

Airport Boulevard Interchange Project

on State Route 101 in the County of Monterey
05-101-Mon-KP 136.1/139.3 (PM 84.6/86.6)
EA: 05-349500

Initial Study with Proposed Mitigated Negative Declaration/ Environmental Assessment



Prepared by the
U.S. Department of Transportation
Federal Highway Administration
and the
State of California Department of Transportation

March 2005



General Information About This Document

What's in this document?

This document is an Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment. It examines the potential environmental impacts of alternatives for the proposed project located in Monterey County, California. The document describes why the project is being proposed; the existing environment that could be affected by the project, potential impacts from each of the alternatives, and the proposed avoidance, minimization and/or mitigation measures.

What should you do?

Please read this Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment. Additional copies of this document as well as the technical studies are available for review at the Caltrans District 5 office at 50 Higuera Street in San Luis Obispo, CA 93401.

We welcome your comments. If you have any concerns regarding the proposed project, please send your written comments to Caltrans by the deadline. Submit comments via regular mail to Caltrans, Attn: Larry Newland, Environmental Planning Branch, 50 Higuera Street, San Luis Obispo, CA 93401; submit comments via email to larry_newland@dot.ca.gov.

Submit comments by the deadline: **July 5, 2005**

What happens next?

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

For individuals with sensory disabilities, this document is 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, Attn: Larry Newland, Environmental Planning Branch, 50 Higuera Street, San Luis Obispo, CA 93401, (805) 542-4603 Voice, or use the California Relay Service TTY number, (800) 735-2929.

The proposed project is located in the City of Salinas in Monterey County. The Pacific Ocean lies approximately 20 miles to the west and the Gabilan Mountain Range lies approximately 10 miles to the east.

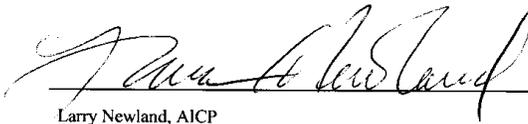
**Initial Study with Proposed Mitigated Negative Declaration/
Environmental Assessment**

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C)

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration

THE STATE OF CALIFORNIA
Department of Transportation

21 March 2005
Date of Approval


Larry Newland, AICP
Branch Chief
District 5 Central Region Environmental
California Department of Transportation

5-16-2005
Date of Approval


for Gene K. Fong
Division Administrator
Federal Highway Administration



Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation, in partnership with the Transportation Agency of Monterey County, City of Salinas and the Federal Highway Administration, proposes to improve the safety and operation of the Airport Boulevard interchange on State Route 101 in the City of Salinas in Monterey County. This proposal involves the complete reconstruction of the existing two-lane structure to provide a four-lane overcrossing with left-turn lanes. All access ramps to and from State Route 101 within the project limits would also be reconstructed and brought up to current design standards.

Determination

This proposed Mitigated Negative Declaration is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a Mitigated Negative Declaration for this project. This does not mean that Caltrans' decision regarding the project is final. This Mitigated Negative Declaration is subject to modification 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 project will be designed and constructed to avoid impacts to cultural and historic resources, public resources, mineral resources, paleontology, parklands, recreational facilities, and educational facilities.
- There would be less than significant impacts to geology, soils, biological resources, farmland and aesthetics based on avoidance, minimization, mitigation and Best Management Practices (see Appendix B).
- There would be some temporary construction impacts that would have no significant adverse effect on transportation, traffic, utilities or service systems, air, noise, or water quality because the following minimization measures would reduce potential effects to insignificance: a Storm Water Pollution Prevention Plan, Best Management Practices, and a Transportation Management Plan.

Larry Newland, AICP
Chief, Central Region Environmental Analysis
California Department of Transportation

Date



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List of Abbreviated Terms

Abbreviation	Term
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
FHWA	Federal Highway Administration
km	kilometer(s)
KP	Kilometer post
LOS	Level of Service
NEPA	National Environmental Policy Act
PM	Post mile



Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) and the Federal Highway Administration propose to make operational improvements along a 3.2-kilometer (2-mile) stretch of State Route 101 in the City of Salinas in Monterey County, California (see Figure 1-1).

The Airport Boulevard interchange at State Route 101 does not operate efficiently. The interchange currently consists of a two-lane overcrossing and a series of short hook ramps that do not reflect current design standards. Vehicles overload the interchange because of the short on- and off-ramps and the insufficient amount of lanes. Heavy traffic volumes, which are expected to increase over time, result in congestion and poor traffic flow.

The proposed project would reconstruct Airport Boulevard, Terven Avenue, and Moffett Road and create new on- and off-ramps to State Route 101. Figures 1-1 and 1-2 show project location and vicinity maps. The project would help reduce accidents, improve Level of Service, and improve the long-term traffic flow at the interchange.

Caltrans initiated this project at the request of the City of Salinas. This candidate project would be funded primarily through the State Transportation Improvement Program with some funding provided by federal Demonstration funds. New right-of-way and utility relocation would be required.

Twelve alternatives have been studied for this project. One viable alternative and the no-build alternative, are discussed in this document. Total construction and right-of-way costs for the build alternative is approximately \$50,000,000.

1.2 Background

State Route 101 accommodates significant amounts of interregional traffic, including commercial, agricultural trucking, commuter, tourist/recreational and business traffic. The Airport Boulevard and Sanborn Road interchanges are the primary access points from State Route 101 for trucks servicing the industrial and agricultural processing hub of Salinas. Approximately 20% of all vehicles using these two interchanges are trucks.

State Route 101 in Salinas is a four-lane freeway with access control. In the project area, State Route 101 consists of four 3.6-meter (12-foot) lanes with 2.4-meter (8-foot) outside and 1.5-meter (5-foot) inside shoulders. Auxiliary lanes allow traffic to enter and exit between interchanges on both the northbound and southbound lanes of State Route 101 between the Sanborn Road and Airport Boulevard interchanges. The project area is approximately 3.2 kilometers (2 miles) long, extending from kilometer post 136.1 to kilometer post 139.3 (post miles 84.6 to 86.6), and is located from just south of the John Street interchange to just south of the Airport Boulevard interchange.

The Airport Boulevard and Sanborn Road interchanges are two of four interchanges located within a 2.7-kilometer (1.7-mile) stretch on State Route 101 through Salinas. The closeness of the interchanges results in short merging and lane-changing distances between the on- and off-ramps. Northbound, the merging and lane-changing distance between the northbound on-ramp from Airport Boulevard and the northbound off-ramp to Fairview Avenue is approximately 280 meters (918 feet). Southbound, the merging and lane-changing distance between the southbound on-ramp from Sanborn Road and the southbound off-ramp to Airport Boulevard is approximately 380 meters (1,246 feet).

1.3 Project Description

Caltrans, in cooperation with the Federal Highway Administration, proposes to improve the safety and operation of the Airport Boulevard interchange on State Route 101 in Salinas in Monterey County (Figures 1-1 and 1-2). The proposed project involves the complete reconstruction of the existing two-lane structure (Airport Boulevard) to provide an overcrossing with four lanes plus left-turn lanes. All access ramps to and from State Route 101 would also be reconstructed.

Twelve alternatives, including a minimum design alternative and a no-build alternative, have been considered for this project. All build alternatives require the complete removal and reconstruction of the Airport Boulevard overcrossing. After careful analysis, ten of the alternatives were removed from future consideration because they did not satisfy the need and purpose of the project and/or did not meet design standards. One viable build alternative and the no-build alternative is discussed in this document.

1.4 Purpose and Need

1.4.1 Project Purpose

The purpose of this project is to improve the safety, operation and goods movements of the Airport Boulevard/State Route 101 interchange.

1.4.2 Project Need

Existing Conditions

Built in 1955, the Airport Boulevard interchange now has numerous operational deficiencies, especially as the traffic volume has risen over the years. The deficiencies and high traffic volume have led to congestion throughout the State Route 101 corridor within the proposed project limits. Below are the existing physical conditions that contribute to the operational issues:

- An existing narrow two-lane overcrossing
- Inadequate ramp lengths for vehicle storage¹
- Nonstandard ramp design
- Lack of left-turn lanes
- Poor local intersection operations
- Close proximity of back to back interchanges
- Close proximity of back to back intersections on Airport Boulevard

Safety

The community of Salinas has expressed concerns over safety and traffic operations at the Airport Boulevard interchange. Some of the safety issues are due to congestion caused by the factors described in the “Existing Conditions” section above.

Accident data within the project limits on State Route 101, for a three-year period, indicate that the accident rates are slightly higher than the statewide average for both the northbound and southbound directions. However, there were no fatalities reported. Details of the accident data collected between June 1, 2000 and May 31, 2003 can be found in Tables 1.1 and 1.2.

¹ Vehicle storage is defined as the ability or capacity to hold cars, which is an important component for intersection operations.

Table 1.1 State Route 101 (Northbound) Accident Rates

Type and Number of Accidents		Accident Rate (ACCS/MVK)*		
Fatal	0		Segment Average	Statewide Average
Injury	2	Fatal	0.000	0.010
Multi-Vehicle	9	Fatal + Injury	0.15	0.33
Total	13	Total	0.94	0.90

Source- Traffic Accident Surveillance and Analysis System. (ACCS/MVK) – Accidents per million vehicle kilometers

Table 1.2 State Route 101 (Southbound) Accident Rates

Type and Number of Accidents		Accident Rate (ACCS/MVK)*		
Fatal	0		Segment Average	Statewide Average
Injury	5	Fatal	0.000	0.010
Multi-Vehicle	13	Fatal + Injury	0.36	0.33
Total	15	Total	1.09	0.90

Source- Traffic Accident Surveillance and Analysis System. (ACCS/MVK) – Accidents per million vehicle kilometers

Traffic Operations

On State Route 101, within the proposed project limits, the current annual average daily traffic count is approximately 54,000 vehicles per day. The future annual average daily traffic count is expected to grow to 65,000 vehicles per day by 2028. Because of the agricultural and industrial nature of the area, there is a high volume of truck traffic, which equates to almost 1 truck per every 5 vehicles traveling through the project limits at midday. The Level of Service for State Route 101 through the project limits is between A and B (Level of Service is explained in section 2.1.5 Traffic and Transportation and Bicycle Facilities).

Although the mainline State Route 101 operates in the efficient range of A and B, the intersections along Airport Boulevard are experiencing operational problems, resulting in a lower Level of Service (see Table 1.3).

Table 1.3 Level of Service for Airport Boulevard Intersections

Intersection	AM Peak Hour Level of Service	Midday Peak Hour Level of Service	PM Peak Hour Level of Service
Airport Boulevard/ Terven Avenue/ State Route 101 southbound ramps	D	C	D
Airport Boulevard/ Hansen Street	D	B	C
Airport Boulevard/ De La Torre Street/ State Route 101 northbound ramps	C	C	E
Airport Boulevard/ Moffett Street	B	C	F

(Existing Conditions--December 2003)

Table 1.3 shows that Airport Boulevard, Terven Avenue and the State Route 101 southbound ramps operate at acceptable levels (Level of Service D or better). However, during the AM peak hour, the off-ramp has cars/trucks backed up. As a result, vehicles exiting State Route 101 become backed up on the southbound auxiliary lane.

As Table 1.3 shows, the intersection of Airport Boulevard, De La Torre Street and the State Route 101 northbound ramps currently operates at Level of Service E during the PM peak hour. Vehicles back up on the northbound approach (Airport Boulevard) as far back as the midpoint between Terven Avenue and Hansen Street. The intersection of Airport Boulevard and Moffett Street currently operates below acceptable levels (Level of Service F) at the northbound left turn off of Moffett Street during the PM peak hour due to the steady stream of traffic on Airport Boulevard.

Goods Movement

The Airport Boulevard interchange is strategically centered between an agricultural/industrial center on one side of State Route 101 and a regional airport on the other. Salinas is a major agricultural processing and growing center for the nation. The southern end of Salinas, where this project is located, has the heaviest concentration of these agricultural businesses. This business sector is economically significant for the following reasons:

- Monterey County generates \$3 billion per year in agricultural products.
- Monterey County is the #1 fresh vegetable producer in the nation (value per acre).
- 80% of Monterey County's fresh vegetable production is transported on State Route 101.
- From March through November, 2,600 interstate trucks leave the Salinas area each day, passing through the Airport Boulevard interchange to transport vegetables to the rest of the nation.

The poor traffic operations in and around the Airport Boulevard interchange contribute to poor accessibility and delay for essential truck and commuter traffic. This affects the movement of goods, having an impact on not only the local economy but the national economy as well.

State Route 101 through the project limits is federally classified as a principal arterial and is also part of the National Highway System. In the State of California classification system, State Route 101 is on the Freeway and Expressway System whose completion has been declared essential to the future development of the state. State Route 101 is also on the Interregional Road System and is designated a Focus Route in the Caltrans Interregional Strategic Plan. Additionally, it is a designated route on the National Truck Network under the federal Surface Transportation Assistance Act and has been declared a State Highway Extra Legal Load Route.

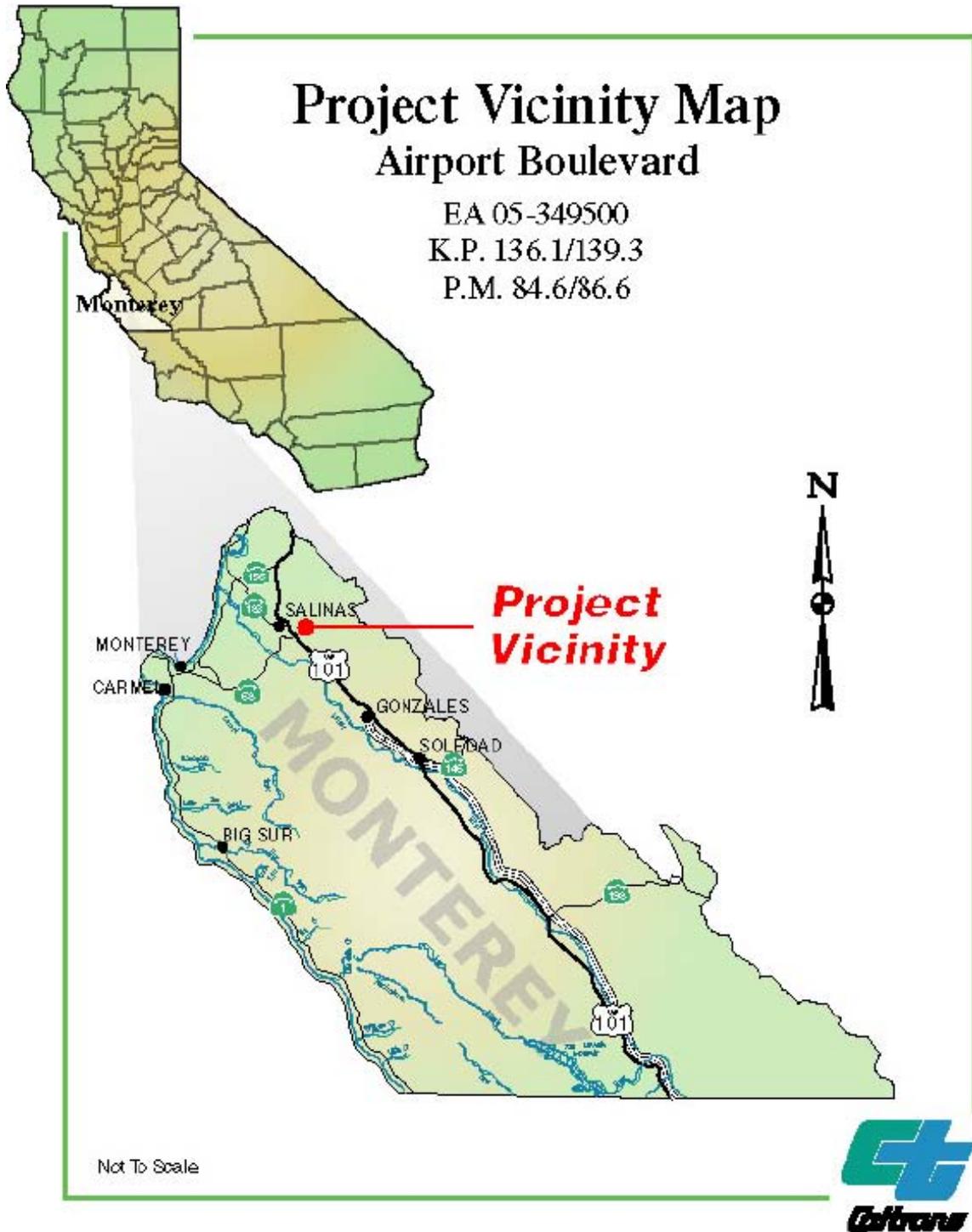


Figure 1-1 Project Vicinity Map



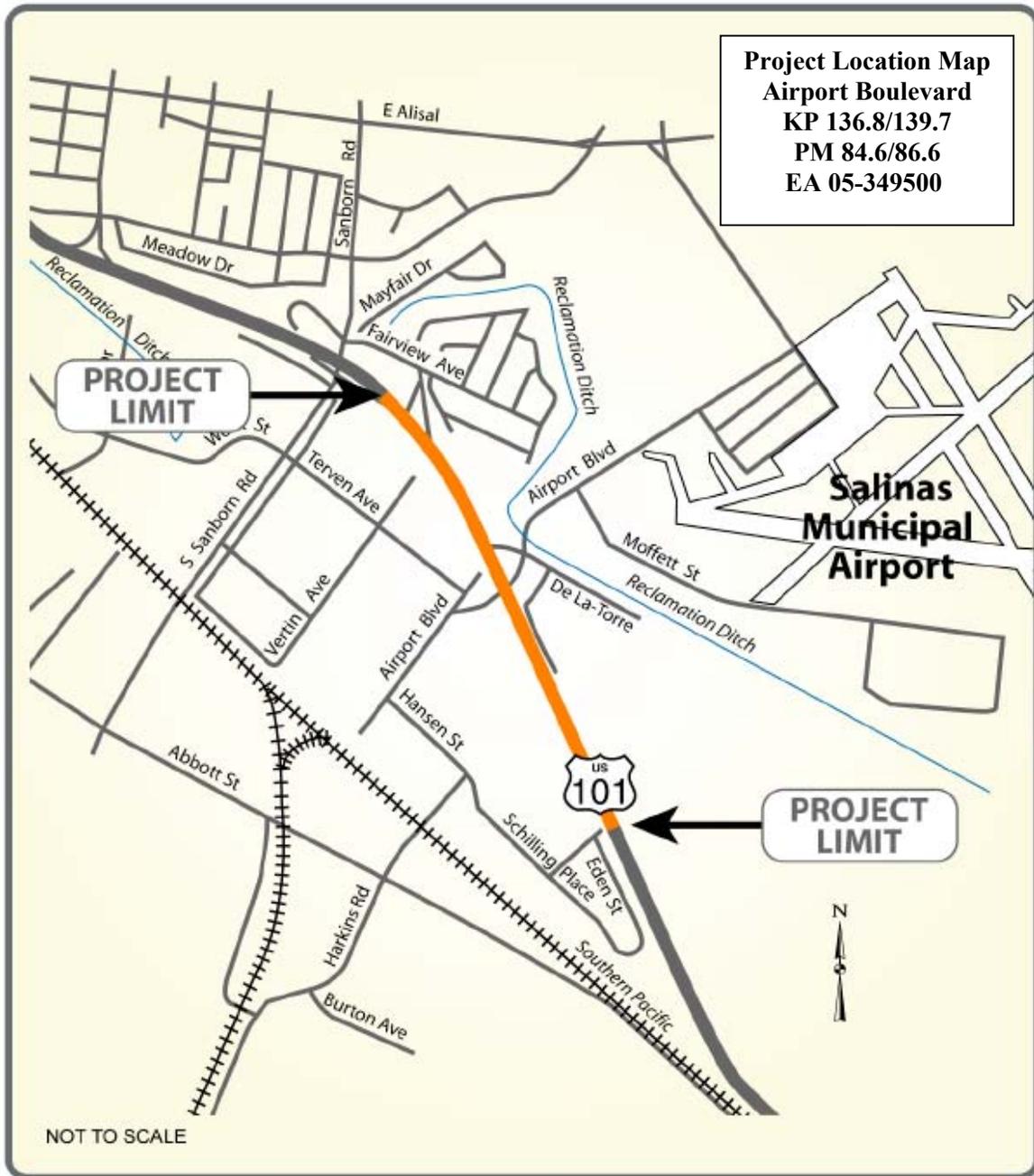


Figure 1-2 Project Location Map



1.5 Alternatives

1.5.1 Proposed Build Alternatives

Originally, 12 alternatives, including a no-build alternative, were studied for this project. However, only one build alternative—Alternative 7—was determined to be viable. It is discussed in detail below (maps are provided in Appendix E).

Alternative 7

Alternative 7 proposes the complete reconstruction of the Airport Boulevard interchange. This alternative would replace the existing two-lane overcrossing with a new five-lane structure with left-turn lanes, shoulders and sidewalks. The new structure would be built north of the existing alignment. All ramps would be constructed to meet current design standards with an increase in the number of lanes and storage space to accommodate expected traffic. In addition, this alternative would provide sufficient width on Airport Boulevard to accommodate bicycle traffic.

Southbound Improvements for Alternative 7

To help reduce some of the operational deficiencies related to the nonstandard lane-changing/merging distances between consecutive on- and off-ramps in the southbound direction, this alternative would remove the off-ramp to Airport Boulevard that now lies north of the interchange. This ramp would be reconstructed to the south of Airport Boulevard and would be built to meet Caltrans design standards. As a result, the distance between the southbound on-ramp from Sanborn Road and the new off-ramp to Airport Boulevard would increase from approximately 380 meters (1,247 feet) to 450 meters (1,476 feet).

To accommodate the configuration of the new southbound loop ramp, the intersection with the southbound off-ramps and Terven Avenue would be moved approximately 80 meters (262 feet) to the west on Airport Boulevard. This would require approximately 280 meters (918.6 feet) of Terven Avenue to be realigned and reconstructed. Also, Airport Boulevard would be widened to the south for approximately 90 meters (295 feet) to allow for smooth transitions from the existing roadway to the new structure crossing State Route 101.

Northbound Improvements for Alternative 7

To help reduce some of the operational deficiencies related to the nonstandard lane-changing/merging distances between consecutive on- and off-ramps in the northbound direction, this alternative would remove the short on and off hook ramps to Airport Boulevard that now lie north of the interchange. These ramps would be reconstructed through the open

farmland to the south of Airport Boulevard and would be built to full design standards. As a result, the length between the northbound on-ramp from Airport Boulevard and the off-ramp to Fairview Avenue would be increased from approximately 280 meters (918.6 feet) to approximately 700 meters (0.435 mile).

The new ramps would end/begin at De La Torre Street, approximately 500 meters (1,640 feet) south of Airport Boulevard. De La Torre Street would be realigned slightly to meet the realigned Airport Boulevard at a right angle. In addition, underground box culverts would divert a portion of the Reclamation Ditch. The project team has determined that the proposed northbound improvements would be the best choice for that side of State Route 101. Because of this, it is common to both of the remaining viable alternatives (7 and 9). This design was chosen for the following reasons:

1. The construction of the ramps at this location provides a solution that meets all design standards for the northbound improvements.
2. The placement of the ramps at this location yields the least disruption in terms of impacts to business and property.
3. This design keeps most of the improvements associated with the project out of the Airport Protection Zones.

The estimated costs for Alternative 7 are:

Roadway Costs	\$19,700,000
Right-of-Way Costs	\$18,491,000
Structure Costs	\$3,465,000
Total	\$41,656,000

Required Design Exceptions

This alternative required the preparation and approval of a Fact Sheet for both nonstandard mandatory and advisory design features. On June 23, 2004, approval was obtained for the nonstandard design features that would require an Exception From Mandatory Design Standards. These include:

- Nonstandard interchange spacing—interchanges are spaced too closely
- Nonstandard lane-changing/merging lengths between consecutive on- and off-ramps—lengths are too short

- Intersection spacing-local road intersecting where highway ramps intersect Airport Boulevard (this is considered a “zero offset” intersection, meaning zero distance between intersections)
- Access control violation (allowing a zero offset intersection)

1.5.2 No-Build Alternative

The No-Build Alternative would keep the interchange as it is. This alternative would make no improvements. It would not reduce congestion or improve safety at this interchange. Without the proposed improvements, traffic would continue to increase over time, accident rates would likely increase, and the Level of Service of both the highway and Airport Boulevard would deteriorate further.

1.5.3 Alternatives Considered but Eliminated from Further Discussion

All rejected build alternatives (1, 1A, 2, 3, 4, 4A, 5, 6, 8 and 9) proposed the complete reconstruction of the Airport Boulevard interchange. These alternatives would have replaced the existing two-lane overcrossing with a new six-lane overcrossing, two through lanes in each direction and two left-turn lanes. The new structure would have been built on a new alignment just to the north of the existing alignment. These alternatives would have provided sufficient width on Airport Boulevard to accommodate bicycle traffic.

Build Alternatives 1, 1A, 2, 3, 4, 4A, 5, 6, 8 and 9 were rejected for reasons ranging from high costs to significant impacts to resources. See Table 1.4 for a comparison of the build alternatives.

1.6 Permits

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

- U.S. Army Corps of Engineers 404 Nationwide permit
- Regional Water Quality Control Board 401 permit
- A National Emission Standard for Hazardous Air Pollutants permit
- California Department of Fish and Game Streambed Alteration Agreement



Table 1.4 Comparison of Alternative

Alternatives Comparisons

Alternative Number	Alternative Description	Safety	Estimated Cost (Escalated)	Right of Way Impacts	Environmental Impacts	Operations and Goods Movement	Constructibility	Other comments or issues	PDT Decision and Date
1	Standard Cloverleaf interchange with modifications to Sanborn NB off-ramp. Sanborn SB on-ramp closed. Fairview NB off & on-ramps closed. Upgrades to Sanborn Road & adding a lane to Terven Ave.	The closure of ramps at Fairview Ave would result in poor operations for the northbound off-ramp at Sanborn. Reduced operational efficiency can lead to safety problems.	\$45 million without Terven improvement costs.	Heavy impacts to businesses.	Biology, Cultural, Noise, Hazardous Waste - Low Impacts Socio/Economic - High Impacts	Results from the Traffic Analysis show that traffic volumes on the Fairview ramps are much heavier than expected. Closing them is not an option.	Difficult issues surrounding construction at Terven Avenue interchange construction appears to be OK		Drop from further study (5-13-04)
1a	Alternative 1 + 4 lanes on Terven	The closure of ramps at Fairview Ave would result in poor operations for the northbound off-ramp at Sanborn. Reduced operational efficiency can lead to safety problems.	\$66 million	Heavy impacts to businesses.	Biology, Cultural, Noise, Hazardous Waste - Low Impacts Socio/Economic - High Impacts	Traffic volumes on the Fairview ramps are much heavier than expected. Closing them is not an option.	Same as Alternative 1		Drop from further study (5-13-04)
2	Modified standard cloverleaf. Sanborn on-ramp, Fairview NB on & off-ramps to remain open. Braid system on NB 101 to allow access/exit to/from Fairview.	Queuing at the Southbound Sanborn off-ramp would prevent traffic from getting off at Airport Boulevard. Queuing issues can lead to safety problems.	\$49 million	Heavy impacts to businesses.	Biology, Cultural, Noise, Hazardous Waste - Low Impacts Socio/Economic - High Impacts	Queuing at the Southbound Sanborn off-ramp would prevent traffic from getting off at Airport Boulevard.	Same as Alternative 1		Drop from further study (3-4-03)
3	Spread Diamond/Braid System. Sanborn SB on-ramp to remain open. Braid system to allow Fairview NB on/off-ramps to remain open. Airport SB off-ramp to be part of Sanborn SB off-ramp.	Queuing at the Southbound Sanborn off-ramp would prevent traffic from getting off at Airport Boulevard. Queuing issues can lead to safety problems.	\$61 million	Extremely heavy R/W impacts on the West side. Braids on the East side would require R/W takes from newly constructed businesses.	Biology, Cultural, Noise, Hazardous Waste - Low Impacts Socio/Economic - Very High Impacts	This alternative does not solve the operations problems. In fact, because it proposed to add an additional intersection on the west side, may have introduced additional operations problems.	Same as Alternative 1		Drop from further study (7-11-02)
4	Modified standard cloverleaf/Braid System. Sanborn on-ramp, Fairview NB on & off-ramps to remain open. Braid system on NB 101 to allow access/exit to/from Fairview.	Queuing at the Southbound Sanborn off-ramp would prevent traffic from getting off at Airport Boulevard. Queuing issues can lead to safety problems.	\$51 million	Heavy R/W impacts on the West side. Braids on the East side would require R/W takes from newly constructed businesses.	Biology, Cultural, Noise, Hazardous Waste - Low Impacts Socio/Economic - Very High Impacts	Queuing at the Southbound Sanborn off-ramp would prevent traffic from getting off at Airport Boulevard.	Same as Alternative 1		Drop from further study (7-11-02)
4a	Same as Alternative 4 with the exception to De La Torre St. will terminate on the southside of hotel complex rather than run in front of hotel and terminate.	Queuing at the Southbound Sanborn off-ramp would prevent traffic from getting off at Airport Boulevard. Queuing issues can lead to safety problems.	\$54 million	Heavy R/W impacts on the West side. Braids on the East side would require R/W takes from newly constructed businesses.	Biology, Cultural, Noise, Hazardous Waste - Low Impacts Socio/Economic - Very High Impacts	Queuing at the Southbound Sanborn off-ramp would prevent traffic from getting off at Airport Boulevard.	Same as Alternative 1		Drop from further study (7-11-02)
5	Standard Cloverleaf interchange with modifications to Sanborn NB off-ramp. Sanborn SB on-ramp to remain open. Fairview NB off & on-ramps closed. No upgrades to Sanborn & Terven roads. Airport SB off-ramp to be part of Sanborn SB off-ramp.	Queuing at the Southbound Sanborn off-ramp would prevent traffic from getting off at Airport Boulevard. Queuing issues can lead to safety problems.	\$56 million	Heavy impacts to businesses.	Biology, Cultural, Noise, Hazardous Waste - Low Impacts Socio/Economic - High Impacts	Queuing at the Southbound Sanborn off-ramp would prevent traffic from getting off at Airport Boulevard.	Same as Alternative 1		Drop from further study (3-4-034)
6	Modified cloverleaf. SB Sanborn on-ramp remains open. Fairview Ave on and off-ramps to remain open. NB Sanborn off-ramp closed. Braid system on NB 101 to allow access to Fairview Ave off-ramp. Upgrades to De La Torre & Terven Ave roads.	Storage and weaving would be improved from current conditions. Certain deficiencies would remain like non-standard interchange spacing.	\$56 million	PDT determined on 5-13-04 that the impacts to the "Safety Zone" of Salinas Airport right of way are unacceptable.	Biology, Cultural, Noise, Hazardous Waste - Low Impacts Socio/Economic - High Impacts	Storage and weaving would be improved from current conditions. Certain deficiencies would remain like non-standard interchange spacing.	Same as Alternative 1		Drop from further study (5-13-04)
7	Hook Ramp/Cloverleaf System. NB on & off-ramps to Airport located south of the Hotel/Restaurant complex with substantial improvements to De La Torre. Upgrades to Terven Ave. Fairview Ave NB on/off-ramps to remain open.	Hook ramp system takes the heaviest movement and makes it a "loop" on-ramp. The huge benefit of a "loop" on-ramp for the heavy NB movement far outweighs the out of direction travel that a hook system causes. Storage and weaving would be improved from current conditions in both the SB and NB directions.	\$47 million	Moderate impacts to businesses.	Biology, Cultural, Noise, Hazardous Waste - Low Impacts Socio/Economic, Farmland - Low Impacts	Hook ramp system takes the heaviest movement and makes it a "loop" on-ramp. Storage and weaving would be improved from current conditions in both the NB and SB directions.	Same as Alternative 1	Airspace concern with airport resolved	Move forward with alternative (5-13-04)
8	Modified cloverleaf interchange with a ramp "braid" system for SB Route 101. Construct a modified diamond interchange for NB Route 101. Close the Sanborn Rd northbound off-ramp. Allow Sanborn Rd SB on-ramp and Fairview on and off-ramps to remain open.	Storage and weaving would be improved from current conditions. Certain deficiencies would remain like non-standard interchange spacing.	\$56 million	Heavy R/W impacts on the West side. Braids on the East side would require R/W takes from newly constructed businesses.	Biology, Cultural, Noise, Hazardous Waste - Low Impacts Socio/Economic - High Impacts Farmland - Low Impacts	Storage and weaving would be improved from current conditions. Adversely affects the East side operations of the Sanborn Interchange	Same as Alternative 1	Hotels would be negatively impacted. Braid ramps not necessary	Drop from further study (5-13-04)
9	NB Hook Ramp / SB Modified Hook Ramp. NB on and off ramps located south of the hotel / restaurant with substantial improvements to De La Torre (same as Alternative 7). Fairview NB on and off-ramps to remain open. SB configuration realigns Airport Blvd to become one leg of four-way intersection.	Storage and weaving would be improved from current conditions on the NB side. The SB storage and weaving would remain the same as the current condition. Certain deficiencies would remain like non-standard interchange spacing.	\$35 million	Low impacts to businesses.	Biology, Cultural, Noise, Hazardous Waste, Socio/Economic - Low Impacts Farmland - Low Impacts	Storage and weaving would be improved from current conditions. Certain deficiencies would remain like non-standard interchange spacing both the NB and SB directions.	Easier Terven Avenue construction but harder staging for structures	Safety concerns; shortened weave between on & off ramps	Drop from further study (4-08-05)

Chapter 2 Affected Environment, Environmental Consequences, Avoidance, Minimization and/or Mitigation 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.

- Coastal Zone Management Act Consistency: The project is located outside of the Coastal Zone.
- Wild and Scenic Rivers: There are no Wild and Scenic Rivers within the proposed project limits.
- Environmental Justice: There are no disproportionately high adverse human health and environmental effects on minority and low income populations within the proposed project limits. (Community Impact Assessment, 2004)
- Timberland Impacts: There are no timberlands within the project limits.
- Paleontology Impacts: According to the California Division of Mines and Geology, the project is entirely underlain by Pleistocene non-marine (terrace) deposits. These sediments are shown as having low potential for encountering sensitive paleontological resources.
- Cultural Resources: There are no historic properties affected by the project pursuant to 36 CFR 800.4(d)(1). There are no cultural resources within the project footprint².
- Utilities: Relocation would be required with little to no interruptions.
- Emergency Services: The proposed project would improve flow, which would benefit any services attempting to move through the proposed corridor.
- Long-term noise impacts: The current proposed alternatives do not move traffic closer to any residence³.

² Historic Property Survey Report, Kiaha, Carr (2003), and Historic Property Survey Report-Addendum Surveys (Kiaha 2004)

³ Air Quality, Noise and Paleontology Reports, Mills (2004)

2.1 Human Environment

2.1.1 Land Use

Salinas has experienced substantial growth over the past 30 years, particularly during the 1990s when the population increased approximately 33 percent from about 108,000 in 1990 to almost 144,000 in 2000. The Association of Monterey Bay Area Governments (AMBAG) projected the growth rate will continue at an average of 1.3%, bringing the population to 170,059 in 2020. The community is compact with a density of about 7,700 persons per square mile and is substantially built-out within the present city boundary to accommodate future growth.

The Greater Salinas Planning Area includes the City of Salinas and the communities of Boronda, Bolsa Knolls and Spreckels. This area is incorporated as part of the Monterey County General Plan; however, for land use purposes, it is more representative of the study area than Monterey County as a whole. Within the Greater Salinas Planning Area, more than 96 percent of the land use is agricultural, with the majority of cultivated farmland and grazing land located outside the City of Salinas.

Approximately 1.4 percent of the land use in Greater Salinas Planning Area is residential. Residential centers are within the City of Salinas and the unincorporated communities of Boronda, Bolsa Knolls and Spreckels. Slightly under 2 percent of land in the Greater Salinas Planning Area is considered commercial and industrial. Commercial and industrial land uses are mostly concentrated in the City of Salinas and to a lesser extent in the unincorporated communities of Boronda and Spreckels. Approximately 1 percent is in public use.

The four primary land use designations, all of which occur in the project area, are:

- *Agricultural*—applies to the production of crops and livestock, and agricultural processing facilities.
- *Residential*—applies to areas used for the development of housing at various densities.
- *Commercial*—applies to areas suitable for the development of retail and service uses, including visitor accommodation and professional office use. Mixed use developments, including both commercial and residential are also allowed.
- *Industrial*—applies to areas designated for development of manufacturing, research, mineral extraction and processing operations.

2.1.1.1 Existing Land Use

Figure 2-1 and Table 2.1 show the general land use within the study area of the proposed Airport Boulevard interchange reconstruction project.

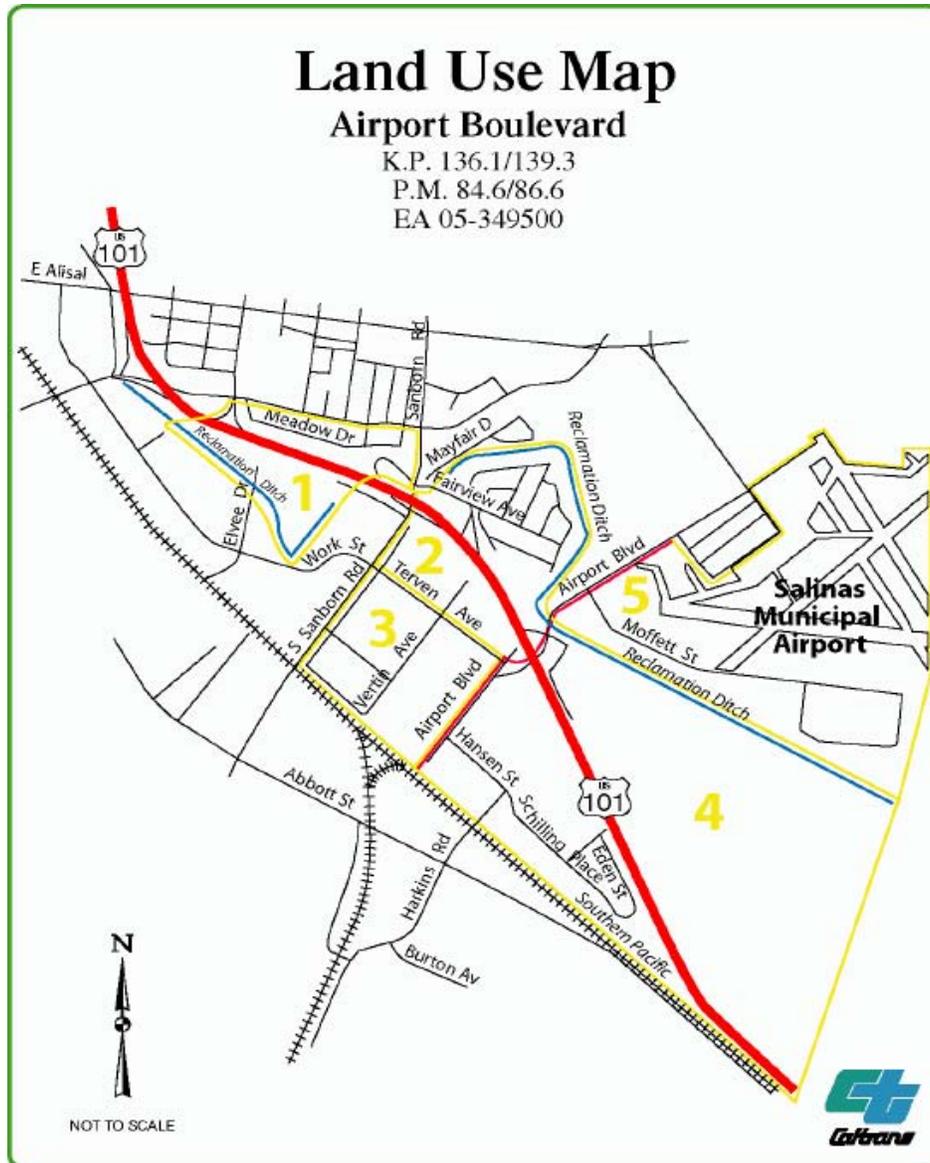


Figure 2-1 Land Use Map



Table 2.1 Land Use within the Study Area

Location	Residential	Commercial and Industrial	Agricultural
Area 1 -North of Sanborn Road, west of John Street, east of Reclamation Ditch, south of Wood Street	Single-family housing and lots, multi-family housing	Motels, gas stations, fleet storage maintenance and above-ground fueling station, private truck scale, new used car sales and service dealership	NA
Area 2 -South of Sanborn Road, north of Airport Boulevard, west of Reclamation Ditch, east of Terven Avenue	Multi-family housing, single-family housing and lots, duplex and apartments	Motels, hotel, office suites, office buildings and fleet storage, public utilities substation, welding supply warehouse, metal fabrication shop, farm labor vehicle storage, truck and pallet storage, agricultural chemical mixing and storage, gas fueling vehicle repair and maintenance, heavy equipment rental and maintenance facility	NA
Area 3 -South of Sanborn Road, north of Airport Boulevard, west of Terven Avenue	Single-family housing and lots, multi-family housing	Office furniture warehouse, cold storage facility and produce distribution warehouse fleet storage, commercial fleet fueling stations, transportation refrigeration repair, office building, grower/produce cold storage and shipping and sales	NA
Area 4 -South of Airport Boulevard, west of Reclamation Ditch, east of the Southern Pacific Railroad tracks	NA	Warehouse, gas station, motels, fleet parking and maintenance, cold storage facility, produce packing shipping sales, food processing and sales, office complex, plumbing materials distribution warehouse	Truck crops
Area 5 -Salinas Municipal Airport area, east of Reclamation Ditch, south of Airport Boulevard	NA	Salinas Municipal Airport, office suites, food processing, cold storage produce shipping sales, government offices, U.S. postal service center, telecommunications and broadcasting, food processing appliance sales and service, beverage distribution shipping facility, agricultural seed supplier	Truck crops

Figure 2-1 and Table 2.1 show the predominant land use throughout the project is commercial and industrial. This includes Areas 1-4, west of State Route 101, south of Wood Street and north of Eden Street. Residential land use is situated in Areas 1-2, east

of State Route 101, north of Airport Boulevard and south of Wood Street in the north and central portions of the study area. Agricultural land use is east of State Route 101 and in Areas 4-5, south of Airport Boulevard in the central and southern portions of the study area.

The proposed project lies within the Salinas city limits and is near the Salinas Municipal Airport. The project is in an urban setting surrounded by industrial, commercial, and agricultural land uses. Currently, there are no parks or recreational facilities in the vicinity of the overcrossing. Therefore, the proposed improvements would not affect existing recreational resources nor would the project result in increased demand for new recreational facilities or services. Both alternatives would result in the acquisition of additional right-of-way.

2.1.1.2 Consistency with State, Regional and Local Plans

Funding Sources

- State Transportation Improvement Program
- Federal Demonstration Funds

This project is consistent with the goals and policies outlined in the following:

- Monterey County 21st Century Draft General Plan
- 2002 Regional Transportation Plan for Monterey County
- 2002 City of Salinas General Plan
- Salinas Municipal Airport Master Plan in 2002-2003

The proposed project would be compatible with surrounding industrial, commercial, and agricultural uses. The proposed improvements are not expected to facilitate growth in this area. The project site is not located in any special plan areas, including local coastal plan areas.

The proposed project is located near the Salinas Municipal Airport, which is on Airport Boulevard, immediately east of State Route 101. The Salinas Municipal Airport Goal LU-12 states: *Maintain the viability and future accessibility of the Salinas Municipal Airport and support the planned development of aviation facilities in order to meet aviation needs within the City and the surrounding area*⁴. Nine of the 11 build alternatives originally proposed for this project had design elements that encroached into

⁴ Salinas Municipal Airport Plan, 2002.

the Flight Protection Zone of the Salinas Municipal Airport. Because of this encroachment, each alternative needed to be analyzed to ensure that improvements would not violate any Federal Aviation Administration obstruction standards (height restrictions) or be a hazard to air navigation.

Once it was determined that the project proposed no airspace violations, the information was sent to the Federal Aviation Administration via FAA Form 7460-1 (Notice of Proposed Construction or Alteration) for concurrence and approval. The Federal Aviation Administration responded on February 10, 2004, stating that it had no objections to the proposed construction of the project as proposed, however, the airspace determination was advisory and was not to be construed to mean that the Federal Aviation Administration either approved or disapproved of the proposal.

Representatives from the City of Salinas and the Salinas Municipal Airport met with administrators from the Federal Aviation Administration to obtain approval for the project; they are still awaiting formal approval.

The proposed project improvements would be consistent with existing City of Salinas and Monterey County land use designations and zoning. Road projects or improvements are considered to be consistent with most land use designations and zoning districts as they are necessary to provide access and support development.

2.1.2 Growth and Future Land Use

Regulatory Setting

The Council on Environmental Quality regulations, which implement the National Environmental Policy Act of 1969, require evaluation of the potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The Council on Environmental Quality regulations, 40 CFR 1508.8, refer to these consequences as secondary impacts. Secondary impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act also requires the analysis of a project's potential to induce growth. California Environmental Quality Act guidelines, Section 15126.2(d), require that environmental documents "...discuss the ways in which the

proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment...”

Affected Environment

Salinas is an urban community within an agricultural setting. Located 32 kilometers (20 miles) inland from Monterey Bay, Salinas serves as the county seat of Monterey County and as the industrial and agricultural hub of the Salinas Valley. The highly productive agricultural lands surrounding Salinas contribute to the area’s economic vitality.

Development Trends

Residential land use has nearly tripled in size when compared to conditions in the 1980s when the initial Greater Salinas Area Plan was developed; commercial land use designations are five times larger in size and industrial land use has doubled. This trend indicates that a substantial amount of development has occurred or may be proposed in the future. Consequently, agricultural acreage has decreased by 11 percent, although agricultural land use is still most prevalent in the Greater Salinas Planning Area⁵.

Adopted Goals and Policies

The City of Salinas experienced a 28 percent increase in population in the last decade. Annexation of additional land to the City of Salinas will be necessary to accommodate future growth. Annexed land will be converted from agricultural use to urban use. However, land use policies in the City of Salinas General Plan direct urban expansion to the north and east, away from the most productive agricultural land and encourage more reuse/revitalization and compact development. The general plan’s land use goal LU1 is to balance land use patterns to provide for a range of housing, jobs, libraries, and educational and recreational facilities that allow residents to live, work, shop, learn, and play in the community.

A checklist, described in the Caltrans (1997) Community Impact Assessment manual, was used to evaluate the potential for growth inducement for the proposed project:

- *Will the project attract more residential development or new population into the community?* **No.** Monterey County and Salinas are already experiencing population increases. Between 1990 and 2000, the population of Monterey County increased by 11.5 percent. During the same time period, the population of Salinas increased by 28

⁵ Community Impact Assessment, Goshgarian, 2004

percent, over twice the growth of Monterey County. This growth prompted Monterey County to evaluate land use policies, housing needs and the job market.

- *Will the project encourage the development of more acreage of employment generating land uses (commercial, industrial or office) in the area?* **Yes.** Predominant land use in the area is currently zoned commercial. However, the development is not anticipated to change beyond what is currently planned for in the local general plan and in the regional transportation plan.
- *Will the project lead to an increase of roadway, intersection, sewer, water supply or drainage capacity?* **Yes.** The proposed project is designed to improve roadway and interchange operations. It is not intended to increase capacity. The proposed project conforms to what is currently planned for in the local general plan and in the regional transportation plan.
- *Is the project not in conformance with the growth-related policies, goals or objectives of the local general plan or the area growth management plan?* **No.** This project is in conformance with and supports the growth-related policies, goals or objectives of the local general plan or the area growth management plan.
- *Is the project in conflict with implementation measures contained in the area's growth management plan?* **No.**
- *Will the project lead to the intensification of development densities or accelerate the schedule for development or will it facilitate actions by private interests to redevelop properties within two miles of an existing or future major arterial roadway or within four miles of a limited access highway interchange?* **Yes.** The project could facilitate redevelopment of nearby properties at the reconstructed Airport Boulevard overcrossing; however, the Salinas Municipal Airport Master Plan and the City of Salinas General Plan are taking that into account. Any redevelopment would be in accordance with local planning.
- *Will the project measurably and significantly decrease home to work travel times to and from or within the project area? (more than 10 percent overall reduction or five minutes or more in commute time savings)* **No.** The purpose of the project is to improve traffic circulation along Airport Boulevard and State Route 101 to improve accessibility to businesses and services within the project area. No reduction in commute time is anticipated.

- *Is the project directly related to the generation of cumulative effects as defined by the California Environmental Quality Act (CEQA) guidelines? No.*

Impacts

The General Plan for the City of Salinas designates a Future Growth Area. This project falls within the boundaries of that area. The improvement of infrastructure resulting from implementation of the proposed project is not expected to substantially affect city population growth. Although this is not a growth-inducing project, it is a growth-facilitating project, which is desired by the city.

Table 2.2 Alternatives Summary of Potential Impacts for Human Environment

Potential Impact		Alternative 7	No-Build Alternative
Agricultural displacements		yes	none
Farmland converted	Prime	yes	none
	Unique	yes	none
	State or Local Importance	yes	none
Business displacements		yes	none
Housing displacements		no	none
Consistency with the Monterey County General Plan		yes	no
Growth inducement		no	no

Avoidance, Minimization and/or Mitigation Measures

The Project Design Team designed a project that would avoid displacing existing housing and minimize the impacts on businesses within the project limits.

2.1.3 Farmlands

Regulatory Setting

The National Environmental Policy Act and the Farmland Protection Policy Act (USC 4201-4209; and its regulations, 7 CFR Ch. VI Part 658) require federal agencies, such as the Federal Highway Administration, to coordinate with the Natural Resources Conservation Service if their activities may irreversibly convert farmland (directly or indirectly) to nonagricultural use. For purposes of the Farmland Protection Policy Act, farmland includes prime farmland, unique farmland, and land of statewide or local importance. The land does not currently have to be used for cropland. It can be forestland, pastureland, cropland, or other land, but not water or urban developed land.

The California Environmental Quality Act 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 deter the early conversion of agricultural and open space lands to other uses.

Currently in Monterey County, 297,685 hectares (735,588.90 acres) are protected under Williamson Act contracts. Policy AG-1.4 of the Monterey County General Plan Draft protects agricultural operations from residential and non-agricultural uses by requiring buffers at the edge of all new development and limiting the uses within the buffer area. Specifics regarding agricultural buffers are found in Policy LU 9.14 of the Monterey County 21st Century Draft General Plan Land Use Element.

Affected Environment

Salinas, “The Salad Bowl of the World,” lies at the north end of the Salinas Valley in Monterey County and is the processing and shipping point for a wide variety of crops including lettuce, broccoli, mushrooms, and strawberries. The area’s climate is also ideal for the floral industry and grape vineyards. Construction of Reclamation Ditch (number 1665) in 1917 provided a major stimulus to agricultural production in the Salinas area, allowing previous marshland areas to be converted to farmland.

Agriculture represents more than 40 percent of Monterey County’s total economy and has made the county the number one vegetable-producing region in the nation. Monterey County supplies 80 percent of the nation’s lettuces and nearly the same percentage of artichokes. Broccoli, cauliflower, spinach, strawberries, peppers, squash, carrots,

asparagus, celery, tomatoes, mushrooms, brussel sprouts, garlic, onions and flowers are also grown in abundance. Organic farming production in the county has mushroomed, from a value of \$12 million in 1994 to more than \$120 million in 2002. Table 2.3 lists the top value crops for Monterey County in 2002.

Table 2.3 Top Value Crops in Monterey County

Crop	Value in millions
Lettuce (head and leaf combined)	\$738.5
Broccoli	\$265.9
Strawberries	\$226.8
Nursery	\$219.0
Grapes	\$147.0
Spinach	\$129.0
Spring Mix	\$119.0

Source: Monterey County Crop Report 2002

Farmland in Monterey County represents only 1 percent of the farmland acres in California, but produces 10 percent of California’s farm income.

Trends in Agricultural Land Use

Agricultural acreage in Monterey County remained fairly stable from 1992 to 2002. According to the California Department of Conservation, Farmland Mapping and Monitoring Program, approximately 525,409 hectares (1,298,301 acres) of land was dedicated to agriculture in 2002, compared to 528,376 hectares (1,305,631 acres) in 1992. Acreage numbers are further separated into farmland (suitable for growing crops) and grazing land (land with existing vegetation for grazing livestock).

Table 2.4 Comparison of Grazing Lands/Farmlands

Year	Grazing Land	Farmland
1992	437,492 hectares (1,081,054 acres)	91,018 hectares (224,909 acres)
2002	429,226 hectares (1,060,630 acres)	96,857 hectares (239,335 acres)

Source: California Department of Conservation 2004

Development pressures are irretrievably converting Monterey County's land from productive agricultural use. Although changes in the amount of agricultural land (grazing plus farmland) are minimal, only about 0.6 percent, the quality of agricultural land has changed. Since 1992, Monterey County has steadily lost prime farmland to urban development and other non-agricultural uses. Between 1992 and 2002, about 3 percent of prime farmland was converted to urban and non-agricultural uses, according to data from the California Department of Conservation.

Between 1992 and 2002, over 2 percent of grazing land was converted to farmland. The conversion of grazing land to other farmland uses (primarily wine grapes) offset some of the losses of farmland. Some of these soils are of lesser quality, making them adaptable to production of certain agricultural commodities.

The California Department of Transportation initiated coordination with the Natural Resources Conservation Service and submitted a request for a Farmland Conversion Impact Rating (Form AD-1006). The Natural Resources Conservation Service completed the form and returned it on June 28, 2004. This form provided a number rating based on a land evaluation and site assessment criteria.

Impacts

The Natural Resources Conservation Service determined that of the total 5.4 hectares (13.3 acres) of land to be acquired for the project, 3.5 hectares (8.7 acres) are prime and unique farmland and 1.9 hectares (4.6 acres) are considered farmland of statewide or local importance. The overall farmland impact rating was 111 out of 260 possible points. A score under 160 points indicates that farmland impacts are not substantial; no further consideration of farmland impacts is required under the National Farmland Policy Act (see Form AD 1006 Appendix G).

No Williamson Act properties lie in the project area, according to Monterey County records.

Avoidance, Minimization and/or Mitigation Measures

Throughout the design process, many alternatives were considered. The viable build alternative (7) that remains is the least invasive overall and was designed to avoid major impacts to farmland to the maximum extent practicable.

The General Plan for the City of Salinas designates a Future Growth Area. This project falls within the boundaries of that area. Although this is not a growth-inducing project, it is a growth-facilitating project, which is desired by the city.

Cumulative Impacts

The proposed project would eliminate approximately 5.4 hectares (13.3 acres) of either prime, unique and/or important farmland. Though a small impact to farmland within this area, this would still contribute to the elimination of farmland. Because the City of Salinas has future development plans for this area, this loss is not being considered as a negative impact within the community.

2.1.4 Community Character and Cohesion

Regulatory Setting

The National Environmental Policy Act of 1969 as amended established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings [42 U.S.C. 4331(b)(2)]. The Federal Highway Administration in its implementation of the National Environmental Policy Act [23 U.S.C. 109(h)] directs that final decisions regarding projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion and the availability of public facilities and services.

Under the California Environmental Quality Act, an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

Affected Environment

Salinas is an urban community within an agricultural setting. Located 32 kilometers (20 miles) inland from Monterey Bay, Salinas serves as the county seat of Monterey County and as the industrial and agricultural hub of the Salinas Valley. The highly productive agricultural lands surrounding Salinas contribute to the area's economic vitality.

Agricultural crops and the life and work of Nobel/Pulitzer Prize-winning novelist John Steinbeck are major features in Salinas today. The community offers many attractions including the National Steinbeck Center, Steinbeck House, California International Airshow, California Rodeo, antique fairs, and community festivals. With its rich heritage of ethnic and cultural diversity, Salinas has retained its western town image as well as its status as the dominant urban center in Monterey County.

Community Impacts

A Draft Relocation Report for the Airport Boulevard interchange reconstruction project was completed on June 9, 2004. The build alternative (7) was studied and the Draft Relocation Report identified seven business displacements for Alternative 7. No residential displacements were identified for the build alternative.

Below are preliminary estimates of takes and are subject to change once survey information is obtained and detailed design work begins.

Alternative 7

9 - Sliver Takes **14** - Partial Takes **7** - Total Takes

Examples of Takes:

- A sliver take is a portion of a drive-way, sidewalk or an easement.
- A partial take is a small portion of land, a section of a parking lot or a portion of a structure.
- A total take is the taking of an entire parcel, structure and/or displaces businesses.

According to data from the Monterey County Office of the Assessor and Office of the Auditor, the loss of revenue from property acquired for the highway project is estimated at less than 0.1 percent of the total property taxes received by Monterey County for the fiscal year 2003-2004. Usually, the potential reduction in tax revenue is considered a temporary effect while businesses relocate following acquisition of their property for the highway project. This loss is anticipated to be temporary because the businesses would most likely relocate within the same general area.

Relocations

Regulatory Setting

The Caltrans Relocation Assistance Program 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 Part 24. The purpose of the Relocation Assistance Program is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons would not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole (see Appendix D for a summary of the Relocation Assistance Program).

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 U.S.C. 2000d, et seq.). See Appendix F for a copy of Caltrans' Title VI policy statement.

Affected Environment

The project does not require residential relocation. The relocations for each build alternative involve only business properties. The properties are generally located at the Terven Avenue and Airport Boulevard intersection on De La Torre. The primary relocation area is the portion of the City of Salinas zoned for and consistent with the existing use of properties to be relocated. This area of the City of Salinas is zoned "General Industrial." The purpose of this zone is to:

Provide appropriately located areas consistent with the general plan for a broad range of manufacturing and services uses; strengthen the city's economic base, and provide employment opportunities close to home for residents of the city and surrounding communities; minimize the impact of industrial uses on adjacent residential and commercial districts.

Additionally, this zoned area is intended to: provide for the full range of manufacturing, industrial processing, general service and distribution uses deemed suitable for location in Salinas; and to protect Salinas' general industrial areas from competition for space from unrelated commercial uses that could more appropriately be located elsewhere in the city.

Impacts

Various non-residential uses, such as businesses and agricultural operations, would be displaced by the proposed project. Displaced businesses represent regional, national and international operating enterprises that have been established in the area for approximately 20 years. All of the displaced businesses provide services to the existing

companies in the area. Over a third of the displaced businesses provide warehouse space for other commercial and retail firms in the area. Approximately 20 percent of the displaced businesses directly rely on the truck traffic associated with the commercial ventures in the Airport Boulevard project area. All businesses benefit from their current proximity to Airport Boulevard and State Route 101.

Due to the nature of their operations, these businesses are limited to relocation in commercially and industrial zoned areas. Relocated businesses would be required to obtain building permits from the City of Salinas. Some of these businesses have expressed concern about their ability to obtain City of Salinas building permits on what they view as a restrictive development environment. If commercial land is available, the displaced businesses would benefit by staying in the immediate vicinity.

Avoidance, Minimization and/or Mitigation Measures

Throughout the design process, many alternatives were considered. The viable build alternative (7) that remains is the least invasive overall and were designed to avoid major impacts to businesses to the maximum extent practicable.

The Relocation Impact Statement found that adequate relocation resources exist for all displacees. At the time of acquisition, when relocation would become necessary, all activities would be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 as amended. Relocation resources would be available to all individuals being relocated without discrimination.

Businesses may be eligible for limited reimbursement of re-establishment expenses that include cost of licenses, fees and permits when not covered as a moving expense.

2.1.5 Traffic and Transportation and Bicycle Facilities

Regulatory Setting

The Federal Highway Administration 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 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.

Caltrans and the Federal Highway Administration are committed to carrying out the 1990 Americans with Disabilities Act by building transportation facilities that provide equal access for all persons. The same degree of convenience, accessibility, and safety available to the general public will be provided to persons with disabilities.

Affected Environment

State Route 101, a major and historic thoroughfare through the Central Coast areas of California, is the main inter-city connection for numerous coastal and inland cities between Los Angeles and San Francisco. The route extends for 433 kilometers (269 miles) through four counties in Caltrans District 5: Santa Barbara, San Luis Obispo, Monterey and San Benito. State Route 101 accommodates a high volume of interregional traffic, including commercial and agricultural trucking, tourist, and business traffic. The route also carries heavy regional business, recreational and commuter traffic, and serves as a connection for daily intra-urban traffic. The traffic volume along the route is expected to increase along with the expected population and commercial growth, which is based in part on proposed industrial and commercial development for the City of Salinas. Growth is slated for the southern portion of the city, with Airport Boulevard providing the main access to State Route 101 for most of these new properties. This projected development combined with the projected population growth is expected to tax the existing interchange. Therefore, the City of Salinas and Monterey County have placed a high priority on improving the interchange.

Through Salinas, State Route 101 is a four-lane freeway with access control. The design speed on State Route 101 is 110 kilometers per hour (68 miles per hour). At the interchange, the design speed on Airport Boulevard is 75 kilometers per hour (46 miles per hour). On State Route 101 in 2002, the project area's annual average daily traffic count was 39,300 vehicles. Goods movement at the Airport Boulevard interchange was also substantial, with mainline truck traffic comprising approximately 32% of the annual average daily traffic count at that location. Of these trucks, 58% were trucks with five or more axles. During peak hours, existing freeway traffic backs up on exit ramps, resulting in vehicles backing onto the mainline freeway.

Table 2.5 Current and Projected Traffic for State Route 101 (Project Area)

Projected Traffic	2000	2004	2008	2018	2028
Average Daily Traffic Count	53,600	54,000	55,700	59,900	64,150
Design Hourly Volume	5,360	5,380	5,510	5,910	6,390

Source: Draft Project Report- Airport Boulevard 2005

Table 2.5 shows average daily traffic volumes. These totals were generated from traffic counts taken during the harvest season and may reflect volumes that are slightly higher than volumes generated from counts taken at other times of the year. The traffic counts were intentionally done during the harvest season to generate the worst-case scenario for operating conditions for these two interchanges. See Tables 1.1 and 1.2 in Chapter 1 for accident data.

Level of Service

Transportation engineers and planners commonly use a grading system called level of service (also referred to as LOS) to measure and describe the operational status of a local roadway system. Level of service is a description of a roadway’s operation, ranging from A (indicating free-flow traffic conditions with little or no delay) to F (representing over-saturated conditions where traffic flows exceed design capacity, resulting in long lines and delays). According to the *City of Salinas General Plan* (September 2002), the current policy used by the City of Salinas is for all intersections to maintain a level of service D or better. Because of the nature of the project location, both the highway (State Route 101 mainline) and the Airport Boulevard intersections were analyzed for level of service.

State Route 101 (Mainline) Level of Service

Table 2.6 shows the level of service calculation for State Route 101 through 2028 if no project is constructed.

Table 2.6 Level of Service for Mainline State Route 101

Location on Mainline State Route 101	Existing Level of Service (2004)	Expected Level of Service (2008)	Expected Level of Service (2028)
Northbound 101, South of Airport Boulevard	B	B	C
Northbound 101 between Airport Boulevard and Fairview Avenue	B	B	D
Northbound 101, North of Sanborn Road	C	C	E
Southbound 101, North of Sanborn Road	C	C	E
Southbound 101 between Sanborn Road and Airport Boulevard	C	C	E
Southbound 101, South of Airport Boulevard	B	B	C

Airport Boulevard Level of Service

The level of service of Airport Boulevard for both the existing roadway and the proposed reconstructed roadway was calculated for the 20-year design period: 2008, 2018 and 2028, as shown in Table 2.7.

Table 2.7 Level of Service for Airport Boulevard

Year	Traffic Volume (vehicles per hour per lane)	No-Build Alternative Level of Service (2008)	Alternative 7 Level of Service (2028)
2008	1,150	F	C
2018	1,329	F	C
2028	1,537	F	D

State Route 101 Weave⁶ Area Level of Service

The level of service for the mainline State Route 101 weave (lane-changing) areas within the limits of the project was calculated for the 20-year design period: 2008 and 2028, as shown in Table 2.8.

⁶ Weaving: The crossing of two or more traffic streams traveling in the same direction along a significant length of highway, without the aid of traffic control devices (except for guide signs).

Table 2.8 Level of Service for State Route 101 Weave Areas

Location Along State Route 101	No-Build Alternative LOS (2008)	Alternative 7 Proposed LOS (2028)
Northbound 101 between Airport Boulevard and Fairview Avenue	B	C
Southbound 101 between Sanborn Road and Airport Boulevard	C	D/E

Airport Boulevard Intersections Level of Service

At intersections with traffic signals, level of service is based on the average delay, measured in seconds per vehicle. Peak hour traffic volumes, lane configurations, and signal timing plans are considered in the level of service calculations. Table 2.9 shows the thresholds for level of service at intersections.

Table 2.9 Intersection Level of Service Thresholds

Level of Service	Intersection with Traffic Signals Control Delay (in seconds per vehicle)	Intersection Without Traffic Signals Control Delay (in seconds per vehicle)	General Description
A	0 – 10.0	0 – 10.0	Little to no congestion or delays.
B	10.1 – 20.0	10.1 – 15.0	Limited congestion. Short delays.
C	20.1 – 35.0	15.1 – 25.0	Some congestion with average delays.
D	35.1 – 55.0	25.1 – 35.0	Significant congestion and delays.
E	55.1 – 80.0	35.1 – 50.0	Severe congestion and delays.
F	> 80.0	> 50.0	Total breakdown with extreme delays.

Existing intersection conditions were evaluated based on lane configurations and traffic volumes. In addition, signal timings (for intersections with traffic signals) truck percentages, and pedestrians were included in the level of service analysis. A free right turn lane from eastbound Airport Boulevard to southbound Moffett Street will be provided as part of this project. This free right turn movement is being constructed to allow separation of Airport Boulevard through traffic from vehicles turning right onto

Moffett Street. Currently, through vehicles on Airport Boulevard must slow down to allow for vehicles turning southbound onto Moffett Street. This right turn, will alleviate this problem and help improve the operation of the Airport Boulevard / Moffett Street intersection. The Moffett Street intersection level of service is projected to remain at level of service F in the AM and PM peak hours (Table 2.10). This is due to the alignment of the road lying directly in the flight path of the Salinas Airport. Therefore it is beyond the scope of this project and must be addressed by the city of Salinas.

The analysis identified two factors for the difference between the calculated and observed levels of service:

- Vehicles stacking up were not reflected in the analysis.
- Heavy vehicles did not affect traffic operations to the degree observed in the field.

These two factors were not adequately characterized by the methodology.

Regarding vehicles stacking up, the methodology does not include parameters to accurately reflect the effects of vehicles backing up or turn lane overflow. For heavy vehicle operations, the methodology does allow heavy vehicles to be introduced into the level of service calculations, but this methodology assumes that each heavy vehicle is equal to two passenger cars. Under normal circumstances, two passenger cars equaling one heavy vehicle is reasonable; however, in the project study area where the majority of heavy vehicles consist of fully-loaded 65-foot semi-truck trailers, each heavy vehicle is closer to three passenger cars in its effect on traffic operations.

Table 2.10 Intersection Level of Service in 2028

Airport Boulevard at	Existing Control	AM Peak Hour			PM Peak Hour		
		2028 LOS with No-Build	2028 LOS with Proposed Project	Peak Hour Warrant Met?	2028 LOS with No-Build	2028 LOS with Proposed Project	Peak Hour Warrant Met?
Terven Avenue	Signals	F	C	Yes	F	C	Yes
Moffett Street	Stop sign	F	C	Yes	F	F	Yes
De La Torre Avenue	Signals	F	B	Yes	F	C	Yes

The existing level of service at the two intersections in Table 2.10 is currently operating at level of service F in both the AM and PM peak hours. If the proposed project were constructed, the level of service would be improved to an acceptable level of service for this area.

Bike Routes and Trails

The City of Salinas has a number of existing and planned Class 1, Class 2, and Class 3 bicycle trails. The existing bicycle network consists of more than 88.5 kilometers (55 miles) of Class 1, Class 2, and Class 3 bicycle trails. Table 2.11 lists the existing and proposed bicycle network within the study area.

The Caltrans Highway Design Manual describes Class 1, 2 and 3 bike paths, as follows:

- Class 1-Bike Path: Facility with exclusive right-of-way, with cross flows by motorists minimized. Section 890.4 of Streets and Highways Code describes Class 1 bikeways as serving “the exclusive use of bicycles and pedestrians.”
- Class 2-Bike Path: Facility for preferential use by bicycles is established within the paved area of highways. Bike lane stripes are intended to promote an orderly flow of traffic, by establishing specific lines between areas reserved for bicycles and lanes to be occupied by motor vehicles. This effect is supported by bike lane signs and pavement markings.
- Class 3-Bike Path: Facility for a shared bike route that does not require pavement markings. This practice is particularly applicable on rural highways, and on major arterials in urban areas where there is no vehicle parking.

Table 2.11 Existing and Proposed Bicycle Network

Existing or Proposed?	Class 1 Bike Path	Class 2 Bike Lane	Class 3 Bike Route
Existing	None	Airport Boulevard and Moffett Street to Skyway Boulevard. State Route 68 and Work Street to Alisal Street.	Terven Avenue and Sanborn Road to State Route 68
Proposed	Eden Street between Hansen Street and Airport Boulevard	Hansen Street and Harkins Road to Abbott Street. Terven Avenue between Airport Boulevard and Sanborn Road.	Moffett Street Schilling Place and Eden Street

Source: City of Salinas Bikeways Plan 2002

Impacts

All efforts will be made to avoid disruption to the flow of bicycle and pedestrian movements. However, there may be short-term impacts to the existing bicycle lanes during construction.

The Airport Boulevard interchange project is consistent with Caltrans Transportation Concept Report for State Route 101 within the project limits, which recommends a six-lane freeway for this stretch of road.

Avoidance, Minimization and Compensation Measures

Traffic Management Plan

Public awareness is necessary for maximum traffic safety and service during construction of the project. The media would be used to disseminate project information to the public. The Caltrans Public Affairs Office would be responsible for providing the media with project information from the resident engineer through the District 6 Central Valley Transportation Management Center. Newspapers, radio and television news organizations would be informed of delays, closures, alternate routes, and other relevant information during construction of the project. Portable highway advisory radios and portable changeable message signs could also be used along the route.

In addition, the Construction Zone Enhancement Enforcement Program may be used at certain times during the proposed project. Under this program, the California Highway Patrol maintains a constant presence in construction zones to serve as a reminder to motorists to slow down and use caution when traveling through these work areas.

The District 6 Central Valley Transportation Management Center, along with District 5 Maintenance and Construction, would monitor the project daily to ensure the safe and efficient movement of traffic.

Staged Construction

Alternative 7

During reconstruction of the interchange, staging would be used where required. The new overcrossing would be built on a new alignment so that the existing structure could be used by traffic during construction. Once the new structure were completed, the traffic would then be detoured onto it while the existing structure were removed and the ramps reconfigured to match up with the new overcrossing. At all times throughout the

construction of the project, businesses would be provided with as much accessibility as possible so disruption to business activities would be kept to a minimum.

2.1.6 Visual/Aesthetics

Regulatory Setting

The National Environmental Policy Act of 1969 as amended establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* and culturally pleasing surroundings [42 U.S.C. 4331(b)(2)]. To further emphasize this point, the Federal Highway Administration in its implementation of the act [23 U.S.C. 109(h)] directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

Likewise, the California Environmental Quality Act 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 Section 21001(b)].

Affected Environment

The proposed build alternative would have some effect on the character and visual scale of the State Route 101 corridor through Salinas and along local roadways. Community sensitivity to the visual quality of the area is reflected in the City of Salinas General Plan Community Design Element and Community Design Plan, which encourages the “preservation and enhancement of view corridors from Highway 101.”

Views throughout the project area, both to and from State Route 101, are of moderate visual quality. The main sights through the project area and along the corridor are the mature highway landscape and the skyline vistas of the surrounding mountains. Factors that detract from the view are the lanes of State Route 101, local roads and associated traffic, scattered commercial and industrial development and the visual clutter of overhead utilities and signs.

A Visual Quality Evaluation was conducted to assess the magnitude of the potential visual changes caused by the proposed project. The evaluation compared the visual quality of both the existing and proposed conditions for each project alternative under consideration. Separate evaluations were conducted from each of the nine Observer Viewpoints. A numerical rating between 1 and 7 was assigned for the visual quality of

existing conditions from each viewpoint, with 1 having the lowest value and 7 the highest. Photo simulations were then prepared illustrating the likely appearance of each view after project construction. After a combination of field reviews and photo simulation study, numerical ratings were then assigned to each of these “proposed” views. The numerical difference, if any, between the existing and proposed conditions quantified the degree of change that could occur as a result of the proposed project. The numerical rating is based on three criteria: vividness, intactness, and unity, described as follows:

Vividness is the visual power or memorability of the landscape components as they combine in a striking and distinctive visual pattern.

- Intactness is the visual integrity of the landscape and its freedom from non-typical encroaching elements. If all of the various elements of a landscape seem to “belong” together, there is a high level of intactness.
- Unity is the visual harmony of the landscape considered as a whole. Unity represents the degree to which potentially diverse visual elements maintain a coherent visual pattern.

The Visual Quality Evaluation determined which specific criteria contributed most to the existing quality of each view and if change would occur to that criteria as a result of the project.

Impacts

The most noticeable visual change would be in the overall scale of the Airport Boulevard corridor and its immediate surroundings. This straighter alignment, combined with the proposed widening of Airport Boulevard and reconstructed, larger intersections at Terven and De La Torre Avenues would increase the visual presence of Airport Boulevard. Alternative 7 would result in a larger, more unified and open-appearing roadway. In addition, the removal of existing commercial buildings on the west side of the highway and longer on- and off-ramps in the southwest quadrant of the State Route 101/Airport Boulevard interchange would enlarge the spatial characteristic of the roadway setting. As seen from State Route 101, the new interchange would be greater in scale. The wider, longer structure would be more dominant visually than the existing structure. The changes Alternative 7 proposes for the east side of the highway would affect the existing character along Airport Boulevard and De La Torre Avenue. The existing

retail/commercial area would absorb the proposed improvements with little effect on the existing character. The existing agricultural fields to the south, however, would undergo a fundamental visual conversion from open space to freeway on- and off-ramps.

Short-term adverse impacts would result from loss of vegetation and screening after construction. As the proposed landscaping matures, combined with the recommended mitigation measures, Alternative 7 would result in a moderate visual enhancement to State Route 101 and the local area. With new replacement planting included as part of the project, much of the urbanizing effect of the alternatives would be minimized.

Avoidance, Minimization and Mitigation Measures

1. Preserve existing mature trees to the greatest extent possible:
 - In areas of proposed grading, design the landform to preserve trees if possible and if aesthetically acceptable.
 - Establish Environmental Sensitive Areas for trees determined to be saved.
2. Include replacement planting to the greatest extent possible, including but not limited to the following:
 - Provide planting at the bridge abutments at Airport Boulevard to soften the presence of the structure.
 - Replant areas around the Airport Boulevard on- and off-ramps to re-establish a vegetated parkway character. Planting should include a mix of trees, shrubs, vines and groundcovers as appropriate.
 - Replace and establish existing street trees removed from city roadways.
 - Replace screen planting on the west side of the highway, adjacent to the Airport Boulevard southbound off-ramp, where existing screen planting has been removed, to obscure views of the industrial yards in the rear.
3. Remove structural section and base material of ramps identified for closure and replace with topsoil suitable for planting.
4. Incorporate aesthetic treatments and design into the new bridge structure at Airport Boulevard.

5. Incorporate aesthetic treatment and planting opportunities into all proposed retaining walls.

Cumulative Impacts

The proposed build alternative would have some effect on the character and visual scale of the State Route 101 corridor through Salinas and along some local roadways. Within the region, several other highway improvement projects have been implemented or are proposed, ranging from median barrier installation to highway widening and major interchange construction. Construction of the Airport Boulevard project would contribute to an incremental change in visual character along the route. Generally, this change would result in a larger, more urbanized highway.

With the implementation of landscape and aesthetic mitigation measures and the resulting potentially beneficial effects of the build alternative, the project would not contribute to an adverse cumulative effect along State Route 101 or within the surrounding community.

2.2 Physical Environment

2.2.1 Hydrology and Floodplain

Regulatory Setting

Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration requirements for compliance are outlined in 23 CFR 650 Subpart A. To comply, the following must be analyzed:

- Practicability of alternatives to any longitudinal encroachments
- Risks of the action
- Impacts on natural and beneficial floodplain values
- Support of incompatible floodplain development
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values affected by the project.

The 100-year floodplain is defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the 100-year floodplain.”

Affected Environment

The City of Salinas lies in the northern portion of the Salinas Valley, on a flat alluvial plain between the Gabilan and Santa Lucia Mountain Ranges. The elevation at City Hall is 16.76 meters (55 feet). However, elevations within the city vary from 12.2 meters (40 feet) to 36.58 meters (120 feet)

Flood Insurance Rate Maps were reviewed, and a field review was performed for the proposed project. Map # 060205 0005 D dated November 4, 1981 designated the area affected by the project as either Zone B or Zone A11. Zone B is defined as *“Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one foot, or where the contributing drainage area is less than one square mile; or areas protected by levees from base flood.”* Zone A11 is defined as *“Areas of 100-year flood; base flood elevations and flood hazard factors are determined.”*

According to the field review, the only waterway that affects the floodplain in the project area is the Reclamation Ditch, which is a manmade channel that parallels the east side of the highway within the project limits. The ditch passes through a culvert at Airport Boulevard, where the flow produced by a 100-year storm backs up before it crosses the culvert. In a 100-year flood, the Reclamation Ditch overflows its left bank and floods the area between the ditch and State Route 101. The ditch also crosses Airport Boulevard and meanders along the highway between Airport Boulevard and Sanborn Road, then crosses under State Route 101 at the Sanborn northbound off-ramp to the west side and continues northwesterly along the highway.

Impacts

The construction of the interchange as proposed would affect both the existing floodplain and the Reclamation Ditch because the ditch would be moved approximately 6.0 meters (20 feet) to the east. However, under the proposed project, the ditch would be enlarged to increase the capacity to convey the flood produced by a 100-year storm. By changing the ditch, the interchange can be built as proposed, the ditch would be capable of conveying a 100-year flood, and approximately 8.1 hectares (20 acres) of land would be removed

from the 100-year flood zone. The project would not constitute a significant floodplain encroachment as defined in Title 23 Code of Federal Regulations, Section 650.105 (q).

Avoidance, Minimization and Compensation Measures

The project would change the Reclamation Ditch by widening and realigning the channel and by replacing an existing circular culvert with a 160-meter-long (525-foot-long) reinforced box culvert. By changing the ditch, the project should not significantly affect this area in terms of the hydraulics (flow, volume, velocity), and it would not significantly change the existing drainage patterns in the area.

Cumulative Impacts

Changing the ditch should improve its ability to carry more water than the current design. Therefore, the project would have no cumulative impact in terms of the hydraulics, and it would not significantly change the existing drainage patterns in the area.

2.2.2 Water Quality and Storm Water Runoff

Regulatory Setting

The main federal law regulating water quality is the Clean Water Act. Section 401 of the act requires a water quality certification from the State Board or Regional Board when a project: 1) requires a federal license or permit (a Section 404 permit is the most common federal permit for Caltrans projects), and 2) will result in a discharge to waters of the United States.

Section 402 of the act establishes the National Pollutant Discharge Elimination System permit system for the discharge of any pollutant (except dredge or fill material) into waters of the United States. To ensure compliance with Clean Water Act Section 402, the State Water Resources Control Board has issued a National Pollutant Discharge Elimination System Statewide Storm Water Permit to regulate storm water discharges from Caltrans facilities. The permit regulates storm water discharges from the Caltrans right-of-way both during and after construction, as well as from existing facilities and operations.

In addition, the State Water Resources Control Board has issued a construction general permit for most construction activities covering greater than 0.40 hectare (1 acre) that are part of a Common Plan of Development exceeding 2.02 hectare (5 acres) or that have the potential to significantly impair water quality. Some construction activities may require an individual construction permit. All Caltrans projects that are subject to the

construction general permit require a Storm Water Pollution Prevention Plan, while all other projects require a Water Pollution Control Program. Subject to Caltrans' review and approval, the contractor prepares both the Storm Water Pollution Prevention Plan and the Water Pollution Control Program. The plan and program identify construction activities that may cause pollutants in storm water and describe the measures to control the pollutants. Since neither the Storm Water Pollution Prevention Plan or the Water Pollution Control Program are prepared at this time, the following discussion focuses on anticipated pollution controls.

Additional laws regulating water quality include the Porter-Cologne Water Quality Act, Safe Drinking Water Act, and Pollution Prevention Act. State water quality laws are codified in the California Water Code.

Affected Environment

The quality of water in an area depends upon several factors, including topography, geology, soils, groundwater, land use, climate and precipitation. Following is a brief description of these general characteristics in the project area and surroundings.

Regional Geology

The project area is within the Coastal Basin Aquifers in the Gabilan Mountains and the Coast Ranges. The Salinas Valley is the largest of California's Coastal Basins. Deposits in the basin are semiconsolidated and unconsolidated deposits and are bound by consolidated rocks. These types of rocks underlie the Salinas Valley. They have minimal permeability and are covered by marine deposits. These deposits compose a productive aquifer consisting of the Paso Robles Formation and alluvium, which includes alluvial fan, river and wind-blown sand deposits.

Surface Water

The project area is located in the Salinas Hydrologic Unit, which drains to the Pacific Ocean through Monterey Bay. The Bolsa Nueva Hydrologic Unit lies in the northern area and drains to the Pacific Ocean through Elkhorn Slough. The Estrella River Hydrologic Unit lies in the southern area and is a tributary to the Salinas River.

The Salinas River Watershed covers approximately 11,914 square kilometers (4,600 square miles) and lies within San Luis Obispo and Monterey counties. The Salinas River, which originates in San Luis Obispo County, flows northwest into Monterey County and

continues throughout the entire length of the Salinas Valley. The watershed's main tributaries are the Arroyo Seco, Nacimiento, San Antonio, and Estrella rivers.

There are no major water bodies within the project limits. A drainage ditch flows through the project area. This un-named channel appears to be a tributary of Alisal Slough.

Groundwater

The two main groundwater basins within the Salinas Watershed are the Salinas Valley Groundwater Basin and the Paso Robles Groundwater Basin.

Impacts

Any potential impacts to water quality would be eliminated or minimized to the maximum extent practicable by incorporating the appropriate Best Management Practices into the project.

Avoidance, Minimization and Compensation Measures

Because the total disturbed soil area is estimated to be greater than 0.40 hectare (1 acre), the contractor would be required to develop and implement a Storm Water Pollution Prevention Plan. The plan must evaluate the minimum required Best Management Practices identified in the Caltrans Storm Water Pollution Prevention Plan/Water Pollution Control Program Preparation Manual (March 2003). During the rainy season (October 15 to April 15), Best Management Practices must be implemented at all times to reduce or eliminate the potential for non-storm water discharge to occur off of Caltrans right-of-way, to a surface body of water, drainage course, or storm drainage system. The contractor would also identify, construct, implement, and maintain Best Management Practices in accordance with a time schedule identified in the Storm Water Pollution Prevention Plan to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the project site during construction. In addition, the General Construction permit requires a Sample and Analysis Plan for non-visible pollutants to be developed and implemented into the Storm Water Pollution Prevention Plan for the proposed project.

Following are project-specific concerns that should be addressed in the Storm Water Information handout and/or included in the resident engineer's file:

- Existing vegetation must be preserved to the maximum extent practicable. All vegetated areas that are to be protected during construction, must be delineated on the

project plans and included in the resident engineer's file and the Storm Water Pollution Prevention Plan.

- All disturbed soil areas should be revegetated as soon as work in a specific area is completed.
- All storm drain inlets that would receive runoff from disturbed areas during construction must have inlet protection installed.
- Location of the excess material stockpiles should be identified in the Storm Water Pollution Prevention Plan. The stockpiles should be put in locations where they are protected from run-off and are located away from concentrated flows of storm water, drainage courses, and inlets.

Cumulative Impacts

Any potential impacts to water quality would be eliminated or minimized to the maximum extent practicable by incorporating the appropriate Best Management Practices into the project, therefore eliminating the potential for cumulative impacts.

2.2.3 Geology/Soils/Seismic/Topography

Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects “outstanding examples of major geological features.” Topographic and geologic features are also protected under the California Environmental Quality Act.

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Caltrans' Geotechnical Design-North is responsible for assessing the seismic hazard for Caltrans projects in the project area. The current policy is to use the anticipated Maximum Credible Earthquake from young faults in and near California. The Maximum Credible Earthquake is defined as the largest earthquake that can be expected to occur on a fault over a particular period of time.

Affected Environment

The project area lies in the Coast Ranges at the northern end of the Salinas Valley. The terrain is relatively flat. Adjacent land use is a mix of agricultural, residential, and industrial.

The project area lies within three geologic units: Quaternary basin deposits, alluvial fan deposits of Chualar, and terrace deposits of Antioch. The basin deposits typically consist of clay and contain a great deal of organic material. Locally, the unit contains thin layers of silt and silty sand. The thickness of the unit is highly variable; it may be as much as 30 meters (98 feet) thick underlying some sloughs. The unit is highly susceptible to flooding and has a moderate to high susceptibility to liquefaction except where the water table is more than 10 meters (33 feet) below the surface. Highly expansive soils develop on these deposits.

The Chualar alluvial fan deposits are sand, silt and gravel deposited as a series of alluvial fans flanking the Salinas Valley. The depth to the groundwater table is generally greater than 10 meters (33 feet) below the ground surface due to ground water pumping for agricultural use. The unit has a low susceptibility to flooding and a low susceptibility to liquefaction.

The Antioch terrace deposits consist of sand, silt and clay with gravel. The soils are moderately well drained. Locally, the thickness of the unit exceeds 30 meters (100 feet). Some expansive soils may be present. The unit has a low susceptibility to flooding and liquefaction.

Test borings from the site of the existing Airport Boulevard overcrossing revealed approximately 3 meters (10 feet) of loose silt, loose silty sand, and soft sandy clay overlying medium-dense to very dense silty sand, sand, and gravel to a depth of approximately 12 meters (40 feet). Groundwater was not encountered during the subsurface exploration for the bridge, nor were any seeps or springs evident during a field review of the project area.

Geologic Hazards—Liquefaction

Liquefaction is a process in which sediments below the water table temporarily lose strength during an earthquake and behave as a viscous liquid (become jelly-like) rather than a solid. Liquefaction occurs in certain geologic and hydrologic environments, specifically areas of recently deposited sands and silts with high groundwater levels.

Impacts

Liquefaction can result when soil compacts, thereby causing the ground to settle (ground settlement can also be the result of small to moderate lateral spreading due to liquefaction). Uneven ground settlement can cause partial or total collapse of structures. Liquefaction can also cause a reduction in the bearing capacity of the soils beneath structures, resulting in settlement or tipping of the structures.

Liquefaction potential in the project area is expected to be low to moderate. For liquefaction to occur, three factors in combination are necessary: loose granular soils, saturated soil conditions, and strong ground shaking. Strong ground shaking and the presence of loose granular soils are likely within the limits of the proposed improvements. The depth to groundwater, however, is uncertain. Subsurface investigations would be conducted once the design features have been determined. Liquefaction potential would be assessed at that time, and appropriate minimization measures would be specified.

Avoidance, Minimization and Compensation Measures

Three measures minimize potential liquefaction hazards:

- Strengthen structures to resist the predicted ground movements if said movements are expected to be small.
- Select appropriate foundation types so that the ground movements are not transmitted to the structure. An example of an appropriate structure foundation type for an area where there is a high potential for liquefaction would be a pile foundation that extends below the zone of liquefiable soil.
- Stabilize the soil to eliminate the potential for liquefaction or control its effects. In some cases, liquefiable soils can be excavated and replaced. Otherwise, liquefiable soils can often be stabilized in place by grouting, densification, or dewatering. Lateral spread zones can be buttressed to resist movement.

Geologic Hazards—Fault Rupture

Fault rupture is a seismic hazard that affects structures located above an active fault. The hazard from fault rupture is the displacement of the ground surface along the fault during an earthquake. Typically, this movement takes place rapidly, while the earthquake is

occurring. However, movement can occur slowly over many years in a process known as creep.

Impacts

Most structures and underground utilities cannot tolerate the surface displacements of several inches to several feet that may occur with fault rupture or creep.

Avoidance, Minimization and Compensation Measures

It is not practical from an economic and engineering point of view to design a structure to withstand the stress of surface fault rupture. Since most surface faulting is confined to a relatively narrow zone of a few feet to a few tens of feet, avoidance is the most appropriate method.

No known active or potentially active faults aim toward or cross the highway alignment within the proposed project limits. Therefore, there is no potential for surface fault rupture to occur, and no mitigation efforts are necessary.

Geologic Hazards - Ground Shaking

Strong ground shaking is the seismic hazard most likely to affect the project area. The severity of ground shaking depends on several variables such as earthquake magnitude, the distance to the epicenter of the earthquake, local geology, thickness and seismic wave-propagation properties of unconsolidated materials, groundwater conditions, and topographic setting. Some areas may experience amplified ground shaking due to their geologic and topographic characteristics, such as soft soils, basin geometry, and shallow depth to groundwater.

Impacts

The most common type of damage from ground shaking is structural damage, ranging from minor cosmetic cracking to total collapse of the structure.

Avoidance, Minimization and Compensation Measures

Incorporating design features that would enable the structures to withstand the forces generated by ground motion can mitigate the hazard to structures from strong ground shaking. Highway cut slopes and embankments would be designed for stability under seismic loading based on the Moment Magnitude of Maximum Credible Earthquake.

Erosion

Erosion is defined as the wearing away of the land surface by flowing water, waves, or wind.

Impacts

The impacts of erosion are the loss of soils and degradation of water and air quality. The potential for erosion in the project area is uncertain at this time. Most soil needed for constructing embankments would have to be brought in from elsewhere, so the characteristics of the soil would be governed by the source of the material.

Avoidance, Minimization and Compensation

Refer to section 2.2.2, Water Quality/Storm Water Runoff, for erosion avoidance and minimization measures.

Expansive Soils

Expansive soils are soils that experience changes in volume due to moisture content. Soils swell as they absorb water and shrink as they dry out. Clay soils are generally expansive; the magnitude of volume change due to change in moisture content varies with the chemistry of the soil. Expansive soils are likely to be encountered in the project area.

Impacts

Impacts can be dramatic if expansive soils supporting structures are allowed to become too wet or too dry. Pavements will heave and crack when the moisture content of the basement soils exceeds the original moisture condition when the pavement is placed.

Structures on spread footings behave differently. The concentrated weight of a structure on a footing will often prevent upward expansion of the soil below, but outward expansion will continue, resulting in the loss of soil from beneath the footing. As the soil dries the footing will settle. The process is cumulative; additional settlement will occur during subsequent wetting and drying cycles.

Avoidance, Minimization and Compensation Measures

Avoidance and minimization efforts would be incorporated to reduce the effects of expansive soils, this may include removing the unsuitable soils, controlling the moisture content of the soils, and, in the case of structures, using deep foundations that penetrate

below the expansive soils. Minimization measures would be specified after a subsurface investigation determines the existence and extent of problem soils.

2.2.4 Hazardous Waste/Materials

Regulatory Setting

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use. Two main federal laws regulate hazardous wastes/materials:

- Resource Conservation and Recovery Act of 1976, which provides for “cradle to grave” regulation of hazardous wastes.
- Comprehensive Environmental Response, Compensation and Liability Act of 1980, often referred to as “Superfund,” whose purpose is to clean up contaminated sites so that public health and welfare are not compromised.

Other federal laws include:

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

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

In California, hazardous waste is regulated mainly under the authority of the federal Resource Conservation and Recovery Act of 1976 and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

Affected Environment

The project site consists of the State Route 101 corridor through Salinas in Monterey County, from approximately 300 meters (984 feet) north of South Sanborn Road to approximately 500 meters (1,640 feet) south of Airport Boulevard. Within the project boundaries, State Route 101 is a four-lane highway with existing structures.

A preliminary research study and a site investigation were performed to estimate the potential for existing environmental impacts to the site from the presence of hazardous materials/wastes on or adjacent to the proposed project area. The guidelines used for the definition of hazardous materials/waste are presented in the California Code of Regulations Title 22.

Impacts

The Site Investigation Report evaluated five parcels within the proposed project area:

- 690 Terven Avenue (Shaw Beacon Gas Station)
- 1194 Terven Avenue (PBI Furniture Warehouse)
- 1222 De La Torre Street (Unocal Gas Station)
- Irrigation Ditch (Reclamation District No. 1665)
- 1506 Moffett Street (Verticare of Salinas underground storage tanks)

Of the 97 soil samples collected from the five parcels, only one sample exceeded a Monterey County Division of Environmental Health Action Level. Sample B2-1.5 from the Beacon Gas Station parcel was obtained at a depth of 1.5 meters (5 feet) and reported 310 milligram/kilogram parts per million for total recoverable petroleum hydrocarbons. The Monterey County Division of Environmental Health Action Level for total recoverable petroleum hydrocarbons is 100 parts per million.

Avoidance, Minimization and Compensation Measures

A copy of the report will be provided to the Monterey County Division of Environmental Health for review. All contaminated soil encountered during future grading operations would be removed in accordance with Monterey County Division of Environmental Health requirements.

The parcels that have active underground storage tanks and full parcel acquisition is required, Caltrans would need to decommissioned the entire site under direction of the Monterey County Division of Environmental Health. Decommissioning includes removing the underground storage tanks, any above-ground storage tanks, product fuel lines and fuel pump islands. Soil and/or groundwater samples would be required at decommissioning to ensure that contamination has not occurred. This preliminary site investigation did not reveal contamination that would require special, health and safety, soil handling or disposal protocols. If no remediation is required by the Monterey County Division of Environmental Health, Caltrans would set aside approximately \$20,000 per tank to cover the potential costs of removal, and/or disposal. Minor soil contamination detected at shallow depths at the Shaw Beacon and Unocal Gas Stations should be removed in accordance with Monterey County Division of Environmental Health requirements during future grading operations.

2.2.5 Noise

Regulatory Setting

The National Environmental Policy Act of 1969 and the California Environmental Quality Act provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment.

For highway transportation projects with Federal Highway Administration involvement, the federal-Aid Highway Act of 1970 and the associated implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations contain noise abatement criteria that are used to determine when a noise impact would occur. The noise abatement criteria differ depending on the type of land use under analysis. For example, the noise abatement criteria for residences (67 dBA) is lower than the noise abatement criteria for commercial areas (72 dBA).

Affected Environment

The project is in an urban setting near the southern end of Salinas. The west side of the highway between Airport Boulevard and Sanborn Road (the next interchange to the north) is commercial. East of the highway is almost entirely residential with a few motels at the southeast corner of both the Sanborn Road and Airport Boulevard interchanges. There are no noise receptors within the proposed project area. Therefore, no noise abatement was considered.

Impacts

Short-term Construction Impacts

Construction would raise local noise levels for residents within 122 meters (400 feet) of the project.

Avoidance, Minimization and/or Noise Abatement

To minimize short-term noise impacts during construction, the following methods are recommended: early notification to inform residents of intended work periods, temporary sound barriers if complaints are received, noise information hotline (refer to Appendix B for more details on Avoidance, Minimization and/or Noise Abatement).

2.2.6 Air Quality

Regulatory Setting

The Clean Air Act as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards. Standards have been established for carbon monoxide (CO), oxides of nitrogen (NO_x), ozone (O₃) and particulate matter that is 10 microns in diameter or smaller (PM₁₀).

Under the 1990 Clean Air Act Amendments, the U.S. Department of Transportation cannot fund, authorize, or approve federal actions to support programs or projects that are not first found to conform to the Clean Air Act requirements. Conformity with the Clean Air Act takes place at two levels—the regional level and the project level. The proposed project must conform at both levels to be approved.

Regional level conformity is concerned with how well the region is meeting the standards set for the pollutants listed above. At the regional level, Regional Transportation Plans

are developed that include all of the transportation projects planned for a region over a period of years, usually 20. Based on the projects included in the Regional Transportation Plan, an air quality model is run to determine whether or not the implementation of those projects would result in a violation of the Clean Air Act. If no violations would occur, then the regional planning organization, such as Association of Monterey Bay Area Governments for Monterey County and the appropriate federal agencies, such as the Federal Highway Administration, make the determination that the Regional Transportation Plan is in conformity with the Clean Air Act. Otherwise, the projects in the Regional Transportation Plan must be modified until conformity is attained. If the design and scope of the proposed transportation project are the same as described in the Regional Transportation Plan, then the proposed project is deemed to be in conformity at the regional level.

Conformity at the project level is also required. If a region is meeting the standard for a given pollutant (carbon monoxide, oxides of nitrogen, ozone or particulate matter that is 10 microns in diameter or smaller [PM₁₀]), then the region is said to be in “attainment” for that pollutant. If the region is not meeting the standard, then it is designated a “non-attainment” area for that pollutant. Areas that were previously designated as non-attainment areas but have recently met the standard are called “maintenance” areas. If a project is located in a non-attainment or maintenance area for a given pollutant, then additional air quality analysis and reduction measures in regard to that pollutant is required. This is most frequently done for carbon monoxide and PM₁₀.

Affected Environment

The proposed project is in the North Central Air Basin. This area is strongly influenced by its proximity to the Pacific Ocean. Warm, dry summers and cool winters with occasional rainy periods characterize the Mediterranean climate of the project area. Maximum summer temperatures in the county average about 70 degrees Fahrenheit near the coast. Minimum winter temperatures in the county range from the low 30s near the coast to the low 20s inland. Airflow around the county plays an important role in the movement and dispersion of pollutants. The speed and direction of local winds are controlled by the location and strength of the Pacific high pressure system and other global weather patterns, topographical factors, and circulation patterns that result from temperature differences between the land and the sea.

Construction Emissions

Project construction would take 2.5 years, with construction slated for completion in March 2011. There would be a temporary increase in air emissions during the construction period. However, the Monterey Bay Unified Air Pollution Control District includes volatile organic compounds and nitrogen oxide emissions from construction projects in its emissions inventory, which is part of the district's Air Quality Management Plan. The district recommends PM₁₀ testing if a project emits direct emissions of greater than 37.2 kilograms (82 pounds) per day of PM₁₀. Direct emissions come from stationary and mobile sources onsite.

Generally, if less than 3.2 hectares (8 acres) per day are "normally" graded, or if less than 0.808 hectare (2 acres) is excavated, the project would not exceed the emission threshold. "Grading" means pushing and scraping; "excavation" is digging and scooping and creates about four times as much particulate matter as normal grading of the same area.

Disturbed Acreage

The primary source of dust on this project would be emissions from grading. The project is expected to have a total disturbed area of about 26 hectares (65 acres). This includes grading as well as excavation for structures and cut slopes. If each acre were graded four times, the total grading would be 105 hectares (260 acres) over the life of the project. If the grading were completed over three-quarters of the life of the project (six quarters),

17 hectares (43 acres) would be graded each quarter (66 days), or about 0.3 hectare (0.7 acre) per day.

The construction emission thresholds discussed above are listed in the 2000 CEQA Air Quality Guidelines, issued by the Monterey Bay Unified Air Pollution Control District, and were noted in a personal conversation with Janet Brennan of Monterey Bay Unified Air Pollution Control District in September 1992.

Impacts

Because no additional lanes are being added to the highway, there would be no difference in long-term air quality emissions with or without the project. In addition, projects that do not increase air pollutant emissions are consistent with the county's state air quality goals.

Construction Impacts

Emissions from both build alternatives are expected to be well within the Monterey Bay Unified Air Pollution Control District thresholds for PM₁₀. This assumes that average daily grading is about 0.3 hectare (0.7 acre), and that all soil areas disturbed by construction are watered daily. Because the nearest residents to the Airport Boulevard interchange are about 183 meters (600 feet) away, dust should not be a major concern during the construction.

Avoidance, Minimization and Compensation Measures

Because of the above grading issues, it is recommended that the project special provisions be amended to specifically prohibit grading of greater than 2.4 hectares (6 acres) per day, and to insist on strict adherence to Caltrans Standard Specifications requiring dust control. Use of these measures can reduce PM₁₀ emissions by up to 50%.

In addition, the following measures from the Monterey Bay Unified Air Pollution Control District California Environmental Quality Act Air Quality Guidelines, October 1995, shall be included in the resident engineer's instructions. Applicable measures from this list should be used at the resident engineer's discretion, when daily watering is insufficient to control visible dust emissions from the project. Also, the contractor will use California Air Resources Board-approved on-road diesel fuel in all diesel construction vehicles when the fuel is locally available.

- Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil and wind exposure.
- Prohibit all grading activities during periods of high wind (over 24.1 kilometer per hour [15 miles per hour]).
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
- Apply non-toxic binders (for example, latex acrylic copolymer) to exposed areas after cut and fill operations, and hydro-seed area.
- Haul trucks shall maintain at least 0.6 meter (2.0 feet) of freeboard.
- Cover all trucks that haul dirt, sand, or loose materials.
- Plant vegetative covers in disturbed areas as soon as possible.

- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Sweep streets if visible soil is carried out from the construction site.
- Post a publicly visible sign that specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Unified Air Pollution Control District shall be visible to ensure compliance with Rule 402 (Nuisance).
- Limit the area under construction at any one time.

2.3 Biological Environment

2.3.1 Natural Communities

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service and the California Department of Fish and Game are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with wildlife not listed or proposed for listing under the state or federal Endangered Species Act.

Federal laws and regulations pertaining to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act
- Federal Endangered Species Act

State laws and regulations pertaining to wildlife include the following:

- California Environmental Quality Act
- California Endangered Species Act
- Section 1602, 4150 and 4152 of the Fish and Game Code

Affected Environment

The proposed project area consists mainly of industrial and commercial areas. Within this environment are a Reclamation Ditch, row crops, landscaping, and ruderal areas that are dominated by non-native vegetation that is typically located next to structures, roads, highways and vacant lots.

The Reclamation Ditch runs through the eastern portion of the project. Three fields of non-native grassland are also in the project area. These fields have been subjected to a variety of disturbance, including disking and off-road vehicle use. (See Appendix H Environmental Mitigation Maps 1-4.)

At the eastern limits of the project between the ditch and the agricultural fields is a native Central Coast riparian scrub community. Two small areas of ruderal “wetlands” lie at the outlets of two culverts on the west side of State Route 101, south of Airport Boulevard. Further discussions of the Reclamation Ditch, Central Coast riparian scrub community, and wetlands are provided in section 2.3.2 Wetlands and Other Waters below.

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 Clean Water Act (33 U.S.C. 1344) is the main law regulating wetlands and waters. The Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. “Waters of the United States” 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 Clean Water Act, a three-parameter approach is used: the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

Section 404 of the Clean Water Act established a regulatory program that provides that no discharge of dredged or fill material can 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 Corps of Engineers with oversight by the Environmental Protection Agency.

The Executive Order for the Protection of Wetlands (Executive Order 11990) also regulates the activities of federal agencies with regard to wetlands. This executive order

states that a federal agency, such as the Federal Highway Administration, 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 Game and the Regional Water Quality Control Boards. In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission) may also be involved. 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 the California Department of Fish and Game before beginning construction. If the California Department of Fish and Game determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. The California Department of Fish and Game 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 U.S. Army Corps of Engineers may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the California Department of Fish and Game.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The control boards also issue water quality certifications in compliance with Section 401 of the Clean Water Act. See section 2.2.2 Water Quality for more information.

Affected Environment

Isolated Wetlands

The “wetlands” are fed mainly by runoff from the row crop irrigation. While these areas contain wetland plants (primarily bulrush [*Scirpus* sp.]), wetland hydrology, and likely have hydric soils, they are isolated from other waters of the United States. The U.S. Army Corps of Engineers no longer claims jurisdiction over isolated wetlands. These areas would return to upland (non-wetland) if the irrigation ceased, and therefore they are exempt from U.S. Army Corps of Engineers jurisdiction.

Central Coast Riparian Scrub Community

The riparian scrub community consists of a patch of willows at the east end of the project area. However, this is not a U.S. Army Corps of Engineers jurisdictional wetland, nor is it within the jurisdiction of the California Department of Fish and Game.

Reclamation Ditch

The water sources for the Reclamation Ditch are road runoff and irrigation water. Backhoes are used to periodically remove silt or sledge, and a spray program keeps the vegetation maintained.

Impacts

The build alternative would shift the Reclamation Ditch approximately 7 meters (22.9 feet) east of the existing alignment. In addition, the channel of the new ditch would be 1 meter (3.2 feet) wider.

Direct impacts anticipated from project construction include the placement of 0.17 hectare (0.47 acre) of fill into U.S. Army Corps of Engineers jurisdictional waters of the United States.

Avoidance, Minimization and/or Mitigation Measures

Direct impacts will be replaced at a 1.5:1 ratio to mitigate for the placement of fill into U.S. Army Corps of Engineers jurisdictional waters of the United States. Construction of the realigned Reclamation Ditch would create 0.29 hectare (0.72 acre) of jurisdictional waters of the United States, an estimated 0.10 hectare (0.25 acre) net gain of waters of the United States.

Cumulative Impacts

All impacts to the Reclamation Ditch would be fully mitigated. Therefore, there would be no cumulative impacts to the resource.

2.3.3 Plant Species

Regulatory Setting

The U.S. Fish and Wildlife Service and California Department of Fish and Game share 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

afforded 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 and/or the California Endangered Species Act.

This section discusses all the other special-status plant species, including California Department of Fish and Game fully protected species and species of special concern, U.S. Fish and Wildlife Service candidate species, and non-listed California Native Plant Society rare and endangered plants.

The regulatory requirements for the Federal Endangered Species Act can be found in United States Code 16, Section 1531, et. seq. See also 50 CFR Part 402. The regulatory requirements for the California Endangered Species Act can be found in California Fish and Game Code, Section 2050, et. seq. Caltrans projects are also subject to the Native Plant Protection Act, found in Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act, Public Resources Code, Sections 2100-21177.

Special-Status Plant Species

Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) is a California Native Plant Society List 1B species. The plant is a seriously threatened annual herb in the sunflower family (*Asteraceae*). It grows in alkaline wetlands or heavy clay soils in valley and foothill grasslands and hayfields. It has been found on road shoulders adjacent to agricultural fields in Chualar in Monterey County. The blooming period is June through November and, under the right conditions, may flower continuously over that period.

Congdon's tarplant is unusual in that it is tolerant of an extreme level of disturbance, but intolerant of competition from other plant species. In natural settings, it is found near vernal pools. The pools drown out competing vegetation, creating an ecological niche that the tarplant exploits.

Affected Environment

The California Natural Diversity Database reported a 1998 occurrence of Congdon's tarplant 240 meters (787 feet) west of the project site. All ruderal and grassland areas within the project footprint and adjacent areas were surveyed. Congdon's tarplant was found in the north and south fields, between the ditch and the commercial buildings northeast of the ditch, and on the Salinas Municipal Airport property. The tarplant grew sporadically, both individually and in small groups, in disturbed areas where the

competing vegetation was minimal (such as wheel ruts). The tarplant was absent in areas of dense grasses and weeds. The plants tended to be smaller and less robust than the population along State Route 101 near Chualar. A notable exception to this observation were the plants growing on the Salinas Municipal Airport property. These plants appeared to be in excellent condition.

While survey methods did not allow for an accurate count of all tarplants present, the total number of plants present was less than 100. However, populations of this annual species can fluctuate tremendously from year to year. A tarplant survey was conducted in a drought year, and showed a yield of a single plant. The next year at the same site, following an El Niño winter, surveys showed an occurrence of thousands of plants. It is believed that Congdon's tarplant is present in the seed bank throughout the grassland and ruderal areas of the project site, and could germinate wherever there is sufficient water and minimal competition.

Impacts

Impacts to the tarplant cannot be avoided. Because of the variability in the number of plants that germinate from year to year, it is impossible to predict how many plants would be affected during the year of construction. Therefore, impacts will be quantified based on the amount of suitable habitat likely to contain Congdon's tarplant in the seed bank that would be affected by each alternative.

Alternative 7 would permanently affect approximately 0.987 hectare (2.44 acres) of tarplant habitat.

Avoidance, Minimization and/or Mitigation Measures

The mitigation for impacts to Congdon's tarplant would follow a method developed and implemented by Dr. Neil Havlik for the DeVaul Ranch development in San Luis Obispo. The method involves creating depressions that mimic natural vernal pools. The pools retain water long enough to drown most of the competitors of Congdon's tarplant. Seven depressions were created for the DeVaul Ranch mitigation project. Congdon's tarplants were collected late in the flowering season and stored in trash cans until needed. This plant material was then spread on the depressions. Five of the seven depressions have been consistent producers of the tarplant.

The build alternative for this project would require the purchase of a piece of property that will be isolated by the two southernmost ramps. The land currently produces row crops. Several depressions would be created in this area. At minimum, the area of the

new depressions would be equal to the area of suitable Congdon's tarplant habitat affected. Congdon's tarplants would be collected from the project area and from the State Route 101 shoulder near Chualar. A qualified biologist would determine the appropriate time to collect the plant material.

Cumulative Impacts

All impacts to Congdon's tarplant would be fully mitigated. Therefore, this project would not contribute to any cumulative impacts.

2.3.4 Animal Species

Affected Environment

Burrowing Owl (Athene cunicularia)

The California Department of Fish and Game considers the burrowing owl (*Athene cunicularia*) a species of special concern. The California Natural Diversity Database shows that the closest occurrence of burrowing owl is at the Salinas Municipal Airport. Owls were observed nesting between the taxiways and runways. The Salinas Municipal Airport is the eastern limit of the project area.

Burrowing owls are often associated with burrowing animals and are found in open, dry grasslands, agricultural lands, range lands, airports, golf courses, vacant lots and desert habitats. They also inhabit grass, forb, and shrub stages of pinyon and ponderosa pine habitats. Burrowing owls can dig their own burrows, but often prefer deserted burrows of other animals. They are also known to use artificial burrows.

Burrowing owls are primarily active at dusk and dawn, but will hunt throughout a 24-hour period. Their nesting season begins in late March or April.

No burrowing owls or owl indicators were observed during surveys. The north and east fields (shown in Appendix H) consisted of small meadow vole (*Microtis californicus*) and California ground squirrel (*Spermophilus beecheyi*) burrows. There were very few large burrows. The south field had several larger burrows and a few smaller burrows. Some of the larger burrows were positively identified as ground squirrel burrows. The banks of the ditch just north of Airport Boulevard also had several larger burrows that likely belonged to ground squirrels.

California Red-Legged Frog (Rana aurora draytonii)

The California red-legged frog (*Rana aurora draytonii*) is listed by the U.S. Fish and Wildlife Service as threatened. The California Natural Diversity Database reports a single California red-legged frog occurrence within five miles of the project. The proposed project is not within “critical habitat” of the species. The nearest water bodies to this occurrence are to the east and northeast. The project lies approximately four miles to the southwest. However, U.S. Geological Survey topographic maps indicate that there are several water bodies, spaced less than one mile apart, between this occurrence and the project site. Most of these water bodies are human-made ponds and reservoirs associated with row crops. While it is unknown whether these ponds are suitable for California red-legged frog breeding, the frogs could migrate from pond to pond and colonize the aquatic habitats of the project area.

The ditch that crosses the project area lacks the dense vegetation typically associated with suitable California red-legged frog aquatic habitat. However, California red-legged frog have been documented in similar marginal habitats. Therefore, U.S. Fish and Wildlife Service protocol surveys were warranted and conducted for this project.

Impacts

Burrowing Owl

If no burrowing owls are found within 76 hectares (250 feet) of the project area, the only impacts to burrowing owl would be the loss of potential nesting habitat.

Alternative 7 would permanently affect approximately 0.283 hectare (0.70 acre) of potential nesting and foraging habitat. This loss of foraging habitat would not be substantial.

In a study of burrowing owls conducted at the Oakland Airport (which also has an adjacent golf course), Thomsen (1971) found that all of the owls flew to the golf course to forage at night, not to the ruderal grassy fields. The primary prey on the golf course was large insects. Because of the strong preference the owls had for the golf course, it is possible that the owls at the Salinas Municipal Airport also forage at the golf course. Thomsen (1971) also found that meadow voles provided a major portion of the owls’ diet. Vole burrows were common in the north and east fields, but uncommon in the east field where most of the impacts to would take place.

If burrowing owls are present, the project could lead to nest abandonment or death to owls. If owls are found within 76 hectares (250 feet) of the project area, the onsite

mitigation measures recommended by the California Burrowing Owl Consortium (1993) and described below would be implemented.

California Red-Legged Frog

No California red-legged frogs were found. The only amphibian species observed were the bullfrog (*Rana catesbeiana*), Pacific tree frog (*Pseudacris regilla*), and western toad (*Bufo boreas*). Because California red-legged frog does not occur within the project area, there would be no impacts.

Avoidance, Minimization and/or Mitigation Measures

Burrowing Owl

While no evidence indicates that burrowing owls are using the east field, there is a potential of owls moving into unoccupied fields. Therefore, Caltrans would conduct winter, nesting season, and preconstruction surveys according to the protocol in the *Burrowing Owl Survey Protocol and Mitigation Guidelines* from the California Department of Fish and Game and the Burrowing Owl Consortium. If any occupied burrows are found during preconstruction surveys, a 76-meter (250-foot) buffer would be designated with fencing as an Environmentally Sensitive Area.

If occupied burrows cannot be avoided and are found within 76-meters (250-feet) of the project area, the following additional measures would be implemented:

- One-way doors would be installed at the entrance of the burrow to encourage owls to move to an alternate burrow.
- If no alternate natural burrows are present outside the 76-meter (250-foot) buffer, an artificial burrow would be provided. Artificial burrows would be placed in the Congdon's tarplant mitigation area to replace the unoccupied potential nest and foraging habitat (Appendix H Environmental Mitigation Maps).

California Red-Legged Frog

Because California red-legged frog does not occur within the project area, no avoidance, minimization or mitigation measures would be necessary.

Cumulative Impacts

Burrowing Owl

All impacts to burrowing owls would be fully mitigated. Therefore, this project would not contribute to any cumulative impacts.

California Red-Legged Frog

Because California red-legged frog does not occur within the project area, there would be no impacts, cumulative or otherwise.

2.3.5 Cumulative Impacts

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 effect 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, and highway development, as well as from agricultural development and the conversion to more intensive types of agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

California Environmental Quality Act Guidelines Section 15130 describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under the California Environmental Quality Act can be found in Section 15355 of the California Environmental Quality Act Guidelines. A definition of cumulative impacts under the National Environmental Policy Act, can be found in 40 CFR, Section 1508.7 of the Council on Environmental Quality Regulations.

The pending and current transportation projects in the Salinas areas are for safety and operational improvements and are not anticipated to contribute to cumulative impacts. As

part of the cumulative analysis, the following local agencies were consulted about future and existing projects that that could contribute to a cumulative impact:

- Monterey County
- Monterey County Water Resources Agency
- City of Salinas
- Transportation Association of Monterey County

The only response received from this inquiry was from Monterey County stating that there are no planned projects in this area in the foreseeable future.

Additional Proposed Caltrans Projects

Along State Route 101 are several projects that have been identified and are in various stages of project development. Transportation projects and development that may contribute to cumulative impacts for the Airport Boulevard interchange reconstruction project include the following:

- Salinas barrier. Located in Salinas, north of the Main Street overcrossing to north of the West Laurel Drive overcrossing. Thrie-beam barrier construction.
- Salinas North barrier. Located in Monterey County at Santa Rita, from south of the Boronda Road overcrossing to north of Espinosa Road. Median barrier construction.
- Chular median barrier. Located at Chular from 1.5 kilometer (0.9 mile) south to 1.4 kilometer (0.9 mile) north of Main Street. Concrete and thrie-beam barrier construction.
- Chular median barrier II. Located near Salinas, north of the Main Street overcrossing to Spence Road. Concrete and thrie-beam barrier construction.
- Salinas State Route 68 rehabilitation. Located near Salinas, from south of the Reservation Road undercrossing to Work Street. Pavement overlay.
- Prudedale Improvement Project.

Based on the proposed project and analysis of additional proposed projects in the vicinity, it was determined that these projects would not contribute to cumulative impacts.



Chapter 3 Coordination and Comments

Coordination

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 mitigation measures and related environmental requirements. This chapter summarizes the results of Caltrans' efforts to identify, address and resolve project-related issues through early and continuing coordination.

- This project is a result of the coordination between legislators, Caltrans, the California Highway Patrol, Community of Salinas, County Association of Governments, concerned citizens and business owners, who all worked together to classify State Route 101 as a Safety Corridor.
- Caltrans and the Transportation Agency of Monterey County held an open house for the Airport Boulevard interchange reconstruction project on August 4, 2004 from 4:00 p.m. to 7:00 p.m. at the Agricultural Conference Center at 1432 Abbott Street in Salinas. The purpose of the open house was to provide the public and all interested parties with information about the proposed project and to obtain public input.
- The Salinas Municipal Airport, Federal Aviation Administration, and U.S. Department of Transportation Federal Aviation Administration were consulted for safety and compliance of airspace and the Airspace Layout Plan.
- The Natural Resource Conservation Service was consulted for concurrence on a Farmland Conversion Impact Rating (see Appendix G for the Form AD-1006).
- The Historic Property Survey Report was sent to the State Historic Preservation Officer for concurrence on findings (see Appendix I for the letters of concurrence).
- The Monterey County Water Resources Agency was consulted for work on the Reclamation Ditch.

Comments

Once the public comment period has closed, all comments and responses will be presented in this section.

Chapter 4 List of Preparers

This Initial Study/Environmental Assessment was prepared by the Central Region of the California Department of Transportation (Caltrans). The following Caltrans staff prepared this Initial Study Environmental Assessment:

Bob Carr, Landscape Associate. B.S., Landscape Architecture; 15 years experience in visual impact analysis and landscape architecture. Contribution: Visual Impact Analysis.

Paula Juelke Carr, Associate Environmental Planner in Architectural History. M.A., interdisciplinary history program from the University of California, Santa Barbara; 20 years' experience researching California history. Contribution: Cultural Resources study and analysis.

Scott P. Dowlan, Licensed Landscape Architect. B.S. Landscape Architecture. Contribution: Assisted Aesthetics Coordinator to prepare Visual Impact Assessment. Prepared initial landscape documents.

Gary Gagliolo, Associate Environmental Planner. B.A., Biological Sciences with emphasis in Molecular Biology; California State University, San Jose. Contribution: Hazardous Waste initial site assessment.

Kay Goshgarian, Associate Environmental Planner. M.S., Environmental Management, University of San Francisco, B.S., Agricultural Science, California State University, Fresno; 5 years environmental, land use, and water use planning experience. Contribution: Community Impact Assessment.

Krista Kiaha, Archaeologist. B.A., Anthropology; M.S., Anthropology; 10 years of archaeological experience throughout California, the Pacific and the Great Basin. Contribution: Cultural Resources study and analysis.

Michael Lisitza, Associate Biologist. B.S., Ecology; 4 years professional biology experience. Contribution: Natural Environment Study and field surveys for sensitive biological resources.

Julie A. McGuigan, Associate Environmental Coordinator. B.S., Wildlife and Fisheries Conservation Biology, University of California at Davis; 1 year Habitat Conservation and University of California Graduate Researcher; 5 years environmental analysis. Contribution: Initial Study/Environmental Assessment preparation and analysis.

Wayne W. Mills, Transportation Engineer. B.A., Earth Science; B.A., Social Science; 20 years experience in air quality, noise and water quality studies; 5 years paleontology studies. Contribution: Air Quality, Noise, Water Quality, and Paleontology Studies preparation and analysis.

Chapter 5 Distribution List

Federal Agencies

U.S. Army Corp of Engineers

State Agencies

Regional Water Quality Control Board
California Department of Fish and Game

Local Government

County of Monterey
Monterey Council of Governments
Monterey County Public Works
Transportation Agency of Monterey County
Monterey County Water Resources Agency
The Association of Monterey Bay Area Governments
Traffic Commission for Salinas
Supervisor Butch Lindley
North Central Air Basin
Salinas Municipal Airport
City of Salinas

Other

J. M. Smucker Co.
Hartnell College
Cool Pacific Land Co.
Mann Packing Co.
Ramco Enterprises
Verticare – Air Trails
Oaktree Property Co.
Shaws Beacon
Salinas Airport Business Assoc.
Mapleton Communications
Salinas Elks



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 project indicated no impacts. A checkmark in the “No Impact” column reflects this determination. See the first page of Chapter 2 for a discussion of the “No Impact” issues.

The words “significant” and “significance” used throughout the following checklist are related to impacts under the California Environmental Quality Act, not the National Environmental Policy Act.



	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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 checked="" type="checkbox"/>	<input 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 which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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:				
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"/>
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:				

	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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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:				
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 checked="" type="checkbox"/>	<input 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, 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 type="checkbox"/>	<input checked="" 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"/>

Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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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 type="checkbox"/> | <input checked="" 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:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| 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 checked="" type="checkbox"/> | <input type="checkbox"/> |
| iv) Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input 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 –

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:

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

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

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"/>

XI. 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 checked="" type="checkbox"/>	<input 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"/>

XII. 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"/>
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	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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"/>

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:

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"/>

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:

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 checked="" type="checkbox"/>	<input type="checkbox"/>
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	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" type="checkbox"/>

XVI. UTILITIES 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 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"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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)?	<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 type="checkbox"/>	<input checked="" type="checkbox"/>



Appendix B Minimization and/or Mitigation Summary

Relocations

Any person (individual, family, corporation, partnership, or association) who moves from real property or moves personal property from real property as a result of the acquisition of the real property, or is required to relocate as a result of a written notice from Caltrans from the real property required for a transportation project is eligible for “Relocation Assistance.” All activities would be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (see Appendix D).

Visual

Landscaping would be incorporated to reduce the negative visual impacts of the new constructed overcrossing. Architectural treatments, such as color and/or textures should reduce glare and relate to other structures within the region.

Cut and fill slopes would be rounded to naturalize their appearance. For replacement trees, Caltrans landscape architecture and biology branches would determine the species and number. Colorful plants would soften the visual impacts to the newly constructed highway. Seed mixes would, as closely as possible, resemble and blend with existing vegetation, maintaining visual unity. All disturbed areas would receive erosion control and storm water runoff control measures.

Water Quality

Since this pollution source is considered a non-point source, management measures and best management practices would need to be addressed during planning, design, construction, operation and maintenance stages. Discharges of waste from non-point sources, including but not limited to storm water runoff, silt, and urban runoff, will be controlled to the extent practicable.

A Storm Water Pollution Prevention Plan would be implemented during construction to help identify the sources of sediment and other pollutants that affect the quality of storm water discharges. The plan would also describe and ensure the implementation of best management practices to reduce or eliminate sediment and other pollutants in storm water as well as non-storm water discharges.

Prior to construction activities a National Pollution Discharge Elimination's permit and a Notice of Construction will be filed with the applicable Regional Water Quality Control Board.

Hazardous Waste

Steps would be taken to reduce or eliminate any airborne dust. Water should be available at all times to moisten the soil in work areas where activities could potentially stir up aerially deposited lead.

Prior to any excavation or other soil disturbance, appropriate health and safety measures, such as a project-specific Lead Compliance Plan must be developed and implemented to prevent or minimize lead exposure to employees and the public. Coordination of any permit is needed.

No significant volume of contaminated soil exceeded Monterey County Division of Environmental Health action levels at any of the five parcels, including the Shaw's Beacon and Unocal Gas Station. It is recommended that pre-construction and construction activities proceed and that remedial actions to address the limited impacts identified be performed on an as-needed basis. Acquisition of property with active underground storage tanks would require full decommissioning in accordance with the Monterey County Division of Environmental Health requirements.

A copy of the Site Investigation Report will be provided to the Monterey County Division of Environmental Health for review. Potentially contaminated soil encountered during future grading operations should be removed in accordance with Monterey County Division of Environmental Health requirements. Bridge removal would require a National Emission Standard for Hazardous Air Pollutants permit.

Air Quality

Bridge removal would require a National Emission Standard for Hazardous Air Pollutants permit.

To minimize dust from the project, it is recommended that the project special provisions be amended to specifically prohibit grading of greater than 2.4 hectares (6 acres) per day and to insist on strict adherence to Caltrans Standard Specifications requiring dust control. (This number of acres was selected to assure conformity with county air quality standards.)

In addition, the following measures from the Monterey Bay Unified Air Pollution Control District California Environmental Quality Act Air Quality Guidelines, October 1995, would be included in the resident engineer's instructions. Applicable measures from this list should be used at the resident engineer's discretion, when daily watering is insufficient to control visible dust emissions from the project.

- Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil and wind exposure.
- Prohibit all grading activities during periods of high wind (over 24.1 kilometer per hour [15 miles per hour]).
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
- Apply non-toxic binders (for example, latex acrylic copolymer) to exposed areas after cut and fill operations, and hydro-seed area.
- Haul trucks shall maintain at least 0.6 meter (2 feet) of freeboard.
- Cover all trucks that haul dirt, sand, or loose materials.
- Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.
- Plant vegetative covers in disturbed areas as soon as possible.
- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Sweep streets if visible soil is carried out from the construction site.
- Post a publicly visible sign that specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Unified Air Pollution Control District shall be visible to ensure compliance with Rule 402 (Nuisance).
- Limit the area under construction at any one time.

Wetlands and Other Waters

Approximately 0.003 hectare (0.006 acre) of fill material (concrete piles) would be placed below the ordinary high water mark for both jurisdictional waters. This minimal impact would require a non-reporting Nationwide Number 14 Permit from the U.S. Army Corps of Engineers, and no compensatory mitigation would be necessary. In addition, a Streambed Alteration Agreement pursuant to the California Department of Fish and Game Code 1600 et. sec. would be required, and compensatory mitigation would likely include establishment of native vegetation along the channel banks, thereby improving the overall quality of both riparian areas.

Special Concern Species

Pre-construction surveys in appropriate habitats would be conducted to identify the presence of any listed threatened and endangered species or important habitat for listed species. Designated staging areas for equipment storage, vehicle parking, and other project-related activities within the biological study area would be pre-approved by a Caltrans regional biologist.

Congdon's Tarplant

Right-of-way would be acquired and several depressions would be created in the areas indicated on Appendix H, Figures 1 and 2. At minimum, the area of the new depressions would be equal to the area of suitable Congdon's tarplant habitat affected. Congdon's tarplants would be collected from the project area and from the State Route 101 shoulder near Chualar. A qualified biologist would determine the appropriate time to collect the plant material.

Burrowing Owl

If owls are found within 76 meters (250 feet) of the project area, the onsite mitigation measures recommended by the California Burrowing Owl Consortium and the California Department of Fish and Game would be implemented.

Invasive Species

Precautions to prevent the spread of invasive species must occur during construction. Plant material removed from the construction zone containing invasive species must be disposed of properly. Mulch or planting materials used must be classified as "weed free." All vehicles driving in areas where invasive plants are found must be washed and cleaned thoroughly to avoid the spread of seeds by tires.

In addition, the following special provisions would be implemented before and/or during construction of the project (these provisions are available for review at the Caltrans office at 1150 Laurel Lane in San Luis Obispo, California):

- *Archaeology Special Provisions* in regard to the discovery of artifacts and/or human remains during construction.
- *Burrowing Owl Protection Special Provisions* in regard to avoidance and relocation, if necessary.

Construction Noise

Local noise levels in the vicinity of the construction would likely rise because of the construction activities. The amount of increased noise would vary with the types and models of equipment used. Average noise from construction activities can be as much as 90 to 95 decibels at 15.2 metric (50 feet) from the source. Caltrans policy is that normal construction equipment should not emit noise levels greater than 86-dBA at 15.2 metric (50 feet). This means that residences up to 487.6 meters (1,600 feet) from the construction activity could be adversely affected by construction noise. Noise decreases by up to 6-dBA with each doubling of the distance away from the source of construction noise. Potential methods that could be used to deal with construction noise include the following:

- **Noise Hot Line:** On projects where construction noise is expected to be a problem, special telephones can be installed in the resident engineer's office to receive noise complaints. The telephone numbers would be well publicized in local newspapers and by letter to residences near the construction area.
- **Advance Notice:** Studies show the public is more tolerant of short-term noise if construction schedules are publicized well in advance. Then, members of the public can adjust their schedules in advance for a few noisy nights. The public may also be advised of noisier operations through the media. Local newspapers and radio would disseminate the information to the public.
- **Temporary Sound Barriers:** When applicable, temporary noise barriers may be effective in mitigating construction noise, dust, glare and visual impacts. These barriers can be quickly constructed from safety-shape and plywood panels. When constructed within 4.6 meters (15 feet) of the edge of the road, noise barriers must be placed on a concrete barrier.



Appendix C List of Available Technical Studies

Contact District 5 Associate Environmental Coordinator Julie McGuigan for information on how to obtain the desired technical study:

E-mail: julie_mcguigan@dot.ca.gov

Phone: (805) 549-3118

Address: California Department of Transportation
Attn: Julie McGuigan
50 Higuera Street
San Luis Obispo, CA 93401

The following technical studies conducted for this project are available for public review:

- Air Quality Report
- Location Hydraulic Study
- Initial Site Assessment
- Hazardous Waste Memo
- Natural Environment Study
- Noise Study Report
- Paleontology Study
- Preliminary Geotechnical Report
- Visual Assessment
- Water Quality Report
- Community Impact Assessment
- Relocation Impact Statement



Appendix D Summary of Relocation Benefits

California Department of Transportation Relocation Assistance Program

Relocation Assistance Advisory Services

Business and Farm Relocation Assistance Program

The Business and Farm Relocation Assistance Program provides aid in locating suitable replacement property for the displacee's farm or business, including, when requested, a current list of properties offered for sale or rent. In addition, certain types of payments are available to businesses, farms, and non-profit organizations. These payments may be summarized as follows:

- Reimbursement for the actual direct loss of tangible personal property incurred as a result of moving or discontinuing the business in an amount not greater than the reasonable cost of relocating the property.
- Reimbursement up to \$1,000 of actual reasonable expenses in searching for a new business site.
- Reimbursement up to \$10,000 of actual reasonable expenses related to the reestablishment of the business at the new location
- Reimbursement of the actual reasonable cost of moving inventory, machinery, office equipment and similar business-related personal property, including dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting personal property.

Payment "in lieu" of moving expense is available to businesses which are expected to suffer a substantial loss of existing patronage as a result of the displacement, or if certain other requirements such as inability to find a suitable relocation site are met. This payment is an amount equal to the average annual net earnings for the last two taxable years prior to relocation. Such payment may not be less than \$1,000 and not more than \$20,000.

Additional Information

No relocation payment received will be considered as income for the purpose of the Internal Revenue Code of 1954 or for the purposes of determining eligibility or the extent of eligibility of any person for assistance under the Social Security Act or any other federal law (except for any federal law providing low-income housing assistance).

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without being given at least 90 days advance notice, in writing. Occupants of any type of dwelling eligible for relocation payments will not be required to move unless at least one comparable "decent, safe and sanitary" replacement residence, open to all persons regardless of race, color, religion, sex or national origin, is available or has been made available to them by the state.

Any person, business, farm or non-profit organization, which has been refused a relocation payment by the Department, or believes that the payments are inadequate, may appeal for a hearing before a hearing officer or the Department's Relocation Assistance Appeals Board. No legal assistance is required; however, the displacee may

choose to obtain legal council at his/her expense. Information about the appeal procedure is available from the Department's Relocation Advisors.

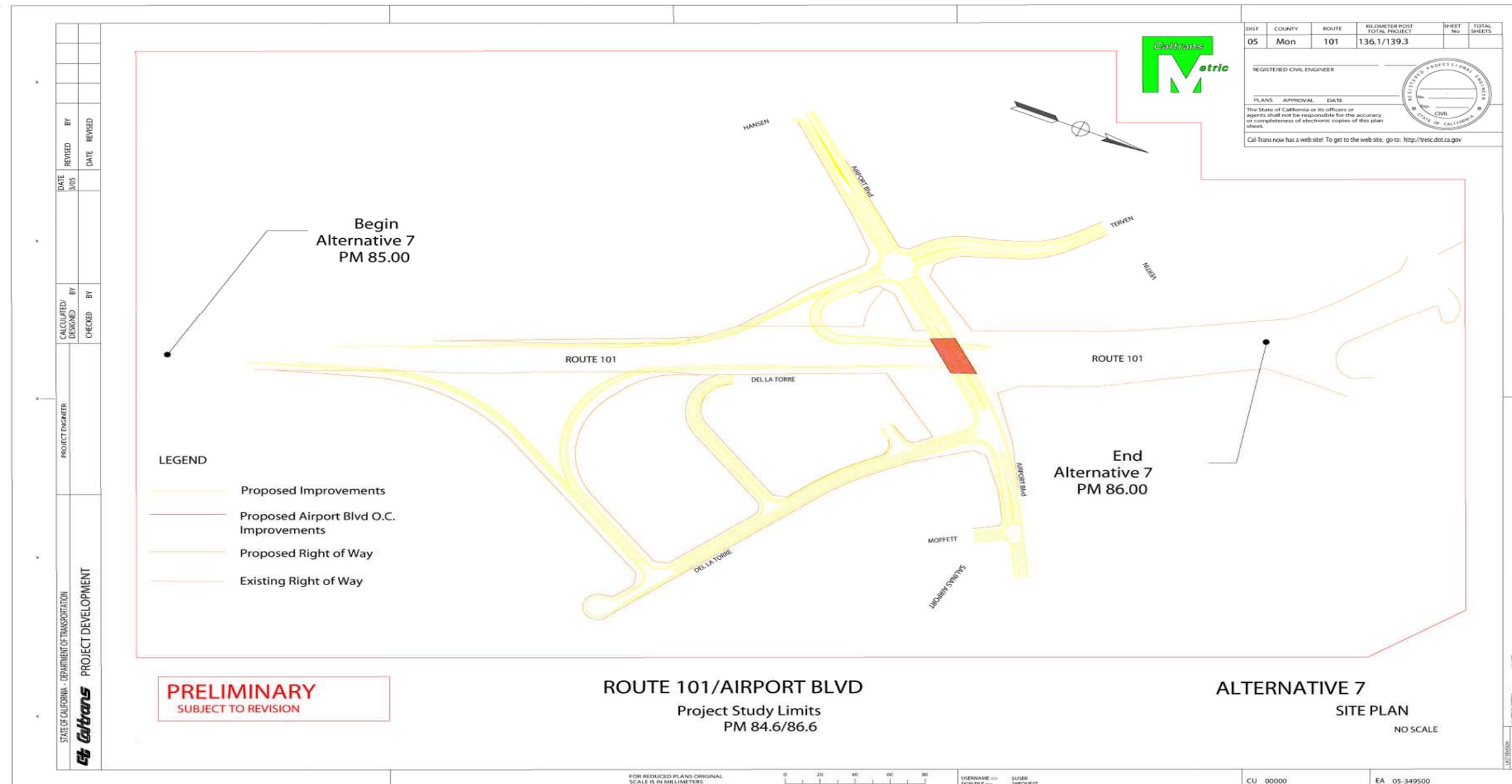
The information above is not intended to be a complete statement of all of the Department's laws and regulations. At the time of the first written offer to purchase, owner-occupants are given a more detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted immediately after the first written offer to purchase, and also given a more detailed explanation of the Department's relocation programs.

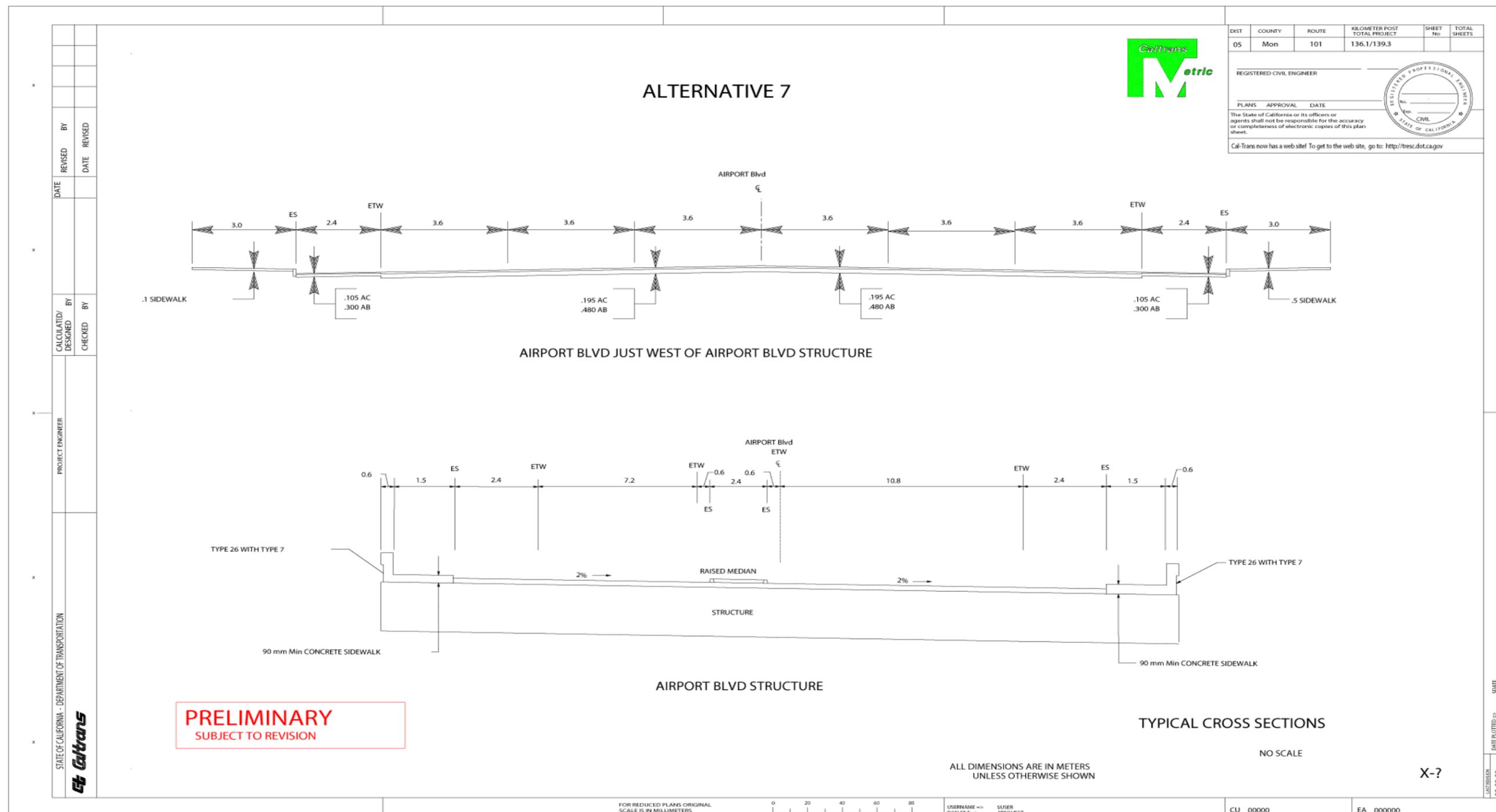
Important Notice

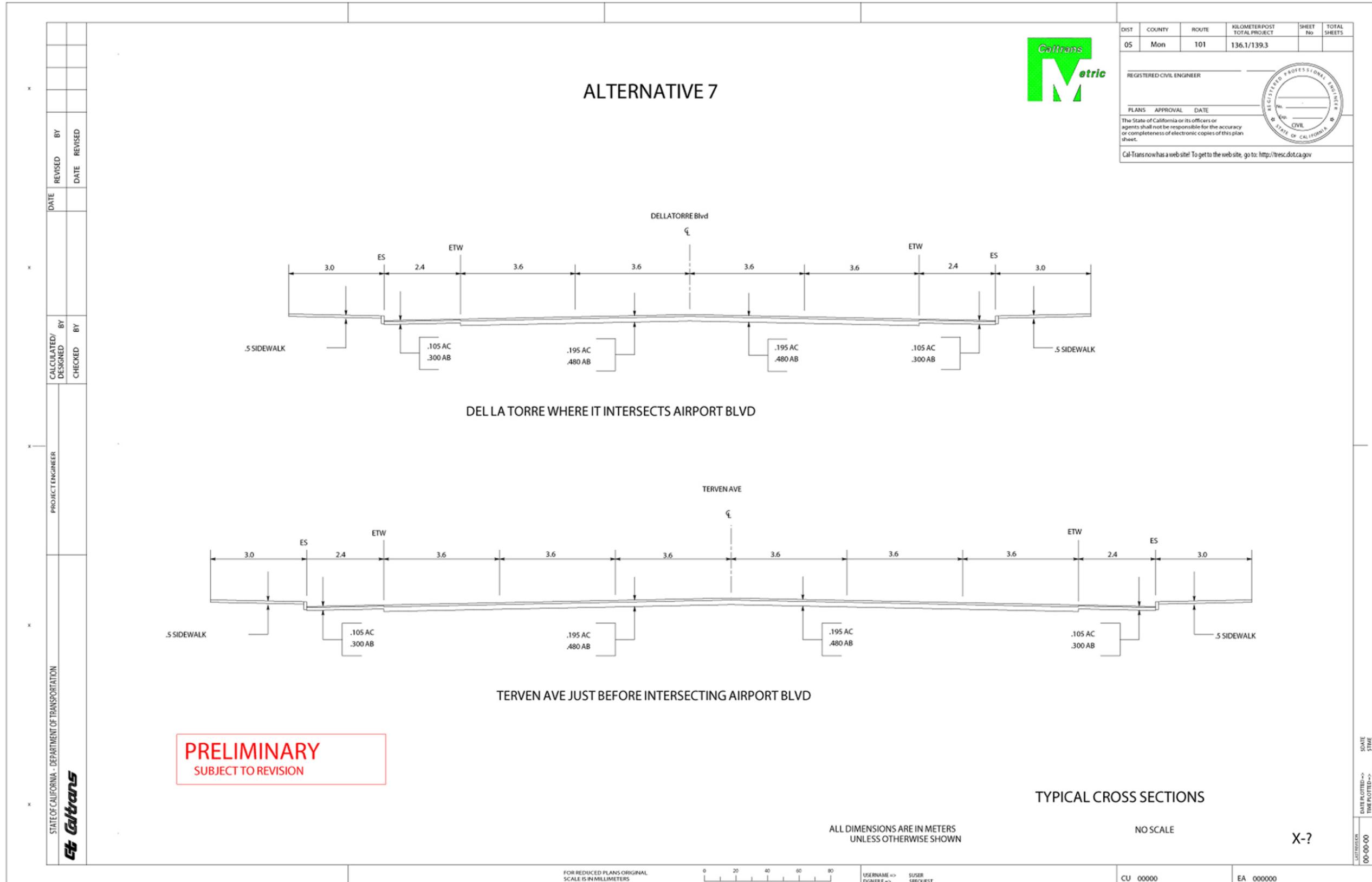
To avoid loss of possible benefits, no individual, family, business, farm or non-profit organization should commit to purchase or rent a replacement property without first contacting a Department of Transportation relocation advisor at:

State of California
Department of Transportation, District # __
Address

Appendix E Project Mapping









Appendix F Title VI Policy Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY (916) 653-4086



*Flex your power!
Be energy efficient!*

January 14, 2005

TITLE VI 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, and age, 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 "Will Kempton".

WILL KEMPTON
Director

"Caltrans improves mobility across California"



Appendix G Form AD-1006

U.S. Department of Agriculture					
FARMLAND CONVERSION IMPACT RATING					
PART I (To be completed by Federal Agency)			Date Of Land Evaluation Request 6/9/04		
Name of Project Airport Boulevard Interchange reconstruction			Federal Agency Involved FHWA		
Proposed Land Use Transportation			County and State Monterey CA		
PART II (To be completed by NRCS)			Date Request Received By NRCS		Person Completing Form:
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"/>	Acres Irrigated 260073	Average Farm Size 1277
Major Crop(s) Lettuce Artichokes Strawberries	Farmable Land In Govt. Jurisdiction Acres: 388633 % 18.2		Amount of Farmland As Defined in FPPA Acres: 224718 %10.6		
Name of Land Evaluation System Used California Storie Index	Name of State or Local Site Assessment System NA		Date Land Evaluation Returned by NRCS 6/28/04		
PART III (To be completed by Federal Agency)			Alternative Site Rating		
			Site A	Site B	Site C
A. Total Acres To Be Converted Directly			8.7	8.7	
B. Total Acres To Be Converted Indirectly			4.6	4.6	
C. Total Acres In Site			80	80	
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland			8.7	8.7	
B. Total Acres Statewide Important or Local Important Farmland			4.6	4.6	
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted			0.00002	0.00002	
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value			NA	NA	
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)			69	69	
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	Site C
1. Area In Non-urban Use		(15)	4	4	
2. Perimeter In Non-urban Use		(10)	1	1	
3. Percent Of Site Being Farmed		(20)	0	0	
4. Protection Provided By State and Local Government		(20)	20	20	
5. Distance From Urban Built-up Area		(15)	0	0	
6. Distance To Urban Support Services		(15)	0	0	
7. Size Of Present Farm Unit Compared To Average		(10)	0	0	
8. Creation Of Non-farmable Farmland		(10)	0	0	
9. Availability Of Farm Support Services		(5)	5	5	
10. On-Farm Investments		(20)	3	3	

11. Effects Of Conversion On Farm Support Services	(10)	0	0		
12. Compatibility With Existing Agricultural Use	(10)	9	9		
TOTAL SITE ASSESSMENT POINTS	160	42	42		
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)	100	69	69		
Total Site Assessment (From Part VI above or local site assessment)	160	42	42		
TOTAL POINTS (Total of above 2 lines)	260	111	111		
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>			
Reason For Selection:					
Name of Federal agency representative completing this form:				Date:	

(See Instructions on reverse side)

Form AD-1006 (03-02)

Appendix H Environmental Mitigation Maps

Maps showing the environmental impact areas and mitigation are provided on the following pages.







Appendix I Letters of Concurrence

STATE OF CALIFORNIA – THE RESOURCES AGENCY

GRAY DAVIS, Governor

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942898
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-6824
calshpo@ohp.parks.ca.gov
www.ohp.cal-parks.ca.gov



21 August 2003

In Reply Refer To
FHWA030618A

Gary N. Hamby
Division Administrator
California Division
Federal Highway Administration
980 Ninth Street, Suite 400
Sacramento, California 95814-2724

RE: HDA-CA, FILE NO. 05-MON-101 KP 136.79/1.9.36, AIRPORT BOULEVARD
INTERCHANGE PROJECT, 05-349500, DOCUMENT NO. P 45213 [SECTION 106
CONSULTATION ON THE RECONSTRUCTION OF THE AIRPORT BOULEVARD
INTERCHANGE, CITY OF SALINAS, MONTEREY COUNTY]

Dear Mr. Hamby,

This letter is a response to your submission of the May 2003 *Historic Property Survey Report, Airport Boulevard Interchange, U.S. Route 101, Monterey County* (HPSR). Your submission and my comments on it here are made pursuant to 36 CFR Part 800, the regulations that implement Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended.

You request in your letter of 9 June 2003 that I concur that

- (1) the area of potential effects (APE) is adequate pursuant to 36 CFR § 800.4(a)(1),
- (2) the HPSR and its attached documents satisfy the requirements of Section 106 pursuant to 36 CFR §§ 800.4(a)(1–4), (b)(1), and (c)(1 and 2),
- (3) the John Street Overcrossing is eligible for inclusion in the National Register of Historic Places (National Register),
- (4) the balance of the 30 “historic-period resources” in the undertaking’s APE are not eligible for inclusion in the National Register, and
- (5) the implementation of the undertaking, as presently proposed, will not affect historic properties pursuant to 36 CFR § 800.4(d)(1).

On the basis of my review of the HPSR, I concur that the Federal Highway Administration’s (FHWA) efforts to determine and document the subject undertaking’s APE are adequate pursuant to 36 CFR § 800.4(a)(1). I understand the APE to include both the “Archaeological APE” and the “Architectural APE” as the HPSR describes those areas in the 2. *Area of Potential Effects* section of that report (pp. 1 and 2), and as the *Area of Potential Effects* aerial map in the report (Figures 3a–3c) appears to depict those same areas as “Archaeological Area of Potential Effects” and “Architectural Area of Potential Effects.”

I will herewith concur that the FHWA's efforts to identify historic properties in the undertaking's APE are adequate pursuant to 36 CFR § 800.4(b). However, I am doubtful that the results of those efforts provide a level of information useful in predicting the potential presence of subsurface archaeological deposits in the portions of the APE where "the local drainage system will require reconstruction," "a small drainage basin may be constructed," and "the excavation for the footings for the new overcrossing structure could be 10 to 12 feet deep" (p. 2 of the HPSR).

The FHWA's characterization of the APE's land use history as "an urban setting that has experienced much land disturbance from construction and agricultural activities" and of the paleoenvironment of the APE as "a low sensitivity zone for prehistoric archaeological sites because it is situated in the lowlands and would have been covered in marsh in prehistory" (p. 3 of the HPSR) is broad and therefore of limited utility in contributing to an assessment of the potential presence of subsurface archaeological deposits at specific, large-scale locations in the APE. I believe that a broad characterization of the APE's land use history is useful and appropriate as part of the background context for an identification effort, but that the focus of the effort itself should be on gathering information, published or otherwise, for rather precise locations in an APE where historic properties may be on the surface or may lie beneath the surface. Consideration of an undertaking's potential to disturb historic properties in these more precise locations should frame such an identification effort. I would welcome the FHWA's consideration and implementation of these recommendations when it carries out and documents identification efforts for undertakings that involve excavation of natural ground to any appreciable depth.

I concur that the FHWA's effort to evaluate historic properties pursuant to 36 CFR § 800.4(c) is adequate.

I concur with the FHWA's determination that 63 properties were treated in accordance with the provisions of the 1 June 2001 *Caltrans Interim Policy for the Treatment of Buildings Constructed in 1957 or Later*. In addition, I concur that the 30 properties on pages 4–5 of the HPSR are not eligible for inclusion in the National Register.

I concur further with the FHWA's determination that

John Street Overcrossing (California Department of Transportation Bridge No. 44 0121)

is eligible for inclusion in the National Register under Criterion C at the statewide level of significance. The overcrossing is a cast-in-place, continuous, pre-stressed, concrete box girder with continuous, concrete slab approaches. It was the first bridge of its kind in the state and represents the important transition from standard reinforced concrete to pre-stressed concrete for highway bridge construction. Its successful application led the way for wide implementation of the bridge type throughout the state.

I concur with the FHWA's finding, pursuant to 36 CFR § 800.4(d)(1), that the implementation of the undertaking, as presently proposed, will not affect historic properties. With regard to the one historic property in the undertaking's APE, the John Street Overcrossing,

GARY N. HAMBY
21 AUGUST 2003
PAGE 3 of 3

FHWA030618A

none of the undertaking's potential alternatives will alter the subject bridge's location, design, setting, materials, workmanship, feeling, or association.

In closing, I recommend that the FHWA consider monitoring the undertaking's implementation where such implementation will result in the disturbance of natural ground to a depth for which the results of the pedestrian surveys of the APE may not have well informed the agency's identification efforts. I recommend further that the FHWA consider developing a process to resolve adverse effects on historic properties should such properties be found in the portions of the undertaking's APE where the agency may choose to monitor the implementation of the undertaking. The FHWA could then implement that process, in consultation under 36 CFR § 800.13(b)(3), should such consultation become necessary.

Please direct any questions that you may have to Project Review Unit Archaeologist Mike McGuirt at 916.653.8920 or at mmcguirt@ohp.parks.ca.gov, or Historian Natalie Lindquist at 916.654.0631 or at nlind@ohp.parks.ca.gov.

Sincerely,



Dr. Knox Mellon
State Historic Preservation Officer

WKM:mdm

DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
TELEPHONE: (805) 549-3111
TDD (805) 549-3259
<http://www.dot.ca.gov/dist05>



November 10, 2003

Gary N. Hamby, Division Administrator
Federal Highway Administration
650 Capitol Mall, Suite 4-100
Sacramento, CA 95814

MON-1 KP 136.79/139.36 (PM 85.0/86.6)
Airport Boulevard Interchange Project
05-349500

ATTENTION: DOMINIC HOANG

Dear Mr. Hamby:

This letter is a response to recommendations made by SHPO in a letter to FHWA dated 21 August 2003, regarding the May 2003 *Historic Property Survey Report, Airport Boulevard Interchange, U.S. Route 101, Monterey County*.

In the 21 August 2003 letter, the SHPO has concurred that:

- The APE is adequate pursuant to 36 CFR 800.4(a)(1);
- The Historic Property Survey Report and its attached documents satisfy the requirements of Section 106 of the National Historic Preservation Act pursuant to 36 CFR 800.4 (a) (1-4), (b)(1) and (c)(1-2);
- The John Street Bridge (Bridge 44-121) is eligible at the state level of significance for listing in the NRHP under Criterion C, due to its distinction as the first cast-in-place continuous prestressed concrete box girder bridge in California, an engineering accomplishment which led the way to wide implementation of this bridge type throughout the state;
- The remaining 30 historic-period resources (27 buildings, two bridges, and a reclamation ditch) within the project APE are ineligible for listing in the NRHP;
- In accordance with the December 20, 1989, Memorandum of Understanding between Caltrans and the SHPO, the 63 MOU properties within the project APE are ineligible for listing in the NRHP;
- No historic properties will be affected by the project, pursuant to 36 CFR 800.4(d)(1).

In addition to concurring with the above listed items, the SHPO has made the following recommendations regarding the implementation of the undertaking:

- (1) FHWA consider monitoring the undertaking's implementation where such implementation will result in the disturbance of natural ground to a depth for which the results of the pedestrian surveys of the APE may not have well informed the agency's identification efforts.
- (2) FHWA consider developing a process to resolve adverse effects on historic properties should such properties be found in the portions of the undertaking's APE where the agency may choose to monitor the implementation of the undertaking.

Caltrans has evaluated the recommendations made by SHPO, and provides the following response:

Caltrans feels that it is not necessary to monitor any portion of the project during construction, as the SHPO recommends. Based on a review of the record search information, soil studies, and the project area's history of past disturbances, it is unlikely that the project will encounter deposits within the APE.

Archaeological Site Patterns

More than ten archaeological studies have been conducted within a one-mile radius of the project boundary. None of these investigations revealed any archaeological sites at all.

The project area is in the lowlands of Salinas Valley, in the Salinas River floodplain, east of the river. Prior to modern water management practices, the area was marshland. This geographic setting is not a prime location for archaeological sites based on our knowledge of site locations in the larger region.

The closest known prehistoric sites to the project area are three to four miles away. Site CA-MNT-2 is situated three and a half miles to the southwest on a bluff overlooking the floodplain of the Salinas River. Although it is a quarter mile from the Salinas River, it sits on the banks of the river at flood stage at 50 feet above sea level. This site appears to be a prehistoric habitation site (Caltrans Cultural Resource Files, Archaeological Site Survey Record, Pilling 1948 and Roop 1982).

To the northwest of Salinas are two other known prehistoric sites. The only known buried archaeological site (CA-MNT-375) in the region is four miles to the northwest of the project area between Salinas and Castroville. It was discovered during agricultural plowing in an earthen bank overlooking a dried-up slough. It is one mile south of Espinosa Lake at 40 feet elevation (Caltrans Cultural Resource Files, Archaeological Site Survey Record, O'Connell and Cowan 1967).

Site CA-MNT-1381 is one and a half miles further west of CA-MNT-375. The setting for this site is similar: it sits 150 meters from Tembladero Slough and 300 meters from Alisal Slough at 40 feet in elevation (Caltrans Cultural Resource Files, Archaeological Site Record, Bouey and Hall 1988).

The geographic setting for these sites to the west of Salinas has a much higher sensitivity level for buried sites. All three are in close proximity to water: either

sloughs or lakes. In contrast, the city of Salinas is situated in the lowlands, and was very marshy throughout prehistory. Sites tend to be situated on higher ground, rather than within marshes.

In addition, an intensive archaeological survey by Caltrans for the Highway 156 Four Lane Widening Project between Prunedale and Castroville provides a regional transect from the coast near Castroville to the inland area near Prunedale (six miles north of Salinas). This study reveals that most prehistoric sites are located in the vicinity of the community of Castroville and the adjacent coastline. In general, these sites are situated on high ground overlooking the sloughs (Moro Cojo, Tembladero, Elkhorn) and ancient lakes (Merritt and Espinosa) that characterize the region. In particular, those sites near Castroville contain rich archaeological material and the density is quite high. The coastal sites are located near the mouth of the various sloughs that empty into the ocean. As one travels east from the lakes or the coastal region, the site density declines radically.

Soils

The project area is located in southeast Salinas, at the northern end of the Salinas Valley. The Salinas River, originating near Santa Margarita flows in a northwesterly direction. The valley is nearly 90 miles in length, decreasing in elevation from 540 feet near Bradley, to 50 feet near Salinas, to 10 feet at Castroville, and finally emptying into the ocean just south of Castroville. The river is bordered on the west by the Santa Lucia Range and the Gabilan Range to the east, hugging the Santa Lucia Range on the west side of the Salinas Valley. Various soil types are found within the project area, with those of the Antioch Series and Chualar Series predominating. The Antioch soils are moderately well drained, and formed in alluvium derived from sedimentary rocks. The Chualar soils are well drained soils that formed in alluvium derived from granitic schistose rocks (Geologic Map of California, Santa Cruz Sheet, 1959; Soil Survey of Monterey County, USDA 1978). The valley is generally described as made up of recent alluvium. While recent alluvium soils show numerous periods of surface stability and then burial, these settings have less potential to contain buried soils. This is in contrast to old alluvium which refers to alluvial fans and terraces that are old and stable enough to have developed significant soil structure (Ballantyne and Hildebrandt 2002). Consequently, since this project area is contained within recent alluvium, it is unlikely to contain buried soils, which also means it has low potential to contain buried archaeological sites.

Land Use History

The native soils within the project area have been subject to significant disturbances for over a century due to industrial development of the city of Salinas, and agricultural practices.

During the Mexican Period the natural landscape of the ranchos in the region of Salinas was swamplands, intermittent lakes, and large fields of mustard. Most of the large ranchos established during this period were used for grazing cattle. All of the land encompassed in the APE is located within the boundaries of three Mexican ranchos: Rancho del Sauzal, Rancho El Alisal (Bernal), and Rancho Llano de Buena Vista. Rancho del Sauzal was used as a cattle range in 1828. This pastoral period ended in the 1850s with the advent of the Gold Rush. In 1868 the city of Salinas was laid out and town lots were sold.

Reclamation Ditch 1665, which crosses through the APE several times, was constructed between 1917 and 1921. The ditch assisted in the reclamation of several thousand acres of swampland in the region. Prior to the construction of the ditch, the Carr Ditch probably served as the precursor to this ditch, reclaiming 1475 acres of land near the northeast edge of Salinas. After construction of the system, the reclaimed swampland was used for agricultural pursuits. In 1932 most of the canal was altered by deepening it five to six feet. In the 1950s several sections of the canal were rerouted underground to accommodate the construction of modern Highway 101 near the Sanborn Road Overcrossing.

In the early decades of the twentieth century, the land within the APE was still held in large units devoted to agriculture. In the 1940s property owners began subdividing their landholding for development.

By the 1950s the portion of the APE west of Highway 101 had developed as an industrial area. Agriculture-related industries such as vegetable processing and packing predominate as well as ice and cooling plants, canneries, agricultural chemical plants and equipment manufacturers. The area east of Highway 101 was devoted mostly to residential subdivisions, other than the Municipal Airport and a scattering of modern commercial businesses and hotels.

The first segment of Highway 101 was built in 1915 from Chualar to Salinas and was later widened in 1929. In 1955 an expressway was built through Salinas, which is the current Highway 101 alignment.

Most of the project area consists of the Highway 101 corridor. It also encompasses several agricultural fields, many industrial parcels, a few residential lots, businesses, hotels, fast-food restaurants, and the right-of-way for Terven Avenue.

The construction and alteration of Highway 101 has resulted in extensive ground disturbance within the APE. The large amount of ground disturbance within the project area has never resulted in the report of an archaeological discovery. It is unlikely that archaeological material, particularly human remains, would go undetected during the course of development projects or agricultural activities.

Conclusion

Our research suggests that the Airport Boulevard Interchange Project area in southeast Salinas did not play a major role in prehistoric settlement compared to the resource-rich coastal zone, and sloughs and lakes in the vicinity of Castroville. Its location in the Salinas River floodplain, once covered in marshes, did not serve as an optimal location for humans to set up camp or establish villages. Humans usually tended to occupy higher ground, on the edge of sloughs and lakes. We conclude that the project area is located in a low sensitivity area for archaeological sites, based on a review of the project geomorphology, previous studies, and archaeological site patterns.

Based on the low likelihood of finding any buried sites, we feel that no additional efforts to monitor for the presence of cultural resources are necessary. The commitment to monitor a construction project for archaeology

needs to be justifiable. Compared to other projects we are currently working on, this project falls as one of the least sensitive areas, and least likely to encounter a discovery during construction. As monitoring efforts are always costly, we would rather spend our limited resources on those projects that are more sensitive for archaeological sites, and which warrant additional work. For these same reasons we cannot justify developing a Treatment Plan to address historic properties should they be discovered during construction. If buried sites are discovered during construction, appropriate measures will be taken pursuant to 36 CFR 800.13(b).

Please feel free to contact Krista Kiaha of my staff at (805) 542-4799 or me at (805) 549-3669 if you have any questions. Thank you.

Sincerely,



Valerie A. Levulett
Environmental Branch Chief,
Technical Studies

State of California

Business, Transportation and Housing Agency

M e m o r a n d u m

To: File

Date: February 5, 2004

File: 05-MON-101-PM 85.0/86.6

KP: 136.79/139.36

EA: 05-349500

From: Krista Kiaha
District 5 Archaeologist



Subject: SHPO Concurrence on Airport Boulevard Interchange Historic Property Survey Report (Kiaha 2003)

A Historic Property Survey Report (HPSR) was completed for the Airport Boulevard Interchange Project in May 2003. In a letter dated August 21, 2003, SHPO concurred on the adequacy of the APE, the inventory, the evaluation efforts, and that the implementation of the undertaking will have **No Effect to Historic Properties**. This letter documents that **Section 106 is complete** for the project. The letter from SHPO also recommended that we consider monitoring the undertaking's implementation, and consider developing a process to resolve adverse effects on historic properties, should any be discovered during construction.

At the request of FHWA, Caltrans prepared a letter to FHWA on November 10, 2003, explaining why the additional studies SHPO recommended are not warranted. FHWA received this letter and decided there is no need to formally respond to SHPO in this regard since Section 106 is complete.

State of California

Business, Transportation and Housing Agency

M e m o r a n d u m

To Julie McGuigan
Associate Environmental Planner
Caltrans Environmental Planning

Date: September 20, 2004

File No. Airport Blvd. Interchange
MON-101 PM 84.6/86.6
EA 05-34950

Krista Kiaha

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Principal Investigator- Prehistoric Archaeology
From DEPARTMENT OF TRANSPORTATION
District 5

Subject Section 106 Complete, Airport Blvd. Interchange

The attached *Historic Property Survey Report for the Airport Boulevard Interchange – Addendum Surveys, in Monterey County* documents that the requirements of 36 CFR 800 have been fulfilled, in accordance with the January 1, 2004 *Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation* (Programmatic Agreement).

Caltrans, under the authority of FHWA has made a finding of No Historic Properties Affected, and no further studies are warranted. In the event cultural material is encountered during construction, work shall cease until a qualified archaeologist can assess the unanticipated discovery in accordance with the Programmatic Agreement, and the Caltrans Environmental Planning Branch shall be notified immediately.

Attachment

Cc: Dominic Hoang, Federal Highway Administration
Valerie Levulett, Caltrans District 5 Heritage Resources Coordinator