlands. Breeding occurs from mid-March until early June when streams have slowed from winter runoff. Clusters of eggs are attached to the downstream side of submerged rocks. FYLF avoid rapid waters to protect the egg masses from being swept away. This species is a stream-dwelling form that deposits masses of 300-1200 eggs on the downstream side of cobbles and boulders over which a relatively thin, gentle flow of water exists. Tadpoles transform in about 15 weeks, from July to September. The seasonal movement and behavior of adults is essentially unknown (CDFW, 2000). FYLF may travel up to 2.05 miles along streams.

The nearest observed occurrence of FYLF is located approximately 1.5 miles east of the project along Greenhorn Creek and was observed in 2009. The second nearest observed occurrence is located 3.7 miles east of the project near the Bear River. Surveys were conducted for the CRLF and FYLF. During those surveys no FYLF were observed; however, this is likely due to the lack of suitable habitat within the project area. FYLF prefer shallow, slow, gravelly streams and rivers with cobbles and boulders and sunny banks. The nearest location of potential FYLF habitat is at tributary 4 which is approximately 0.16 miles west of the ESL. Refer to Appendix D for a map of ponds and tributaries within one mile of the ESL.

Western Pond Turtle

Western pond turtle (WPT) is listed by the CDFW as a Species of Special Concern. This species prefers permanent ponds, lakes, streams, and irrigation ditches in a wide variety of habitat types. They require basking sites such as partially submerged logs, rocks, and mats of floating vegetation, or open mud banks. This turtle is often seen basking above the water, but will quickly slide into the water when it feels threatened.

WPT seldom basks by floating at the water surface. They are active from around February to November and may be active during warm periods in winter. WPT hibernate underwater, often in the muddy bottom of a pool. They estivate during summer droughts by burying itself in soft bottom mud. When creeks and ponds dry up in summer, some turtles that inhabit creeks will travel along the creek until they find an isolated deep pool, others stay within moist mats of algae in shallow pools while many turtles move to woodlands above the creek or pond and bury

themselves in loose soil where they will overwinter until temperatures warm up enough for them to become active and the heavy winter flows of the creek subside, and then they return to the creek in Spring.

A WPT was observed in pond 7 just outside of the ESL during biological surveys. Refer to Appendix D for the location of pond 7.

Environmental Consequences

Foothill Yellow Legged Frog

No Foothill Yellow Legged Frogs were observed within the ESL. Due to the lack of suitable habitat within the project area, it is very unlikely that this species would occur within the project limits. No impacts to this species as a result of the proposed project.

Western Pond Turtle

No Western Pond Turtles were observed within the ESL. Despite the lack of suitable WPT habitat within the ESL, there is suitable adjacent habitat. A WBT was observed just outside of the ESL. To ensure there will be no impacts to potential foraging/dispersing turtles or any other aquatic species, avoidance and minimization measures will be incorporated into the project.

Avoidance and Minimization Measures

Foothill Yellow Legged Frog

The project has been designed to minimize effects on aquatic and riparian habitat identified in the study area. BMP's will be implemented to reduce water quality impacts, which may include placement of silt fencing or filter fabric along the banks of any affected waterway once the vegetation is removed. Construction activities would be implemented outside of the rainy season, which will reduce the potential for adverse impacts on the tributaries located in the study area. Additionally, avoidance and minimization measures implemented for the Western Pond Turtle will reduce/eliminate potential impacts to FYLF.

Western Pond Turtle

- Twenty-four hours prior to the commencement of construction activities, the project shall be surveyed for turtles, frogs, or any other aquatic species by a qualified biologist. The biologist will provide a written report that adequately documents the monitoring efforts within 24-hours of commencement of construction activities. The project shall be re-inspected by the monitoring biologist whenever a lapse in construction activity of two weeks or greater occur.
- Vegetation should be manually clipped to ground level and removed by hand, where possible, near the stream channel and riparian zone. The vegetation removal will be conducted with the presence of a qualified biologist who will monitor the area for the presence of WPT or other aquatic species.

- Following removal of vegetation, the work area will be fenced with frog exclusion fencing to prevent encroachment of frogs within the work area. A qualified biologist will determine the location of frog exclusion fencing placement and monitor its installation. The fencing shall be buried a minimum of six inches into the ground. The project limits will be flagged and/or signed to prevent the encroachment of construction personnel and equipment into any sensitive areas during project work. Animal exclusion fencing shall be checked once per week by construction personnel, trained by a qualified biologist, to identify weaknesses. All compromised portions shall be repaired and/or replaced immediately. Animal exclusion fencing shall be removed once the construction is completed or by October 15 of the construction year, whichever comes first.
- If WPT are found at any time during project work, construction will stop and CDFW will be contacted immediately for further guidance.
- Staging areas as well as fueling and maintenance activities shall be a minimum of 50 feet from riparian or aquatic habitats. The project proponent will prepare a spill prevention and clean-up plan.
- The project will administer Best Management Practices to protect water quality and control erosion.
- If a work site is to be temporarily dewatered by pumping, intakes shall be completely screened with wire mesh not larger than five millimeters. Water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Ideally the animal exclusion fencing will tie into the outfall of the dewatering system at the ends of the project area to prevent a gap in the exclusion. A qualified biologist will be on site during the initial stages of any dewatering to monitor for WPT or other aquatic species in the work area.
- Upon completion of construction activities, any barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate.

2.3.5 Threatened and Endangered Species

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA), are required to consult with the U.S. Fish and Wildlife Service (USFWS)

and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) to ensure that they are not undertaking, funding, permitting or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement, a Letter of Concurrence and/or documentation of a no effect finding. Section 3 of FESA defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFW. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

Affected Environment

Black Rail

The California Black Rail is listed as a State Threatened Species. California black rail populations were previously thought to be restricted to the San Francisco Bay Area, Bolinas Lagoon, Tomales Bay, Morro Bay, Suisun Bay, the Delta region to White Slough in San Joaquin County, the Salton Sea area, and the Lower Colorado River Valley. In 1994, however, new populations were discovered in the western Sierra Nevada foothills of Yuba County, and subsequent surveys revealed previously unknown populations in the foothills of Butte, Nevada,

Placer, and San Joaquin Counties. As of 2006, California black rail has been found in 103 marshes in the foothills of Butte, Nevada, Yuba, Placer, and San Joaquin counties, almost all below 1,155 feet. California black rails build well concealed nests from March 12 to June 4th on the ground, often under dense vegetation. The California black rail require dense cattail, rushes, or sedge vegetation in well-drained settings, with perennial water flow and water levels an inch deep or less. Foothill springs, or even irrigation ditch leaks, that maintain marshes or wet meadows as small as one acre, even if surrounded by dry annual grassland or woodland, could be black rail habitat. They are likely to be found in marginal use areas, where vegetation is not especially desirable or extensive for grazing and too wet for other uses. Some areas moderately winter-grazed by cattle have even been found to continue to attract black rails. Proximity to heavily traveled roadways and home sites does not seem to limit their occurrence. Larger wetlands are more likely to support populations that will exist over time. Black rails in the Sierra Nevada foothills were positively associated with larger PEM1 (Palustrine Emergent Persistent) wetlands that had flowing water, dense vegetation or varying heights and irrigation water as a primary source; they were negatively associated with fringe wetlands and seasonal water regimes.

Black Rail surveys were conducted by qualified bird biologists to determine habitat suitability within the BSA; no black rails were identified during the survey. Additionally, the habitat within the ESL, and directly adjacent to the ESL, is unsuitable. The CNDDDB nearest observed occurrence of black rail is approximately 0.55 miles west of the proposed project and the second nearest observed occurrence is approximately 4 miles west of the proposed project.

Black rails require large wetlands with dense vegetation of varying heights consisting of cattails, rushes, or sedges. The vegetation at the small wetland (0.50 acres) and along Butterfly Creek adjacent to the ESL are grazed by cattle, and from time to time, mowed by property owners. The wetland is not large enough nor is the vegetation dense enough, making it unsuitable habitat for black rail. Black rails typically occur in the shallowest zones of wetland edges where water depths are generally less than 1.2 inches (3 centimeters). Even in the wettest months, the wetlands directly adjacent to the ESL did not contain standing water in most areas due to the sloped topography and diversion of water into ponds. Tributary 2, also known as Butterfly Creek, maintains constant water flow from springs and irrigation; the water was approximately 2-3 inches deep during August – October, some of the driest months of the year. During rain events the water level fluctuates to greater depths and is swift running making it unsuitable habitat for black rails. Additionally, these wetlands are typically dry with no flowing water due to water diversion into nearby stock ponds. In addition, almost all known populations of California black rail were found below elevation of 1,155 feet; the project area is approximately 2,500 feet in elevation.

California Red Legged Frog

The California Red Legged Frog is federally listed as a threatened species. The historic range of CRLF extended along the coast from the vicinity of Point Reyes National Seashore, Marin County, California and inland from the vicinity of Redding, Shasta County, California, southward to northwestern Baja California, Mexico. This range encompassed 46 counties, but the subspecies has been extirpated from 24 of those counties which represents 70 percent of its former range. Only isolated populations have been documented in the Sierra Nevada, northern Coast, and northern Transverse ranges. Within the Sierra Nevada Range, there are currently nine extant populations of CRLF. CRLFs use a variety of habitat types, including various aquatic, riparian, and upland habitats. These include, but are not limited to, ephemeral ponds, intermittent streams, seasonal wetlands, springs, seeps, permanent ponds, perennial creeks, manmade aquatic features, marshes, dune ponds, lagoons, riparian corridors, blackberry thickets, nonnative annual grasslands, and oak savannas.

CRLF breed from November through March with earlier breeding records occurring in southern localities. CRLF are often prolific breeders, typically laying their eggs during or shortly after large rainfall events in late winter and early spring. Embryos hatch 6 to 14 days after fertilization and larvae require 3.5 to 7 months to attain metamorphosis. Larvae probably experience the highest mortality rates of all life stages, with less than 1 percent of eggs laid reaching metamorphosis. Sexual maturity normally is reached at 3 to 4 years of age; CRLF may live 8 to 10 years. Juveniles have been observed to be active diurnally and nocturnally, whereas adults are mainly nocturnal. At any time of the year, adult CRLFs may be found in any body of water for refuge and shelter. Adults are closely tied to aquatic habitats during the dry summer (<6 meters [20 feet] from their pond), but during the early winter rains, they utilize surrounding upland habitats usually within about 60 meters (200 feet) of a pond. CRLF will foray between 4 and 6 days in summer, but 20 to 30 days in rainy season. In summer and fall, persistence of water is more important than depth, and CRLF can be found in springs, soil cracks, water-holding devices, and other structures that provide moisture and cover.

CRLF also occur in dense growths of riparian woodland or marshland dominated by willow, cattail, and bulrush. Metamorphs require dense cover for escape, which can include floating plants such as water-primrose, pondweed and duckweed (*Ludwigia* sp., *Potamogeton* sp., *Lemna* sp., etc.), as well as emergent hydrophytes. The largest CRLF densities are associated with deep-water pools with dense stands of overhanging willows and an intermixed fringe of cattails.

The project area is not within CRLF current range (approximately 2 miles away) nor within any designated critical habitat (approximately 8 miles away).

A CRLF Site Assessment was conducted within the BSA and within a 1-mile radius of the BSA. Ponds and streams surveyed within the project CRLF Site Assessment Area have a potential to support CRLF and their breeding habitat if it were not for the abundant presence of known

predators to CRLF. Habitat quality ranges from un-vegetated or manicured stock ponds and small perennial streams to ponds with greater shoreline complexity and more extensive aquatic or riparian vegetation. Based solely on observations of the structure and quality of available habitat, without considering the potential presence of bullfrog competition or predatory fish, many of the ponds within the project CRLF Site Assessment Area are suitable for CRLF breeding. However, considering the presence and abundance of predatory species observed during surveys including bullfrogs (*Rana catesbeiana*), bass (*Micropterus sp.*), and sunfish (*Centrarchids sp.*), it is unlikely that CRLF would be present. Based on the results of surveys, analyses of habitat conditions and requirements, and current range, it was determined that the project will have “no effect” on CRLF. Potential impacts to CRLF were ruled out based on the following:

- Almost all aquatic features surveyed in the site assessment area contained one or more non-native species known to prey on most of the CRLF life cycles, particularly those within 200 feet of the ESL. There were predators in 10 of 12 ponds within 200 feet of ESL and in 8 of 14 ponds within 200 feet and one-mile of the ESL. Because these non-native species appear to be well established in the project area, the likelihood for the presence of CRLF in the area is substantially decreased.
- Day-time and night-time surveys within the SR 174 site assessment area did not detect CRLF.
- CRLF have not been recorded within the vicinity of the proposed project area and the SR 174 site assessment area. No known CRLF records occur within the Bear River watershed where the project ESL is located. The closest occurrence of CRLF was observed in 2007 and is 9 miles northwest of the project near the South Yuba River drainage at Sailor Flat. The second closest occurrence (observed in 2006) is 18 miles away from the site assessment area and the third closest occurrence is 22 miles (observed in 2009) from the site assessment area.
- The project area is not within USFWS CRLF current range nor within USFWS designated critical habitat. The project area is approximately two miles within the historical range of CRLF.
- No new barriers to CRLF dispersal (additional roads, removal of culverts, and placement of additional structures) will be implemented as part of this project. In fact, the new culverts to be placed are likely to be larger in size, making them more likely to be used as dispersal routes. Despite the widening of the highway throughout the ESL, the traffic usage is likely to remain unchanged.

VELB

The Valley elderberry longhorn beetle (VELB) was federally listed as a threatened species with critical habitat on August 8, 1980 (USFWS, 1980). Elderberry plants must be at least one inch in diameter to provide suitable habitat within the stem for VELB.

The nearest observed occurrence of VELB is 12 miles south of the project near Meadow Vista at an elevation of approximately 2,000 feet. Despite the greater elevation at the project area, elderberry shrubs are present within the ESL. Five small elderberry shrubs less than one inch in diameter are located at the northern end of the project near Seven Cedars Drive and SR 174. These shrubs are located on private property, have been pruned to the ground regularly, and are surrounded by and understory of blackberry vines. A stem less than one inch in diameter will not be utilized by VELB therefore no habitat exists within these five shrubs.

One elderberry shrub with a stem greater than one inch (approximately 1.5 inches in diameter) is located south of Wild Duck Lane. The shrub is approximately 4 feet from SR 174 to its east and approximately 2 feet from a hiking trail to its west. The shrub has been pruned to appear more tree-like. The shrub has no VELB exit holes, is isolated from other elderberry shrubs and isolated from riparian habitat (riparian habitat is approximately 0.47 miles away). The closest known observed occurrence of VELB is 11.5 miles south of the project in the Colfax USGS quadrangle.

These elderberry shrubs will be removed as a result of the project; however, the elderberry shrubs do not provide suitable habitat for VELB. The shrubs near Seven Cedars are less than one inch diameter and therefore are unsuitable for VELB. VELB presence in the elderberry shrub that is greater than one inch diameter is unlikely due to its location. Because of the location of the elderberry shrub and the distance to the nearest riparian habitat, any VELB that could be inhabiting these shrubs could be considered isolated. Therefore by removing the shrubs during construction activities, fragmenting an existing population is not likely. Additionally, there were no exit holes observed in the shrub and the project area to be outside of the range of VELB. Based on the results of surveys, analyses of habitat conditions and requirements, and range of VELB, it was determined that the project will have “no effect” on VELB; therefore, no consultation with USFWS will be initiated.

Environmental Consequences

Black Rail

No Black Rails were identified in surveys conducted by qualified bird biologists. Additionally, the habitat within the ESL, and directly adjacent to the ESL, is unsuitable for Black Rails. No impacts to Black Rails are expected.

California Red Legged Frog

The project area is not within the CRLF current range nor within any designated critical habitat. Ponds and streams surveyed within the CRLF Site Assessment Area have a potential to support CRLF and their breeding habitat if it were not for the abundant presence of known predators to CRLF. However, considering the presence and abundance of predatory species observed during surveys including bullfrogs, it is unlikely that CRLF would be present. No impacts to CRLF are expected.

VELB

Elderberry plants must be at least one inch in diameter to provide suitable habitat within the stem for VELB. One elderberry shrub with a stem greater than one inch (approximately 1.5 inches in diameter) is located south of Wild Duck Lane. This shrub will be removed during construction activities. The shrub has no VELB exit holes and is isolated from other elderberry shrubs and riparian habitat. Therefore by removing the shrubs during construction activities, fragmenting an existing population is not likely. The project area is outside of the range of VELB and no impacts to VELB are anticipated.

Avoidance and Minimization Measures

Since none of these threatened and endangered species are anticipated to be present within the project area, no avoidance and minimization measures will be required.

2.3.6 Invasive Species

Regulatory Setting

Federal Highway Administration (FHWA) guidance issued August 10, 1999 directs the use of the State's invasive species list maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the environmental analysis for a proposed project.

Affected Environment

Invasive Species are present within the project limits. These species are highly adept at outcompeting native vegetation and Caltrans will use both minimization measures and best management practices during construction and post construction, to ensure that the least amount of these species are present within the project limits upon completion of construction to comply with Executive Order 13112 listed under Regulatory Requirements in Chapter 2.

Environmental Consequences

The project area has an existing presence of non-native plant species. The project is not expected to result in an increase or spread of introduced or invasive species. Less than significant impacts from invasive species pursuant to CEQA are anticipated with the implementation of the avoidance and minimization measures.

Avoidance and Minimization Measures

- All construction equipment would be clean of potential noxious weed sources (mud, vegetation) before entering the project area, to help ensure noxious weeds from outside of the project area are not introduced into the project area.
- Equipment would be considered free of soil, seeds, and other such debris when a visual inspection does not disclose such material

- Only native plant species appropriate for the project area would be used in any erosion control or revegetation seed mix or stock. Certified weed-free straw would be required when erosion control straw is to be used. In addition, any hydro-seeded mulch used for revegetation activities must also be certified weed-free.
- Non-native plant control would consist of mechanical or spot chemical treatments of the selected most invasive plant species listed by the United States Department of Agriculture (USDA), California Exotic Pest Plant Council (CEPPC), and the California Invasive Plant Council (CALIPC) that if left untreated, would dominate the onsite revegetation area.

2.4 Construction Impacts

Temporary Air Quality and Noise Impacts During Construction

The construction of roadway improvements could generate temporary air quality impacts (e.g., increase in diesel fumes and dust) and noise impacts from heavy equipment operations.

Air Quality

The proposed project may result in the generation of short-term construction-related air emissions, including fugitive dust and exhaust emissions from construction equipment. Fugitive dust, sometimes referred to as windblown dust or PM₁₀, would be the primary short-term construction impact, which may be generated during excavation, grading, and hauling activities. However, both fugitive dust and construction equipment exhaust emissions would be temporary and transitory in nature and minimized with the following:

- Caltrans Standard Specifications, a required part of all construction contracts, should effectively reduce and control emission impacts during construction under the provisions of Section 7-1.02C “Emission Reduction” and Section 14-9.03 “Dust Control”. Provision 14-9.02 “Air Pollution Control” requires the contractor to comply with all pertinent rules, regulations, ordinances, and statutes of the local air district.

Noise

During construction, noise may be generated from the contractors’ equipment and vehicles. Caltrans requires the contractor to conform to the provisions of Standard Specification, Section 14-8.02 “Noise Control”:

- Noise levels would not exceed 86 dBA LMax at 50 feet from the job site activities from 9 p.m. to 6 a.m.
- Equipment would include an internal combustion engine with manufacturer-recommended muffler
- An internal combustion engine would not be operated on the job site without the appropriate muffler

2.5 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988, has led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), HFC-23 (fluoroform), HFC-134a (s, s, s, 2-tetrafluoroethane), and HFC-152a (difluoroethane).

In the U.S., the main source of GHG emissions is electricity generation, followed by transportation. In California, however, transportation sources (including passenger cars, light duty trucks, other trucks, buses, and motorcycles make up the largest source (second to electricity generation) of GHG emitting sources. The dominant GHG emitted is CO₂, mostly from fossil fuel combustion.

There are typically two terms used when discussing the impacts of climate change. "Greenhouse Gas Mitigation" is a term for reducing GHG emissions in order to reduce or "mitigate" the impacts of climate change. "Adaptation," refers to the effort of planning for and adapting to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels)³.

There are four primary strategies for reducing GHG emissions from transportation sources: 1) improving the transportation system and operational efficiencies, 2) reducing growth of vehicle miles traveled (VMT), 3) transitioning to lower GHG emitting fuels, and 4) improving vehicle technologies. To be most effective all four strategies should be pursued collectively. The following Regulatory Setting section outlines state and federal efforts to comprehensively reduce GHG emissions from transportation sources.

Regulatory Setting

This section outlines state and federal efforts to comprehensively reduce GHG emissions from transportation sources.

³ http://climatechange.transportation.org/ghg_mitigation/

State

With the passage of several pieces of legislation including State Senate and Assembly bills and Executive Orders, California launched an innovative and proactive approach to dealing with GHG emissions and climate change.

Assembly Bill 1493 (AB 1493), Pavley, Vehicular Emissions: Greenhouse Gases, 2002: This bill requires the California Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year.

Executive Order (EO) S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to 1) year 2000 levels by 2010, 2) year 1990 levels by 2020, and 3) 80 percent below the year 1990 levels by 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32.

Assembly Bill 32 (AB 32), Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 sets the same overall GHG emissions reduction goals as outlined in EO S-3-05, while further mandating that ARB create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases."

Executive Order S-20-06 (October 18, 2006): This order establishes the responsibilities and roles of the Secretary of the California Environmental Protection Agency (Cal/EPA) and state agencies with regard to climate change.

Executive Order S-01-07 (January 18, 2007): This order set forth the low carbon fuel standard for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

Senate Bill 97 (SB 97) Chapter 185, 2007, Greenhouse Gas Emissions: This bill required the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the California Environmental Quality Act (CEQA) Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

Senate Bill 375 (SB 375), Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires the California Air Resources Board (CARB) to set regional emissions reduction targets from passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan for the achievement of the emissions target for their region.

Senate Bill 391 (SB 391) Chapter 585, 2009 California Transportation Plan: This bill requires the State's long-range transportation plan to meet California's climate change goals under AB 32.

Federal

Although climate change and GHG reduction are a concern at the federal level, currently no regulations or legislation have been enacted specifically addressing GHG emissions reductions and climate change at the project level. Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has issued explicit guidance or methods to conduct project-level GHG analysis. FHWA supports the approach that climate change considerations should be integrated throughout the transportation decision-making process—from planning through project development and delivery. Addressing climate change mitigation and adaptation up front in the planning process will assist in decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project-level decision-making. Climate change considerations can be integrated into many planning factors, such as supporting economic vitality and global efficiency, increasing safety and mobility, enhancing the environment, promoting energy conservation, and improving the quality of life.

The four strategies outlined by FHWA to lessen climate change impacts correlate with efforts that the state is undertaking to deal with transportation and climate change; these strategies include improved transportation system efficiency, cleaner fuels, cleaner vehicles, and a reduction in travel activity.

Climate change and its associated effects are also being addressed through various efforts at the federal level to improve fuel economy and energy efficiency, such as the “National Clean Car Program” and EO 13514 - Federal Leadership in Environmental, Energy and Economic Performance.

Executive Order 13514 (October 5, 2009): This order is focused on reducing greenhouse gases internally in federal agency missions, programs and operations, but also directs federal agencies to participate in the Interagency Climate Change Adaptation Task Force, which is engaged in developing a national strategy for adaptation to climate change.

U.S. EPA's authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six greenhouse gases constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and EPA's assessment of the scientific evidence that form the basis for EPA's regulatory actions. U.S. EPA in conjunction with NHTSA

issued the first of a series of GHG emission standards for new cars and light-duty vehicles in April 2010.

The U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles with reduced GHG emissions and improved fuel efficiency from on-road vehicles and engines. These next steps include developing the first-ever GHG regulations for heavy-duty engines and vehicles, as well as additional light-duty vehicle GHG regulations.

The final combined standards that made up the first phase of this national program apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The standards implemented by this program are expected to reduce GHG emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016).

On August 28, 2012, U.S. EPA and NHTSA issued a joint Final Rulemaking to extend the National Program for fuel economy standards to model year 2017 through 2025 passenger vehicles. Over the lifetime of the model year 2017-2025 standards this program is projected to save approximately four billion barrels of oil and two billion metric tons of GHG emissions.

The complementary U.S. EPA and NHTSA standards that make up the Heavy-Duty National Program apply to combination tractors (semi trucks), heavy-duty pickup trucks and vans, and vocational vehicles (including buses and refuse or utility trucks). Together, these standards will cut greenhouse gas emissions and domestic oil use significantly. This program responds to President Barack Obama's 2010 request to jointly establish greenhouse gas emissions and fuel efficiency standards for the medium- and heavy-duty highway vehicle sector. The agencies estimate that the combined standards will reduce CO₂ emissions by about 270 million metric tons and save about 530 million barrels of oil over the life of model year 2014 to 2018 heavy duty vehicles.

Project Analysis

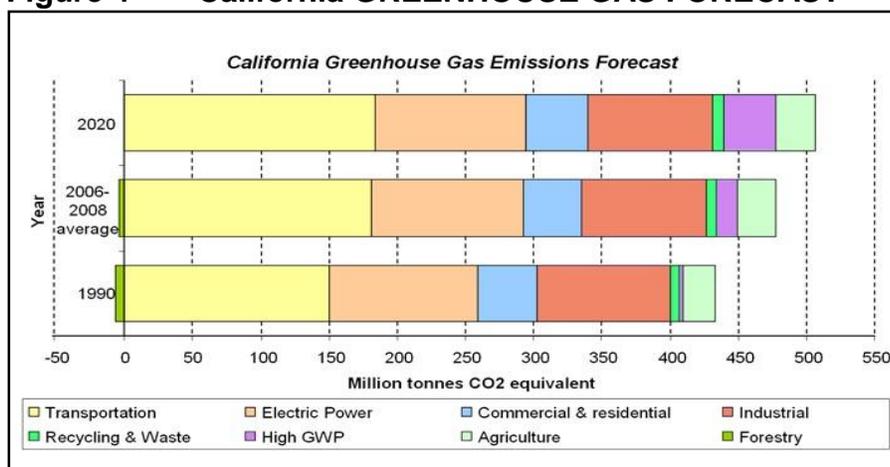
An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its incremental change in emissions when combined with the contributions of all other sources of GHG.⁴ In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines sections 15064(h)(1) and 15130). To make this determination the incremental

⁴ This approach is supported by the AEP: *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), as well as the South Coast Air Quality Management District (Chapter 6: The CEQA Guide, April 2011) and the US Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).

impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult, if not impossible, task.

The AB 32 Scoping Plan mandated by AB 32 contains the main strategies California will use to reduce GHG emissions. As part of its supporting documentation for the Draft Scoping Plan, ARB released the GHG inventory for California (forecast last updated: October 28, 2010). The forecast is an estimate of the emissions expected to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented. The base year used for forecasting emissions is the average of statewide emissions in the GHG inventory for 2006, 2007, and 2008.

Figure 4 California GREENHOUSE GAS FORECAST



Source: <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>

Caltrans and its parent agency, the California State Transportation Agency (CalSTA), have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California’s GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing the Climate Action Program at Caltrans that was published in December 2006.⁵

The purpose of the proposed project is to improve safety and reduce the number of collisions by improving the existing alignment and widening the shoulders. The proposed project will not increase the vehicular capacity of State Route 174 as the roadway will be re-constructed with the same lane configuration and capacity as the existing roadway. Because the project would not increase capacity nor vehicle hours travelled, no increases in operational GHG are

⁵ Caltrans Climate Action Program is located at the following web address: http://www.dot.ca.gov/hq/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/Caltrans_Climate_Action_Program.pdf

anticipated. While construction emissions of greenhouse gases are unavoidable, there will likely be long term benefits while improved safety, operation and smooth pavement surface.

Construction Emissions

Greenhouse gas emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

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

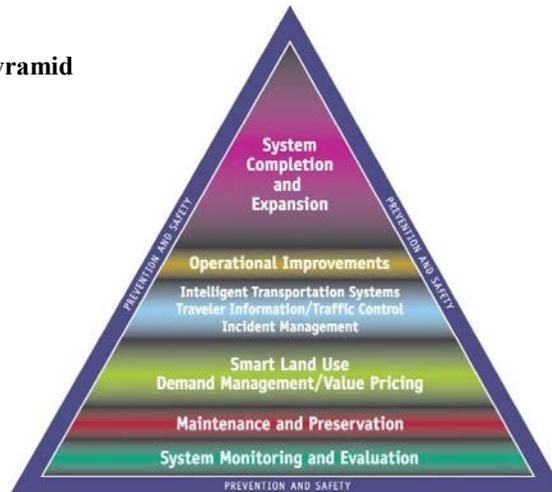
CEQA Conclusion

While construction would result in a slight increase in GHG emissions during construction, it is anticipated that the project would not result in any increase in operational GHG emissions. While it Caltrans' determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct impact and its contribution on the cumulative scale to climate change, Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

The Department continues to be involved on the Governor's Climate Action Team as the ARB works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Many of the strategies the Department is using to help meet the targets in AB 32 come from Former Governor Arnold Schwarzenegger's Strategic Growth Plan for California. The Strategic Growth Plan targeted a significant decrease in traffic congestion below 2008 levels and a corresponding reduction in GHG emissions, while accommodating growth in population and the economy. The Strategic Growth Plan relies on a complete systems approach to attain CO₂ reduction goals: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements as shown in Figure 5: The Mobility Pyramid.

Figure 5: Mobility Pyramid



The Department is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high-density housing along transit corridors. The Department works closely with local jurisdictions on planning activities, but does not have local land use planning authority. The Department also assists efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks; the Department is doing this by supporting on-going research efforts at universities, by supporting legislative efforts to increase fuel economy, and by participating on the Climate Action Team. It is important to note, however, that control of fuel economy standards is held by the U.S. EPA and ARB.

The Department is also working towards enhancing the State's transportation planning process to respond to future challenges. Similar to requirements for regional transportation plans under Senate Bill (SB) 375 (Steinberg 2008), SB 391(Liu 2009) requires the State's long-range transportation plan to meet California's climate change goals under Assembly Bill (AB) 32.

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce greenhouse gas (GHG) emissions. The CTP defines performance-based goals, policies, and strategies to achieve our collective vision for California's future, statewide, integrated, multimodal transportation system.

The purpose of the CTP is to provide a common policy framework that will guide transportation investments and decisions by all levels of government, the private sector, and other transportation stakeholders. Through this policy framework, the CTP 2040 will identify the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the State's transportation needs.

Table 2 below summarizes the Department and statewide efforts that it is implementing to reduce GHG emissions. More detailed information about each strategy is included in the Climate Action Program at Caltrans (December 2006).

| Table 2 Climate Change/CO₂ Reduction Strategies | | | | | | |
|---|--|-------------------------------------|--|--|--|---------------------------|
| Strategy | Program | Partnership | | Method/Process | Estimated CO ₂ Savings Million Metric Tons (MMT) | |
| | | Lead | Agency | | 2010 | 2020 |
| Smart Land Use | Intergovernmental Review (IGR) | Caltrans | Local governments | Review and seek to mitigate development proposals | Not Estimated | Not Estimated |
| | Planning Grants | Caltrans | Local and regional agencies & other stakeholders | Competitive selection process | Not Estimated | Not Estimated |
| | Regional Plans and Blueprint Planning | Regional Agencies | Caltrans | Regional plans and application process | 0.975 | 7.8 |
| Operational Improvements & Intelligent Transportation System (ITS) Deployment | Strategic Growth Plan | Caltrans | Regions | State ITS; Congestion Management Plan | 0.07 | 2.17 |
| Mainstream Energy & GHG into Plans and Projects | Office of Policy Analysis & Research; Division of Environmental Analysis | Interdepartmental effort | | Policy establishment, guidelines, technical assistance | Not Estimated | Not Estimated |
| Educational & Information Program | Office of Policy Analysis & Research | Interdepartmental, CalEPA, ARB, CEC | | Analytical report, data collection, publication, workshops, outreach | Not Estimated | Not Estimated |
| Fleet Greening & Fuel Diversification | Division of Equipment | Department of General Services | | Fleet Replacement B20 B100 | .0045 | 0.0065 0.045 0.0225 |
| Non-vehicular Conservation Measures | Energy Conservation Program | Green Action Team | | Energy Conservation Opportunities | 0.117 | 0.34 |
| Portland Cement | Office of Rigid Pavement | Cement and Construction Industries | | 2.5 % limestone cement mix | 1.2 | 4.2 |
| | | | | 25% fly ash cement mix | 0.36 | 3.6 |
| | | | | > 50% fly ash/slag mix | | |
| Goods Movement | Office of Goods Movement | Cal EPA, ARB, BT&H, MPOs | | Goods Movement Action Plan | Not Estimated | Not Estimated |
| Total | | | | | 2.72 | 18.18 |

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012): is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities.

Caltrans Activities to Address Climate Change (April 2013)⁶ provides a comprehensive overview of activities undertaken by Caltrans statewide to reduce greenhouse gas emissions resulting from agency operations.

The following measures will also be included in the project to reduce the GHG emissions and potential climate change impacts from the project:

1. According to the Caltrans' Standard Specifications, the contractor must comply with all of the local Air Pollution Control District's (APCD) rules, ordinances, and regulations regarding to air quality restrictions.
2. Caltrans Standard Specifications, a required part of all construction contracts, should effectively reduce and control emission impacts during construction under the provisions of Section 7-1.02C "Emission Reduction", Section 14-9.03 "Dust Control", and Section 14-9.02 "Air Pollution Control".

Adaptation Strategies

"Adaptation strategies" refer to how Caltrans and others can plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damage to roadbeds from longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

⁶ http://www.dot.ca.gov/hq/tpp/offices/orip/climate_change/projects_and_studies.shtml

At the federal level, the Climate Change Adaptation Task Force, co-chaired by the Council on Environmental Quality (CEQ), the Office of Science and Technology Policy (OSTP), and the National Oceanic and Atmospheric Administration (NOAA), released its interagency task force progress report on October 28, 2011⁷, outlining the federal government's progress in expanding and strengthening the Nation's capacity to better understand, prepare for, and respond to extreme events and other climate change impacts. The report provides an update on actions in key areas of federal adaptation, including: building resilience in local communities, safeguarding critical natural resources such as freshwater, and providing accessible climate information and tools to help decision-makers manage climate risks.

Climate change adaptation must also involve the natural environment as well. Efforts are underway on a statewide-level to develop strategies to cope with impacts to habitat and biodiversity through planning and conservation. The results of these efforts will help California agencies plan and implement mitigation strategies for programs and projects.

On November 14, 2008, former Governor Arnold Schwarzenegger signed EO S-13-08 which directed a number of state agencies to address California's vulnerability to sea level rise caused by climate change. This EO set in motion several agencies and actions to address the concern of sea level rise.

In addition to addressing projected sea level rise, the California Natural Resources Agency (Resources Agency) was directed to coordinate with local, regional, state and federal public and private entities to develop The California Climate Adaptation Strategy (Dec 2009)⁸, which summarizes the best-known science on climate change impacts to California, assesses California's vulnerability to the identified impacts, and then outlines solutions that can be implemented within and across state agencies to promote resiliency.

The strategy outline is in direct response to EO S-13-08 that specifically asked the Resources Agency to identify how state agencies can respond to rising temperatures, changing precipitation patterns, sea level rise, and extreme natural events. Numerous other state agencies were involved in the creation of the Adaptation Strategy document, including the California Environmental Protection Agency; Business, Transportation and Housing; Health and Human Services; and the Department of Agriculture. The document is broken down into strategies for different sectors that include: Public Health; Biodiversity and Habitat; Ocean and Coastal Resources; Water Management; Agriculture; Forestry; and

⁷ <http://www.whitehouse.gov/administration/eop/ceq/initiatives/adaptation>

⁸ <http://www.energy.ca.gov/2009publications/CNRA-1000-2009-027/CNRA-1000-2009-027-F.PDF>

Transportation and Energy Infrastructure. As data continues to be developed and collected, the state's adaptation strategy will be updated to reflect current findings.

The National Academy of Science was directed to prepare a Sea Level Rise Assessment Report to recommend how California should plan for future sea level rise. The report was released in June 2012 and included:

- Relative sea level rise projections for California, Oregon and Washington taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge and land subsidence rates.
- The range of uncertainty in selected sea level rise projections.
- A synthesis of existing information on projected sea level rise impacts to state infrastructure (such as roads, public facilities and beaches), natural areas, and coastal and marine ecosystems.
- A discussion of future research needs regarding sea level rise.

In 2010, interim guidance was released by The Coastal Ocean Climate Action Team (CO-CAT) as well as Caltrans as a method to initiate action and discussion of potential risks to the states infrastructure due to projected sea level rise. Subsequently, CO-CAT updated the Sea Level Rise guidance to include information presented in the National Academies Study.

All state agencies that are planning to construct projects in areas vulnerable to future sea level rise are directed to consider a range of sea level rise scenarios for the years 2050 and 2100 to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. Sea level rise estimates should also be used in conjunction with information on local uplift and subsidence, coastal erosion rates, predicted higher high water levels, storm surge and storm wave data.

All projects that have filed a Notice of Preparation as of the date of EO S-13-08, and/or are programmed for construction funding from 2008 through 2013, or are routine maintenance projects may, but are not required to, consider these planning guidelines. The proposed project is outside the coastal zone and direct impacts to transportation facilities due to projected sea level rise are not expected.

Executive Order S-13-08 also directed the Business, Transportation, and Housing Agency (now CalSTA) to prepare a report to assess vulnerability of transportation systems to sea level rise affecting safety, maintenance and operational improvements of the system, and economy of the state. Caltrans continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise.

Currently, Caltrans is working to assess which transportation facilities are at greatest risk from climate change effects. However, without statewide planning scenarios for relative sea level rise and other climate change effects, Caltrans has not been able to determine what change, if any, may be made to its design standards for its transportation facilities. Once statewide planning scenarios become available, Caltrans will be able review its current design standards to determine what changes, if any, may be warranted in order to protect the transportation system from sea level rise.

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. Caltrans is an active participant in the efforts being conducted in response to EO S-13-08 and is mobilizing to be able to respond to the National Academy of Science Sea Level Rise Assessment Report.

Chapter 3 Comments and Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation, the level of analysis required, and to identify potential impacts and avoidance, minimization and/or mitigation measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods. This chapter summarizes the results of Caltrans' efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

A public open house was held on May 7, 2015 at the Peardale Fire Station to introduce the project to the public and solicit their input.

During the circulation of this Initial Study, an additional open house will be held at the following locations and times:

Thursday, June 9, 2016

Chicago Park Elementary School, 15725 Mt. Olive Road, Grass Valley, CA 95945

Time: 5:00PM -7:00PM

Following circulation of this Initial Study, comments made on the project submitted during circulation will be placed in and addressed in this chapter.

Chapter 4 List of Preparers

The following Caltrans North Region staff contributed to the preparation of this Initial Study:

Mundeep Purewal - Associate Environmental Planner. Contribution: Environmental Coordinator and Document Writer

Stefan Sutton – Senior Environmental Planner. Contribution: Document Reviewer

Lesley Morgan – Landscape Architect. Contribution: Visual Impact Assessment

William Larson – Associate Environmental Planner (Archaeology). Contribution: Historic Property Survey Report

Chris Kuzak – Associate Environmental Planner (Architectural Historian). Contribution: Historic Resources Evaluation Report

Kelli Angell – Associate Environmental Planner (Natural Sciences). Contribution: Project Biologist, Natural Environment Study

Maria Alicia Beyer-Salinas – Transportation Engineer. Contribution: Hazardous Waste Initial Site Assessment

Darrell Naruto – Transportation Engineer. Contribution: Water Quality Assessment

Jason Lee – Transportation Engineer. Contribution: Air Quality Report and Noise Assessment

Sergio Aceves – Transportation Engineer. Contribution: Project Manager.

Appendix A CEQA Checklist

The impacts checklist starting on the next page identifies physical, biological, social, and economic factors that might be affected by the proposed project. The California Environmental Quality Act impact levels include “potentially significant impact,” “less than significant impact with mitigation,” “less than significant impact,” and “no impact.”

A brief explanation of each California Environmental Quality Act checklist determination follows each checklist item.

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|--------------------------------|--|------------------------------|-----------|
|--------------------------------|--|------------------------------|-----------|

I. AESTHETICS — Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

“No Impact” and “Less than Significant Impact” are based on the project scope, field reviews, and the Visual Impact Assessment (VIA).

II. AGRICULTURE 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 Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|--------------------------------|--|------------------------------|-----------|
|--------------------------------|--|------------------------------|-----------|

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

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

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

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?

| | | | |
|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|-------------------------------------|--------------------------|

“No Impact” and “Less than Significant Impact” determinations are based on the project scope and field reviews.

III. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

c) 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 (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

d) Expose sensitive receptors to substantial pollutant concentrations?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

e) Create objectionable odors affecting a substantial number of people?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|--------------------------------|--|------------------------------|-----------|
|--------------------------------|--|------------------------------|-----------|

“No Impact” determinations are based on the project scope, field reviews, and the Air Quality Report.

IV. BIOLOGICAL RESOURCES — Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

| | | | |
|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|-------------------------------------|--------------------------|

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

| | | | |
|--------------------------|-------------------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|-------------------------------------|--------------------------|--------------------------|

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

| | | | |
|--------------------------|-------------------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|-------------------------------------|--------------------------|--------------------------|

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?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

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

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

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?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

“No Impact”, “Less than Significant Impact” and “Less Than Significant With Mitigation” determinations are based on project scope, field reviews, and the biological reports.

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|--------------------------------|--|------------------------------|-----------|
|--------------------------------|--|------------------------------|-----------|

V. CULTURAL RESOURCES — Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

“No Impact” and “Less than Significant Impact” determinations are based on the project scope, field reviews, and the Cultural Resources Reports.

VI. GEOLOGY AND SOILS — Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii) Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iii) Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iv) Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|--------------------------------|--|------------------------------|-----------|
|--------------------------------|--|------------------------------|-----------|

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

“No Impact” determinations in this section are based on the project scope, field reviews, and conversations with Project Engineer, January 2016.

VII. GREENHOUSE GAS EMISSIONS: Would the project:

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

While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans’ determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and CEQA significance, it is too speculative to make a significance determination regarding the project’s direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project.

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|--------------------------------|--|------------------------------|-----------|
|--------------------------------|--|------------------------------|-----------|

VIII. HAZARDS AND HAZARDOUS MATERIALS —

Would the project:

| | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on a site that 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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 for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|--------------------------------|--|------------------------------|-----------|
|--------------------------------|--|------------------------------|-----------|

areas or where residences are intermixed with wildlands?

“No Impact” and “Less than Significant” determinations are made based on the project scope, field reviews, and the Initial Site Assessment (ISA).

IX. HYDROLOGY AND WATER QUALITY —

Would the project:

| | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or offsite? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Otherwise substantially degrade water quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|--------------------------------|--|------------------------------|-----------|
|--------------------------------|--|------------------------------|-----------|

h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

j) Result in inundation by a seiche, tsunami, or mudflow?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

“No Impact” and “Less than Significant Impact” determinations are based on the project scope, field reviews, and water quality report.

X. LAND USE AND PLANNING — Would the project:

a) Physically divide an established community?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

| | | | |
|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|-------------------------------------|--------------------------|

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

“No Impact” and “Less than Significant Impact” determinations are based on the project scope, field reviews, and review of local land use/planning documents.

XI. MINERAL RESOURCES — Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

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?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|--------------------------------|--|------------------------------|-----------|
|--------------------------------|--|------------------------------|-----------|

“No Impact” determinations in this section are based on the project scope and field reviews.

XII. NOISE — Would the project result in:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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 expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

“No Impact” and “Less than Significant Impact” determinations are based on the project scope, field reviews, and Noise Study.

XIII. POPULATION AND HOUSING — Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Induce substantial 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)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|--------------------------------|--|------------------------------|-----------|
|--------------------------------|--|------------------------------|-----------|

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

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

“No Impact” determinations in this section are based on the project scope and field reviews.

XIV. PUBLIC SERVICES —

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?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

Police protection?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

Schools?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

Parks?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

Other public facilities?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

“No Impact” determinations in this section are based on the project scope and field reviews.

XV. 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?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|--------------------------------|--|------------------------------|-----------|
|--------------------------------|--|------------------------------|-----------|

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

“No Impact” determinations in this section are based on the project scope and field reviews.

XVI. TRANSPORTATION/TRAFFIC — Would the project:

a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

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

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

e) Result in inadequate emergency access?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

f) Result in inadequate parking capacity?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

| | | | |
|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|-------------------------------------|--------------------------|

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|--------------------------------|--|------------------------------|-----------|
|--------------------------------|--|------------------------------|-----------|

“No Impact” and “Less than Significant” determinations in this section are based on the project scope and field reviews.

XVII. UTILITY AND SERVICE SYSTEMS — Would the project:

| | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Result in a determination by the wastewater treatment provider that 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

“No Impact” determinations in this section are based on the project scope and field reviews.

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|--------------------------------|--|------------------------------|-----------|
|--------------------------------|--|------------------------------|-----------|

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE —

a) Does the project have the potential to 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, 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?

| | | | |
|--------------------------|-------------------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|-------------------------------------|--------------------------|--------------------------|

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)?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

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

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

Appendix B Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY 711
www.dot.ca.gov



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March 2013

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, please visit the following web page: http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14th Street, MS-79, Sacramento, CA 95811. Telephone: (916) 324-0449, TTY: 711, or via Fax: (916) 324-1949.

A handwritten signature in blue ink, appearing to read "Malcolm Dougherty".

MALCOLM DOUGHERTY
Director

"Caltrans improves mobility across California"

Appendix C Avoidance, Minimization, and/or Mitigation Summary

Farmland

Avoidance and Minimization Measures

- Any farmland take will be minimized as much as possible.

Relocations and Real Property Acquisition

Avoidance and Minimization Measures

- Following project approval, Caltrans Right of Way staff will coordinate with affected property owners
- Property acquisition will be minimized as much as possible.

Utilities/Emergency Services

Avoidance and Minimization Measures

- It is anticipated that the Overhead PG&E and AT&T utility relocations will be minor in nature and short term. Typically the new poles are installed while the existing poles are still active. This limits the amount of time the utilities are shut off because they can be moved immediately onto the new poles. No disruption is expected for homeowners.
- Once potholing data is received, relocation or protect-in-place efforts will be coordinated between NID and Caltrans. If a disruption in service is anticipated all parties involved such as homeowners will be notified via letters, fliers, and door to door contact.

Traffic and Transportation/Pedestrian and Bicycle Facilities

Avoidance and Minimization Measures

Traffic handling charts and specifications will be incorporated into the project during the design phase that will be included as part of the Contractor's specification package in order to manage temporary construction delays. Elements that should be considered in the Transportation Management Plan (TMP) are:

- Restrictions on when lanes may be closed

- A Construction Zone Enhanced Enforcement Plan (COZEEP) with the CHP during major construction that affects traffic, such as stage changes and traffic shifts

Visual

Avoidance and Minimization Measures

- During the design stage of project, modify the alignment where possible to avoid taking out vegetation screen from homes that are in close proximity to route 174.
- If a retaining wall is needed, the surface shall be textured and colored to fit in context of the surrounding environment.
- Protect as many trees and as much screening vegetation as possible
- Minimize the gentle slopes and curve correction areas, re-vegetate where possible.
- All areas disturbed during construction shall receive permanent erosion control measures. All finished slopes and contour graded areas shall be hydroseeded with a permanent seed mix composed of native plant species indigenous to the areas. A Landscape Architect will prepare the erosion control plans and specifications.

Cultural Resources

Avoidance and Minimization Measures

- If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.
- If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to CA Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), which will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Caltrans District 3 Environmental cultural staff so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

Water Quality and Storm Water Runoff

Avoidance & Minimization Measures

In order to prevent erosion during construction activities and/or operations related to this project, the following actions are recommended:

- Adherence to the following is recommended to prevent receiving water pollution as a result of construction activities and/or operations from this project:
 - Follow all applicable guidelines and requirements in the 2015 Caltrans Standard Specifications (2015 CSS), Section 13, regarding water pollution control and general specifications for preventing, controlling, and abating water pollution in streams, waterways, and other bodies of water.
 - The Contractor prepared Storm Water Pollution Prevention Plan (SWPPP) shall incorporate appropriate temporary construction site BMPs to implement effective handling, storage, use and disposal practices during construction activities.
 - Consideration should be given to 2015 CSS, Section 13-4 (Job Site Management), to control potential sources of water pollution before it encounters any storm water system or watercourse. It requires the Contractor to control material pollution, manage waste and non-storm water at the construction site.
 - Existing drainage facilities should be identified and protected by the application of appropriate Construction Site BMPs.

- The disposal of non-storm water discharges from dewatering activities should be considered. The Central Valley Regional Water Quality Control Board has specific waste discharge requirements for specific types of low threat discharge to land. Resolution R5-2013-0145, "Waiver Of Reports Of Waste Discharge And Waste Discharge Requirements For Specific Types Of Discharge Within Central Valley Region" and Water Quality Order No. 2003-003-DWQ, "Statewide General Waste Discharge Requirements (WDRs) For Discharge To Land With A Low Threat to Water Quality (General WDRs)".

- The Caltrans' Storm Water Management Plan (SWMP), the Project Planning and Design Guide (PPDG) Section 4, and the Evaluation Documentation Form (EDF) provide detailed guidance in determining if a specific project requires the consideration of permanent Treatment BMPs.

- Caltrans NPDES Unit will participate in early project design consultation with Central Valley RWQCB if the project entails one or more acre of total soil disturbance.
- If the Department determines that all or any portion of on-site treatment for a project is infeasible on-site, the Project Engineer in consultation with the Design Storm Water Coordinator, shall prepare a proposal for Alternative Compliance for approval by the Regional Water Board Executive Officer or his designee until such time as a statewide process is approved by the Executive Director of the State Water Board. The proposal shall include documentation supporting the determination of infeasibility. Alternative Compliance may be achieved outside project limits within the Department's right of way, including within another Department project. Alternative Compliance to be achieved outside project limits shall include provisions for the long-term maintenance of such treatment facilities. Guidance for Alternative Compliance can be found in the Statewide Storm Water Management Plan and in the Storm Water Quality Handbook, Project Planning and Design Guide.

Hazardous Waste

Avoidance and Minimization Measures

Aerially Deposited Lead

The Contractor must implement a project specific Lead Compliance Plan prepared by a Certified Industrial Hygienist (CIH) as required by the California Occupational Safety and Health Administration (Cal/OSHA). The plan will detail the correct procedures for handling, removing, and disposing of earth materials containing lead and waste from removing traffic stripes and pavement markings.

All materials containing lead will be handled in accordance with all applicable laws, rules, and regulations, including those of the following agencies: Cal/OSHA, Central Valley RWQCB, and California Department of Toxic Substances Control (CA DTC).

All workers, including Caltrans staff, will receive lead compliance training before beginning any work that could potentially expose them to lead containing substances.

Asbestos

To prevent worker exposure to asbestos, Caltrans will require that the contractor submit an Asbestos Compliance Plan that will detail the correct procedures for handling, removing, and disposing of materials containing asbestos.

Treated Wood Waste

During the proposed project, any workers that have the potential to come in contact or handle TWW will be given training on the proper handling procedures and applicable laws, including procedures for identifying and segregating TWW, and proper disposal methods.

TWW will be properly labeled for easy identification, and stored within the project area in a secured lockable enclosure to prevent unauthorized access. The TWW will also be stored so that it is protected from precipitation, or any other sources of water, to prevent contaminating any water that could leave the site. All TWW that leaves the site will be documented and disposed of at an approved TWW facility.

Natural Communities

Avoidance and Minimization Measures

Sierra Nevada Mixed Conifer

- Tree removal will be avoided wherever possible
- Removal of any trees should be done outside of the bird nesting and bat roosting season (February 15 to September 1). Trees should be removed between September 2 and February 14.
- Exclusionary fencing shall be installed along the boundaries of the ESL to ensure that impacts outside of the construction zone are minimized.

Mitigation Measures

Valley-Foothill Riparian

The permanent loss of 0.02 acres of riparian habitat and temporary impacts of 0.09 acres will be mitigated through on-site restoration.

Wetlands and Other Waters

Avoidance and Minimization Measures

Best management practices will be implemented to guarantee the smallest practical footprint to minimize temporary, indirect, and permanent impacts to jurisdictional waters of the United States. Work will be limited to when tributaries are dry. Wetlands not impacted by the project will be fenced with environmentally sensitive area fencing to prevent encroachment and impacts from the proposed project.

Mitigation Measures

The permanent loss of 0.08 acres of jurisdictional wetlands and 0.03 acres of potentially jurisdictional waters of the United States will be mitigated by the purchase of credits at an approved mitigation bank or through “in-lieu-fee” mitigation. Temporary impacts for

0.01 acres of potentially jurisdictional waters of the United States will be mitigated through on-site restoration.

Animal Species

Avoidance and Minimization Measures

Foothill Yellow Legged Frog

The project has been designed to minimize effects on aquatic and riparian habitat identified in the study area. BMP's will be implemented to reduce water quality impacts, which may include placement of silt fencing or filter fabric along the banks of any affected waterway once the vegetation is removed. Construction activities would be implemented outside of the rainy season, which will reduce the potential for adverse impacts on the tributaries located in the study area. Additionally, avoidance and minimization measures implemented for the Western Pond Turtle will reduce/eliminate potential impacts to FYLF.

Western Pond Turtle

Despite the lack of suitable habitat within the ESL, there is suitable adjacent habitat. To ensure there will be no impacts to potential foraging/dispersing turtles, or any other aquatic species, the following measures will be incorporated into the project:

- Twenty-four hours prior to the commencement of construction activities, the project shall be surveyed for turtles, frogs, or any other aquatic species by a qualified biologist. The biologist will provide a written report that adequately documents the monitoring efforts within 24-hours of commencement of construction activities. The project shall be re-inspected by the monitoring biologist whenever a lapse in construction activity of two weeks or greater occur.
- Vegetation should be manually clipped to ground level and removed by hand, where possible, near the stream channel and riparian zone. The vegetation removal will be conducted with the presence of a qualified biologist who will monitor the area for the presence of WPT or other aquatic species.
- Following removal of vegetation, the work area will be fenced with frog exclusion fencing to prevent encroachment of frogs within the work area. A qualified biologist will determine the location of frog exclusion fencing placement and monitor its installation. The fencing shall be buried a minimum of six inches into the ground. The project limits will be flagged and/or signed to prevent the encroachment of construction personnel and equipment into any sensitive areas during project work. Animal exclusion fencing shall be checked once per week by construction personnel, trained by a qualified biologist, to identify

weaknesses. All compromised portions shall be repaired and/or replaced immediately. Animal exclusion fencing shall be removed once the construction is completed or by October 15 of the construction year, whichever comes first.

- If WPT are found at any time during project work, construction will stop and CDFW will be contacted immediately for further guidance.
- Staging areas as well as fueling and maintenance activities shall be a minimum of 50 feet from riparian or aquatic habitats. The project proponent will prepare a spill prevention and clean-up plan.
- The project will administer Best Management Practices to protect water quality and control erosion.
- If a work site is to be temporarily dewatered by pumping, intakes shall be completely screened with wire mesh not larger than five millimeters. Water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Ideally the animal exclusion fencing will tie into the outfall of the dewatering system at the ends of the project area to prevent a gap in the exclusion. A qualified biologist will be on site during the initial stages of any dewatering to monitor for WPT or other aquatic species in the work area.
- Upon completion of construction activities, any barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate.

Invasive Species

Avoidance and Minimization Measures

- All construction equipment would be clean of potential noxious weed sources (mud, vegetation) before entering the project area, to help ensure noxious weeds from outside of the project area are not introduced into the project area.
- Equipment would be considered free of soil, seeds, and other such debris when a visual inspection does not disclose such material
- Only native plant species appropriate for the project area would be used in any erosion control or revegetation seed mix or stock. Certified weed-free straw would be required when erosion control straw is to be used. In addition, any hydro-seeded mulch used for revegetation activities must also be certified weed-free.

- Non-native plant control would consist of mechanical or spot chemical treatments of the selected most invasive plant species listed by the United States Department of Agriculture (USDA), California Exotic Pest Plant Council (CEPPC), and the California Invasive Plant Council (CALIPC) that if left untreated, would dominate the onsite revegetation area.

Air Quality

Avoidance and Minimization Measures

- Caltrans Standard Specifications, a required part of all construction contracts, should effectively reduce and control emission impacts during construction under the provisions of Section 7-1.02C “Emission Reduction” and Section 14-9.03 “Dust Control”. Provision 14-9.02 “Air Pollution Control” requires the contractor to comply with all pertinent rules, regulations, ordinances, and statutes of the local air district.

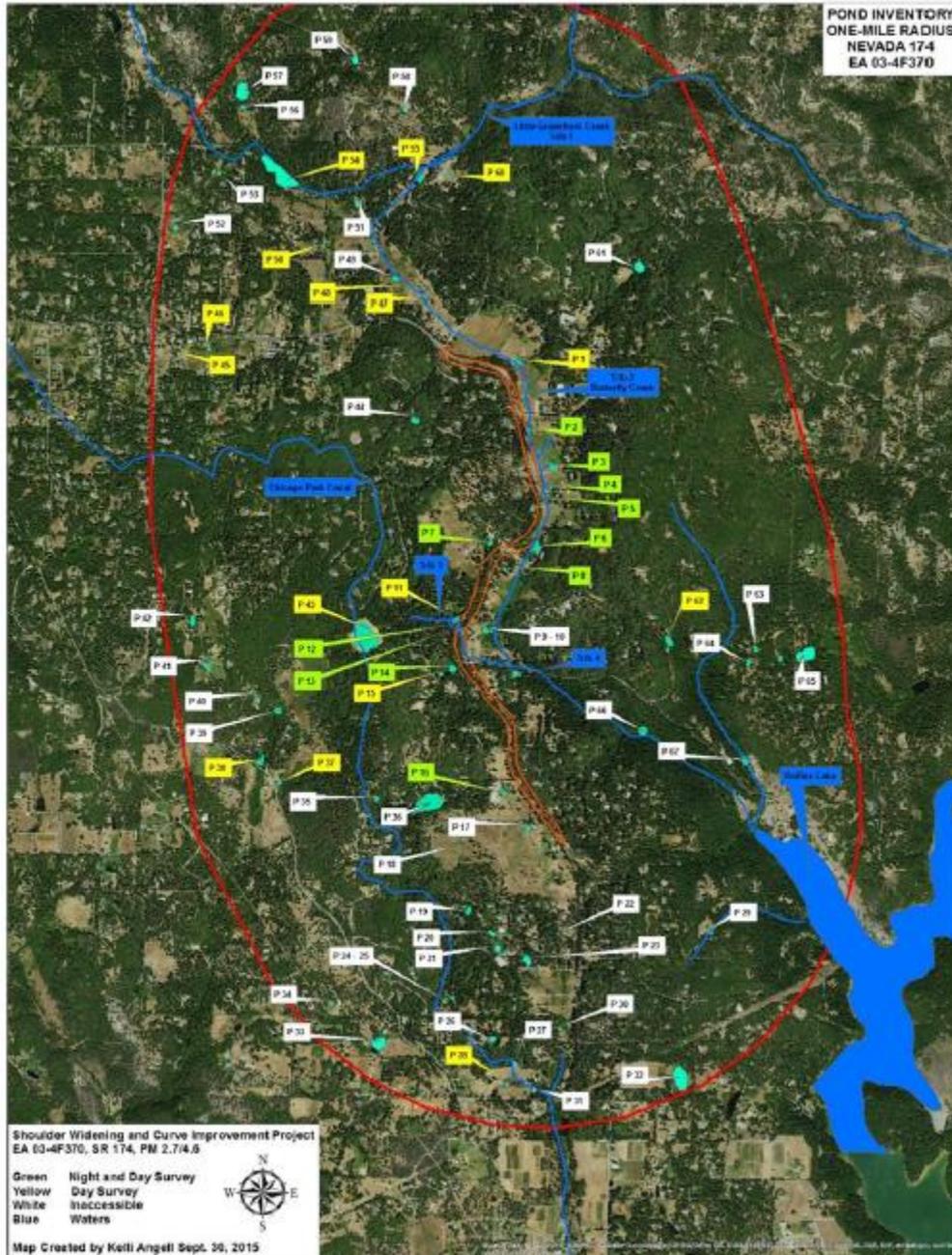
Noise

Avoidance and Minimization Measures

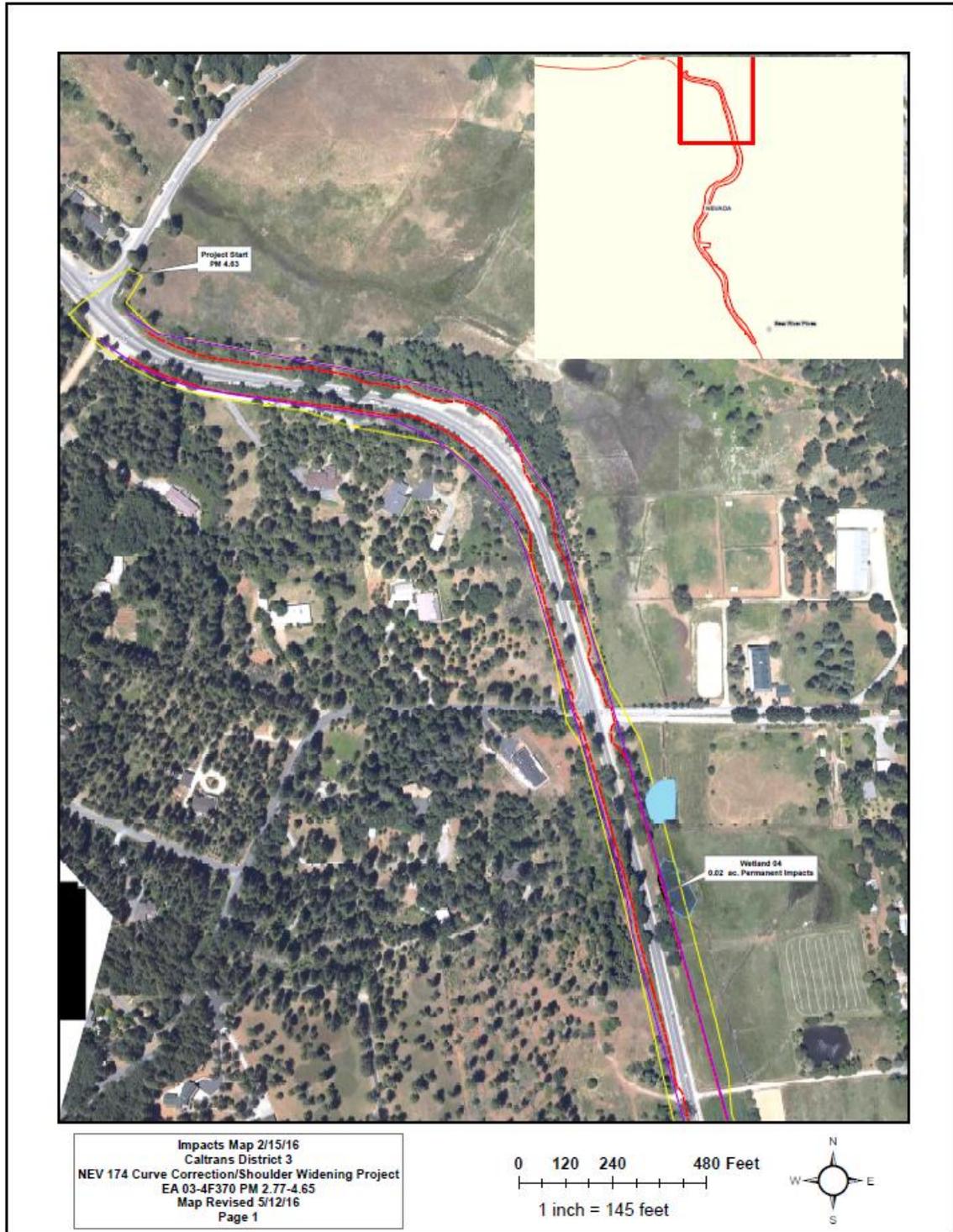
During construction, noise may be generated from the contractors’ equipment and vehicles. Caltrans requires the contractor to conform to the provisions of Standard Specification, Section 14-8.02 “Noise Control”:

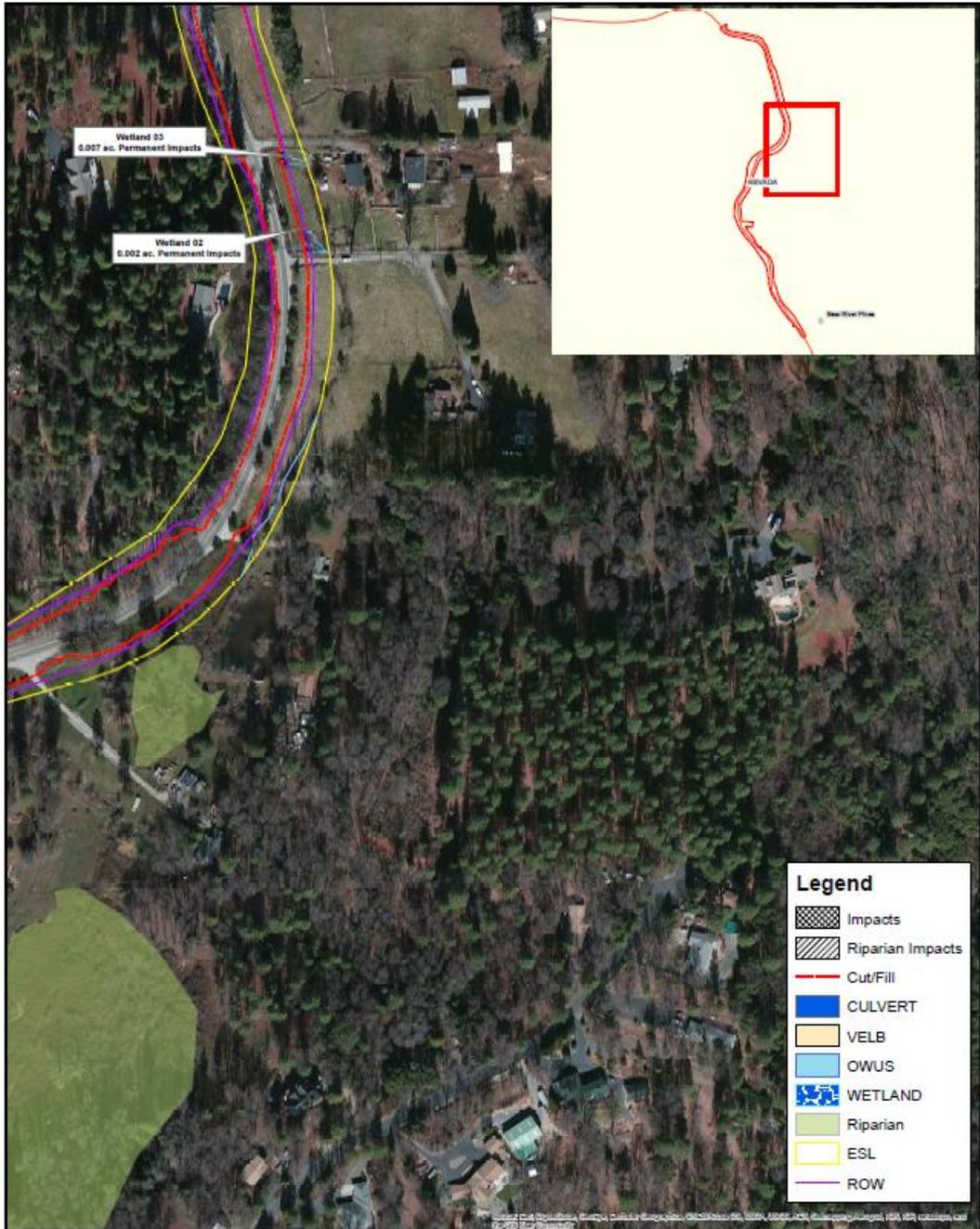
- Noise levels would not exceed 86 dBA LMax at 50 feet from the job site activities from 9 p.m. to 6 a.m.
- Equipment would include an internal combustion engine with manufacturer-recommended muffler
- An internal combustion engine would not be operated on the job site without the appropriate muffler

Appendix D Water Features within One Mile of Project

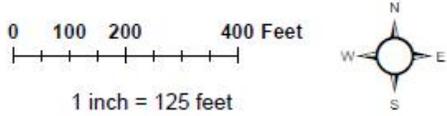


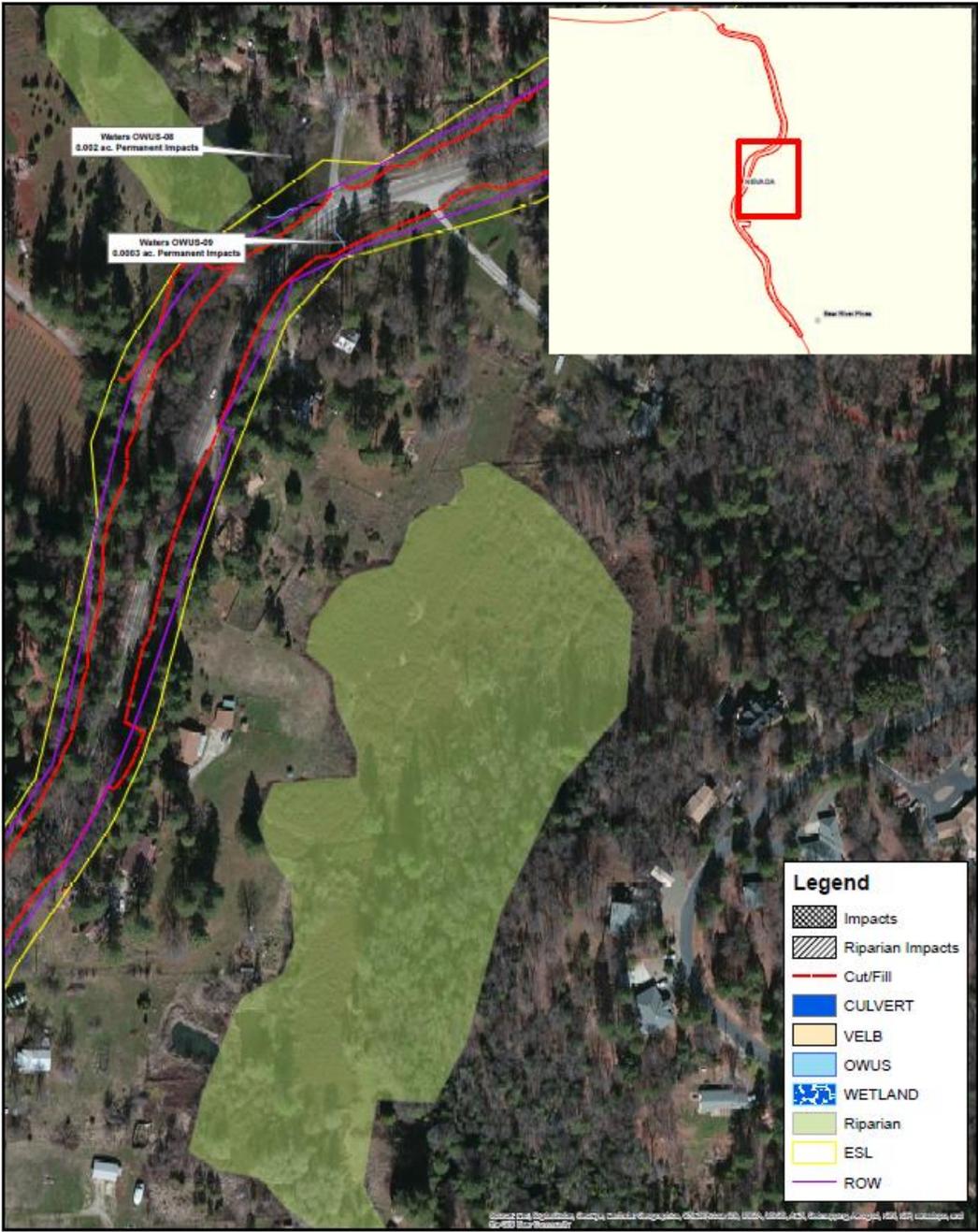
Appendix E Impacts to Biological Resources



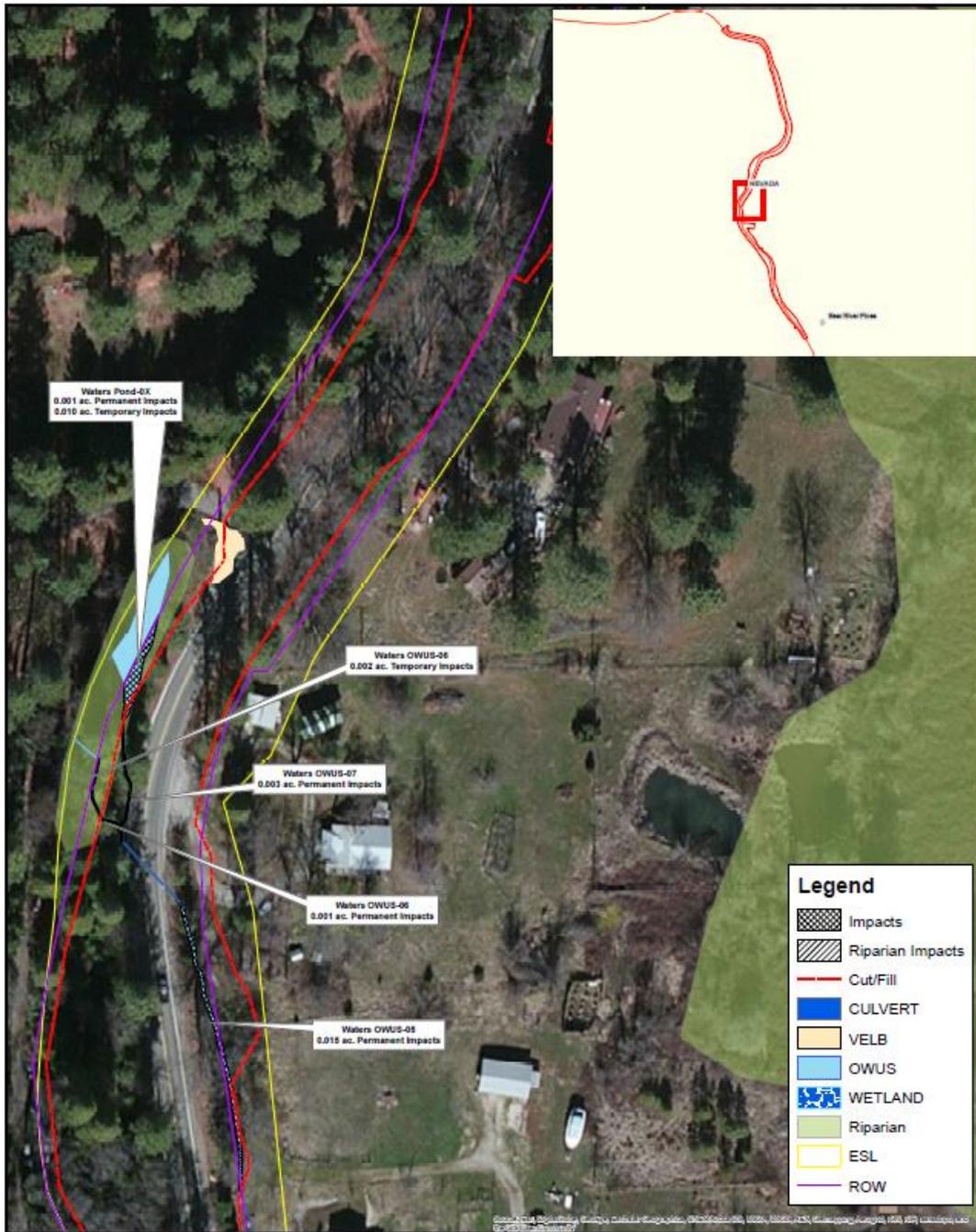


Impacts Map 2/15/16
 Caltrans District 3
 NEV 174 Curve Correction/Shoulder Widening Project
 EA 03-4F370 PM 2.77-4.65
 Map Revised 5/12/16
 Page 2





Impacts Map 2/15/16
 Caltrans District 3
 NEV 174 Curve Correction/Shoulder Widening Project
 EA 03-4F370 PM 2.77-4.65
 Map Revised 5/12/16
 Page 3

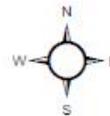


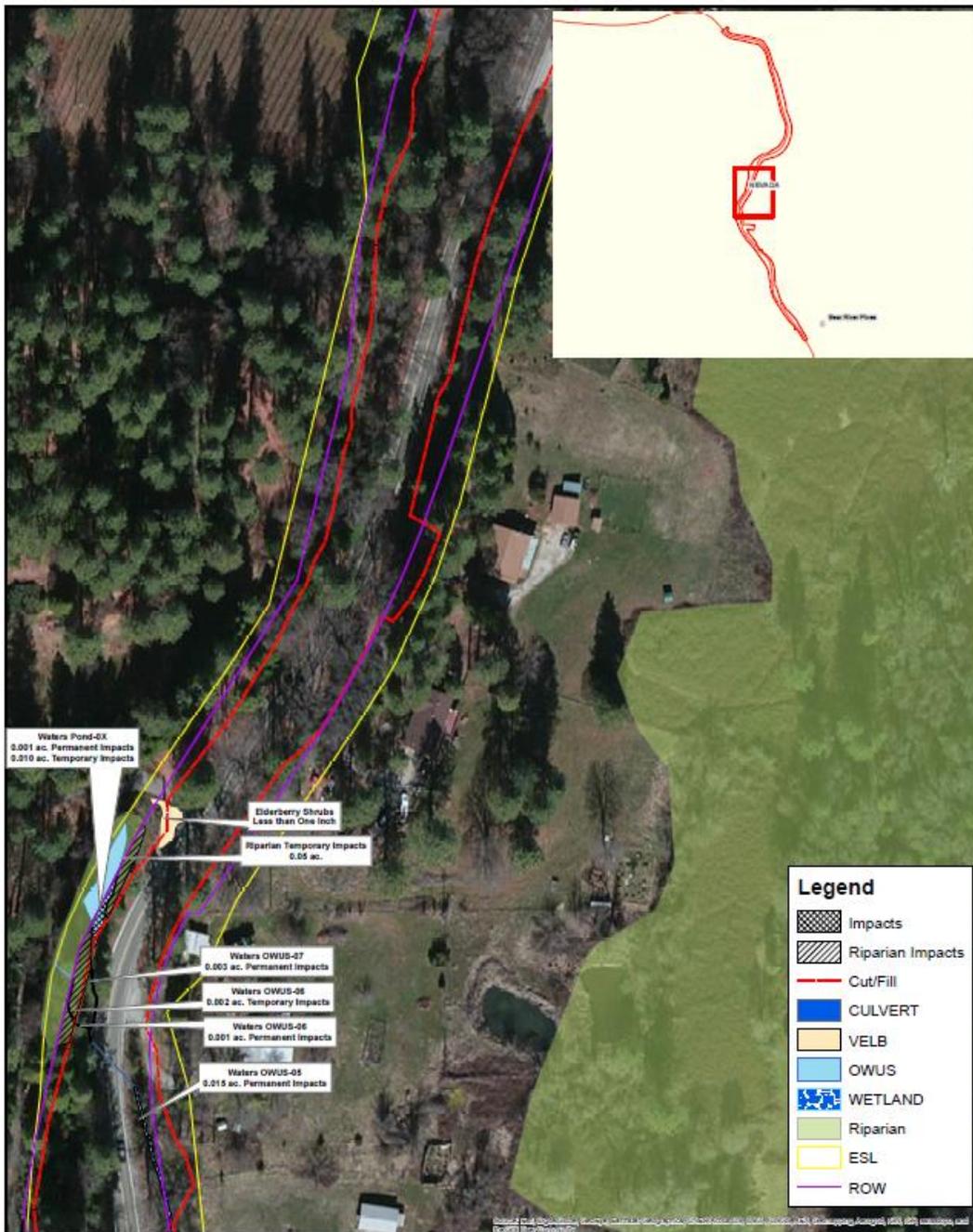
Impacts Map 2/15/16
Caltrans District 3
NEV 174 Curve Correction/Shoulder Widening Project
EA 03-4F370 PM 2.77-4.65
Map Revised 5/12/16
Page 4

0 40 80 160 Feet



1 inch = 50 feet

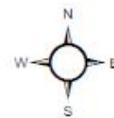


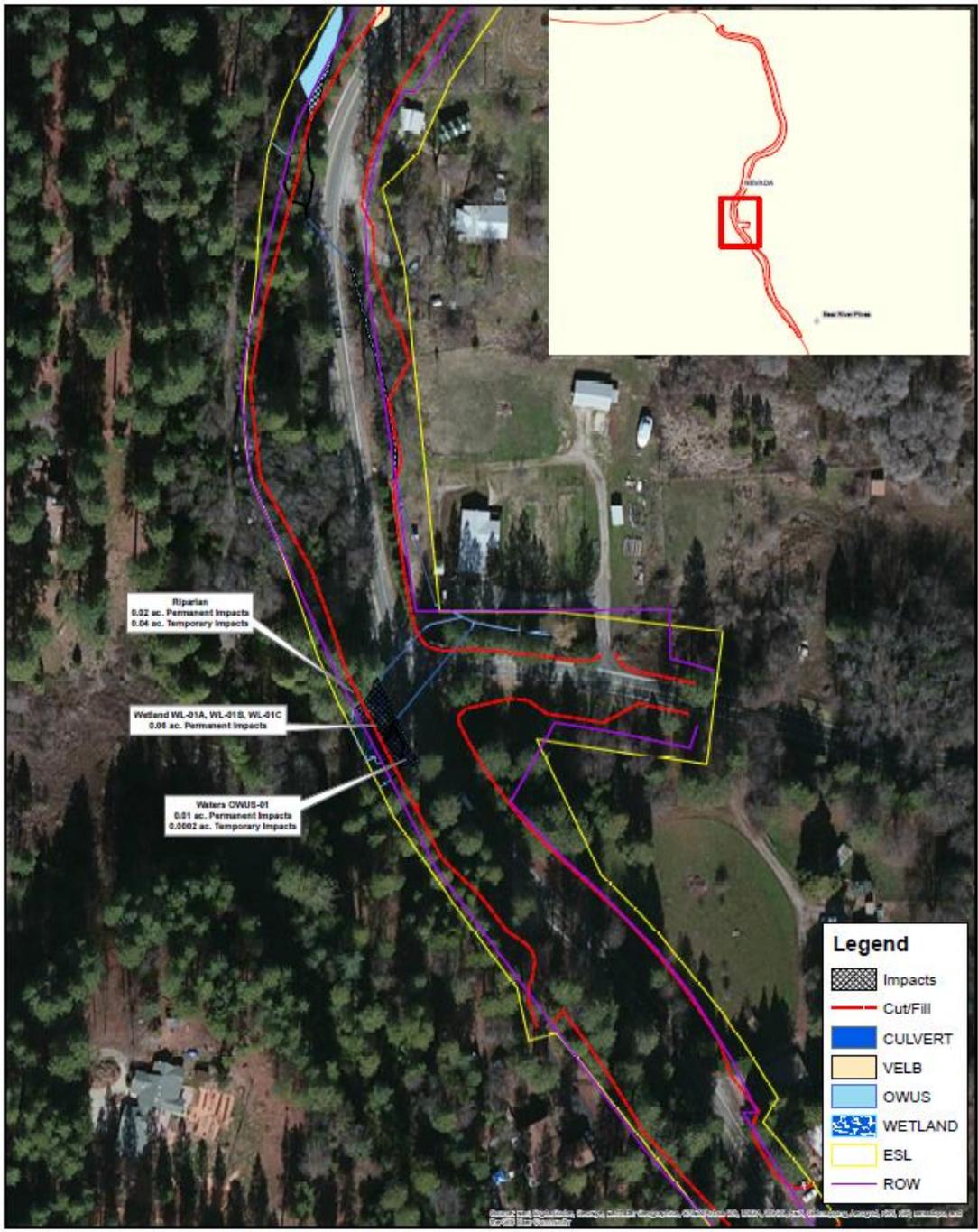


Impacts Map 2/15/16
 Caltrans District 3
 NEV 174 Curve Correction/Shoulder Widening Project
 EA 03-4F370 PM 2.77-4.65
 Map Revised 5/12/16
 Page 5

0 55 110 220 Feet

1 inch = 67 feet





Impacts Map 2/15/16
 Caltrans District 3
 NEV 174 Curve Correction/Shoulder Widening Project
 EA 03-4F370 PM 2.77-4.65
 Map Revised 5/12/16
 Page 6

Appendix F NRCS-CPA-106 Form

| U.S. Department of Agriculture | | | | | | |
|--|--|--|--|--|---|--|
| FARMLAND CONVERSION IMPACT RATING | | | | | | |
| PART I (To be completed by Federal Agency) | | | | Date Of Land Evaluation Request 5/2/16 | | |
| Name of Project State Route 174 Curve Improvement | | | Federal Agency Involved Caltrans as assigned by FHWA | | | |
| Proposed Land Use Transportation | | | County and State Nevada County, CA | | | |
| PART II (To be completed by NRCS) | | | | Date Request Received By NRCS May 5, 2016 | | Person Completing Form: Pamela Hertzler |
| Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i> | | | | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> | |
| Major Crop(s) Livestock, orchard, vineyard | | | Farmable Land In Govt. Jurisdiction Acres: 7301 % 1.2 | | Acres Irrigated 7223 Average Farm Size 102 | |
| Name of Land Evaluation System Used CA Revised Storie Index | | | Name of State or Local Site Assessment System LESA | | Date Land Evaluation Returned by NRCS May 24, 2016 | |
| PART III (To be completed by Federal Agency) | | | | Alternative Site Rating | | |
| | | | | Site A | Site B | Site C |
| A. Total Acres To Be Converted Directly | | | | 14.72 | | |
| B. Total Acres To Be Converted Indirectly | | | | 0 | | |
| C. Total Acres In Site | | | | 322.55 | | |
| PART IV (To be completed by NRCS) Land Evaluation Information | | | | | | |
| A. Total Acres Prime And Unique Farmland | | | | 11.1 | | |
| B. Total Acres Statewide Important or Local Important Farmland | | | | 0 | | |
| C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted | | | | 0.04 | | |
| D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value | | | | Not Available | | |
| PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points) | | | | 86 | | |
| PART VI (To be completed by Federal Agency) Site Assessment Criteria <i>(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)</i> | | | | Maximum Points | Site A | Site B |
| 1. Area In Non-urban Use | | | | (15) | 13 | |
| 2. Perimeter In Non-urban Use | | | | (10) | 8 | |
| 3. Percent Of Site Being Farmed | | | | (20) | 16 | |
| 4. Protection Provided By State and Local Government | | | | (20) | 15 | |
| 5. Distance From Urban Built-up Area | | | | (15) | 0 | |
| 6. Distance To Urban Support Services | | | | (15) | 0 | |
| 7. Size Of Present Farm Unit Compared To Average | | | | (10) | 0 | |
| 8. Creation Of Non-farmable Farmland | | | | (10) | 0 | |
| 9. Availability Of Farm Support Services | | | | (5) | 3 | |
| 10. On-Farm Investments | | | | (20) | 10 | |
| 11. Effects Of Conversion On Farm Support Services | | | | (10) | 0 | |
| 12. Compatibility With Existing Agricultural Use | | | | (10) | 2 | |
| TOTAL SITE ASSESSMENT POINTS | | | | 160 | 67 | 0 |
| PART VII (To be completed by Federal Agency) | | | | | | |
| Relative Value Of Farmland (From Part V) | | | | 100 | 86 | 0 |
| Total Site Assessment (From Part VI above or local site assessment) | | | | 160 | 67 | 0 |
| TOTAL POINTS (Total of above 2 lines) | | | | 260 | 153 | 0 |
| Site Selected: Site A | | | Date Of Selection 5/2/16 | | Was A Local Site Assessment Used? | |
| | | | | | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| Reason For Selection: The project proposes one build alternative and one no-build alternative. For the purposes of this assessment, the build alternative is chosen. | | | | | | |
| Name of Federal agency representative completing this form: Mundeep Purewal - Caltrans District 3 | | | | | Date: 5/2/16 | |
| <i>(See Instructions on reverse side)</i> | | | | | | |

Form AD-1006 (03-02)

Appendix G SHPO Correspondence

STATE OF CALIFORNIA – THE NATURAL RESOURCES AGENCY EDMUND G. BROWN, JR., Governor

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov



November 19, 2015 Reply To: FHWA_2015_1021_002

Suzanne Melim
Senior Environmental Planner
Caltrans District 3
703 B Street
Marysville, CA 95901

Re: Determination of Eligibility for the Proposed SR 174 Shoulder Widening and Curve Improvement Project, Nevada County, CA

Dear Ms. Melim:

Thank you for consulting with the State Historic Preservation Officer (SHPO) about the subject undertaking in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*.

Caltrans proposes to undertake a shoulder and curve improvement project on State Route 174 between post miles (PM) 2.7 and 4.6, Nevada County. The project is needed to reduce collisions on SR 174, which features narrow shoulders, limited sight distances, and low radius curves. Vehicles frequently run off the road and strike fixed objects close to the highway. Widening shoulders, improving clear recovery zones, and realigning curves will reduce the loss of vehicular control, but also provide drivers an opportunity to recover if control is lost.

Caltrans has determined that the Nevada County Narrow Gauge Railroad Segment between PMs 3.2 to PM 3.8 is not eligible for the National Register of Historic Places (NRHP) due to a lack of integrity to its period of significance, 1876 to 1942. Based on my review of the submitted documentation I concur.

If you have any questions, please contact Natalie Lindquist of my staff at (916) 445-7014 or Alicia Perez at (916) 445-7020.

Sincerely,



Julianne Polanco
State Historic Preservation Officer

Appendix H List of Acronyms

| | |
|-----------------------|--|
| ac | acres |
| ADI | Area of Direct Impact |
| ADL | Aerially deposited lead |
| APE | Area of Potential Effects |
| BMPs | Best Management Practices |
| Caltrans | California Department of Transportation |
| CDC | California Department of Conservation |
| CDFW | California Department of Fish and Wildlife |
| CESA | California Endangered Species Act |
| CEQ | Council of Environmental Quality |
| CEQA | California Environmental Quality Act |
| CFR | Code of Federal Regulations |
| CNDDB | California Natural Diversity Database |
| CNPS | California Native Plant Society |
| CVRWQCB | Central Valley Regional Water Quality Control Board |
| CO | Carbon monoxide |
| CWA | Clean Water Act |
| CRZ | Clear Recovery Zone |
| Dbh | Diameter at breast height |
| DWR | California Department of Water Resources |
| EO | Executive Order |
| EPA | Environmental Protection Agency |
| ESA | Environmentally Sensitive Area |
| FESA | Federal Endangered Species Act |
| FHWA | Federal Highway Administration |
| FPPA | Farmland Protection Policy Act |
| ft | foot/feet |
| GHGs | Greenhouse Gases |
| GIS | Geographic Information System |
| GPS | Global Positioning System |
| HPSR | Historic Property Survey Report |
| in | inch(es) |
| MOA | Memorandum of Agreement |
| MSAT | Mobile Source Air Toxics |
| NAAQS | National Ambient Air Quality Standards |
| NEPA | National Environmental Policy Act |
| NHPA | National Historic Preservation Act |
| NMFS | National Marine Fisheries Service |
| NOA | Naturally occurring asbestos |
| NO₂ | Nitrogen dioxide |
| NPDES | National Pollutant Discharge Elimination System |

| | |
|------------------------|---|
| NRCS | Natural Resources Conservation Service |
| NRHP | National Register of Historic Places |
| NID | Nevada Irrigation District |
| O₃ | Ozone |
| PA | Programmatic Agreement |
| PM | post mile |
| PM₁₀ | Particulate matter |
| PQS | Professionally Qualified Staff |
| RAP | Relocation Assistance Program |
| RWQCB | Regional Water Quality Control Board |
| RSP | Rock Slope Protection |
| RTP | Regional Transportation Plan |
| R/W | Right of Way |
| SHPO | State Historic Preservation Officer |
| SHOPP | State Highway Operation and Protection Program |
| SR | State Route |
| SSP | Standard Special Provisions |
| SWMP | Storm Water Management Plan |
| SWPPP | Storm Water Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |
| TMDLs | Total Maximum Daily Loads |
| TCR | Transportation Concept Report |
| WDRs | Waste Discharge Requirements |
| WPCP | Water Pollution Control Program |
| USACE | United States Army Corps of Engineers |
| USC | United States Code |
| USFWS | United States Fish and Wildlife Service |