

Route 12 Arnold Drive Curve Realignment and Trinity Road Intersection Improvements

SONOMA COUNTY, CALIFORNIA
DISTRICT 4 – SON – 12, KP 47.8-48.8 and 49.1-49.7 (PM 29.7-30.3 and 30.5-30.9)
Expenditure Authorization 219860

Initial Study with Proposed Negative Declaration



May 2005

Prepared by the
State of California Department of Transportation



GENERAL INFORMATION ABOUT THIS DOCUMENT

What's in this document:

The Department of Transportation (Department) has prepared this Initial Study to satisfy CEQA, which examines the potential environmental impacts of the alternatives being considered for the proposed project located in Sonoma County, California. The document describes why the project is being proposed, alternatives for the project, the existing environment that could be affected by the project, the potential impacts from each of the alternatives, and the proposed avoidance, minimization and/or protection measures.

What you should do:

- Please read this Initial Study. Additional copies of this document as well as the technical studies are available for review at the district office, 111 Grand Avenue, Oakland, California 94612, as well as at the Sonoma County Public Library, Sonoma Branch, 755 West Napa St., Sonoma, California 95476.
- We welcome your comments. If you have any comments regarding the proposed project please send your written comments to the Department by the deadline of July 15th, 2005.
- Submit comments via postal mail to:

Valerie Heusinkveld, Environmental Branch Chief
Attention: Darryl Gruen
Dept. of Transportation, Environmental Analysis
P.O. Box 23660
Oakland, CA 94623

- Submit comments via email to darryl_gruen@dot.ca.gov.
- **Submit comments by the deadline: July 15th, 2005.**

What happens next:

After comments are received from the public and reviewing agencies, the Department may: (1) give environmental approval to the proposed project, (2) undertake additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is appropriated, the Department 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 on computer disk. To obtain a copy in one of these alternate formats, please call or write to Department of Transportation, Attn: Darryl Gruen, Office of Environmental Analysis, 111 Grand Avenue, Oakland, CA 94623; (510) 622-1640 Voice, or use the California Relay Service TTY number, (800) 735-2929.

Route 12 Arnold Drive Curve Realignment and Trinity Road Intersection Improvement Project, KP 47.8-48.8
(PM 29.7-30.3) and 49.1-49.7 (PM 30.5-30.9)

INITIAL STUDY

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

THE STATE OF CALIFORNIA
Department of Transportation

Robert Gross
Office Chief
Office of Environmental Analysis
California Department of Transportation – District 04

Date of Approval

NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (the Department) proposes to Rehabilitate State Route 12 in Sonoma County near Kenwood by making spot improvements at two separate locations approximately 0.2 miles (0.32 km) from each other. The first improvement is at the intersection with Trinity Road, where the Department proposes to install left-turn lanes and medians. To accommodate these lanes, the roadway would be widened only on the eastbound side for a stretch of 890 meters (2920 feet). The widening at Trinity Road would also accommodate 1.2-meter (3.9 feet) wide shoulders on each side of the roadway, and 1-meter (3.3 feet) wide shoulder backing. A 1.8-meter (5.9 feet) wide V-ditch may be constructed if the existing ditch is impacted by the widening. The westbound side of the roadway would not be widened or modified.

The second improvement is a 400-meter (1312-foot) long curve realignment at the Arnold Drive intersection. The scope of work includes realigning and straightening a curve over a stretch of roadway approximately 570 meters (1870 feet). The curvature of the roadway at the Arnold Drive intersection would be straightened from 165 (541 feet) to 260 meters (853 feet) in radius to accommodate a traffic speed of 50 miles per hour (80 kilometers per hour), with standard 2.4 meter (7.9 feet) shoulders on each side. The existing left-turn lane and traffic signals would also be restored on the new alignment.

Determination

This proposed Initial Study (IS) is included to give notice to interested agencies and the public that it is the Department's intent to adopt an ND for this project. This does not mean that the Department's decision regarding the project is final. This IS is subject to modification based on comments received by interested agencies and the public.

The Department 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 significant effect on biological resources, cultural resources, farmland, utilities, visual aesthetics, water quality, and storm water run-off.

The remaining resources located within the project area are not expected to be affected.

Susan Chang
Deputy District Director of Environmental Planning
and Engineering
California Department of Transportation – District 4

Date

TABLE OF CONTENTS

Cover Sheet	
Title Page	ii
Negative Declaration	iii
Table of Contents	iv
List of Tables and Figures	vii
List of Abbreviated Terms in this Document	viii
1 CHAPTER 1 PROJECT PURPOSE AND NEED	1-1
1.1 INTRODUCTION	1-1
1.1.1 Scope and Project Location	1-1
1.1.2 Purpose and Need	1-1
1.1.2.1 Purpose	1-1
1.1.2.2 Needs	1-2
1.2 PROJECT DESCRIPTION	1-2
1.2.1 Proposed Project	1-2
1.2.2 Proposed Alternative	1-2
1.2.3 Project Construction Phases and Lane Closures	1-5
1.2.4 No Build Alternative	1-5
1.3 PERMITS AND APPROVALS	1-5
2 CHAPTER 2 AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION AND/OR PROTECTION MEASURES	2-1
2.1 FARMLAND	2-1
2.1.1 Regulatory Setting	2-1
2.1.2 Affected Environment	2-2
2.1.3 Project Impacts	2-2
2.2 UTILITIES	2-2
2.2.1 Project Impacts	2-2
2.3 VISUAL AESTHETICS	2-2
2.3.1 Affected Environment	2-2
2.3.2 Project Impacts	2-3

2.3.3	Avoidance, Minimization, and Protection Measures	2-3
2.4	CULTURAL RESOURCES	2-3
2.4.1	Regulatory Setting	2-3
2.4.2	Affected Environment	2-4
2.4.3	Project Impacts	2-4
2.4.4	Protection Measures	2-5
2.5	WATER QUALITY AND STORM WATER RUN-OFF	2-5
2.5.1	Affected Environment	2-5
2.5.2	Project Impacts	2-6
2.5.3	Avoidance, Minimization, and Protection Measures	2-6
2.5.3.1	Section 401 of the Clean Water Act	2-6
2.5.3.2	Section 402 of the Clean Water Act	2-6
2.5.3.3	Construction Site Best Management Practices (BMPs)	2-6
2.5.3.4	Permanent Design Pollution Prevention BMPs	2-7
2.5.3.5	Permanent Treatment BMPs	2-7
2.6	GEOLOGY AND SOILS	2-7
2.6.1	Affected Environment	2-7
2.6.2	Project Impacts	2-8
2.7	TOPOGRAPHY AND SEISMICITY	2-8
2.7.1	Affected Environment	2-8
2.7.2	Project Impacts	2-8
2.8	NATURAL COMMUNITIES	2-9
2.8.1	Affected Environment	2-9
2.8.2	Project Impacts	2-9
2.8.3	Avoidance, Minimization, and Protection Measures	2-9
2.9	WETLANDS AND OTHER WATERS OF THE UNITED STATES	2-10
2.9.1	Regulatory Setting	2-10
2.9.2	Affected Environment	2-10
2.9.3	Project Impacts	2-10
2.9.4	Avoidance, Minimization, and Protection Measures	2-11
2.10	ANIMAL SPECIES	2-11
2.10.1	Regulatory Setting	2-11
2.10.2	Affected Environment	2-11
2.10.3	Project Impacts	2-11
2.10.4	Avoidance, Minimization, and Protection Measures	2-11
2.11	CONSTRUCTION IMPACTS	2-12
2.11.1	Affected Environment	2-12

2.11.2	Project Impacts	2-12
2.11.3	Protection Measures	2-12
2.12	CUMULATIVE IMPACTS	2-13
2.12.1	Regulatory Setting	2-13
2.12.2	Project Impacts and Protection Measures	2-13
2.12.2.1	Visual Aesthetics	2-13
2.12.2.2	Water Quality	2-13
2.12.2.3	Wetlands and Other Waters of the United States	2-14
	CHAPTER 3 AGENCY COORDINATION AND PUBLIC INVOLVEMENT	3-1
3.1.1	CONSULTATION AND COORDINATION WITH PUBLIC AGENCIES	3-1
3.2	PUBLIC PARTICIPATION METHODS	3-1
	CHAPTER 4 LIST OF PREPARERS	4-1
	CHAPTER 5 DISTRIBUTION LIST	5-1
	CHAPTER 6 REFERENCES	6-1
	APPENDIX A ENVIRONMENTAL SIGNIFICANCE CHECKLIST	
	APPENDIX B TITLE VI POLICY STATEMENT	
	APPENDIX C TYPICAL CROSS SECTIONS FOR CURVE REALIGNMENT AT ARNOLD DRIVE, AND LEFT TURN CHANNELIZATION AT TRINITY ROAD	

List of Tables and Figures

Title	Page Number
Project Vicinity Map	1-3
Project Location Map	1-4
Agency Permits and Approvals Table	1-5

List of Abbreviated Terms in This Document

ACOE	U.S. Army Corps of Engineers
APE	Area of Potential Effect
BMP	Best Management Practice
Department	California Department of Transportation
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
ESA	Environmentally Sensitive Area
FHWA	Federal Highway Administration
ft	foot/feet
KP	Kilo Post
m	meter(s)
ND	Negative Declaration
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
PM	Post Mile
RWQCB	Regional Water Quality Control Board
SHOPP	State Highway Operation & Protection Plan
SHPO	State of California Office of Historic Preservation
SWPPP	Storm Water Pollution Prevention Plan

1. CHAPTER 1 PROJECT PURPOSE AND NEED

1.1 Introduction

1.1.1 Scope and Project Location

The Department of Transportation (Department) proposes spot improvements on the section of Route 12 in Sonoma County at the intersection of Arnold Drive, and at the intersection of Trinity Road. The Federal Highway Administration (FHWA) is the Department's federal partner in proposing this project. Under the direction of the FHWA, this project has been determined to be Categorically Excluded from the National Environmental Policy Act (NEPA). The Department will prepare documentation of this categorical exclusion before the proposed project could be approved.

The project proposes improvements at Arnold Drive and at Trinity Road, which are separated by 0.32 km (0.2 miles). Improvements would include curve realignment at Arnold Drive, left-turn channelization at Trinity Road, and shoulder widening at both locations.

This project is included in the 2005 State Highway Operations Protection Program (SHOPP). It is also included in the Metropolitan Transportation Commission's (MTC) 2003 Regional Transportation Plan (RTP) and the Sonoma County Transportation Plan, developed by the Sonoma County Transportation Authority (SCTA).

1.1.2 Purpose and Need

1.1.2.1 Purpose

The purpose of the project is to upgrade the highway to current design standards where possible, improve operations, reduce accidents and other vehicle incidents, and alleviate congestion due to accidents.

Trinity Road Intersection

Storage for vehicles turning left onto Trinity Road from Route 12 would reduce queuing on the highway. Also, such storage has successfully reduced higher than average accident rates in similar locations. Shoulder width of 2.4 meters (8 feet) is a design standard for new construction and major reconstruction on conventional highways. However, shoulder width of 1.2 meters (4 feet) and 1 meter (3.3 feet) of additional shoulder backing was estimated appropriate for design sensitivity in the context of this officially designated scenic highway.

Arnold Drive Intersection

Roadway realignment to create a shallower curve on Route 12 at this location will bring the curve closer to design standards. Making curves shallower on

stretches of roadway that have experienced higher than average accident rates has successfully reduced accident rates in past cases.

The 2.4 meter (8 feet) shoulder width is a mandatory design standard for new construction and major reconstruction on conventional highways. Design standards are those considered most essential to providing a safe and efficient transportation system. Shoulder widening has been found to significantly reduce run-off-the-road collisions.

1.1.2.2 Needs

Operational deficiencies. Near both Arnold Drive and Trinity Road, SR 12 needs rehabilitation to bring highway design to current Department standards. Some parts of both locations do not have paved shoulders and need asphalt concrete repair. Also, cars turning left onto Trinity Road from Route 12 must wait for oncoming traffic to clear before completing their turn, thereby forcing cars behind them to wait in the through lane, and contributing to queuing and congestion in both directions of this 2-lane highway.

Higher than statewide average accident rates. When compared with the statewide average for similar stretches of roadway, both locations experience higher accident rates. Trinity Road experiences almost twice the statewide average accident rate for injuries and fatalities, while Arnold Drive sees almost three times the statewide average.

1.2 Project Description

1.2.1 Proposed Project

The project is located in Sonoma County on Route 12 from the intersection with Arnold Drive (KP 49.7/PM 30.9) at the western end to the intersection with Trinity Road (KP 47.8/PM 29.7) at the eastern end. Separate spot improvements would be at Arnold Drive, and at Trinity Road, which separated by 0.32 km (0.2 miles). Within the limits of both proposed project improvements, Route 12 is a conventional two lane undivided highway with two 3.6 meter (12 feet) lanes, and non-standard shoulders approximately 0.15 to 1.2 meters (0.5 to 4 feet) wide.

1.2.2 Proposed Alternative

This projects consists of spot improvements at two locations:

SR 12 INTERSECTION MODIFICATION AT TRINITY ROAD

The first location involves the installation of left-turn lanes at Trinity Road intersection. This 890-meter (2920 feet) long improvement will only widen the eastbound (southern) side of the roadway. The widening would accommodate 2 left-turn lanes, 2 medians varying from 0 to 3.6 meters (11.8 feet), one 3.6-meter

Project Vicinity Map

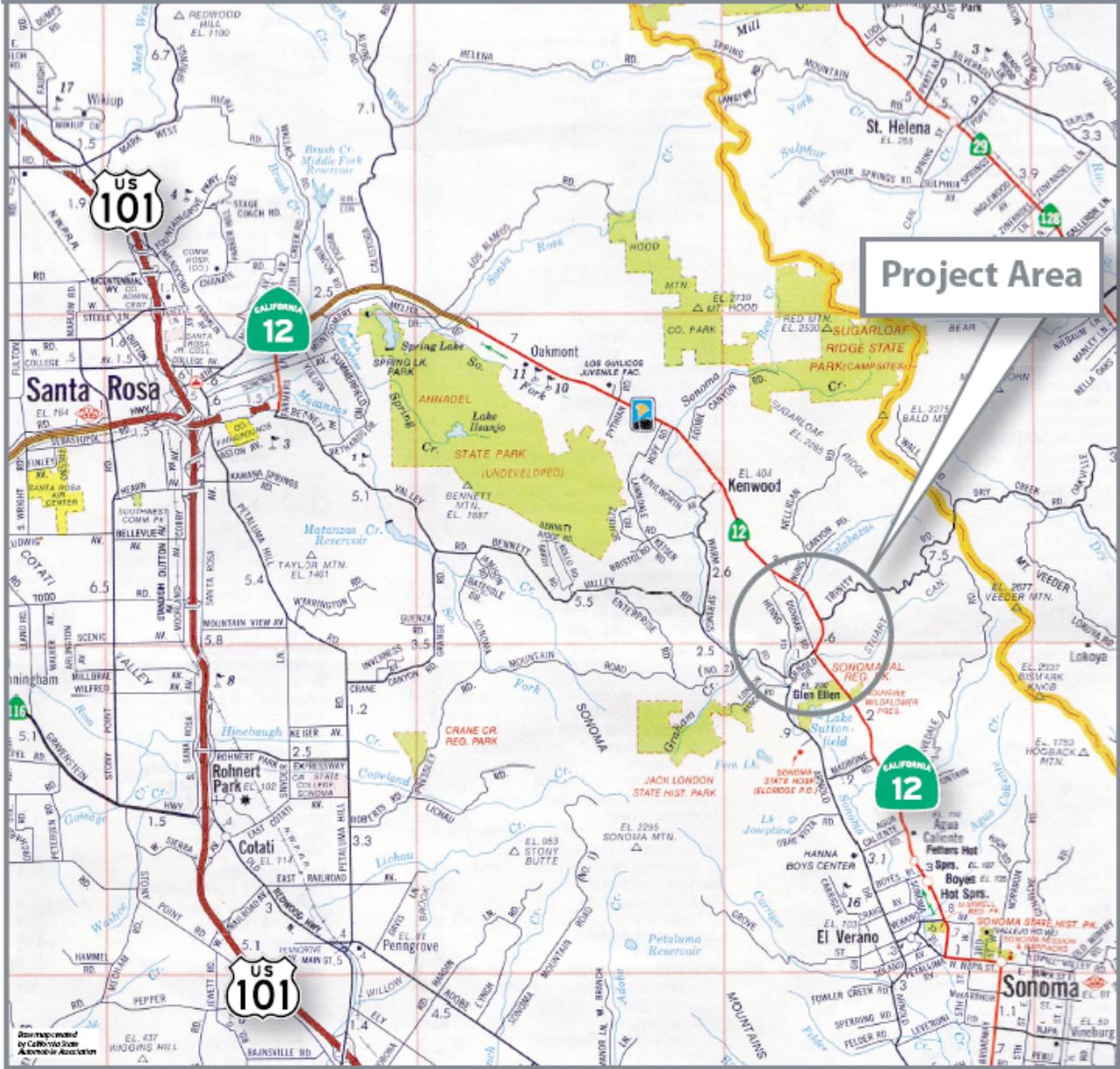


Figure 1

Project Location Map

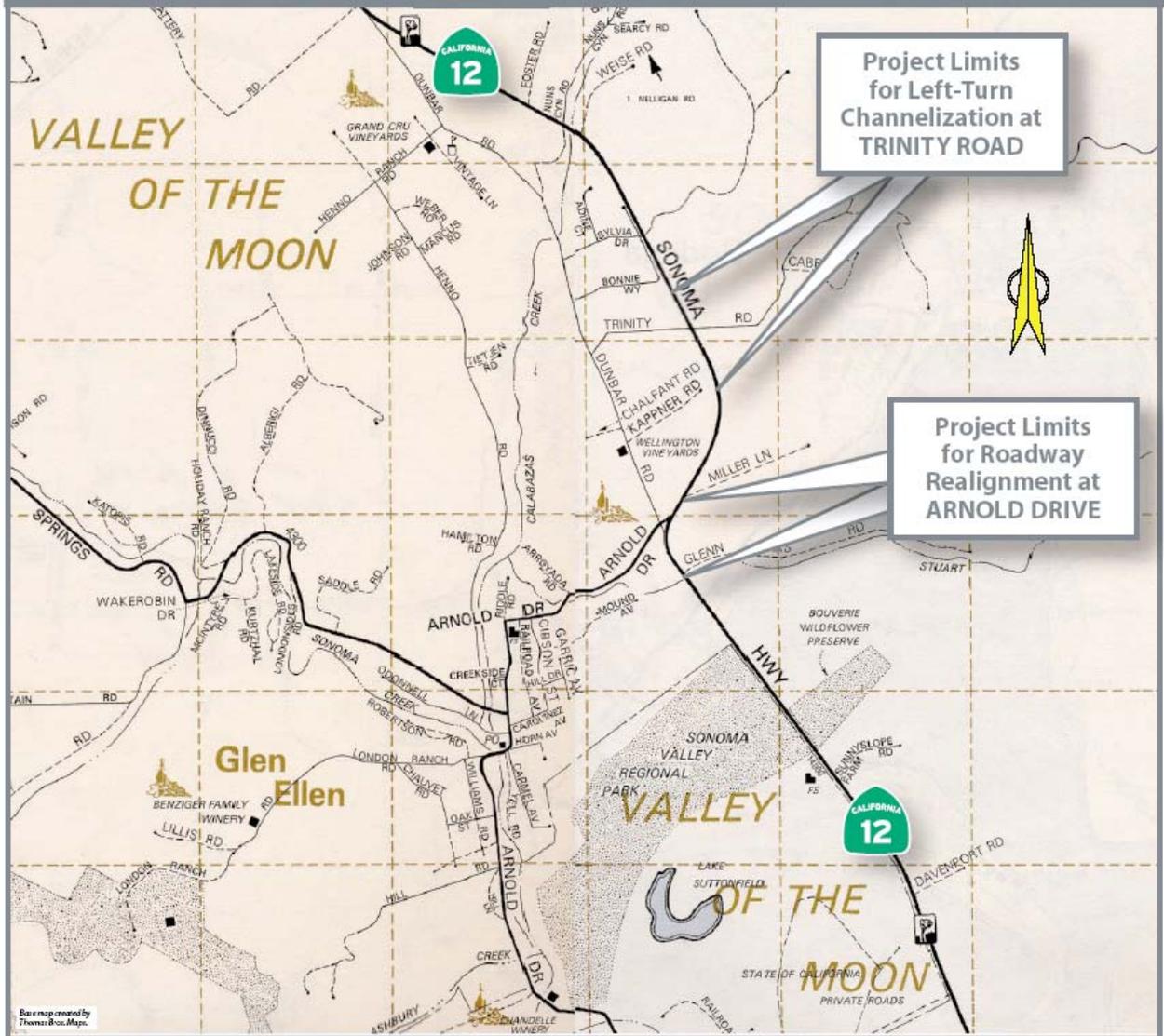


Figure 2

(11.8 feet) wide traveled way for each direction, a 1.2-meter (3.9 feet) wide shoulder in each direction, and a 1-meter wide shoulder backing on both sides of the road. This would provide storage for left-turning vehicles, and help separate them from through traffic. A 1.8-meter (5.9 feet) wide V-ditch may be constructed if the existing ditch is impacted by the widening. To avoid impacts to ditches and minimize impacts to trees on this scenic highway, no widening would be made on the westbound (northern) side of the roadway.

SR 12 CURVE REALIGNMENT AT ARNOLD DRIVE INTERSECTION

The second improvement (approximately 570 meters or 1870 feet long) proposes to realign, make more gradual, and superelevate the Arnold Drive intersection curve for approximately 400 meters (1312 feet), and provide transition to the existing roadway, thereby improving sight distance for drivers. Standard 2.4 meter (8 feet) shoulders would be provided on each side side of the roadway.

1.2.3 Project Construction Phases and Lane Closures

A Traffic Management Plan would be developed during the Plans, Specifications and Estimates portion of the project in order to describe the phases of construction. To accommodate one phase of the project, temporary one-way traffic control may be necessary on Route 12 west of the Arnold Drive intersection.

1.2.4 No Build Alternative

Environmental review must consider the effects of not implementing the proposed project. Not building the proposed project would fail to meet the purpose of reducing accidents and addressing operational deficiencies. Leaving the highway as it is would not have any impacts to the environment.

1.3 Permits and Approvals

The following permits, approvals, and reviews would be necessary for project construction.

Agency	Permit/Approval	Status
United States Army Corps of Engineers	Section 404 Permit for Filling Waters of the United States	Application in progress.
Regional Water Quality Control Board	Section 401 Water Quality Certification Permit	Application in progress.
California Water Resources Control Board	Water Discharge Permit	Application in progress.
State Historic Preservation Officer	Concurrence on Findings of Effects to an official National Historic Register Property	Concurrence requested.
California Department of Fish and Game	1602 Streambed Alteration Agreement	Evaluation in progress.

CHAPTER 2 - AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION &/OR PROTECTION MEASURES

As part of the scoping and environmental analysis conducted for the project, the following environmental resources were considered but no potential for adverse impacts to these resources was identified. Consequently, there is no further discussion regarding these resources in this document.

- **Consistency with state, regional and local plans**
- **Parks and Recreation**
- **Growth**
- **Existing and Future Land Use**
- **Community Character and Cohesion**
- **Relocations**
- **Environmental Justice**
- **Pedestrian and Bicycle Facilities**
- **Air Quality**
- **Noise**
- **Hazardous Waste/Materials**
- **Threatened and Endangered Species**
- **Paleontology**
- **Archaeology**
- **Traffic and Transportation**
- **Emergency Services**
- **Hydrology and Floodplain**

The proposed project would have less than significant effects on farmland; utilities; visual aesthetics; cultural resources; water quality and storm water runoff; geology and soils; topography and seismicity; and biological resources such as natural communities, animal species, and wetlands and waters of the United States. All of these resources are described below.

2.1 Farmland

2.1.1 Regulatory Setting

The California Environmental Quality Act requires the review of projects that would convert Williamson Act (Act) contract land to non-agricultural uses. The main purposes of the Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Act provides incentives to landowners through reduced property taxes to deter the early conversion of agricultural and open space lands to other uses, and also insulate the county from related tax revenue loss.

2.1.2 Affected Environment

The project area is located within a rural, agricultural setting, with large parcels and very low population and housing density. Many of the parcels adjacent to the project area are farmland. Slivers would be acquired from four parcels. However, none of the four parcels have Act contracts with the Sonoma County.

2.1.3 Project Impacts

Although the project would require the state to acquire “slivers” of certain parcels, which are narrow strips of land adjacent to the highway, the project would not necessitate the cancellation of any Williamson Act contracts. However, three slivers would be acquired from parcels that are designated as farmland. These three parcels are:

- Poultry Ranch located at 12575 Dunbar Road, Glen Ellen California.
- Acquisition of the vineyard portion of Glen Oaks Ranch, 13255 Highway 12, Glen Ellen, California.
- Poultry Ranch located at 12201 Highway 12, Glen Ellen, California.

2.2 Utilities

2.2.1 Project Impacts

The project might affect overhead utilities; underground gas, electric, and telecommunications lines; and underground sewer and water lines. Any utilities needing relocation would be moved without interruption of service.

2.3 Visual Aesthetics

2.3.1 Affected Environment

The character of the landscape in the area of the project is distinctly rural. Views along Route 12 throughout the project limits are dominated by farm-related uses that include agricultural fields, grazing lands, vineyards, barns and other farm buildings, often with rolling foothills as a backdrop. A few widely scattered rural residences are also seen in the area. Scattered groups of mature, native California oak trees punctuate the grassy, rolling hills. Along some sections of the highway, mature trees and shrubs occur along the shoulders. Some groups of trees along the roadway form a canopy over the roadway. Roadside trees in the vicinity of Trinity Road include a mix of oaks and eucalyptus. Other sections of the roadway lack significant vegetation, which allow motorists to enjoy long range views of the rural landscape. State Route 12 throughout the project limits is designated a State Scenic Highway.

2.3.2 Project Impacts

The project would not have an adverse effect on scenic vistas, would not substantially damage scenic resources or special landscape features, would not substantially alter the visual character or quality of the project area, and would not create a substantial new source of light or glare.

At the Trinity Road landscape unit, it is anticipated that approximately 94 oak trees, and 69 eucalyptus trees would be removed from alongside the roadway. At the Arnold Drive landscape unit, estimates anticipate removal of 6 oak trees. With the protection for removal of trees alongside the highway, the project will be consistent with the portions of the Sonoma County General Plan that address aesthetic/visual resource issues. Protection measures are described below.

2.3.3 Avoidance, Minimization, and Protection Measures

To lessen the visual impact caused by removing trees, replacement trees will be provided. Further, it is Department policy to replace vegetation that is damaged or removed due to highway improvement projects, in part, as a means of mitigating the adverse visual effects of tree removal. The Department will consult with local agencies to identify the most appropriate and feasible locations and species for replacement within or near the project limits. Such locations must meet safety requirements for sight distances, and provide conditions favorable to tree establishment and survival. A replacement ratio of 1:1, one tree planted for each one removed, should be used when 15 gallon containerized stock is used. This ratio and/or size of replacement trees may be increased based upon consultation between the Department and local agencies. The species, size, precise number, location, and spacing of replacement trees would ultimately be determined by Department District 4 Office of Landscape Architecture at a future phase of the project.

2.4 Cultural Resources

2.4.1 Regulatory Setting

“Cultural resources” as used in this document refers to historic and archaeological resources.

The National Historic Preservation Act, as amended, (NHPA) sets forth national policy and procedures regarding “historic properties” – that is, districts, sites, buildings, structures and objects included in or eligible for the National Register of Historic Places. Section 106 of NHPA requires federal agencies to consider the effects of their undertakings on such properties, following regulations issued by the Advisory Council on Historic Preservation (36 CFR 800).

Under California law, cultural resources are protected by the California Environmental Quality Act (CEQA) as well as Public Resources Code Section 5024.1, which established the California Register of Historic Places.

2.4.2 Affected Environment

For historic architecture resources, a literature search and on-the-ground field survey were completed in 1995 for a previous and larger version of the current proposed project. A follow-up literature search and on-the-ground field survey were performed by a Department architectural historian and completed in 2005 for the current proposed project. During the survey, the architectural historian had full access to all parcels potentially affected by the proposed project.

The sole historic property in the Area of Potential Effect is Glen Oaks Ranch, which is on the National Register of Historic Places, located on State Route 12 near the town of Glen Ellen and between the towns of Kenwood and Agua Caliente. This agricultural property covers 143 acres (58 hectares). The main house on the property is a two-story building constructed with native stone in the Italianate style. The pasture north of the house and east of the highway was the location of nineteenth century vineyards that existed during the period of historic significance. The entrance to the property is located on Route 12 across from Arnold Drive. The vineyard field is a contributing element to the Glen Oaks Ranch.

2.4.3 Project Impacts

The proposed realignment of Route 12 at the intersection of Arnold Drive would acquire approximately 1.64 acres (0.66 hectares) of the contributing agricultural field of historic Glen Oaks Ranch, which constitutes approximately 1.1% of the total property. Despite the loss of acreage, the project would not meaningfully change the historic or current use of the contributing agricultural field; only the unplanted area between the vine rows and the road would be reduced. However, by taking a portion of the edge of the field, the historic property's west boundary would be altered. Although the road would be closer (a maximum of 9.8 meters or 32 feet) to the main house and its surrounding cluster of residential buildings and structures, the proposed project would not bring the road close enough to introduce new visual, atmospheric or audible elements that would diminish the integrity of the property's significant features.

The proposed acquisition of land from the historic Glen Oaks Ranch would be an adverse effect under Section 106 of the National Historic Preservation Act (NHPA), although the proposed take has been greatly reduced from the project proposed in 1995. No buildings would be affected, and the Glen Oaks Ranch would retain its historical significance. Consequently, The Department and FHWA have concluded that the project would not have a substantial impact

under NEPA on the historic property. Under CEQA, there would be no substantial adverse change to Glen Oaks Ranch.

Although no archaeological resources were identified within the project boundaries, it is still possible that buried archaeological deposits exist. If artifacts are discovered during construction activities such as excavation, all earth moving activities within and around the immediate discovery area would be diverted until a qualified archaeologist can assess the find.

2.4.4 Protection Measures

In order to document the latest protection efforts planned for this project, an amendment to the Memorandum of Agreement (MOA) has been prepared for signature by FHWA, SHPO, the Department, and Advisory Council on Historic Preservation (ACHP). As set out in this MOA, protection for impacts to Glen Oaks Ranch due to loss of a sliver of a vineyard field would include the preparation of a pamphlet describing the history of Glen Oaks Ranch, illustrated with contemporary and historic photographs. Copies of this pamphlet would be filed at the Bancroft Library, the California Room of the State Library, the Sonoma Depot Museum, the Sonoma Historic Preservation Society-Vasquez Library, the Glen Ellen Historical Society, and the Sonoma Land Trust. An electronic version of the pamphlet would also be provided to the Sonoma Land Trust for future production. Production of any and all additional copies or updated iterations would be the responsibility and property of the Sonoma Land Trust.

2.5 Water Quality and Storm Water Run-Off

2.5.1 Affected Environment

The project is located in Sonoma County, within the San Francisco Bay Regional Water Control Board (RWQCB) jurisdiction (Region 2), which is responsible for implementation of State and Federal water quality protection laws and regulations in the vicinity of the project site.

Stormwater

The project site is within the San Pablo Basin Watershed and hydrologic unit boundary 206. Storm water from the project drains through a series of open ditches and pipes to Justi Creek, Moon Creek and Stuart Creek, which drains into Calabazas Creek. From Calabazas, water flows to Sonoma Creek, and eventually into the San Pablo Bay. Justi, Moon, and Stuart Creeks are the direct receiving water bodies for this project, and are not on EPA's 303(d) List of Water Quality Limited Segments. Calabazas Creek is 303(d) listed for diazinon and Sonoma Creek is listed for nutrients, pathogens, and sedimentation/siltation. The Region 2 RWQCB Basin Plan has not established any beneficial uses for

Justi, Moon, Stuart, nor Calabazas Creek. However, Sonoma Creek's beneficial uses include cold freshwater habitat, fish migration, preservation of rare and endangered species, water contact and non-contact recreation, fish spawning, warm freshwater habitat, and wildlife habitat. Trinity Road and Arnold Drive are 823 meters (2700 feet) and 640 meters (2100 feet) away from Calabazas Creek, respectively.

2.5.2 Project Impacts

The added pavement for the improvements will increase roadway runoff. The area of soil disturbance is approximately 2.47 ac (1ha) at Trinity Road and Arnold Drive each, for a total of nearly 5 ac (2 ha), adding approximately 0.25 and 0.3 ac (0.1 and 0.13 ha) of new pavement (impervious) area, respectively.

2.5.3 Avoidance, Minimization and Protection Measures

2.5.3.1 Section 401 of the Clean Water Act

A 401 Water Quality Certification from Region 2, RWQCB is required because of the construction work within or near the creek(s).

2.5.3.2 Section 402 of the Clean Water Act

According to the Department's NPDES permit and the Construction General Permit, Best Management Practices (BMPs) will be incorporated into this project to reduce the discharge of pollutants during construction as well as permanently to the Maximum Extent Practicable (MEP). These BMPs fall into three categories, Temporary Construction Site BMPs, Design Pollution Prevention BMPs, and Permanent Treatment BMPs.

2.5.3.3 Construction Site Best Management Practices (BMP)

Construction Site BMPs are implemented during construction activities to reduce pollutants in storm water discharges throughout construction. Grading of existing slopes would be required. Temporary silt fence, concrete washout, stockpile cover, stabilized construction entrance/exit and temporary soil stabilizers are some of the temporary erosion and water pollution control measures that may be utilized in combination to prevent and minimize soil erosion and sediment discharges during construction. Given an anticipated soil disturbance of greater than 0.4 hectares (1 acre), a Storm Water Pollution Prevention Plan (SWPPP) would be developed during construction. This dynamic document addresses the deployment of various erosion and water pollution control measures that are required commensurate to changing construction activities.

2.5.3.4 Permanent Design Pollution Prevention BMPs

Design Pollution Prevention BMPs are permanent measures to improve storm water quality by reducing erosion, stabilize disturbed soil areas, and maximize vegetated surfaces. Erosion control measures would be provided on all disturbed areas to the extent feasible. These measures can utilize a combination of source and sediment control measures to prevent and minimize erosion from soil disturbed areas. Source controls can utilize erosion control netting in combination with hydroseeding. The biodegradable netting is effective in providing good initial mechanical protection while seed applied during the hydroseeding operation germinates and establishes itself. Other forms of source control such as tacked straw may also be used when applicable. Sediment controls such as biodegradable fiber rolls can be used to retain sediments and to help control runoff from disturbed slope areas. These measures would be investigated during the design phase.

Outlet protection and velocity dissipation devices placed at the downstream end of culverts and channels are also Design Pollution Prevention BMPs that reduce runoff velocity and control erosion and scour. The need of these devices for this project would also be further investigated during the design phase.

2.5.3.5 Permanent Treatment BMPs

Treatment BMPs are permanent devices and facilities treating storm water runoff. The Department approved Treatment BMPs are Biofiltration Swales, Infiltration Basins, Detention Basins, Traction Sand Traps, Dry Weather Flow Diversions, Media Filters, Gross Solids Removal Devices (GSRDs), Multi-chamber Treatment Trains, and Wet Basins.

Since the proposed project is within an urban area and disturbs over 3.0 ac (1.2 ha) of soil, it would need to consider Treatment BMPs. Physical site constraints such as environmentally sensitive areas and lack of right of way would minimize the types of Treatment BMPs that can be implemented for this project. Currently, biofiltration strips and swales are the only candidates that may be feasible due to the limited right of way. This would be further investigated in the design phase.

2.6 Geology and Soils

2.6.1 Affected Environment

Sonoma County lies in the California Coast Ranges, a northwest-trending band of folded and faulted mountains that roughly parallel the San Andreas fault zone. The Coast Ranges consist of folded Tertiary sedimentary rocks, with minor metamorphic and volcanic components.

The Sonoma Creek valley cuts through the Pliocene Sonoma Volcanics. The Sonoma Volcanics extend over about 3,200 square km (1,236 square miles) in

Sonoma and Napa Counties. They are about 1,500 meters thick. Andesitic and rhyolite flows make up the bulk of the section, along with tuffs and agglomerates.

The site lies in the Sonoma Creek Valley on the Huichica/Glen Ellen Formation, which is fluvial gravel, sand, silt, and clay, with undifferentiated continental deposits.

The Sonoma County Soil Survey lists the soils present in the project area as having low to moderate shrink-swell potential. The soil survey classifies the soils present in the project area as having moderate to severe limitations for septic tank filter fields.

The slope stability map for Sonoma County shows no slides at the project site.

2.6.2 Project Impacts

The soils in the project area are neither highly erodable, expansive, nor unstable geologically. The project would not raise the risk of soil erosion or loss of topsoil above the current level, nor would it increase the risk of life or property above the current level.

2.7 Topography and Seismicity

2.7.1 Affected Environment

The region is highly seismically active, with numerous active and potentially active faults. In Sonoma County, the Rodgers Creek-Healdsburg fault zone is a major strike-slip fault that controls seismic hazard.

The project lies 9 km away from the Rodgers Creek fault zone. There are no mapped active faults that cross the project site. Ground rupture is unlikely to occur at this site, as most ground rupture is limited to active fault traces. Ground shaking may occur at the project site in the event of an earthquake.

There have been no historical earthquakes attributed to the Rodgers Creek fault. However, the Working Group on California Earthquake Probabilities (2003) assigns a 27% probability of an earthquake greater than 6.7 on the Richter scale in the next 30 years along the Rodgers Creek fault. The project area has experienced large ground motion produced by regional earthquakes, and numerous small earthquakes that have occurred in Sonoma County.

2.7.2 Project Impacts

The proposed project does not increase the risk to life or property from liquefaction or landslides above the current level. The project may lie in areas considered to have moderate liquefaction hazard. Typically, no special

protection measures are taken for roads built on liquefiable soils. In road construction, the native soil may be removed and replaced with a suitable fill. The slope stability map for Sonoma County shows no slides at the project site.

2.8 Natural Communities

2.8.1 Affected Environment

The project area contains several different natural communities: roadside vegetation, agricultural/vineyard, and oak/bay woodland. Roadside vegetation varies, but in general contains ruderal grasses, thistles and other herbaceous annual weeds. None of the species on the California list of noxious weeds is currently used by the Department for erosion control or landscaping in Sonoma County. The agricultural/vineyard land contains cultivated crops, almost exclusively planted in grapes used for wine-making. An altered oak woodland community occurs primarily on both sides of Route 12 in the vicinity of the proposed left-turn channelization at the Trinity Road intersection.

Coast Live Oaks, Valley Oaks, and Blue Oaks are the most common tree species of the oak-bay woodland community, but there are also black oaks. Eucalyptus trees are commonly found throughout this community as well.

2.8.2 Project Impacts

At the Trinity intersection, the project proposes to impact Oak woodlands, including removing approximately 94 Oak trees and 67 Eucalyptus trees. Approximately 1.01 hectares (2.51 acres) of roadside woodland would be removed at this vicinity.

The roadway realignment at Arnold Drive would require the removal of 6 oak trees. The total acreage of roadside woodland removal at this location is estimated at 0.13 hectares (0.31 acres).

2.8.3 Avoidance, Minimization and Protection Measures

Where is it possible, the realignment and widening would be shifted away from woodland communities. Appropriate protection will be determined through coordinated effort between California Department of Transportation, California Department of Fish and Game, and California Department of Parks and Recreation.

In compliance with the Executive Order on Invasive Species, E.O. 13112, and subsequent guidance from the Federal Highway Administration, the landscaping and erosion control included in the project would not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions would be taken if invasive species are found in or adjacent to the construction areas.

These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur. Eucalyptus trees may be replaced with native tree species.

2.9 Wetlands and Other Waters of the United States (Waters)

2.9.1 Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Clean Water Act (33 U.S.C. 1344) is the primary law regulating wetlands and waters. The Army Corps of Engineers (ACOE) has the primary responsibility to enforce the wetlands provisions of the Clean Water Act. The pertinent sections and provisions of the Clean Water Act are discussed in detail in the section on Water Quality and Storm Water Runoff.

At the state level, wetlands and waters are regulated primarily by the Department of Fish and Game (CDFG) and the Regional Water Quality Control Boards (RWQCB). Sections 1600-1607 of the 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 CDFG before beginning construction. If CDFG determines that the project may substantially and adversely affect fish, wildlife, or other aquatic resources, a Lake or Streambed Alteration Agreement will be required. CDFG jurisdictional limits are usually defined by the top of bank of lakes and streams, or the outer edge of riparian vegetation. Waters of the U.S., including wetlands under jurisdiction of the ACOE, may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFG.

2.9.2 Affected Environment

Wetlands and Waters, as defined by the ACOE, occur throughout the project area. These areas are primarily associated with roadside ditches, Moon Creek, Justi Creek, and several other culverts crossing Route 12.

2.9.3 Project Impacts

In those locations where culvert extensions are proposed, permanent losses of ACOE jurisdictional areas may result. In total, approximately 6.4 square meters of wetlands, and 120.2 square meters of waters are anticipated to be permanently impacted in both locations. The waters impacts include 43.3 square meters impacted by filling a ditch alongside Route 12 at the Arnold Drive improvement, 64.7 square meters impacted by filling a ditch alongside Route 12 at the Trinity Road improvement, and 12.2 square meters permanently culverted due to culvert extensions at the Trinity Road improvement. The wetlands impact quantity includes exclusively a wetland at the Trinity Road location.

2.9.4 Avoidance, Minimization, and Protection Measures

Because the project proposes alteration to an existing roadway, relocating the project is not a practicable alternative, although a portion of the road is being realigned to minimize harm to the environment.

The Department will consult with ACOE to determine appropriate protection, and to ensure that there is no net loss of wetlands or waters as a result of this project.

2.10 Animal Species

2.10.1 Regulatory Setting

The Migratory Bird Treaty Act (MBTA) protects nests or nestlings of any migratory bird species within the project area.

2.10.2 Affected Environment

The oak titmouse was identified by The Department biologists during field surveys in 2003 and 2004. This small bird is not likely to nest in the project area, but was probably observed while foraging. In addition to the titmouse, other birds may migrate through, nest, or forage in the project area.

2.10.3 Project Impacts

Shoulder widening and realignment of the highway would necessitate removal of some mature trees immediately adjacent to the roadway, where oak titmouse nesting habitat value is low. Since there is so much quality habitat in the surrounding countryside, traffic noise and activity in the project area would deter most individuals of this species from nesting in the trees within the project limits. Hence, potential for project impacts to the oak titmouse is minimal.

2.10.4 Avoidance, Minimization and Protection Measures

The Department will minimize the impacts to the oak titmouse and other species of birds by adhering to the provisions of the Migratory Bird Treaty Act (MBTA). The MBTA protects all bird species that may nest within the project area. All trees and shrubs that are removed to accommodate the construction of this project must be removed between September 15th and February 15th, when the birds are not nesting.

2.11 Construction Impacts

2.11.1 Affected Environment

The proposed project has the potential to create a number of temporary construction impacts to resources located in the project limits. These impacts include soil disturbance due to excavation and vegetation removal and traffic disruption caused by temporary lane closures. The resources impacted would include air quality, noise, traffic, and public services.

2.11.2 Project Impacts

The proposed project would generate air pollutants during construction. Trucks and construction equipment emit hydrocarbons, oxides of nitrogen (NO_x), carbon monoxide (CO), and suspended particulate matter (PM₁₀ and PM_{2.5}). Most pollution would consist of wind-blown dust generated by excavation, grading, hauling, and various other activities. The impacts from the above activities would vary from day to day as construction progressed.

Some temporary noise disturbance would occur during construction, associated with operation of construction machinery and equipment.

Construction activity would require traffic controls such as lane closures. Traffic would be subject to delays during various periods throughout the construction. Such delays may affect public services such as public transit and school bus schedules. Emergency services may also experience delays during these periods. Some night construction would be necessary in order to reduce impacts to traffic circulation during the day.

2.11.3 Protection Measures

The Special Provisions and Standard Specifications in the construction contract for the proposed project would include requirements to minimize or eliminate construction-related dust through the application of water or dust palliatives. The Department and its contractors would comply with “fugitive dust” emissions rules and policies to minimize construction dust impacts. The Standard Specifications also require that during the construction period, the contractor would be required to comply with the local noise ordinances.

During construction, The Department would implement a Traffic Management Plan (TMP) to minimize traffic impacts using such measures as alternative routes (detours), one-way traffic controls, and night work. Changeable message signs and ground-mounted signs would be employed to provide advance notice to motorists regarding potential delays and/or available detours during construction throughout the project. Temporary lane closures may be required for construction of left-turn pockets and medians, and pavement gradings at the

intersection of Route 12 and Arnold Drive. Construction would be carefully staged to keep traffic delay to a minimum.

Coordination with Sheriff, Fire, CHP, public transit and local school districts would occur to minimize the temporary impacts to these services.

2.12 Cumulative Impacts

2.12.1 Regulatory Setting

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

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, highway development, agricultural development, and the conversion to more intensive types of agricultural cultivation.

The Department has identified two projects near these proposed roadway improvements for its analysis of cumulative impacts:

- Kenwood Plaza Park Footbridge
- Glen Ellen Storage Tank

2.12.2 Project Impacts and Protection Measures

Impacts from the proposed highway project and the two other identified projects are considered in combination in each of the three sections below. In each section, these projects are analyzed as a group of three.

2.12.2.1 Visual Aesthetics

All three of the projects would cause some alteration to the physical environment. However, measures to lessen the impacts such as aesthetic treatments, vegetation screening and habitat restoration would be implemented. Such measures would ensure that the cumulative impacts from the above-mentioned projects would not constitute a substantial adverse change to the visual character of the area and would not be a significant impact.

2.12.2.2 Water Quality

Construction of any of the three projects, including the proposed one, has the potential to cause erosion, which can affect water quality. However, measures are available that prevent water quality impacts due to erosion. Effective

measures are also available to treat the types of contaminants associated with highway projects. The Regional Water Quality Control Board, which takes a cumulative approach to analyzing water quality, has the authority to impose protective measures on all the identified projects. Cumulative impacts from the above-listed projects would not be significant.

2.12.2.3 Wetlands and Other Waters of the United States (Waters)

Construction of all three projects has the potential to impact wetlands and waters. However, the ACOE requires a permit for the proposed project to ensure no net loss of wetlands or waters as a result of the proposed project. As a result, the cumulative impacts of the three projects on wetlands would not be significant.

CHAPTER 3 – AGENCY COORDINATION AND PUBLIC INVOLVEMENT

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and protection measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including: project development team meetings, interagency coordination meetings, and field visits to answer questions for the public. This chapter summarizes the results of the Department's efforts to fully identify, address and resolve project-related issues through early and continuing coordination.

3.1 CONSULTATION AND COORDINATION WITH PUBLIC AGENCIES

The Department is beginning consultation or has consulted with the following public agencies about the proposed project:

1. U.S. Army Corps of Engineers correspondence regarding wetlands and waters jurisdiction.
2. State Historic Preservation Officer regarding concurrence on evaluation of impacts to historic Glen Oaks Ranch, and regarding determination of appropriate protection measures for impacts to Glen Oaks Ranch.
3. Advisory Council on Historic Preservation regarding determination of appropriate protection measures for impacts to Glen Oaks Ranch.
4. State Water Resource Control Board regarding water quality certification.
5. California Department of Fish and Game (CDFG) regarding tree, creek and other drainage impacts.

3.2 PUBLIC PARTICIPATION METHODS

The Department has held regular project development team meetings on a bi-monthly basis.

Public participation for a previously proposed version of the current project included meetings with individual property owners and a public meeting held September 28, 1994.

Upon revising the proposed project, letters identifying the location of the proposed undertaking were sent to a local government agency, and local historical societies and historic preservation groups on July 24, 2004. The recipients were asked if they or any of their associates/members knew of historic properties in the area of the proposed project. The local government agency

contacted was the Sonoma County Landmarks Commission; the historical groups included the Sonoma County Historical Society, the Sonoma Valley Historical Society, the Sonoma League for Historic Preservation, and the Glen Ellen Historical Society. The Sonoma League for Historic Preservation responded by identifying several properties in the region; only one, Glen Oaks Ranch, was located within the proposed project's APE. There were no other responses to the query.

To disclose impacts to historic Glen Oaks Ranch, the Department was also in contact with the then-owner Joan Cochran. More recently, telephone conversations, emails, and an on-site meeting with the Sonoma Land Trust, the new owners of the Glen Oaks Ranch, were conducted in December 2004, to discuss the current proposed project.

The Department has also begun coordination with California Department of Fish and Game, California Department of Parks and Recreation, and U.S. Army Corps of Engineers. The Department has informed each of these agencies of the proposed project pursuant to the permit process.

CHAPTER 4 - LIST OF PREPARERS

This IS was prepared by the California Department of Transportation, District 4 Office of Environmental Analysis. The following staff and consultants contributed to the preparation of this IS:

Office of Design State High Operations Protection Program (SHOPP)

Patrick Pang-Office Chief of Design SHOPP
Ghulam Popal-Senior Transportation Engineer
Bo Yuan-Senior Transportation Engineer
James Hsiao-Project Engineer

Office of Environmental Analysis

Robert Gross, District Office Chief
Valerie Heusinkveld, Senior Environmental Planner
Darryl Gruen, Associate Environmental Planner

Office of Natural Sciences/Permits

Chuck Morton, District Branch Chief, Natural Sciences
Hal Durio, Associate Environmental Planner, Natural Sciences

Office of Cultural Resources

Brian Ramos, Office Chief
Lissa McKee, Senior Environmental Planner, Archaeology
Elizabeth Krase, Senior Environmental Planner, Architectural History
Meg Scantlebury, Associate Environmental Planner, Architectural History

Office of Environmental Engineering

Andre Nguyen, District Branch Chief, Noise and Air Quality
Glenn Kinoshita, District Branch Chief, Noise and Air Quality
Chris Wilson, District Branch Chief, Hazardous Waste
Joseph Mendez, Transportation Engineer

Office of Water Quality

David Yam, District Office Chief
Analette Ochoa, District Branch Chief, Storm Water Coordinator
Trang T. Hoang, Transportation Engineer
Kee Tsang, District Branch Chief, Water Quality
Kathleen Jenkins, Erosion Control Specialist

Office of Engineering Services I (Hydraulics)

Charlotte Cashin, Senior Transportation Engineer

Office of Geology

Grant Wilcox, Senior Engineering Geologist
Anna Sojourner, Engineering Geologist

Office of Landscape Architecture

Bryan Walker, District Branch Chief
Owen Williams, Landscape Associate

Office of Right-of-Way

Paul Voix, Senior Right-of-Way Agent
John Carlston, Associate Right-of-Way Agent

Office of Traffic Operations

Lori Ahmadi, Transportation Engineer

Office of Business Management

Lori Piccone, Graphic Designer III

CHAPTER 5 – DISTRIBUTION LIST

Federal Agencies

U.S. Army Corps of Engineers
Regulatory Branch
San Francisco District
Attention: CESP-NO-R
333 Market St., 8th Floor
San Francisco, CA 94105

U.S. Department of Agriculture
Natural Resources Conservation Service
430 G Street #4164
Davis, CA 95616

State Agencies

Executive Director
Office of Planning and Research
State Clearinghouse
1400 Tenth Street
Sacramento, CA 94814

Executive Officer, Susan A. Warner
Regional Water Quality Control Board
North Coast Region
5550 Skylane Blvd.
Santa Rosa, CA 95403

California Dept. of Fish and Game
Fisheries, Wildlife, and Environmental
Programs
P.O. Box 47
Yountville, CA 94599

California Dept. of Fish and Game
Habitat Conservation Planning Branch
1416 9th St., Suite 1341
Sacramento, CA 94296

Office of Historic Preservation
P.O. Box 942896
Sacramento, CA 94296

California Dept. of Water Resources
Reclamation Board
1416 Ninth St., Room 1601
Sacramento, CA 95814

California Dept of Water Resources
Environmental Services Office
3251 S Street, Room 111
Sacramento, CA 95816

California Highway Patrol
Office of Special Projects
2555 1st Avenue
Sacramento, CA 95818

California Dept. of General Services
Environmental Services Section
1325 J Street, Suite 1910
Sacramento, CA 95814

California Air Resources Board
Transportation Projects
1102 Q St.
Sacramento, CA 95812

Integrated Waste Management Board
P.O. Box 4025
Sacramento, CA 95812

Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

California State Water Resources
Control Board
Division of Water Quality
P.O. Box 100
Sacramento, CA 95812

California Energy Commission
1516 Ninth St., MS-29
Sacramento, CA 95814

California Department of Toxic
Substances Control
1000 I Street
Sacramento, CA 95814

Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, CA 95825

Regional

Executive Director, Eugene Leong
Association of Bay Area Governments
101 8th St.
Oakland, CA 94604

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Executive Director, Steve Heminger
Metropolitan Transportation Commission
101 8th Street
Oakland, CA 94604

Sierra Club
6014 College Avenue
Oakland, CA 94618

Local

Executive Director, Suzanne Wilford
Sonoma County Transportation Authority
520 Mendocino Avenue #240
Santa Rosa, CA 95401

County Administrator, Michael Chrystal
Sonoma County
575 Administration Drive, Room 100A
Santa Rosa, CA 95403

Sonoma County Bicycle Coalition
P.O. Box 3088
Santa Rosa, CA 95402
Attention: Gary Wysocky

Federal Elected Officials

Honorable Barbara Boxer
United States Senator
1700 Montgomery Street, #240
San Francisco, CA 94111

Honorable Diane Feinstein
United States Senator
1700 Montgomery St., #305
San Francisco, CA 94111

Honorable Mike Thompson
Representative in Congress, 1st District
1040 Main Street #101
Napa, CA 94559

Honorable Lynn C. Woolsey
Representative in Congress, 6th District
1101 College Avenue, #200
Santa Rosa, CA 95404

State Elected Officials

Honorable Wesley Chesbro
California Senator, 2nd District
50 D Street, #120A
Santa Rosa, CA 95404

Honorable Carole Migden
California Senator, 3rd District
3501 Civic Center Room 425
San Rafael, CA 94903

Honorable Joseph Nation
California Assembly, 6th District
50 D Street, #450
Santa Rosa, CA 95404

Honorable Noreen Evans
California Assembly, 7th District
50 D Street, Suite 301
Santa Rosa, CA 95404

Local Elected Officials

Board of Supervisors
Sonoma County
575 Administration Drive, Room 100A
Santa Rosa, CA 95403

CHAPTER 6 REFERENCES CITED

Sonoma Route 12, Natural Environment Study, "Rehabilitation of Sonoma Route 12: Trinity Road Intersection and Arnold Drive Curve Correction", The California Department of Transportation Office of Biology, February, 2005.

Supplemental Finding of Adverse Effect Glen Oaks Ranch: For the Proposed Roadway Widening, Rehabilitation, and Channelization near the Town of Glen Ellen, at Arnold Drive and State Route 12 in Sonoma County, The California Department of Transportation Office of Cultural Resources, April, 2005.

Memo on Geology, Soils and Seismicity for Sonoma Route 12 at Arnold Drive and Trinity Road in Sonoma County, The California Department of Transportation Office of Geology, April, 2005.

Sonoma Route 12 Kenwood Visual Impact Assessment , Scott Steinwart, May, 2005.

Water Quality Report for Route 12 Kenwood Rehabilitation Project, The California Department of Transportation Office of Water Quality, April, 2005.

Federal Emergency Management Agency, Community Panels #060375 0745B and 060375 0885B, October 18, 1995.

Sonoma Route 12 Shoulder Widening and Curve Realignment, Right of Way Summary Sheet, April, 2005.

Sonoma Route 12 Memo on Potential Utility Impacts Associated with Sonoma Route 12 Trinity Road Intersection and Arnold Drive Curve Correction Project, The California Department of Transportation Office of Right-of-Way, March, 2005.

The California Department of Transportation interview with Sonoma County Permit and Resource Management Department, Richard Rogers (Planner III), April 4th, 2005.

"TASAS, Selective Accident Rate Calculation Route Sequence for Sonoma Route 12 at Arnold Drive", California Department of Transportation, 11-01-04.

"TASAS, Selective Accident Rate Calculation Route Sequence for Sonoma Route 12 at Trinity Road", California Department of Transportation, 11-01-04.

APPENDIX A: Environmental Significance Checklist

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the relevant section of the document is identified for reference. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project: (REFER TO VISUAL AESTHETICS SECTION 2.5)				
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 checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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: (REFER TO FARMLAND SECTION 2.1)				
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 type="checkbox"/>	<input checked="" 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"/>
c) 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"/>
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: (REFER TO BEGINNING OF CHAPTER 2)				

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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"/>

IV. BIOLOGICAL RESOURCES -- Would the project: (REFER TO NATURAL COMMUNITIES SECTION 2.11, WETLANDS AND OTHER WATERS SECTION 2.12, AND ANIMAL SPECIES SECTION 2.13)

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 type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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"/>

	Less Than Significant			
	Potentially Significant Impact	With Mitigation Incorporation	Less Than Significant Impact	No Impact

V. CULTURAL RESOURCES -- Would the project: **(REFER TO CULTURAL RESOURCES SECTION 2.6)**

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| 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"/> |

VI. GEOLOGY AND SOILS -- Would the project: **(REFER TO GEOLOGY AND SOILS SECTION 2.9, AND TOPOGRAPHY AND SEISMICITY SECTION 2.10)**

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <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 checked="" type="checkbox"/> | <input 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"/> |
| 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 on- or off-site 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 waste water disposal systems where sewers are not available for the disposal of waste water? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	Less Than Significant			
Potentially Significant Impact	With Mitigation Incorporation	Less Than Significant Impact	No Impact	

VII. HAZARDS AND HAZARDOUS MATERIALS (REFER TO BEGINNING OF CHAPTER 2)

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 type="checkbox"/> | <input checked="" 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 which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | <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 areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

VIII. HYDROLOGY AND WATER QUALITY -- Would the project: (REFER TO HYDROLOGY SECTION 2.7 AND WATER QUALITY SECTION 2.8)

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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 which 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"/> |

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<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 which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<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 type="checkbox"/>	<input checked="" 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"/>
h) Place within a 100-year flood hazard area structures which 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) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IX. LAND USE AND PLANNING - Would the project: (REFER TO BEGINNING OF CHAPTER 2)				
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 type="checkbox"/>	<input checked="" 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"/>
X. MINERAL RESOURCES -- Would the project: (REFER TO BEGINNING OF CHAPTER 2)				
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"/>

	Less Than Significant			
Potentially Significant Impact	With Mitigation Incorporation	Less Than Significant Impact	No Impact	

XI. NOISE (REFER TO BEGINNING OF CHAPTER 2)

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 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 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"/> |

XII. POPULATION AND HOUSING -- Would the project: (REFER TO BEGINNING OF CHAPTER 2)

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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"/> |
| 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"/> |

	Less Than Significant			
Potentially Significant Impact	With Mitigation Incorporation	Less Than Significant Impact	No Impact	

XIII. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: **(REFER TO EMERGENCY SERVICE SECTION 2.3)**

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>

XIV. 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"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XV. TRANSPORTATION/TRAFFIC -- Would the project: **(REFER TO TRAFFIC AND TRANSPORT SECTION 2.4)**

a) Cause an increase in traffic which 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"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XVI. UTILITIES AND SERVICE SYSTEMS

Would the project: **(REFER TO UTILITY SECTION 2.2)**

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 type="checkbox"/>	<input checked="" 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 which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<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"/>

XVII. 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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)? (REFER TO CUMULATIVE IMPACTS SECTION 2.15)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5267
FAX (916) 654-6608



July 26, 2000

**TITLE VI
POLICY STATEMENT**

The California State 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, sex and national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

A handwritten signature in black ink that reads "Jeff Morales".

JEFF MORALES
Director