State Route 216/Houston Avenue 4-Lane Widening

On State Route 216 from Lovers Lane to Road 152
06-TUL-216-PM 1.9/3.7
06-430700

Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment and Programmatic Section 4(f) Evaluation

Prepared by the
State of California Department of Transportation

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by the Department under its assumption of responsibility pursuant to 23 U.S. Code 327.

August 2007

Caltrans

General Information About This Document

What's in this document?

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration, has prepared this Initial Study/Environmental Assessment, which examines the potential environmental impacts of alternatives being considered for the proposed project located in Tulare County, California. The document describes why the project is being proposed, alternatives for the project, the existing environment that could be affected by the project, the potential impacts from each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What should you do?

- Please read this Initial Study/Environmental Assessment. Additional copies of this document as well as the technical studies are available for review at the Caltrans District Office at 1352 West Olive Avenue in Fresno, California, 93726 and Tulare County Library–Visalia Main Branch Library at 200 West Oak Street, Visalia, CA 93292.
- Attend the public hearing on September 19, 2007**.**
- We welcome your comments. If you have any concerns regarding the proposed project, please attend the public hearing, and/or send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to Caltrans at the following address:

  Sarah Gassner, Acting Branch Chief
  Southern Sierra Environmental Analysis Branch
  California Department of Transportation
  2015 E. Shields Avenue, Suite 100
  Fresno, CA 93726-5308

  Submit comments via email to: sarah_gassner@dot.ca.gov.
- Submit comments by the deadline: October 4, 2007.

What happens next?

After comments are received from the public and reviewing agencies, Caltrans, as assigned by 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 is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

It should be noted that at a future date, the Federal Highway Administration or another federal agency may publish a notice in the Federal Register, pursuant to 23 U.S. Code Section 139(1), indicating that a final action has been taken on this project by the Federal Highway Administration or another federal agency. If such notice is published, a lawsuit or other legal claim will be barred unless it is filed within 180 days after the date of publication of the notice (or within such shorter time period as is specified in the federal laws pursuant to which judicial review of the federal agency action is allowed). If no notice is published, then the lawsuit or claim can be filed as long as the periods of time provided by other federal laws that govern claims are met.

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: Sarah Gassner, Southern Sierra Environmental Analysis Branch, 2015 E. Shields Avenue, Suite 100, Fresno, CA 93726; (559) 243-8157 Voice, or use the California Relay Service TTY number, 1-800-735-2929.

SCH# _____
06-TUL-216- PM 1.9/3.7
EA: 06-430700

State Route 216 (Houston Avenue) 4-lane widening from
Post Mile 1.9 to Post Mile 3.7 in the City of Visalia and Tulare County, California

INITIAL STUDY with Proposed Mitigated Negative Declaration/ENVIRONMENTAL ASSESSMENT and Programmatic Section 4(f) Evaluation

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 U.S. Code 4332(2)(C), 23 U.S. Code 327, and 49 U.S. Code 303

THE STATE OF CALIFORNIA
Department of Transportation

8/10/2007
Date of Approval

Malcolm X. Dougherty
District 6 Director
California Department of Transportation

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to widen State Route 216 from Lovers Lane in the City of Visalia to Road 152 in Tulare County (post miles 1.9 to 3.7). The proposed project would convert the existing highway from a two-lane to a four-lane conventional highway with a median strip within the Visalia city limits, then transition to a two-lane conventional highway with standard shoulders from just east of the city limit near Post Mile 2.99 to Road 152 in Tulare County. The intersection at Road 152 would be realigned, while intersections at Lovers Lane and McAuliff Road would be upgraded with additional left-turn lanes.

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 from interested agencies and the public.

Caltrans has prepared an Initial Study for this project and, and pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The project would not affect planned land use and is consistent with the Tulare County and the City of Visalia General Plans. No hazardous waste materials were identified within the project area. The proposed project would have no effect on paleontological resources. The proposed project would have no effect on air quality, hydrology and floodplain, water quality, or storm water runoff. The proposed project would have no effect on natural communities, wetlands, animal and plant species, or cultural resources, and would not spread invasive species.

In addition, the proposed project would have no significant effect on farmland or noise.

In addition, the proposed project would have no significantly adverse effect on homes and businesses, visual resources (oak trees), an educational complex, or threatened and endangered species because the following mitigation measures would reduce potential effects to insignificance:

- Relocation of homes and one business and the purchase of farmland property would be done in accordance with the Uniform Relocation Assistance and Real Properties Acquisition Policies Act of 1970, as amended.
- Two heritage oak trees would be replaced in accordance with the City of Visalia's Oak Tree Preservation Ordinance (Municipal Code 12.24).
- The parking lot at the Visalia Adult School would be reconfigured.
- Environmentally Sensitive Areas would be designated for six elderberry bushes within the project area, which provide habitat for the valley elderberry longhorn beetle, a federal threatened species.

_____ _____

Christine Cox-Kovacevich, Chief — Date
Office of Environmental Management, North
Central Region Environmental Division
California Department of Transportation

Summary

The California Department of Transportation (Caltrans) proposes to widen State Route 216 from post mile 1.9 on Lovers Lane in the City of Visalia to post mile 3.7 at Road 152 in Tulare County. The proposed project would convert the existing highway from a two-lane to a four-lane conventional highway with a median strip within the Visalia city limits, then transition to a two-lane conventional highway with standard shoulders from just east of the city limit to Road 152 in Tulare County. The intersection at Road 152 would be realigned, while intersections at Lovers Lane and McAuliff Road would be upgraded with additional left-turn lanes.

The proposed project was divided into two segments for the development of project alternatives. Segment 1 would be widened from two to four lanes from post mile 1.9 on Lovers Lane to about post mile 2.83 at Comstock Street where the south side of the roadway has already been widened as part of an existing subdivision. Although this section was widened to allow three lanes, it is currently striped for two lanes and would be widened to four lanes as part of the project. Segment 1 would then transition back to two lanes, just east of the Visalia city limit, around post mile 2.99. Segment 2 covers the area from around post mile 2.99 east to Road 152.

Alternatives Considered

Segment 1

In Segment 1, three build alternatives are proposed to widen State Route 216 from a two-lane conventional highway to a four-lane conventional highway between Lovers Lane and just east of the Visalia city limit/Tulare county line. A single build alternative is proposed for Segment 2, where State Route 216 would transition back to a two-lane conventional highway.

The three proposed build alternatives would widen the roadway from a two-lane conventional highway to a four-lane conventional highway with about 120 feet of right-of-way. The build alternatives would widen the existing roadway either to the north, the south, or symmetrically along the existing centerline.

Each of the three build alternatives would include:

- Installing a second left-turn lane at the intersections with Lovers Lane and McAuliff Road
- Relocating utilities

- Replacing and relocating existing sidewalk(s)
- Constructing new sidewalk(s) where none currently exist
- Replacing an existing bicycle path with a bicycle lane in both directions
- Replacing trees and landscaping

Alternative 1 would shift the existing highway about 30 feet north of the existing roadway between Lovers Lane and Comstock Street.

Alternative 2 would shift the existing highway about 20 feet south of the existing roadway between Lovers Lane and Comstock Street.

Alternative 3 would widen the existing roadway symmetrically, about 15 feet on either side of the existing centerline between Lovers Lane and Comstock Street.

From Comstock Street to about post mile 2.99, all of the Segment 1 alternatives would widen State Route 216 one lane to the north, since the roadway has already been widened one lane to the south. Segment 1 would then transition back to two lanes, just east of the Visalia city limit, near post mile 2.99.

Segment 2

The build alternative for Segment 2 would repave the existing two-lane conventional highway, add 8-foot shoulders, and bring this segment up to current Caltrans standards. The intersection at Road 152 would be reconfigured to provide improved sight distances.

No-Build Alternative

Under the No-Build Alternative, the existing two-lane highway and intersections would remain unchanged. The No-Build Alternative would result in continued higher-than-average accident rates and traffic congestion near the Golden West Educational Complex. If the No-Build Alternative were chosen, operational deficiencies in Segment 1 would not be corrected and substandard shoulder widths in Segment 2 would remain.

A summary of the potential impacts for each of the project alternatives is provided on the next page.

Summary of Major Potential Impacts from Alternatives

Potential Impact		Segment 1			Segment 2	No-Build Alternative
		Alternative 1	Alternative 2	Alternative 3		
Land Use	Consistency with the Visalia General Plan	Consistent with the City of Visalia General Plan			Consistent with the City of Visalia General Plan	Does not conform with the City of Visalia General Plan
	Consistency with the County of Tulare General Plan	Consistent with the County of Tulare General Plan			Consistent with the County of Tulare General Plan	Does not conform with the County of Tulare General Plan
Parks and Recreation		.69 acre	No impact	.17 acre	No impact	No impact
Growth		Consistent with the City of Visalia General Plan and the County of Tulare General Plan			Consistent with the City of Visalia General Plan and the County of Tulare General Plan	No Impact
Relocation	Business displacements	One home-based business displaced			0	No Impact
	Housing displacements	2 potential displaced residences	36 potential displaced residences	20 potential displaced residences	0	No Impact
	Utility service relocation	Utilities would require relocation				No Impact
Traffic and Transportation/ Pedestrian and Bicycle Facilities		Move the sidewalk and replace the bike path with a bike lane between Lovers Lane and McAuliff Road			Widening the shoulder would make it safer for pedestrians and bicyclists.	Level of Service would continue to worsen
Parking spaces		53 parking stalls from Visalia Adult School and on-street parking on the north side of State Route 216 would be removed	On-street parking on the south side of State Route 216 would be removed	53 parking stalls from Visalia Adult School and on-street parking on both sides of State Route 216 would be removed	No Impact	No Impact

Potential Impact	Segment 1			Segment 2	No-Build Alternative
	Alternative 1	Alternative 2	Alternative 3		
Visual	Remove 110 trees in Segment 1	Remove 94 trees in Segment 1	Remove 94 trees in Segment 1	Remove 37 trees in Segment 2	No Impact
Air Quality	May provide overall air quality benefit by improving Level of Service and reducing idling time at intersections.				Air Quality would worsen due to longer idling times
Noise and Vibration	Noise levels at 11 single-family residences and a mobile home park would exceed the criteria of 67 decibels.				No Impact
Schools	Remove sidewalks, trees, parking lot, and a bicycle path	No Impact	Remove sidewalks, trees, parking lot, and a bicycle path	No Impact	No Impact
Construction	Temporary access delays during construction				No Impact
Farmlands	No Impact			Acquire 0.577 acre of farmland	No Impact
Biology	No Impact			Establish Environ-mentally Sensitive Areas for six elderberry shrubs, which are habitat for Valley elderberry longhorn beetle	No Impact

Table of Contents

List of Figures

List of Tables

List of Abbreviated Terms

Caltrans	California Department of Transportation
PM	Post mile

Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) proposes to widen State Route 216 from post mile 1.9 on Lovers Lane in the city of Visalia to Road 152 in Tulare County (post mile 3.7). State Route 216 serves as an intra-regional corridor between Visalia and the smaller communities of Ivanhoe, Woodlake, and Lemoncove.

Throughout the project area, State Route 216 follows the alignment of a number of local roads and, therefore, is also known by city and county street names. At the beginning of the project limits, State Route 216 is also called Lovers Lane. In the vicinity of the Golden West Educational Complex east to the Visalia city limit it is called Houston Avenue, and in the Tulare County portion of the project it is called Ivanhoe Drive (see Figures 1.1 and 1.2).

The proposed project would convert the existing highway from two lanes to four lanes with a median strip from post mile 1.9 on Lovers Lane to just east of the county line (around post mile 2.99), then transition to a two-lane conventional highway with standard shoulders to Road 152 in Tulare County. The intersection at Road 152 would be realigned, while intersections at Lovers Lane and McAuliff Road would be upgraded with additional left-turn lanes.

The original proposal for the project included acquiring the right-of-way to eventually build four lanes on State Route 216 between the Visalia city limit and Road 152. Opposition to this part of the project was expressed at the public information meeting on February 23, 2006. Residents of the area were opposed to acquisition of their property when improvements would not be constructed for at least 20 years. Based on that input, Caltrans scaled back the project in Segment 2, proposing only to repave the existing highway, add 8-foot shoulders, and provide some intersection improvements at Road 152.

The proposed project is programmed in the 2006 Federal Transportation Improvement Program and the 2004/2005 Regional Transportation Plan as a Constrained Capacity Increasing Project for inclusion in the Tulare County 2004/2005 Regional Transportation Improvement Plan. Regional Improvement Program Funds would be used for this 2006 State Transportation Improvement Program project.

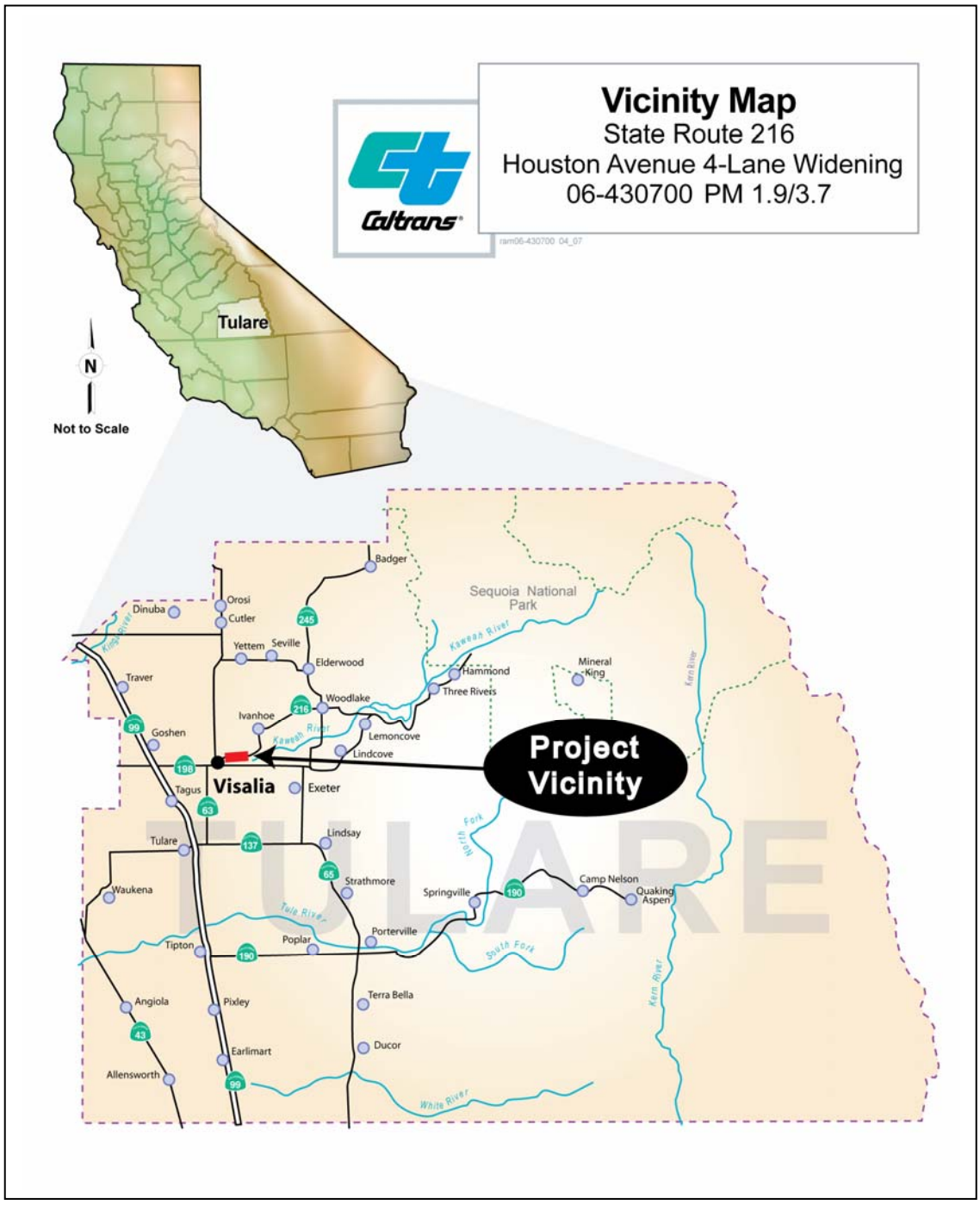


Figure 1-1 Project Vicinity Map

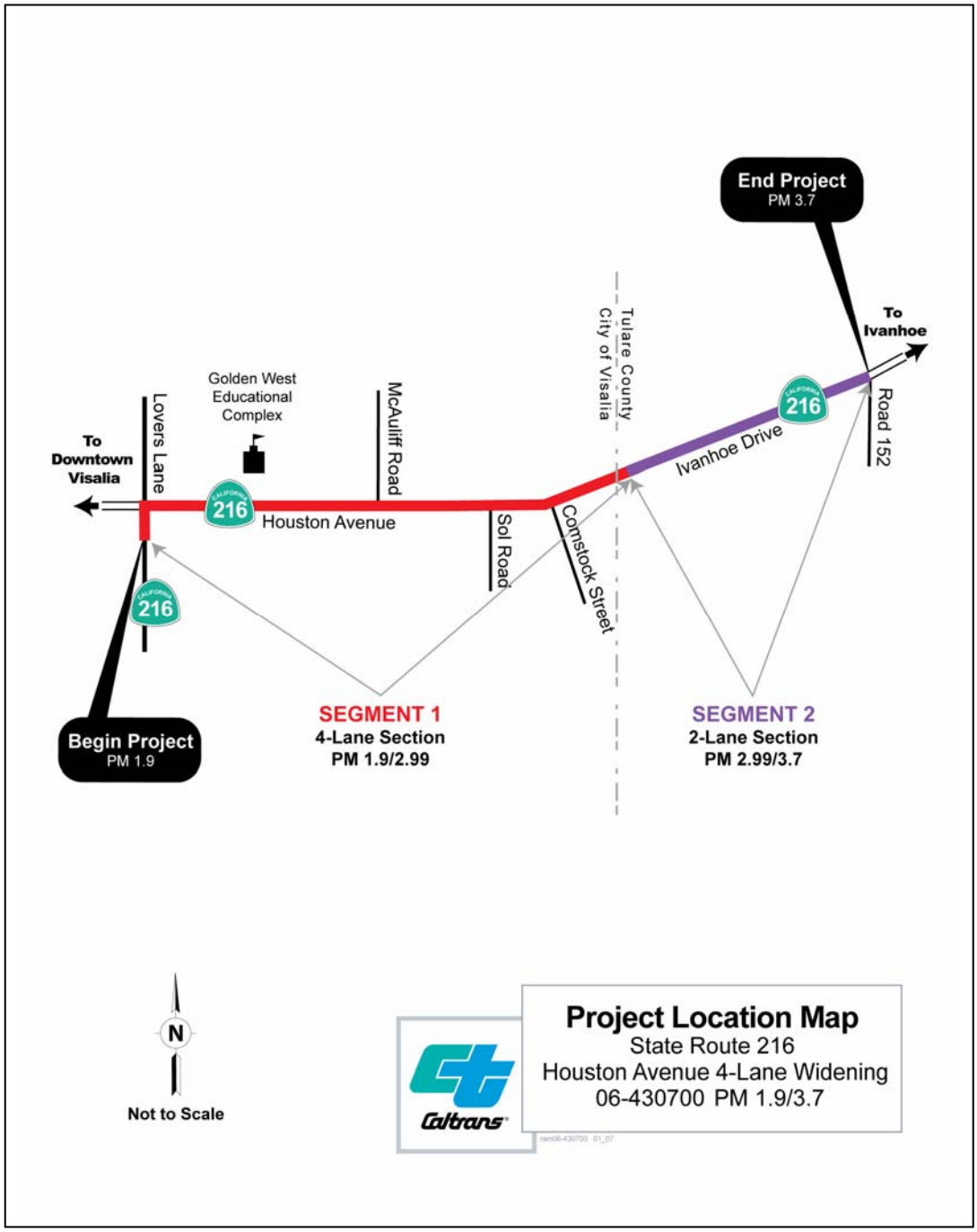


Figure 1-2 Project Location Map

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the proposed project is to:

- Improve the operation of State Route 216 from Lovers Lane in the city of Visalia to Road 152 in Tulare County.
- Increase the capacity of State Route 216 from Lovers Lane in the city of Visalia to just east of the city limits near Post Mile 2.99.
- Improve safety on State Route 216 from Lovers Lane in the city of Visalia to Road 152 in Tulare County.

1.2.2 Need

The proposed project was divided into two segments during the alternative development process. Segment 1 lies between Lovers Lane and just east of the city limits, an area of the city that is experiencing urban development, while Segment 2 extends through a predominantly rural area to Road 152 (Figure 1-2).

State Route 216 is a two-lane conventional highway within Segment 1. The existing roadway has two 12-foot travel lanes and 8-foot outside shoulders. Sidewalks exist only in some areas of Segment 1, mostly in front of the Golden West Educational Complex and they range from 4- to 10-feet wide. Intersections at Lovers Lane and McAuliff Road have traffic signals and dedicated single left-turn lanes. Additional intersections in Segment 1 include Sol Road and Comstock Street. Each of these intersections is a T-intersection with the side street controlled by a stop sign.

Segment 2 is also a two-lane conventional highway. The existing roadway has two 12-foot travel lanes. There are no shoulders or sidewalks in this portion of the project. Road 152 is the only major intersection in Segment 2 while some driveways and unpaved roads also access the state route. Road 152 is a T-intersection with the side street controlled by a stop sign.

The existing highway serves growing residential, school, and commuter traffic, as well as the Groppetti football stadium (located north of Golden West High School on McAuliff Road).

1.2.2.1 Operations

Currently, State Route 216 operates satisfactorily throughout the majority of the day, with the exception of the peak hours. These peak hours coincide with the time when

children go to school in the morning and are released from school in the early afternoon. However, the same deficiencies affect traffic operations during special events taking place at the school and/or the Groppetti football stadium. These operational deficiencies mainly affect Segment 1 between Lovers Lane and McAuliff Road.

Left-turn lanes at the intersections of State Route 216 with Lovers Lane and McAuliff Road experience back-ups with waiting vehicles blocking the through lanes. Vehicles waiting to move in all directions must often wait through more than one red light before being able to continue on to their destination. Adding a second left-turn lane would add storage capacity at the intersections, remove stopped vehicles from the through traffic lanes, and consequently improve safety as well.

Turning vehicles block through traffic between intersections during peak hours. A second through lane in each direction would not only increase the capacity of the highway, but also would allow opportunities to pass slow-moving traffic and traffic waiting to make a turn. The added through lanes and left-turn lanes at intersections would enable vehicles to move around stopped vehicles, improving traffic flow. In addition, a raised median would control crossover traffic, also improving the flow of through traffic.

In Segment 2, the proposed project would add 8-foot shoulders between the Visalia city limit and Road 152 and realign the Road 152/State Route 216 intersection. Widening the existing shoulders to 8 feet would enable vehicles to turn right off the highway outside the flow of traffic and bring the highway up to current Caltrans standards. Realigning the existing intersection of Road 152/State Route 216 to a right angle would improve sight distances for drivers turning onto the highway.

1.2.2.2 Capacity

Traffic volume is defined through the use of the Levels of Service rating. Levels of Service describe the operating conditions a motorist would experience while traveling on a highway. This rating system ranges from “A” to “F,” with “A” being free-flowing traffic and “F” being traffic with heavy congestion and considerable delays (see Figures 1-3 and 1-4 for a description of Level of Service).

The City of Visalia’s Circulation Element, the Tulare County General Plan, and Caltrans’ Draft Transportation Concept Report for State Route 216 designate the highway as a four-lane arterial with a minimum Level of Service “D.”

Table 1.1 gives current traffic volumes and predicted volumes for 2011 and 2013. Table 1.2 shows the current and predicted Levels of Service for Segments 1 and 2, as well as intersections in the project area without the project.

Table 1.1 Traffic Volumes (Annual Daily Traffic)

	2005	2011	2031
Segment 1	11,200	29,000	40,000
Segment 2	4,700	5,600	7,800

Source: Caltrans Operational Analysis, January 2007

Table 1.2 Levels of Service (No-Build Alternative)

	2005		2011		2031	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
Segment 1	C	B	C	C	D	F
State Route 216/ Lovers Lane	C	B	C	C	D	F
State Route 216/ McAuliff Road	B	B	C	C	D	E
Segment 2	B	B	C	C	D	E
State Route 216/Road 148	-	-	-	-	C	E
State Route 216/ Road 152	B	B	B	B	B	B

Source: Caltrans Operational Analysis, April 2007

The average annual daily traffic count indicates that traffic volumes drop significantly east of McAuliff Road. However, this project proposes to widen State Route 216 to four lanes east of McAuliff Road to post mile 2.94 because, the south side of the existing roadway has already been widened as part of an existing subdivision from Comstock Street (post mile 2.83) to post mile 2.94. Caltrans therefore proposes, as part of this project, to widen the north side of State Route 216 to four lanes in this developed area and transition back to 2 lanes close to post mile 2.99. This would provide route continuity in this area and would create a symmetrical roadway.

State Route 216 within the project area is characterized by residential housing, a school complex, and agricultural land uses. Anticipated growth in the community is expected to add to the congestion of State Route 216 in Segment 1.

Traffic volumes in Segment 1 would increase more than 250 percent between 2005 and 2011 and increase an additional 40 percent between 2011 and 2031(Table 1.1), causing the Level of Service to deteriorate to a Level of Service “F” in 2031 (Table

1.2). Intersections at Lovers Lane and McAuliff Road in Segment 1 would also fail during the 20-year planning horizon. Level of Service at the Comstock Street intersection would decrease from Level of Service "B" to a Level of Service "E" during the 20-year design period for the segment. This is below the minimum Level of Service "D" designated for this roadway.

Within Segment 2, traffic volumes are projected to increase 39 percent from 5,600 vehicles per day (year 2011) to 7,800 vehicles per day (year 2031) during the 20-year design period. Level of Service on the existing highway would decrease from Level of Service "B" to a Level of Service "E" during the 20-year design period for the segment. This is below the minimum Level of Service "D" designated for this roadway.

1.2.2.3 Safety

Because of the differences in traffic patterns for the two segments in the project limits, each segment was analyzed individually. In addition, the accident history for intersections was analyzed separately to include accidents on cross-streets.

During the three-year study period, 21 accidents occurred on this section of State Route 216: one fatal, seven injury, and 13 property-damage-only type accidents. Eleven of the accidents occurred on the mainline section of the highway and 10 accidents occurred at the intersections.

Segment Analysis

The accident history for Segment 1 for the most recent three-year study period from April 1, 2003 to March 31, 2006 (see Table 1.3) indicates that the actual fatal-plus-injury accident rate is lower than the statewide average accident rate. However, the actual fatal and total accident rates are higher than the statewide average accident rates. During the three-year study period, 15 accidents occurred on this highway section: one fatal, five injury, and nine property-damage-only type accidents. The accidents break down as follows: one for driving under the influence of alcohol (one broadside), two for failure to yield (sideswipe), three for speeding (two rear-end and one broadside), two for improper turn (one hit object and one broadside), and seven classified as "other violations" (two sideswipe, one broadside, one rear-end, and three hit objects).

Table 1.3 Accident Data for Highway Segments (April 1, 2003 to March 31, 2006)

Highway Segment*	Actual			Statewide Average		
	Fatal	Fatal + Injury	Total**	Fatal	Fatal+ Injury	Total**
Segment 1 (PM 1.9 – PM 2.99	0.112	0.56	1.69	0.026	0.64	1.50
Segment 2 (PM 2.99 – PM 3.7)	0.000	0.49	1.47	0.037	0.47	0.98

* Accidents per million-vehicle-miles
** Total includes all accidents (fatal, fatal-plus-injury, and property damage only)

The accident history for Segment 2, as shown in Table 1.3 indicates that the actual fatal accident rate is lower than the statewide average accident rate. However, the actual fatal-plus-injury and total accident rates are higher than the statewide average accident rates. A total of six accidents (zero fatal, two injury, and four property-damage-only) were reported for this segment: two for improper turns (one overturn and one hit object), two for failure to yield (broadside), one for speeding (overturn), and one for driving under the influence of alcohol (a hit object).

Intersection Analysis

The total accident rates at the intersections in the project limits were below the statewide average accident rate for similar intersections (Table 1.4), even though close to the average rate in some instances. The intersection of State Route 216 and McAuliff Road experienced a higher than average accident rate for fatal accidents and the same accident rate for fatal and fatal-plus-injury types of accidents. Two accidents (one fatal and one property damage only) were reported at this intersection: one for following too close (a rear-end accident) and one for driving under the influence of alcohol (a broadside).

Table 1.4 Accident Data for Intersections (April 1, 2003 to March 31, 2006)

Intersections of State Route 216 with*	Actual			Average		
	Fatal	Fatal + Injury	Total**	Fatal	Fatal+ Injury	Total**
Intersections in Segment 1						
Lovers Lane	0.000	0.06	0.37	0.001	0.17	0.43
McAuliff Road	0.082	0.08	0.16	0.002	0.08	0.19
Sol Road	0.000	0.00	0.18	0.002	0.08	0.19
Intersection in Segment 2						
Road 152	0.000	0.19	0.19	0.004	0.10	0.22

* Accidents per million vehicles
** Total includes all accidents (fatal, fatal plus injury, and property damage only)

The total accident rate for the intersection of State Route 216 with Road 152 in Segment 2 has a slightly lower than average total accident rate, but a higher than average fatal-plus-injury rate. However, this rate was caused by a single injury accident during the three-year accident history period. The type of accident was a failure-to-yield (broadside) accident.

With continued development in the area, including three subdivisions, a potential fire station, and two potential schools, it is anticipated that the proposed improvements, such as additional left-turn lanes and 8-foot shoulders, would help lower accident rates in the future.

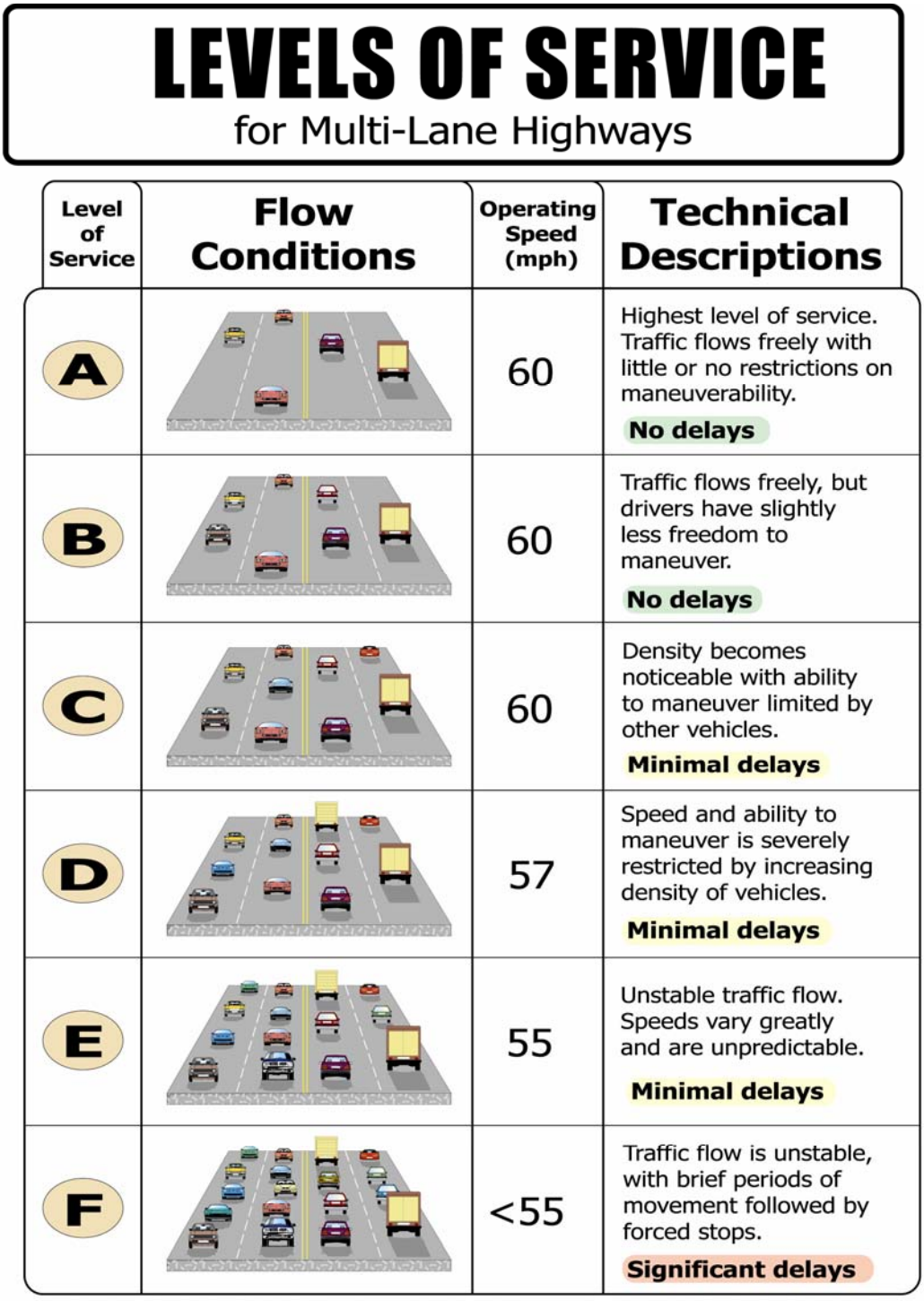
LEVELS OF SERVICE

for Two-Lane Highways

Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		55+	Highest quality of service. Free traffic flow with few restrictions on maneuverability or speed. **No delays**
B		50	Stable traffic flow. Speed becoming slightly restricted. Low restriction on maneuverability. **No delays**
C		45	Stable traffic flow, but less freedom to select speed, change lanes or pass. **Minimal delays**
D		40	Traffic flow becoming unstable. Speeds subject to sudden change. Passing is difficult. **Minimal delays**
E		35	Unstable traffic flow. Speeds change quickly and maneuverability is low. **Significant delays**
F			Heavily congested traffic. Demand exceeds capacity and speeds vary greatly. **Considerable delays**

Source: 2000 HCM, Exhibit 20-2, LOS Criteria for Two-Lane Highways in Class 1

Figure 1-3 Level of Service, Two-Lane Highway



Source: 2000 HCM, Exhibit 21-3, Speed-Flow Curves with LOS Criteria for Multi-Lane Highways

Figure 1-4 Level of Service, Multi-Lane Highway

1.3 Alternatives

This section describes the proposed actions and the design alternatives that were developed to achieve the project purpose and need while avoiding or minimizing environmental impacts (see Appendix E: Alternative Cross-Sections and Layouts).

The project was divided into two segments during the alternative development process. Multiple alternatives were developed for Segment 1. Each of the alternatives would convert State Route 216 from a two-lane conventional highway to a four-lane conventional highway. A single build alternative is under consideration for Segment 2, leaving the existing highway as a two-lane conventional highway with the addition of 8-foot shoulders. The existing two-lane highway and intersections would remain unchanged under the No-Build Alternative.

The purpose of the proposed project is to improve operation and safety, and increase capacity on State Route 216 from Lovers Lane in the city of Visalia to Road 152 in Tulare County.

1.3.1 Build Alternatives [Segment 1-Urban]

Common Design Features of the Build Alternatives

A four-lane conventional highway (120 feet of right-of-way) would be constructed in Segment 1 of the project. Three build alternatives are under consideration for this segment of the project.

Each of the three build alternatives in Segment 1 would have four 12-foot lanes, up to a 23-foot-wide raised center median, 2-foot inside shoulders, and 8-foot outside shoulders. Sidewalks that would vary in width from 6.5 to 11 feet would be constructed on both sides of State Highway 216 between the intersection with Lovers Lane and McAuliff Road. The sidewalks in front of the school complex on the north side would remain 11 feet wide and would narrow to 10 and eight feet wide towards and east of McAuliff Road. Sidewalk widths on the south side vary from 6 feet wide on the west side of the project area to 10 feet wide on the east side around McAuliff Road. The widths of sidewalks would vary to minimize impacts to property owners (6-foot width) and reflect the higher pedestrian traffic in front of the school. The existing sidewalks would be replaced in kind.

Additional 12-foot left-turn lanes would be constructed at the intersections of State Route 216 at Lovers Lane and McAuliff Road. A 10-foot-wide planter strip would be constructed between the sidewalk and the roadway from the intersection with Lovers

Lane to the east end of the Visalia Adult School. Trees and landscaping would be installed. A 5-foot bicycle lane would be striped on both shoulders.

Unique Features of the Build Alternatives

Cross-sections of the build alternatives can be found in Appendix E.

1.3.1.1 Build Alternative 1

Alternative 1 would shift the highway centerline about 30 feet to the north and would convert the existing two-lane conventional highway to a four-lane divided highway from post mile 1.9 on Lovers Lane to Comstock Street. From Comstock Street to about post mile 2.99, the highway would only be widened one lane to the north, since the roadway has already been widened one lane to the south. The road would transition to two lanes just east of the Visalia city limit, near post mile 2.99. With construction scheduled to begin in 2011, the estimated project cost for this alternative, including acquisition of right-of-way and relocation of utilities, is $16.7 million (in 2011 dollars).

1.3.1.2 Build Alternative 2

Alternative 2 would shift the highway centerline about 20 feet to the south and would convert the existing two-lane conventional highway to a four-lane divided highway from post mile 1.9 on Lovers Lane to Comstock Street. From Comstock Street to about post mile 2.99, the highway would only be widened one lane to the north, since the roadway has already been widened one lane to the south. The road would transition to two lanes just east of the Visalia city limit, near post mile 2.99. With construction scheduled to begin in 2011, the estimated project cost for this alternative, including acquisition of right-of-way and relocation of utilities, is $19.9 million (in 2011 dollars).

1.3.1.3 Build Alternative 3

Alternative 3 would widen the existing roadway symmetrically, about 15 feet on either side of the existing centerline between Lovers Lane and Comstock Street and would convert the existing two-lane conventional highway to a four-lane divided highway. From Comstock Street to about post mile 2.99, the highway would only be widened one lane to the north, since the roadway has already been widened one lane to the south. The road would transition to two lanes just east of the Visalia city limit, near post mile 2.99. With construction scheduled to begin in 2011, the estimated project cost for this alternative, including acquisition of right-of-way and relocation of utilities, is $19.8 million (in 2011 dollars).

1.3.2 Build Alternatives [Segment 2-Rural]

The proposed improvements in Segment 2 include repaving the existing two-lane conventional highway and adding 8-foot shoulders. The skewed intersection at Road 152 would be realigned to improve sight distances by constructing a right-angle intersection. With construction scheduled to begin in 2011, the estimated project cost for Segment 2, including acquisition of right-of-way and relocation of utilities, is $8.8 million (in 2011 dollars).

1.3.3 No-Build Alternative

Under the No-Build Alternative, the existing two-lane highway and intersections would remain unchanged. The No-Build Alternative would result in continued higher-than-average accident rates and traffic congestion in Segment 1. Operational deficiencies would not be corrected. This alternative would not meet the purpose and need for the project.

1.3.4 Comparison of Alternatives

The main criteria used to compare the alternatives under consideration for the proposed project include the number of relocations required for the improvements and impacts on the Golden West Educational Complex. Additional criteria include removal of parking spaces, improved operation of the highway, and project cost. The alternatives are compared below and in Table 1.5.

Segment 1

Three build alternatives are being considered for this segment of the project. All build alternatives would decrease traffic conflicts by adding two through lanes and dedicated left-turn lanes and would construct a raised median on State Route 216. All build alternatives would satisfy the purpose and need of the proposed project by improving the traffic flow and operation and by increasing capacity and improving safety. All build alternatives would also provide passing opportunities around slower-moving traffic along State Route 216 by:

- Adding an additional through lane in each direction of travel
- Separating oncoming traffic and reducing conflicting traffic movements with a raised center median
- Adding additional left-turn lanes at two intersections with traffic signals (Lovers Lane and McAuliff Road)
- Adding continuous sidewalks from Lovers Lane to McAuliff Road on both sides of State Route 216

All build alternatives would displace one home-based business.

Alternative 1 would shift the roadway about 30 feet north of the existing centerline and affect two residential buildings and one home-based business (see Table 2.4). Partial acquisition of a sliver of land from 22 parcels would also be needed. The Golden West Educational Complex would be affected because a sliver of school property would be needed to move the sidewalk north. However, this impact would not restrict the future use of the school property. The Visalia Adult School parking lot adjacent to Houston Avenue, trees, a sidewalk, and street parking along Houston Avenue would also be affected.

Alternative 2 would shift the roadway 20 feet to the south and affect 36 residential units and one home-based business. Partial acquisition of a sliver of land from 18 parcels would also be needed. A privacy wall would need to be replaced at the Burgundy House Apartments. Trees, a sidewalk, a bicycle path, and street parking along Houston Avenue would also be affected.

Alternative 3 would construct the proposed improvements symmetrically, requiring about 15 feet of land from both sides of the roadway. One home-based business and 20 residential units would be affected. Partial acquisition of a sliver of land from 24 parcels would also be needed. The Golden West Educational Complex would be affected because a sliver of school property would be needed to move the sidewalk north. However, this impact would not restrict the future use of the school property. The Visalia Adult School parking lot adjacent to Houston Avenue, the Burgundy House Apartments, trees, a sidewalk, and street parking along Houston Avenue would also be affected.

Segment 2

Only one build alternative is being considered for Segment 2. The proposed improvements include repaving the existing two-lane conventional highway and adding 8-foot shoulders. The skewed intersection at Road 152 would be reconfigured at a right angle. The addition of 8-foot shoulders would give drivers who go off the roadway more room to recover, provide an area for emergency parking, and provide safer access to driveways.

In addition, the Road 152 intersection would be realigned to Caltrans current design standards to improve sight distances on and off State Route 216. The proposed improvements in Segment 2 would be constructed within the existing 60-foot-wide right-of-way and would not require any full acquisitions of additional right-of-way. A

partial acquisition of agricultural land would be required to construct proposed improvements to the State Route 216/Road 152 intersection. Potential impacts to elderberry bushes would be avoided through the creation of Environmentally Sensitive Areas.

No-Build Alternative

The No-Build Alternative would mean no change from the existing condition of State Route 216 in the project area. The No-Build Alternative does not conform to the City of Visalia's and the County of Tulare's general plans or Caltrans' ultimate plan for State Route 216. The No-Build Alternative does not improve operation or safety and does not meet the purpose and need of the project.

Table 1.5 Comparison of Alternatives

Criteria	Segment 1 Alternative 1	Segment 1 Alternative 2	Segment 1 Alternative 3	Segment 2	No-Build Alternative
Number of partial property acquisitions	22	18	24	5	None
Number of full property acquisitions	3	37	21	0	None
Affect Golden West Educational Complex	Sliver of property needed	No	Sliver of property needed	No	No
Improves safety and traffic flow	Yes	Yes	Yes	Yes	No
Adds capacity	Yes	Yes	Yes	No	No
Removes Parking Spaces	53 parking stalls from Visalia Adult School and on-street parking on the north side of State Route 216	On-street parking on the south side of Route 216	53 parking stalls from Visalia Adult School and on-street parking on both sides of Route 216	No	None
Conforms with state and local planning	Yes	Yes	Yes	No	No
Improves air quality	Yes	Yes	Yes	No	No
Visual	Removes 110 trees in Segment 1	Remove 94 trees in Segment 1	Remove 94 trees in Segment 1	Remove 37 trees in Segment 2	No Impact
Cost	$16.7 Million (in 2011 dollars)	$19.9 Million (in 2011 dollars)	$19.8 Million (in 2011 dollars)	$8.8 Million (in 2011 dollars)	Maintenance and repair costs only

After the public circulation period, all comments will be considered, and Caltrans will select a preferred alternative and make the final determination of the project's effect on the environment. In accordance with the California Environmental Quality Act, if no immitigable significant adverse impacts are identified, Caltrans will prepare a Mitigated Negative Declaration. Similarly, if Caltrans determines the action does not significantly impact the environment, Caltrans, as assigned by the Federal Highway Administration, will issue a Finding of No Significant Impact in accordance with the National Environmental Policy Act.

1.4 Alternatives Considered and Withdrawn

During the project development process one alternative was withdrawn from consideration.

The project originally proposed to acquire enough right-of-way in Segment 2 to build a four-lane highway in the future. The proposed improvements would have included the same improvements as the current build alternative for Segment 2—repaving the existing two-lane conventional highway and adding 8-foot shoulders. The skewed intersection at Road 152 would also have been reconfigured at a right angle. In addition, however, right-of–way would have been purchased to allow for future widening of State Route 216 to four lanes from just east of the city limits near post mile 2.99 to Road 152 (post mile 3.7).

At a Public Information Meeting/Open House held on February 23, 2006, members of the public asked Caltrans to construct an eight-foot shoulder in Segment 2 without acquiring additional right-of-way for construction of a four-lane conventional highway in this portion of the project. Caltrans agreed with the request from the public at a subsequent Project Development Team meeting because construction of four lanes in Segment 2 would not occur for about 20 years.

1.5 Permits and Approvals Needed

The following permits would be required:

- National Pollutant Discharge Elimination System storm water permit

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

This chapter explains the impacts that the project would have on the human, physical, and biological environments in the project area. It describes the existing environment that could be affected by the project, potential impacts from each of the alternatives, and proposed avoidance, minimization, and/or mitigation measures. Any indirect or cumulative impacts are included in the general impact analysis and discussion that follow.

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

- Paleontology—There are no expected impacts to paleontological resources due to the low sensitivity of the area. (Paleontology memo dated May 13, 2006).
- Wetlands and Other Waters of the United States—There are no wetlands or other Waters of the United States within the project limits as stated in the Caltrans Natural Environment Study dated November 2006.
- Plant Species – There are no sensitive plant species in the project area. See Natural Environment Study dated November 2006 for additional documentation.
- Wild and Scenic Rivers—There are no wild and scenic rivers in the project area. (Field visit December 25, 2006).
- Coastal Zone—The project is not located in the coastal zone.

2.1 Human Environment

2.1.1 Land Use

2.1.1.1 Existing and Future Land Use

Affected Environment

Visalia lies in west-central Tulare County, about five miles east of State Route 99. Visalia is the oldest city in the southern San Joaquin Valley and has been the county seat of Tulare County since 1853.

Land use in Segment 1 is in transition from agriculture to urban uses. See Figure 2-1. The City of Visalia's General Plan designates the area adjacent to State Route 216 for high density, low density, rural residential, public institutional, convenience commercial, and agricultural uses. See Figure 2-2. Zoning reflects the land uses described above. See Figure 2-3.

Construction of new housing units in the project area is occurring near the Golden West Educational Complex and on the south side of Houston Avenue across from the Visalia Adult School.

Table 2.1 shows the status of larger developments along State Route 216 in the project area. River Run Ranch, a planned development that contains a variety of residential choices, contains 289 single-family and 51 multi-family residences on 135 acres near McAuliff Road and the Saint Johns River across from Golden West High School.

East Oaks Estates contains 67 single-family residences on 27 acres near State Route 216 and Comstock Street. Development in this custom home subdivision has been ongoing for a number of years, but is reaching final build-out.

Two new subdivisions have been approved on the south side of State Route 216. Madison Heights is located just east of the Burgundy Home Apartments and Golden Crest Estates is just east of McAuliff Road.

Table 2.1 Status of Development Along State Route 216

Name	Jurisdiction	Proposed Uses	Status
East Oak Estates	City of Visalia	67 single-family homes on 27 acres	Under construction
River Run Ranch	City of Visalia	340 parcels (289 single-family homes and 51 multiple-family residences) on 135 acres	Under construction
Golden Crest Estates	City of Visalia	17 single-family residences on 4 acres	Tentative subdivision map approved. Not all conditions for approval met at this time.
Madison Heights	City of Visalia	17 single-family residences on 5 acres	Under construction

Source: City of Visalia, Community Development Department, Planning Division

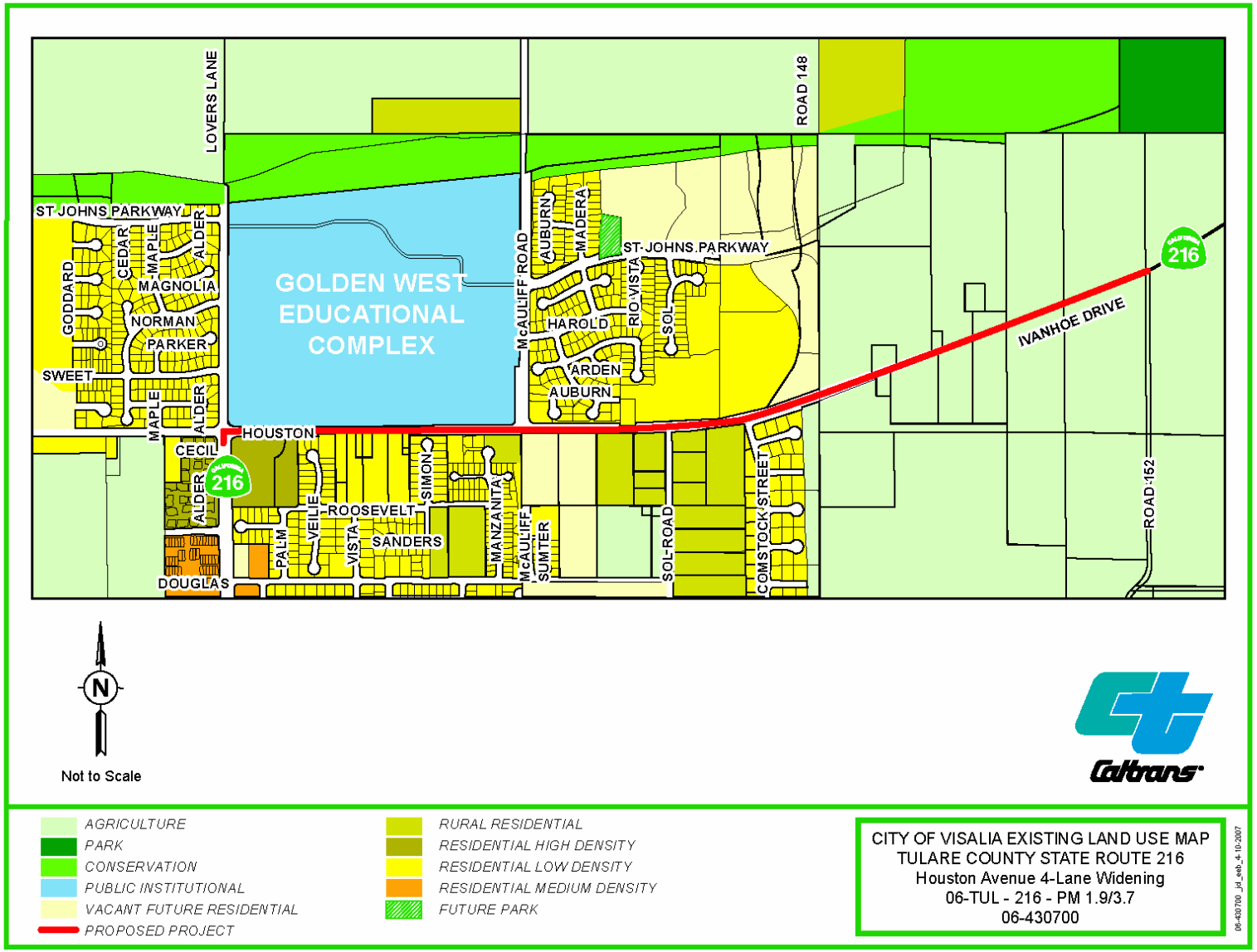


Figure 2-1 Existing Land Use Map

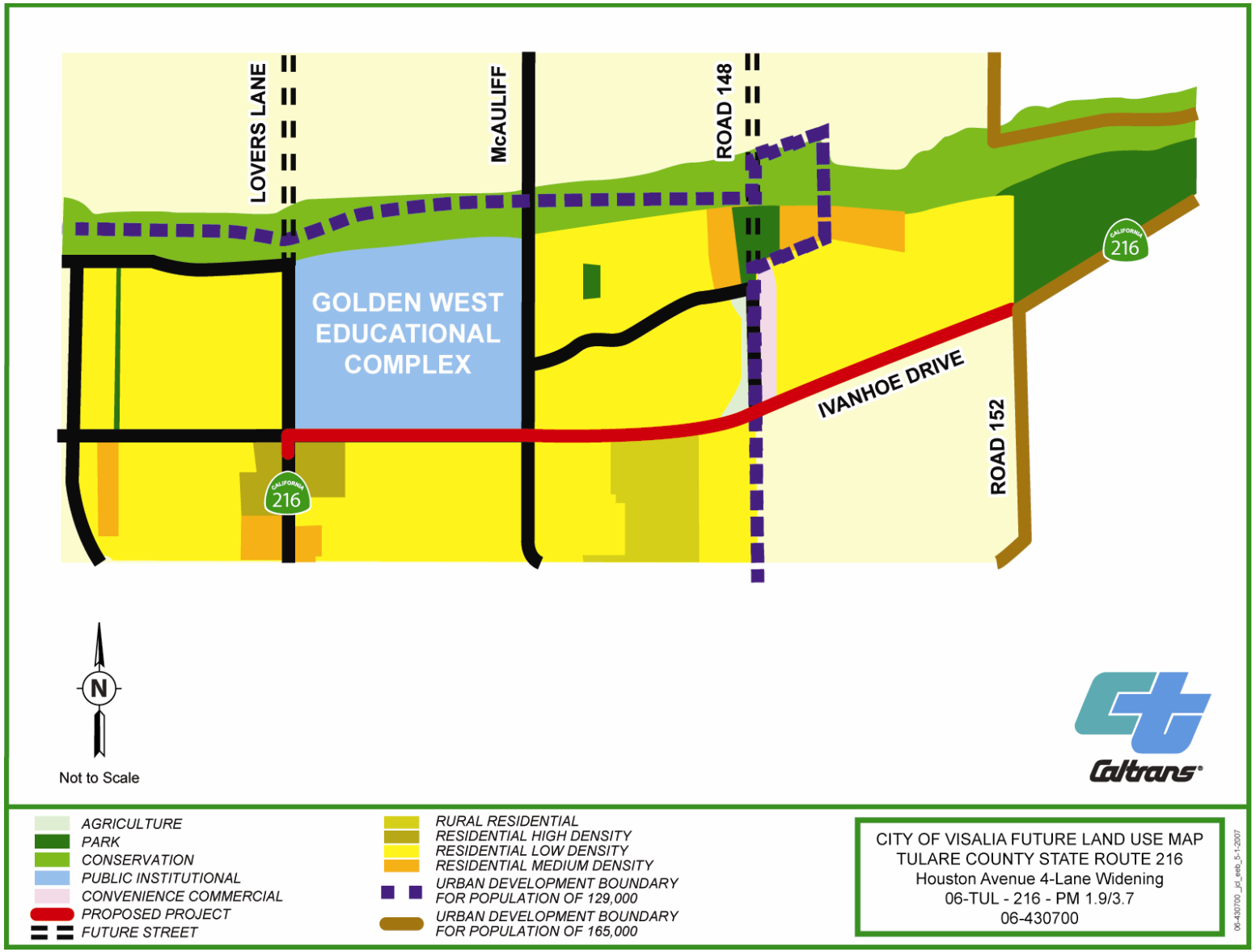
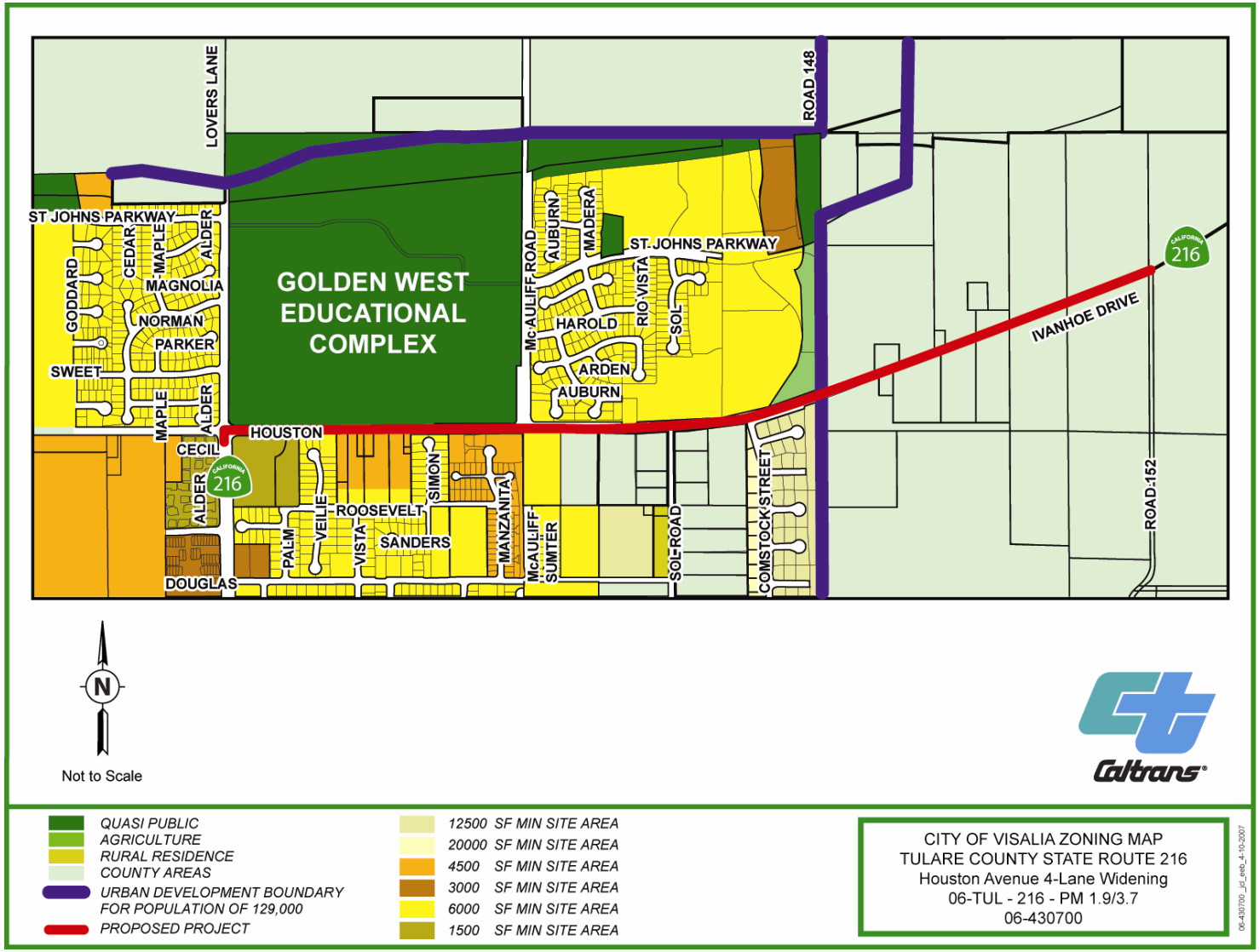


Figure 2-2 Future Land Use Map



SF MIN = square feet minimum

Figure 2-3 Zoning Map

Golden Crest Estates has received approval of a tentative subdivision map, but has not met all of the conditions of approval, including annexation of the parcel into the City of Visalia.

Madison Heights contains 17 single-family residences on five acres. Construction of this subdivision is now underway.

The project area is located inside the urban growth boundary of the City of Visalia's General Plan for the year 2020. The general plan designates the area for the continuation of the pattern of low-density residential development that is dominant throughout the city. The area on the south side of State Route 216 between Road 148 and Road 152 is designated as urban reserve for future urban development. This is part of a larger area that is being held in reserve along the east side of the community.

The Tulare County General Plan designates the portion of the project area within the city limits as being within the 20-year Urban Development Boundary of the City of Visalia. The remainder of the project area, from the Visalia city limits to Road 152, is designated and zoned for agriculture. There are no large developments proposed in Segment 2. See Figure 2-2. Projected growth is planned for in the Tulare County Comprehensive Policy Plan, which includes the Rural Valley Land Plan and the urban development boundaries.

In addition, the Visalia Unified School District owns property for an elementary school on the south side of State Route 216, just west of Road 152. Some preliminary site work has been done at this location, but development of the site is many years away. The school district also indicated that the site could be sold or traded depending on growth trends in the community.

Environmental Consequences

The project would acquire strips of land from the front of parcels adjacent to State Route 216 in Segment 1 and Segment 2. Adding two lanes to State Route 216 would accommodate expected urban growth in Visalia and would not change the land use patterns. The relationship between the proposed project and growth in the area is one of accommodation of planned growth rather than growth inducement. Local development, in conformance with existing city and county plans, can be expected to occur, particularly in areas designated for future urban development.

Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required.

2.1.1.2 Consistency with State, Regional and Local Plans

Affected Environment

The Visalia General Plan and the Tulare County General Plan dictate land use in the project area. The circulation element of the Visalia General Plan (2001) designates State Route 216 as an arterial within the project limits. Standards for arterial streets established by the general plan call for a typical right-of-way of 110 feet.

The circulation element of the Tulare County General Plan (1963) designates State Route 216 as a "County Primary Road" within the project limits. A standard right-of-way is not established by the general plan.

Tulare County is currently in the process of updating its general plan. Final adoption of the new general plan is expected in 2007. The future designation for State Route 216 is unknown at this time; however, proposed roadway standards call for a right-of-way of 84 to 110 feet depending on the adopted designation of the roadway in the general plan.

Both the Visalia General Plan and the Tulare County General Plan envision State Route 216 as a four-lane highway within the project limits. This project supports the land use and circulation elements of these plans.

The project is also included in the Tulare County Association of Governments' 2004 - 2005 Regional Transportation Plan and the State Transportation Improvement Program. The State Route 216 Houston Avenue 4-Lane Widening project is included in the 2006 Federal Transportation Improvement Program.

Environmental Consequences

All of the build alternatives in Segment 1 are consistent with local land use plans and support planned growth. The improvements proposed for Segment 2 are also consistent with local land use plans, which currently designate the area for agricultural uses.

Avoidance, Minimization, and/or Mitigation Measures

No mitigation measures would be required.

2.1.1.3 Parks and Recreation

Affected Environment

The Visalia Unified School District owns about 154 acres on the north side of State Route 216 between Lovers Lane and McAuliff Road. On this property, the district

operates five schools, including one elementary school, one middle school, a high school, a school for the physically disabled (kindergarten through eighth grade) and an adult school. There are areas for competitive athletic events, physical education classes, and recess activities throughout the school complex. A chain link fence runs along State Route 216 except in front of the Visalia Adult School parking lot. All schools except the adult school are fenced. Figure I-1 in Appendix I provides an aerial view of the area, known as the Golden West Educational Complex.

Environmental Consequences

Alternative 1 would require the use of about a 20-foot strip of land (0.94 acre) behind the existing chain link fence adjacent to State Route 216. The area is comprised of grass, 16 trees (0.69 acre), and a parking lot for the adult school (0.25 acre). See Table 2.2.

Alternative 2 would not require any property from the school complex. See Table 2.2.

Alternative 3 would require the use of about a 5-foot strip of land (0.42 acre) behind the chain link fence adjacent to State Route 216. The area is comprised of grass, 16 trees (0.17 acre), and a parking lot for the adult school (0.25 acre). See Table 2.2.

Table 2.2 Acreage Required from Golden West Educational Complex

Alternative	Golden Oak Elementary School Playground	Grass Area	Parking Lot	High School Soccer Practice Field	Total*
1	.16	.21	.25	.32	.94
2	0	0	0	0	0
3	.04	.05	.25	.08	.42

* Total acreage does not include the sidewalk area.

Section 4(f)

Section 4(f) of the Department of Transportation Act (49 U. S. Code 303) applies to school playgrounds that also function as public parks or recreation areas during non-school hours. A Section 4(f) use occurs when land from a publicly owned park or recreation area is permanently incorporated into a transportation facility.

A property protected under Section 4(f) may be approved for permanent incorporation into a transportation facility if there is no prudent and feasible alternative to using the land and the project includes all possible planning to minimize harm to the property.

The Golden Oak Elementary School playground, the adjoining grass area west of the Visalia Adult School, and the Golden West High School soccer practice field are protected under Section 4(f) (see Appendix I).

Avoidance, Minimization, and/or Mitigation Measures

The Visalia Unified School District would be compensated the fair market value for any land or improvements required for the proposed project.

All activities would be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (see Appendices C and D). The Uniform Relocation Assistance and Real Property Acquisition Policies Act is a requirement of the project. Caltrans must comply with all requirements of the act.

Caltrans would coordinate construction activities with the Visalia Unified School District to minimize disruption of their activities and services. This would include scheduling construction in this portion of the project during school vacations to the degree that this is feasible. Otherwise night construction may be necessary to lessen impacts on the school district.

The 16 trees along the south side of the school playground would be replaced at a 1:1 ratio. Caltrans has worked with the Visalia Unified School District to minimize harm to the playground and the grass area with the following additional mitigation measures: 1) visual/aesthetics (Section 2.1.7); 2) parking (Section 2.1.4.4); and 3) pedestrian and bicycle circulation (Section 2.1.6).

2.1.2 Growth

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 Code of Federal Regulations 1508.8, refers 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

Refer to Section 2.1.1 Land Use for information on local plans and policies that control growth in the project area. Tulare County's population has grown at a moderate, steady pace in recent years (see Table 2.3 and Section 2.1.1 for information on local plans and policies). According to the U.S. Census Bureau, the county's population was about 311,932 in 1990 and grew to 368,021 in 2000, for an annual growth rate of 1.8 percent. In contrast, statewide population growth averaged 1.5 percent over the same period. In May 2004, the California Department of Finance projected a population of 650,466 by 2030 for Tulare County.

Much of Tulare County's recent growth has occurred in the City of Visalia, the county's largest city. The City of Visalia's population increased from 76,659 in 1990 to 91,565 in 2000, an average annual growth rate of 2.5 percent. Like the countywide growth rate, the City of Visalia's average annual growth rate is expected to increase between 2000 and 2020. As shown in Table 2.3, the projected average annual growth rate of 4.0 percent between 2000 and 2020 would result in a population of 165,000 by 2020.

Table 2.3 Historic, Existing, and Projected Population Growth in California, Tulare County, and Visalia

Area of Concern	1990	2000	2010	2020	Average Annual Growth Rate 1990-2000
California	29,760,021	33,871,648	39,958,000	45,449,000	1.4%
Tulare County	311,932	368,021	470,000	570,000	1.8%
Visalia	76,659	91,565	129,000	165,000	1.9%

Source: U.S. Department of Commerce, Bureau of Census 2000

Factors affecting growth patterns depend on a range of economic forces that can be local, regional, statewide, or national in scope. Ultimately, the amount and location of population growth and economic development that occurs in a specific area is

controlled, to some extent, by local and county governments through zoning, land use plans and policies, and decisions regarding development applications.

Environmental Consequences

The urban development boundaries in Visalia's general plan is linked to population growth projections and development levels in the city and is anticipated to provide adequate quantities of land for development through 2020.

The proposed project conforms to the circulation element of the city and county general plans, and to Caltrans' plan for the highway contained in the draft Route Concept Report for State Route 216. The project does not open any new areas to development by removing barriers to access.

Given the coordinated growth-control mechanisms in place, the proposed project would not encourage unplanned development in the area or shift growth eastward along the State Route 216 corridor. Planned development of vacant and agricultural parcels along State Route 216 will likely occur within the Visalia urban development boundaries. The proposed project is designed to accommodate growth, and increase safety and circulation based on local plans and growth projections. The project would not induce unplanned development and is consistent with local and regional land use and transportation planning.

Avoidance, Minimization, and/or Mitigation Measures

No impacts are expected; therefore, no mitigation is required.

2.1.3 Farmland/Timberlands

Regulatory Setting

The National Environmental Policy Act and the Farmland Protection Act (United States Code 4201-4209; and its regulations, 7 Code of Federal Regulations Ch. VI Part 658) require federal agencies, such as the Federal Highway Administration, and Caltrans as assigned, to coordinate with the National 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 state or local importance.

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.

Affected Environment

The California Department of Conservation's Farmland Mapping and Monitoring Program indicates that the proposed project area includes prime farmland and farmland of local importance. Prime farmland is land that has the best combination of physical and chemical characteristics for the production of crops. Farmland of local importance is land of importance to the local economy, as defined by each county's local advisory committee and adopted by its board of supervisors.

No agricultural land within the proposed project limits is currently under the Williamson Act.

Environmental Consequences

No agricultural parcels would be affected by any of the build alternatives for Segment 1 of the project.

Only one build alternative is under consideration in Segment 2. This alternative would require slivers of property along the edge of the road from five parcels. Only two of these parcels are in active agricultural production. Two more of the parcels are rural home sites. The fifth parcel is owned by the developer of River Run Ranch and is not in active agricultural production. About 0.58 acre of prime farmland would be converted to non-agricultural use in Segment 2. This represents 0.000082 percent of farmland in the county. The agricultural production of the remaining portion of both parcels would not be affected.

The Farmland Conversion Impact Rating score for the affected agricultural land in Segment 2 was 104.5 points out of 260 possible points (see Appendix F). A rating of 160 or more would trigger protection under the Farmland Protection Policy Act.

The affected properties in Segment 2 are as follows:

- A walnut grove on the south side of the road near the transition of the project from four lanes to two lanes. The project would require 0.18 acre of this property, but would not affect the agricultural production of the walnut grove or the general operation of the farm.

- A walnut orchard at the corner of State Route 216 and Road 152 would also be affected. The acquisition of 0.4 acre of the property would require the removal of about 37 walnut trees and an agricultural well.

Avoidance, Minimization, and/or Mitigation Measures

The project would require relocating an agricultural well and replacing and/or compensating for the removal of walnut trees. For additional compensation information please see Chapter 2.1.4.2 Relocations and Appendix C.

2.1.4 Community Impacts

2.1.4.1 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 United States Code 4334(b)(2)]. The Federal Highway Administration in its implementation of the National Environmental Policy Act (23 United States Code 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 and 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

State Route 216 is an 18-mile-long highway that begins at State Route 198 in the City of Visalia and ends at State Route 198 in Tulare County. It is a Federal-Aid Primary State Highway that serves as an intra-regional corridor between the City of Visalia and the smaller communities of Ivanhoe, Woodlake, and Lemoncove. Within the Visalia city limits, State Route 216 follows (and shares the alignment with) two main roads: Lovers Lane and Houston Avenue. These roads serve residential communities

and five schools. Outside the Visalia urbanized area, the corridor is known as Ivanhoe Drive. Traffic is mostly school commuters and agriculture oriented.

Agriculture is the predominant land use in Tulare County, with orchards, vineyards, and field crop acreages. Tulare County currently ranks second in the nation and state, behind neighboring Fresno County, in agricultural output.

The proposed project begins in northeast Visalia at Lovers Lane and ends to the east of the intersection of Road 152. Housing development is playing an ever-increasing role in the development of the area, as agricultural fields are being taken out of production and developed for residential use.

Five schools and various residential subdivisions are located in the western part of the project area within the Visalia city limits. Two county islands on the south side of the highway have additional subdivisions. From the city limits to the east end of the project at Road 152 are walnut orchards, rural homes, a horse race track, and stables.

The major community facility within the project area is the Golden West Educational Complex. The complex contains five schools ranging from kindergarten through adult education on about 154 acres. The educational complex is also used for occasional public meetings and youth sports. All Valley Youth Football League football and American Youth Soccer Organization soccer are played at the south end of the complex near State Route 216.

Other community amenities and facilities such as commercial uses are located outside of the project area. The nearest shopping center is located a mile west of the project at Ben Maddox Way and Houston Avenue.

The 2000 U.S. Census reported that there were roughly 32,700 housing units in the City of Visalia. Owner-occupied housing units made up 63 percent of the housing stock and renter-occupied housing 37 percent, with a 5 percent vacancy rate.

According to the 2000 U.S. Census, 336 housing units sit in the project corridor. These are made up of owner-occupied housing units (56 percent) and renter-occupied housing stock (39 percent). Five percent of the housing units in the project corridor were vacant at the time of the census.

The schools and most of the homes in the project area were built after 1970. New housing subdivisions are being developed in two areas next to the city limits:

- River Run Ranch spans 135 acres with 340 planned lots: 289 for single-family homes and 51 for multi-family units.
- East Oak Estates has been under construction for a number of years and contains 67 lots for custom homes on 27 acres.

More new housing is scheduled to be developed on vacant land within the city limits near State Route 216 by 2010.

The existing residences in the area provide a variety of housing types. Caltrans surveyed the area on April 9, 2007. Dwelling units in the urban portion of the area included a large apartment complex at the southeast corner of Lovers Lane and State Route 216. Adjacent to the apartments is a cluster of dilapidated mobile homes, single-family residences, and a Quonset hut that borders the highway and stretches to the east and south. The average assessed value of the properties in this area is $94,664 (http://maps.digitalmapscentral.com -DMP –Microsoft Internet Explorer).

Newer single-family residences that ranged in size from about 1,600 square feet to 2,600 square feet were also located in the area. The price of these homes ranged from $269,000 to over $500,000. The smaller, less expensive homes are located at the northeast corner of State Route 216 and McAuliff Road. The larger homes are located south of the intersection of State Route 216 and Comstock Street. There is also an area of rural residential lots with large homes located on Sol Road. East of post mile 2.99 the setting is rural. There are only scattered residences in this portion of the project area along with a few mobile homes.

Each of these residential types appears to form a separate, distinct neighborhood with internal cohesion, but no clear connection to any other neighborhood in the area.

The City of Visalia's population was 91,565 in 2000 and grew to an estimated 108,467 in 2005. The population in the project area was 1,018 in 2000. The project area is made up of the U.S. census blocks that most closely border State Route 216. The U.S. Census does not have a population estimate for the project area for 2005. The study area's population was about 50.3 percent White, 37.3 percent Hispanic, 7.4 percent Asian/Pacific Islander, 2.4 percent Other, 2.2 percent Black/African American, and 0.4 percent American Indian/Alaska Native according to the 2000 U.S. Census.

The new subdivisions and the Golden West Educational Complex attract families with school age children to the area. About 9.8 percent of the project area's

population was under 5 years old, 24.3 percent were school age (5-17), 61.2 percent were 18-64, and 4.7 percent were 65 years of age or older. The percentage of children, 17 years old and younger, in the project area (34.1 percent) is greater than either the City of Visalia (31.3 percent) or Tulare County (33.7 percent) as a whole; while the percentage of people 65 years and over in the project area is less (4.7 percent) than in the City of Visalia as a whole (10.9 percent) or Tulare County (9.8 percent) as a whole.

The percentage of disabled persons in the project area (7.8 percent) is virtually the same as in Tulare County as a whole (7.5 percent). The percentage of disabled persons is higher in the City of Visalia as a whole (10.5 percent) than either the county as a whole or the project area.

Environmental Consequences

The project is located in a growth area on the northeast side of Visalia. The area is in transition from rural use to urban use. None of the proposed build alternatives would isolate the Golden West Educational Complex from the surrounding neighborhoods in the project area. Even though all of the build alternatives would result in a wider highway, the project would improve traffic circulation and air quality in the community; improve access to the Golden West Educational Complex and other community amenities such as commercial uses; improve safety for motorists, pedestrians, and bicyclists; and allow for faster emergency vehicle response. No impacts would be expected to community character and cohesion since no established cohesive community is currently present in the project area.

Avoidance, Minimization, and/or Mitigation Measures

No impacts to community cohesion and character are expected therefore no mitigation is required.

2.1.4.2 Relocations

Regulatory Setting

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 public transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the

public as a whole. Please see Appendix C 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 United States Code 2000d, et seq.). Please see Appendix B for a copy of Caltrans' Title VI Policy Statement.

Affected Environment

Caltrans prepared a Draft Relocation Impact Report for the project dated June 8, 2006.

The proposed project lies in the northeast section of the City of Visalia, on the edge of rural and suburban development. In Segment 1, existing structures that border the project include the Golden West Educational Complex and the Burgundy House Apartments, while two residential subdivisions continue to be constructed at River Run Ranch and East Oak Estates. In Segment 2, farmland continues to be cultivated from the Visalia city limits east to Road 152 and beyond in Tulare County.

Environmental Consequences

Table 2.4 compares the number of agricultural operations, businesses, and residential units displaced by each alternative within Segment 1. Caltrans would acquire as many as 36 residences for the widening of State Route 216 in Segment 1. In Segment 2, Caltrans would acquire strips of land from five parcels. Two of the parcels are in agricultural production. Two other parcels are rural home sites and one parcel is owned by the developer of River Run Ranch and does not appear to be in agricultural production. (See Section 2.1.3). Residents would not be displaced in Segment 2 and use of the remaining agricultural land would not be impaired.

Table 2.4 Estimated Number of Displacements

Types of Use	Alternative		
	1	2	3
Single-Family Residences	2	13	11
Multi-Family Residential Units	0	23	9
Businesses	1	1	1
Agricultural Operations	0	0	0
Total Units	3	37	21

Source: Department of Transportation Draft Relocation Impact Report, May 2007.

Alternative 1 would displace two single-family residences and one small home-based business.

Caltrans would acquire a 30-foot strip of land from the Golden West Educational Complex along the north side of Houston Avenue. The land acquired from the school complex would include about 0.69 acre with a grassed area with trees along the fence line and 53 parking stalls at the Visalia Adult School. See the following sections for additional related items: parking (Section 2.1.4.4), pedestrian and bicycle circulation (Section 2.1.6), visual (Section 2.1.7), and properties evaluated relative to Section 4(f) (Appendix I).

Alternative 2 would displace 36 residential units, including 13 single-family residences and 23 multi-family residential units. Alternative 2 would also displace one home-based business.

The multi-family residential units that would be affected by Alternative 2 are located in the Burgundy House Apartments complex at the southeast corner of State Route 216 and Lovers Lane. The apartment buildings are two stories with two- and three-bedroom units. Two townhouse residences with private drives and two-car garages in the Burgundy House Apartments must also be relocated.

Caltrans would acquire a 20-foot strip of land along the south side of Houston Avenue and reconstruct 0.11 mile of an existing privacy/block wall in front of the apartment complex.

Alternative 3 would displace 20 residential units including 11 single-family residences and 9 multi-family residential units. Alternative 3 would also displace one home-based business.

Caltrans would acquire strips of land along both sides of State Route 216. On the north side of State Route 216, Caltrans would acquire a 15-foot strip of land from the Golden West Educational Complex along the north side of Houston Avenue. The land acquired from the school complex would affect about 0.17 acre of grassed area with trees along the fence line and 53 parking stalls at the Visalia Adult School. On the south side of State Route 216, Caltrans would acquire a 15-foot strip of land and reconstruct 0.11 mile of an existing privacy/block wall in front of the apartment complex.

The multi-family residential units affected by Alternative 3 are located in the Burgundy House Apartments complex at the southeast corner of State Route 216 and Lovers Lane. The apartment buildings are two stories with two- and three-bedroom units. Two townhouse residences with private drives and two car garages in the Burgundy House Apartments must also be relocated.

Avoidance, Minimization, and/or Mitigation Measures

The Draft Relocation Impact Report concluded that there would be ample replacement housing available in the City of Visalia within a five-mile radius of the project area for sale and rent that would be safe and sanitary, and comparable in terms of amenities, public utilities, and accessibility to public services, transportation, and shopping for households that might be displaced by the project.

Funding would be available to relocate or re-establish any home or business affected by the project. The Residential Relocation Payment Program would help eligible residential occupants by paying certain costs and expenses necessary for or incidental to the purchase or rental of replacement housing and actual reasonable moving expenses to a new location within 50 miles of the displacement property.

The Non-Residential Relocation Assistance Program provides assistance to businesses, farms, and nonprofit organizations in locating suitable replacement property and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program would provide current lists of properties offered for sale or rent, suitable for a particular business' specific needs.

Agricultural parcels reduced in size by the proposed project would receive compensation if the reduction negatively affected their farming operation. If farm and business displacements incur increased costs as a result of being relocated, they would be given the opportunity to file a claim for loss of goodwill. 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 the California Department of Transportation from the real property required for a transportation project is eligible for "Relocation Assistance."

All activities would be conducted in accordance with Title VI of the Civil Rights Act of 1964 and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (see Appendices B and C). The Uniform Relocation

Assistance and Real Property Acquisition Policies Act is a requirement of the project. Caltrans, as assigned by the Federal Highway Administration, must comply with all requirements of the act.

The Visalia Unified School District would be compensated the fair market value for any land or improvements required for the proposed project.

Caltrans would coordinate construction activities with the Visalia Unified School District to minimize disruption of their activities and services. This could include scheduling construction in this portion of the project during vacation.

2.1.4.3 Environmental Justice

Regulatory Setting

All projects involving a federal action (funding, permit, or land) must comply with Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed by President Bill Clinton on February 11, 1994. This executive order directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2007, this was $20,650 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. Caltrans' commitment to upholding the mandates of Title VI is evidenced by its Title VI Policy Statement, signed by the Director of Caltrans, which can be found in Appendix B of this document.

Affected Environment

To comply with Executive Order 12898, U.S. Census demographic data was analyzed for the project area. The environmental justice assessment focused on an examination of the two census tracts that surround the project site and compose the study area. Income and ethnicity variables for the combined census tracts were compared to Tulare County's and the City of Visalia's income and ethnic composition to determine whether the census tracts had a relatively large low-income or minority composition.

The U.S. Census Bureau does not provide income and poverty information at the block level. Caltrans used mapping of the block groups to display the population demographics of the project corridor to determine the ethnic population of the project corridor. Only data from blocks affected by the proposed project were used for the analysis.

Caltrans' Draft Relocation Impact Report was reviewed for information related to multi-family housing in the project area.

Caltrans reviewed the area on the south side of State Route 216 between the Burgundy House Apartments and McAuliff Road on April 9, 2007. The purpose of the field review was to survey the manager and residents of the Burgundy House Apartments and to take a close look at the adjacent 12 parcels between the apartments and McAuliff Road. These parcels front on the south side of State Route 216, and appear to comprise a low-income enclave within the larger project area.

The Burgundy House Apartments are located at the southeast corner of Lovers Lane and State Route 216. The complex contains 133 units, including town homes with attached garages. The complex appeared to be clean and well maintained. There was no clear indicator of the ethnic makeup of the apartment complex. The manager and the residents that were interviewed were split on whether the majority of residents are Hispanic or evenly split between Hispanics and Whites. The manager indicated that residents who received Section 8 assistance occupied five units (3.8 percent) in the apartment complex. Within the last year, a block of apartments was rented to a company that housed Asian farm workers at the complex.

All but one of the mailboxes for the 12 parcels that front on the south side of State Route 216 between the Burgundy House Apartments and McAuliff Road, that had a name on it was a Hispanic/Latino surname. The individuals observed in this area all appeared to be Hispanic.

Caltrans staff looked at the square footage and the asking price of some existing houses for sale in the project area. These homes ranged in size from 1,500 to 2,600 square feet and the asking prices ranged from $269,000 to over $500,000. None of the properties that appeared to comprise a low-income area were for sale, but a review of Tulare County Assessor records indicated that the assessed value of the 12 parcels ranged from $21,521 to $250,811, with eight of the 12 parcels valued below $100,000. Two parcels were valued between $100,000 and $199,999 and two parcels

were valued between $200,000 and $251,811 One of the two properties with an assessed value over $200,000 contained four housing units. The mean value of the 12 properties was $94,664 (http://maps.digitalmapscentral.com -DMP –Microsoft Internet Explorer).

In general, the residences located on the south side of State Route 216 were older and in poor condition. The residences in the area that were recorded as part of the Historic Resource Evaluation Report were built between 1915 and 1955. A few of the residences were moved into the area during the early 1960s as a part of the construction of the State Route 198 freeway through the city. This contrasts to the Golden West Educational Complex and the residential subdivisions in the area that have been built since the late 1970s.

A review of the Historic Resource Evaluation Report and observation of the parcels during the field review indicated that at least four of the parcels contained multiple residential units. Many of these units appeared to be small and in dilapidated condition.

Environmental Consequences

Based on the 2000 U.S. Census data by census tract block, the project corridor has a population that is about 50.3 percent White, 37.3 percent Hispanic, 7.4 percent Asian/Pacific Islander, 2.4 percent Other, 2.2 percent Black/African American, and 0.4 percent American Indian/Alaska Native. An evaluation of the 2000 U.S. Census data shown in Table 2.5 indicates that the percentage of people of Hispanic origin living in the study area (37.3 percent) is about equal to the Hispanic population in the City of Visalia (35.6 percent); however, the percentage is low when compared to the total Hispanic population living in Tulare County (50.8 percent). The percentages of Black/African Americans, Asians, and other races living in the project area are greater than in the City of Visalia or Tulare County. The largest ethnic group in the project area is White (50.3 percent). The percentage of Whites in the City of Visalia as a whole (54.9 percent) is larger than in the project area. The percentage of Whites in the project area is much higher than in Tulare County as a whole (41.8 percent).

Table 2.5 Ethnicity Data

Ethnicity Data* (Census Bureau 2000)						
Ethnicity	**Tulare County**		**City of Visalia**		**Project Area**	
	Population	**%**	**Population**	**%**	**Population**	**%**
Hispanic or Latino	186,846	50.8	32,619	35.6	380	37.3
White	153,916	41.8	50,269	54.9	512	50.3
Black – African-American	5,122	1.4	1,558	1.7	22	2.2
American Indian/Alaska Native	3,011	0.8	675	0.7	4	0.4
Asian	11,457	3.1	4,472	4.9	75	7.4
Native Hawaiian, Other Pacific Islander	257	0.1	79	0.1	0	0.0
Other	7,412	2.0	1,893	2.1	25	2.4
Total	368,021	100*	91,565	100*	1,018	100*

Source: U.S. Census Bureau, American Fact Finder, 2000

As shown in Table 2.6, the project corridor had an average median annual household income of $43,665 in 2000, which according to census data is higher than for Tulare County and the City of Visalia.

Table 2.6 1999 Household and Income

Area	Total Households	Persons per Household	Median Household Income $ (year)
Project Corridor	2,980	3.0	$43,665 (1999)
Tulare County	110,385	3.3	$33,983 (1999)
City of Visalia	30,883	2.9	$41,349 (1999)

Source: U.S. Department of Commerce, Bureau of the Census 2000

When viewed as a whole, the project area has a higher income and more diverse population than the City of Visalia or Tulare County.

Caltrans identified beneficial and adverse impacts of the project. The beneficial effects resulting from this project would affect the entire population within the project area. Those beneficial effects are as follows:

- Improving safety and operation
- Increasing capacity would relieve traffic congestion and reduce idling time for vehicles, which would improve air quality in the project area (See Section 2.2.4)

- Providing designated bike lanes that would be incorporated into the shoulders of the highway between Lovers Lane and McAuliff Road
- Constructing a continuous sidewalk on both sides of State Route 216 between Lovers Lane and McAuliff Road would provide for safe pedestrian travel.

Adverse effects from this project include the following:

- Short-term construction impacts (noise and air quality)
- Noise would increase by moving the highway closer to existing residences (See Section 2.2.6)
- Residential relocations

Short-term construction impacts and impacts from increased noise levels would occur throughout the entire project area and would not disproportionately affect minority and low-income populations.

All three alternatives under consideration in Segment 1 would result in relocations. Alternative 1 would acquire 2 single-family residences and a home-based business. Alternative 2 would acquire 13 single-family residences, 23 multi-family residences, and a home-based business. Alternative 3 would acquire 11 single-family residences, 9 multi-family residences, and a home-based business. Alternative 1 would affect three structures and would be less severe than Alternative 2 (37 structures) or Alternative 3 (20 structures). No relocations would be required in Segment 2.

Two of three parcels (67 percent) that would be fully acquired for Alternative 1 would affect a minority or low-income population. Seven of 10 parcels (70 percent) that would be fully acquired for Alternative 2 and four of six parcels (67 percent) that would be fully acquired for Alternative 3 would affect a minority or low-income population.

The two parcels in Alternative 1 that affect a minority or low-income population constitute 17 percent of the parcels between the Burgundy House Apartments and McAuliff Road that Caltrans identified as part of a potential low-income area The seven parcels in Alternative 2 constitute 58 percent and the six parcels in Alternative 3 constitute 50 percent of the parcels between the Burgundy House Apartments and McAuliff Road that Caltrans identified as part of a potential low-income area.

Based on the above discussion and analysis, Build Alternatives 2 and 3 in Segment 1 would cause disproportionately high and adverse effects on a minority or low-income population as per Executive Order 12898 regarding environmental justice.

Avoidance, Minimization, and/or Mitigation Measures

Caltrans would minimize harm to the identified low-income minority community between the Burgundy House Apartments and McAuliff Road by designing the proposed project to avoid fully acquiring as many parcels from the south side of the highway as practical. Construction of the proposed project to the north of the existing highway would require the full acquisition of two homes and one home-based business, but it would avoid 23 multi-family residences and reduce the number of single-family residences that would need to be fully acquired by as many as 11.

2.1.4.4 Parking

Affected Environment

Parking is an issue only in the developed portion of Segment 1. In Segment 1, designated striped parking stalls are provided for about 200 vehicles immediately adjacent to the highway at the Visalia Adult School located on the north side of State Route 216. Parking is also provided for students at Golden West High School off of McAuliff Road. This parking lot is striped for about 475 vehicles. In addition, parking is provided in other areas of the Golden West Educational Complex for students, faculty, staff, volunteers, and parents. A grass parking area is provided for events at the Groppetti football stadium.

On-street parking is restricted in various areas throughout Segment 1. Onsite parking is provided throughout the Burgundy House Apartments.

Environmental Consequences

Alternative 1 would shift the roadway about 30 feet north of the existing centerline and would remove about 53 parking stalls from the Visalia Adult School parking lot. Approximately 100 existing non-marked on-street parking spaces on the north side of State Route 216 would also be removed.

Alternative 2 would shift the roadway about 20 feet south of the existing centerline. Approximately 100 existing non-marked on-street parking spaces on the south side of State Route 216 would be removed.

Alternative 3 would widen the existing roadway symmetrically, about 10 feet on each side of the existing centerline. Alternative 3 would remove about 53 parking stalls

from the Visalia Adult School parking lot. Approximately 200 existing non-marked on-street parking spaces, which are on both sides of State Route 216, would also be removed.

Impacts to parking could change during the final design of the project.

Avoidance, Minimization, and/or Mitigation Measures

Alternative 1 and Alternative 3 would remove about 53 parking spaces at the Visalia Adult School. A field review of the project indicated that these stalls could be replaced onsite. Space next to the northeast portion of the existing adult school parking lot could be designated for new stalls to replace all of the stalls that would be removed. Detailed design would be closely coordinated with the Visalia Unified School District during the next phase of the project.

2.1.5 Utilities/Emergency Services

Affected Environment

A number of companies and the City of Visalia have utilities located within the project area. Southern California Edison Company operates utility poles and aerial service lines. Southern California Gas Company operates high-pressure gas lines within the project area. American Telephone & Telegraph operates aerial telephone lines. Underground utilities in the project area include fiber optic lines and Comcast cable television lines. Additional underground utilities include Kaweah Delta Irrigation District lines, California Water Service Company water lines, and City of Visalia sewer and storm drain lines.

No emergency responders are stationed on State Route 216. The Tulare County Fire Department and the Visalia City Fire Department both provide emergency services within the proposed project area. The Tulare County Fire Department provides services from its Station #19 at 1968 South Lovers Lane between Paradise and Walnut avenues. Additional fire service is provided from a station 3.9 miles away at 309 South Johnson Street. The Visalia City Police Department and the Tulare County Sheriff’s Department provide police service.

The Tulare County Fire Department, Mobile Life Support, and American Ambulance Service provide emergency medical service.

Environmental Consequences

Construction and acquisition of right-of-way for this project would require utility facilities to be relocated within the project limits. A detailed study would be conducted during the final design phase of this project.

Before construction, public utilities affected by the project would be relocated. Although utilities poles and service lines would be relocated, minimal service interruption may occur. During construction, traffic in each direction of travel would remain open.

During construction, response times for emergency medical and fire services would be delayed for calls east of Road 152. After completion of the project, response times would be improved.

Avoidance, Minimization, and/or Mitigation Measures

Scheduling construction work that would require lane closures during non-peak hours would minimize traffic delays. Pre-construction meetings with emergency services agencies and the local school district would be conducted. Meetings would continue throughout construction of the project as needed.

A Transportation Management Plan would be required for the project before construction. Transportation Management Plans are prepared for projects on the state highway system to reduce traffic delays and congestion associated with construction activities. Emergency providers would be asked to participate in developing the plan, which would describe how emergency responders would handle detours or delays. Emergency vehicles would receive preference through any detours and lane closures.

2.1.6 Traffic and Transportation/Pedestrian and Bicycle Facilities

Regulatory Setting

Caltrans, as assigned by 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 Code of Federal Regulations 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 pedestrians 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 is 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 would be provided to persons with disabilities.

Affected Environment

Caltrans prepared a *Traffic Operational Analysis Report*, dated November 18, 2002, which was updated on May 12, 2003, May 11, 2006 and April 3, 2007. Existing State Route 216 within the project area is a two-lane conventional highway, which passes through urban residential and rural agricultural areas.

The City of Visalia expects substantial urban growth in the project area in the coming years. The anticipated growth in the community as well as projected increased traffic volumes are expected to affect the operation of State Route 216, causing the Level of Service of the existing highway to deteriorate. The two identified segments of the proposed project would be affected in different ways. Segment 1 is more urban and developing rapidly, with heavy traffic between McAuliff Road and Lovers Lane during school hours. Segment 2 is more rural.

State Route 216 currently operates at Level of Service C in Segment 1 and, without improvements, would deteriorate to Level of Service F before the end of the 20-year planning horizon (see Table 2.7).

Table 2.7 Levels of Service for State Route 216 in the Project Area

Location	Existing		2011				2031			
			No-Build		Build		No-Build		Build	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Segment 1	C	B	C	C	B	B	D	F	C	C
State Route 216/Lovers Lane	C	B	C	C	B	B	D	F	C	C
State Route 216/McAuliff Road	B	B	C	C	B	B	D	E	C	C
Segment 2	B	B	C	C	B	B	D	E	C	C
State Route 216/Road 148	-	-		-	-		C	E	B	C
State Route 216/Road 152	B	B	B	B	B	B	B	B	B	B

Source: Caltrans Operational Analysis, April 2007

With the proposed improvements in Segment 1, this portion of State Route 216 would improve to a Level of Service B on opening day (year 2011) and would remain at a

Level of Service C through the end of the 20-year planning horizon. This is also true for the intersections of State Route 216 with Lovers Lane and with McAuliff Road.

Segment 2, which would stay a two-lane highway but with added shoulders, would continue to operate at acceptable Levels of Service throughout the 20-year planning horizon. The Level of Service would improve mainly due to the upgrade of the intersection at State Route 216 and McAuliff Road permitting a better traffic flow.

Areas with sidewalks are located on the north and south sides of State Route 216 in some portions of Segment 1. Narrow planting strips adjoin both sidewalks, separating them from the roadway. The 10-foot sidewalk on the north side of State Route 216 runs from Lovers Lane to about 100 feet east of McAuliff Road. This sidewalk accommodates both pedestrian and bicycle traffic and transitions to an asphalt path from the Visalia Adult School to the corner of McAuliff Road. There are currently no curbs and gutters in the area of the asphalt path.

The 4-foot sidewalk on the south side of State Route 216 runs from Lovers Lane about 50 feet to the east of the Burgundy House Apartments. Pedestrians and bicyclists share this sidewalk. There are additional pieces of discontinuous sidewalk on the south side of State Route 216 that have been constructed as new development has occurred in the area. There are no sidewalks along State Route 216, and no shoulders to accommodate pedestrians and bicycles in Segment 2.

The intersection of State Route 216 and Lovers Lane has traffic signals and a pedestrian crosswalk. The intersection of State Route 216 and McAuliff Road also has traffic signals, but pedestrian crosswalks are only on the north and east sides of the intersection at this time.

In February 2006, the Visalia City Council approved a draft Bicycle Facilities Plan that includes plans for bicycle lanes along State Route 216. The plan shows the proposed number of routes in the community and on the existing route along Houston Avenue in Visalia. One of the proposed routes along Houston Avenue (State Route 216) would continue to the new Santa Fe Trail that is being established near the Lincoln Oval west of the proposed project.

Environmental Consequences

Each of the proposed build alternatives would improve the Level of Service to acceptable levels in Segment 1. Segment 2 would continue to show acceptable Levels of Service through the year 2031. Improved Level of Service within the project area

would benefit the operation and safety of the highway due to the increased capacity and decreased conflicting traffic movements.

Adding a second left-turn lane at the intersections of State Route 216 with Lovers Lane and McAuliff Road would increase waiting space for left-turning vehicles and improve the overall Level of Service for those intersections.

Constructing continuous sidewalks and a median with pedestrian refuges (waiting areas) and adding bicycle lanes on both sides of State Route 216 from the intersection of Lovers Lane to McAuliff Road would improve safety for pedestrians and bicyclists.

Avoidance, Minimization, and/or Mitigation Measures

During construction, a traffic management plan would help reduce traffic delays, congestion, and accidents. Standard Caltrans construction practices include providing information on roadway conditions, portable changeable message signs, lane and road closures, advance warning signs, alternate routes, reverse and alternate traffic control, and a traffic contingency plan for unforeseen circumstances and emergencies. The Caltrans Public Affairs Office would keep the local media informed of construction progress and information pertaining to delays, closures, and major changes in traffic patterns with information provided by the resident engineer.

A Construction Zone Enhanced Enforcement Program may be appropriate during portions of this project. The program involves the continuous presence of the California Highway Patrol in construction zones to serve as a reminder to motorists to slow down and use caution when traveling through work areas. The Caltrans Construction Division would be consulted to determine if the program is warranted for this project.

Improvements such as sidewalks and curb ramps would be constructed to conform to the requirements of the Americans With Disabilities Act.

2.1.7 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* (emphasis added) and culturally pleasing surroundings

[42 United States Code 4331(b)(2)]. To further emphasize this point, the Federal Highway Administration in its implementation of the National Environmental Policy Act [23 United States Code 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 also 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." [California Public Resources Code Section 21001(b)].

This section assesses the visual change and the potential impacts that would result from the proposed project.

Affected Environment

Caltrans prepared a Visual and Scenic Resources Evaluation dated May 22, 2006 for the proposed project, which was updated on May 7, 2007.

The regional landscape around the project area is characterized as rural, with new residential development replacing agricultural lands and open fields. The two segments of the project represent different visual environments.

Segment 1 starts at Lovers Lane and ends at the Visalia city limits. The development in this area includes an educational school complex to the north and residential development to the northeast and south of the project. Street trees line the area between Lovers Lane and McAuliff Road. Telephone and electrical poles are also located on both sides of State Route 216 between Lovers Lane and McAuliff Road.

In Segment 2, the land uses change from urban to rural. North of State Route 216 are rural single-family homes, a very small mobile home park, and walnut orchards. On the south side of the highway are rural single-family homes, a walnut production plant, walnut orchards, row crops, and a horse stable and riding arena. There are no sidewalks or bicycle lanes within this portion of the project area. The streetscape along this segment of State Route 216 would remain intact for the most part.

Environmental Consequences

The proposed project would remove about 64 trees along the street in Segment 1, including valley oak, redbud, tallow, and eucalyptus. Most of the trees that would be

removed range from 3 to 14 inches in trunk diameter at breast height, except for two heritage oaks that have diameters at breast height of about 34 inches. In addition, about 16 trees inside the fence of the Golden West Educational Complex might be affected along with about 30 trees on private properties.

As shown in Table 2.8, Alternative 1 would remove about 110 trees within the proposed project area, including about 16 within the educational complex. Alternatives 2 and 3 would remove about 94 trees and would avoid the 16 trees inside the Golden West Educational Complex.

All tree removal in Segment 1 would occur between Lovers Lane and McAuliff Road, except for two oak trees classified as heritage oaks by the City of Visalia. Both oak trees, located on the north side of State Route 216 at about post mile 2.6 are of substantial size with diameters of 34 inches at breast height. These trees are visual resources and are valued by the City of Visalia. They are covered under the City of Visalia's Oak Tree Preservation Ordinance (Municipal Code 12.24).

Table 2.8 Number of Trees Affected by Alternatives

	Alternative 1	Alternative 2	Alternative 3	No-Build Alternative
North Side City Trees	25	25	25	0
South Side City Trees	37	37	37	0
Heritage Oak Trees	2	2	2	0
Trees on Private Properties*	30	30	30	
Golden West Educational Complex Trees	16	0	0	0
Total	110	94	94	0

Source: Caltrans Visual and Scenic Resources Evaluation, May 2007.
*Trees on private properties that may be removed would be covered through right-of-way acquisition.

Avoidance, Minimization, and/or Mitigation Measures

Existing vegetation would be preserved and protected to the maximum extent feasible in accordance with the Highway Design Manual. Appropriate replacement planting would be provided when native or specimen trees are removed or planting installed by others is damaged or removed by state highway construction activity.

Caltrans would replace planting installed by others in conformance with the Encroachment Permits Manual, Chapter 506.3, including irrigation modification and/or replacement.

If mitigation replacement planting is not installed with this project it must be accomplished within two years of its completion. Funds would be set aside for the mitigation replacement planting. A plant establishment period would be provided and a cooperative/maintenance agreement would be required with the City of Visalia to ensure the survival of the newly planted landscaping.

The proposed landscape concept for this project consists of landscape and irrigation design as allowed by the Highway Design Manual. Trees and grass could be planted along the sidewalk planting strips on both sides of State Route 216 in Segment 1.

In addition, Caltrans would also provide aesthetic treatment of the raised median, which could include tree planting and textured paving. Between Lovers Lane and McAuliff Road, the raised median could include stamped concrete paving and/or landscaping. Caltrans would work with the City of Visalia and the Visalia Unified School District to develop an acceptable design for the improvements.

Tree Replacement

In Segment 1, trees with a diameter at breast height ranging from 3 inches to 14 inches would be removed for the project: about 108 trees for Alternative 1, about 92 trees for Alternative 2 and about 92 trees for Alternative 3. The Caltrans Landscape Architecture Branch would determine the need for replacement planting to mitigate for the removal of trees. Replacement planting should be done within the project limits or as close to the project site as possible.

Heritage Oak Replacement

Mitigation for the removal of the two heritage Valley oak trees would also be included in the project. Oak trees would be incorporated in the proposed landscape concept where possible.

Heritage oak trees would be replaced in accordance with the City of Visalia's Oak Tree Preservation Ordinance (Municipal Code 12.24). The ordinance applies to oak trees with a diameter at breast height of 2 inches or greater.

Section 12.24.120 of the Oak Tree Preservation Ordinance addresses the preservation and maintenance of existing oak trees through implementation of measures to ensure

protection of the root zone. As a state agency, Caltrans is not subject to the city ordinance, but would make an effort to be consistent with it.

2.1.8 Cultural Resources

Regulatory Setting

"Cultural resources" as used in this document refers to historic and archaeological resources. The primary federal laws dealing with cultural resources include the following:

The National Historic Preservation Act, as amended, sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places. Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 Code of Federal Regulations 800). On January 1, 2004, a Section 106 Programmatic Agreement among the Advisory Council, the Federal Highway Administration, the State Historic Preservation Officer, and Caltrans went into effect for Caltrans projects, both state and local, with Federal Highway Administration involvement. The Programmatic Agreement implements the Advisory Council's regulations, 36 Code of Federal Regulations 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The Federal Highway Administration's responsibilities under the agreement have been assigned to Caltrans as part of the Surface Transportation Delivery Pilot Program (23 Code of Federal Regulations 773) (July 1, 2007).

Historic properties may also be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the "use" of land from historic properties.

Historical resources are considered under the California Environmental Quality Act, as well as California Public Resources Code Section 5024.1, which established the California Register of Historical Resources. Section 5024 of the Public Resources Code requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing criteria. It further specifically requires Caltrans to inventory state-owned structures in its rights-of-way.

Affected Environment

Caltrans prepared a Historic Property Survey Report dated April 5, 2006 for the proposed project.

The Area of Potential Effects for the project coincides with the right-of-way required for all ground-disturbing activities, including road construction, realignment and installation of utilities, and vehicle and equipment storage.

Standard sources of information were consulted for the proposed project, including the following: the National Register of Historic Places, the California Register of Historical Resources, California Historical Landmarks, California Inventory of Historic Resources, California Points of Historical Interest, State Historic Resources Commission, Caltrans Historic Highway Bridge Inventory, and the Archaeological Information Center for the Southern San Joaquin Valley at California State University, Bakersfield.

Additional resources used included the Annie Mitchell Room of the Tulare County Library, Tulare County Assessor's office, the archive of Vintage Resources in Exeter, the Special Collections Library at the Henry Madden Library at California State University, Fresno; and the California State Library and the Caltrans Structures Division Archives, both in Sacramento.

Native American consultation efforts included contacts with the Native American Heritage Commission, Kern Valley Indian Community, Tule River Indian Tribe, and Wukchumni Tribal Council. No Native American concerns with respect to the project have been received to date.

Archaeological field surveys were conducted in March and April 2001. No prehistoric or archaeological resources were identified within the Area of Potential Effects.

Field reviews for potential historic architectural and engineering resources, such as buildings, bridges, or canals, occurred between 2003 and 2005. Seventeen properties within the Area of Potential Effects were formally evaluated. None of the evaluated resources meet the eligibility criteria for inclusion in the National Register of Historic Places. None of the resources evaluated are considered historical resources for the purposes of the California Environmental Quality Act.

On April 27, 2006, the State Historic Preservation Officer concurred with Caltrans' finding in the Historic Property Survey Report that there are no cultural resources in

the project area that are eligible for the National Register of Historic Places. See the letter in Appendix H.

Environmental Consequences

No impacts to cultural resources that are eligible for the National Register of Historic Places are anticipated.

Avoidance, Minimization, and/or Mitigation Measures

If cultural materials were discovered during construction, all earth-moving activity within and around the immediate discovery area would be diverted until a qualified archaeologist could assess the nature and significance of the find.

If human remains were discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities would stop in any area or nearby area suspected to overlie remains, and the County Coroner would be contacted. Pursuant to Public Resources Code Section 5097.98, if the remains were thought to be Native American, the coroner would notify the Native American Heritage Commission, who would then notify the Most Likely Descendent. At this time, the person who discovered the remains would contact Caltrans Archaeologist Steven Ptomey, of the Central Region, so that he may work with the Most Likely Descendent on the respectful treatment and disposition of the remains. Further provisions of Public Resources Code Section 5097.98 are to be followed as applicable.

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. Requirements for compliance are outlined in 23 Code of Federal Regulations 650 Subpart A.

To comply, the following must be analyzed:

- The 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 base or 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." The 500-year floodplain is defined as areas where there is a 0.2 percent chance of being flooded in any given year.

Affected Environment

A Location Hydraulic Study was completed on September 29, 2003.

According to the Federal Emergency Management Agency, the Flood Insurance Rate Map indicates that from just east of Lovers Lane (post mile 2.0) to just east of the Visalia city limit (post mile 3.0), the existing highway borders the northern boundary of an area designated as a Zone X flood area. The centerline of the existing roadway is the northern boundary of a Zone A0 floodplain from about 0.2 mile east of the Visalia city limit (post mile 3.2) to just east of Road 152 (post mile 3.7). Zone X is defined as "an area inundated by 500-year flooding; an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flooding." Zone A0 is defined as "areas of 100-year shallow flooding where depths are between one and three feet."

Environmental Consequences

The proposed project consists of a longitudinal encroachment towards the Zone X floodplain, but it would not increase the base flood backwater elevation. Within Segment 1, Caltrans proposes converting the existing two-lane conventional highway into a four-lane conventional highway with a raised median, while Segment 2 would remain as a two-lane conventional highway with 8-foot shoulders added. None of the build alternatives proposed for the project would constitute a significant floodplain encroachment as defined under 23 Code of Federal Regulations, Section 650.105(q).

The risks associated with the implementation of the proposed action are not significant. The proposed action would not support probable incompatible floodplain development. There are no significant impacts on the natural and beneficial floodplain values. Routine construction procedures would minimize impacts on the

floodplain. No special mitigation measures would be necessary to minimize impacts or restore and preserve natural and beneficial floodplain values.

Avoidance, Minimization, and/or Mitigation Measures

The proposed project would not have a significant impact on the floodplain since the roadway alignment would be maintained at the same elevation; therefore, no mitigation measures would be required.

2.2.2 Water Quality and Storm Water Runoff

Regulatory Setting

Section 401 of the Clean Water Act requires water quality certification from the State Water Resources Control Board or from a Regional Water Quality Control Board when the project requires a Clean Water Act Section 404 permit to dredge or fill within a water of the United States.

Along with Section 401 of the Clean Water Act, Section 402 of the Clean Water Act establishes the National Pollutant Discharge Elimination System permit for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the National Pollutant Discharge Elimination System program to the State Water Resources Control Board and nine Regional Water Quality Control Boards. The State Water Resources Control Board and Regional Water Quality Control Boards also regulate other waste discharges to land within California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act.

The State Water Resources Control Board has developed and issued a statewide National Pollutant Discharge Elimination System permit to regulate storm water discharges from all Caltrans activities on its highways and facilities. Caltrans construction projects are regulated under the statewide permit, and projects performed by other entities on Caltrans right-of-way (encroachments) are regulated by the State Water Resources Control Board's Statewide General Construction Permit. All construction projects require a Storm Water Pollution Prevention Plan to be prepared and implemented during construction.

Affected Environment

Caltrans prepared a Water Quality Report dated January 12, 2007.

Regional

The project lies in the San Joaquin Valley. The San Joaquin Valley is a topographic and structural trough, which has received a thick accumulation of sediments from the Sierra Nevada on the east and the Coast Range on the west. The east side of the valley, bounded by the Sierra Nevada fault block, dips gently to become flat over the granite rocks of the Sierra Nevada. The west side of the valley dips steeply at its extreme western boundary along the base of the Coast Range, where it lies over the Franciscan formation.

Surface Water

The project is located in the Tulare Lake Basin. The Basin is made up of six subunits, called management areas. The project is located in the Kaweah River Basin Management Area. Major water bodies in this part of the watershed include the Kaweah River, Saint John's River, Mill Creek, and the Friant-Kern Canal. The Kaweah River and the Friant-Kern Canal are not in the immediate vicinity of the project and any water discharge from the project in the form of runoff or spills would not discharge into these water bodies. The Saint John's River and Mill Creek are located about one mile to the north and south of the project area respectively.

Groundwater

The underlying groundwater in the Kaweah River Basin Management Area is impacted due to agricultural practices, the closed nature of the basin, and the lack of a laterally extensive clay layer.

Storm Water Quality

Storm water runoff is a major source of storm water pollution. Runoff from Caltrans sites in a particular watershed composes less than one percent of the total runoff generated from the entire watershed.

Environmental Consequences

Impacts from the project would be the same for all build alternatives. Potential sources of water pollution from this project include runoff containing sediment from soil erosion, petroleum distillates, and wear products from motor vehicle operation, landscaping chemicals, and hazardous material spilled along the highway during an accident. These materials would usually be transported offsite by runoff from rainfall.

Short-term impacts to surface water could occur during construction, mainly from exposure of loose soil during construction. Suspended solids, dissolved solids, and

organic pollutants in surface water bodies could increase while soils are disturbed and dust is generated. These conditions would likely persist until construction has been completed and erosion control measures have been implemented. Proper selection and implementation of best management practices during construction would prevent or greatly reduce these short-term impacts. It is unlikely that any discharge from the proposed project would detrimentally affect these water bodies except during a possible 50- to 75-year flood event. A 50-year flood has a two percent probability of occurring in any given year, and a 75-year flood has a 1.5 percent annual probability.

Long-term water quality impacts can occur due to changes in storm water drainage. The primary pollutants in the storm water are anticipated to be sediments, petroleum distillates, and metals. These substances are washed off the highway during storms and become runoff. With implementation of a Storm Water Pollution Prevention Plan during construction and the inclusion of design pollution best management practices, no long-term impacts to surface water quality would be expected as a result of this project.

An agricultural well located near the intersection of State Route 216 and Road 152 would need to be abandoned as part of the improvements to be made at the intersection. Long-term impacts to ground water quality could occur through improper abandonment or destruction of the well, which could lead to contamination of groundwater by creating a conduit for contaminants due to the lack of an extensive clay layer in the area.

Avoidance, Minimization, and/or Mitigation Measures

During construction, a Storm Water Pollution Prevention Plan would be implemented to 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.

Standard Specifications, Section 7-1.01G requires the construction contractor to implement pollution control practices related to construction projects via a Water Pollution Control Plan and Storm Water Pollution Prevention Plan.

Presently, when a project is expected to disturb more than one acre of soil, the following is required:

1. A Notification of Construction is to be submitted to the appropriate Regional Water Quality Control Board at least 30 days prior to the start of construction. The Notice of Construction forms ask for tentative start date and duration, location, description of project, estimate of affected area, resident engineer with telephone number, etc.

2. A Storm Water Pollution Prevention Plan is to be prepared and implemented during construction to the satisfaction of the Resident Engineer.

3. A Notice of Construction Completion is to be submitted to the Regional Water Quality Control Board upon completion of the construction and stabilization of the site. A project will be considered complete when the criteria for final stabilization in the State General Construction Permit is met.

Caltrans would ensure that abandonment or destruction of the existing water well near the intersection of State Route 216 and Road 152 is done in accordance with Department of Water Resources Bulletin Number 74-81: "Water Well Standards: State of California" and Bulletin Number 74-90: "California Well Standards."

Tulare County has standards equal to or more stringent than those in the bulletins. A well destruction permit may be required from the County and a report that the well has been properly abandoned needs to be filed with Tulare County and the California Department of Water Resources.

2.2.3 Hazardous Waste

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.

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

- Community Environmental Response Facilitation Act of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety & Health Act
- 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.

Hazardous waste in California is regulated primarily 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 study area consists of 51 parcels within and adjacent to the proposed right-of-way. Parcels include agricultural land, rural single-family residences, irrigation and individual domestic groundwater wells, individual sewage systems, an educational complex owned by the Visalia Unified School District, and single and multiple-family residential uses.

Aerially Deposited Lead

An Aerially Deposited Lead Investigation Report was completed for the project on October 2, 2002, to evaluate the presence and concentration of aerially deposited lead in shallow soil within the work area of the project.

Hazardous Waste

Caltrans completed an Initial Site Assessment on March 13, 2002. The study focused on potential hazardous waste issues in the project area, including hazardous waste sites, underground storage tanks, asbestos, and lead-based paint.

The Initial Site Assessment indicated that there were no known hazardous waste sites or underground storage tank facilities in the project area based on a review of the Leaking Underground Storage Tank Information System database and the VISTAinfo Inc. report.

There is a potential, due to the age and condition of some of the buildings and homes along State Route 216, to encounter lead-based paint and asbestos.

Utilities within the proposed right-of-way include electrical power lines, fiber-optic cable, and telephone lines. Power transformers associated with the power lines or other electrical or hydraulic equipment may contain polychlorinated biphenyls, a chemical that could affect human health.

Yellow thermoplastic paint may be present in yellow painted traffic stripes and pavement markings.

Environmental Consequences

The Aerially Deposited Lead study found lead in soil samples collected from the site, but not in hazardous concentrations. The source of the lead is not known, but is believed to be related to the accumulation of dust and debris containing lead from leaded gasoline emissions. In addition, lead concentrations generally decreased with increasing depth.

Based on the total and soluble lead analytical results, soil generated from individual layers or as a whole, would be considered non-hazardous. If the soil had been found to exceed the regulatory threshold outlined in Title 22, California Code of Regulations, it would have to be classified as hazardous waste and disposed of at a permitted hazardous waste landfill. The soil can be reused on the project or relinquished to the contractor without restriction.

Older homes that might have lead-based paint or asbestos would be affected by all build alternatives. Asbestos and lead are a threat to human health.

Where yellow thermoplastic paint is to be removed, it may contain heavy metals in concentrations that exceed established thresholds and may produce toxic fumes when heated.

Avoidance, Minimization, and/or Mitigation Measures

Prior to any excavation or soil disturbance within project boundaries, a project specific Lead Compliance Plan must be developed and implemented for earthwork as part of Caltrans non-standard special provisions.

Steps would be taken to reduce or eliminate any airborne dust. Water should be available at all times where work activities are being performed.

The contractor would use proper health and safety measures to minimize the exposure of workers to potential asbestos or lead-based paint from affected buildings and structures.

The demolition of water wells within the project limits must be in accordance with standards prepared by the Department of Water Resources (Bulletins 74-90) Title 23, California Code of Regulations and local regulatory standards.

Where yellow thermoplastic paint is to be removed, the contractor would comply with standard special provision 15-300.

2.2.4 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 concentration 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 six criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), lead (Pb), and sulfur dioxide (SO_2).

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 State Implementation Plan for achieving the goals of the Clean Air Act requirements. Conformity with the Clean Air Act takes

place on two levels-first, at the regional level and second, at 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 carbon monoxide, nitrogen dioxide, ozone, and particulate matter. California is in attainment for the other criteria pollutants. 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 at least 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 conform to emission budgets or other tests showing that attainment requirements of the Clean Air Act are met. If the conformity analysis is successful, the regional planning organization, such as the San Joaquin Valley Air Pollution Control District and the appropriate federal agencies, such as the Federal Highway Administration, make the determination that the Regional Transportation Plan is in conformity with the State Implementation Plan for achieving the goals of 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 meet regional conformity requirements for purposes of the project-level analysis.

Conformity at the project-level also requires “hot spot” analysis if an area is in “nonattainment” or “maintenance” for carbon monoxide (CO) and/or particulate matter. A region is a “nonattainment” area if one or more monitoring stations in the region fail to attain the relevant standard. Areas that were previously designated as non-attainment areas but have recently met the standard are called “maintenance” areas. “Hot spot” analysis is essentially the same, for technical purposes, as carbon monoxide or particulate matter analysis performed for National Environmental Policy Act and California Environmental Quality Act purposes. Conformity does include some specifics standards for projects that require a hot spot analysis. In general, the project must not cause the carbon monoxide standard to be violated, and in “nonattainment” areas, the project must not cause any increase in the number and severity of violations. If a known carbon monoxide or particulate matter violation is located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well.

Affected Environment

Caltrans prepared an Air Quality Analysis for this project dated March 7, 2006.

The project area lies in the San Joaquin Valley Air Basin. Mountain ranges bordering the air basin influence the wind speed and direction, affecting both the climate and the dispersion of air pollutants in the valley, where temperature inversions frequently occur. In an inversion, upper air becomes warmer than the air beneath it. Because warm surface air cannot rise into an even warmer layer, surface air and its pollutants get trapped at ground level. Inversions are more prevalent and of greater magnitude in late summer and fall.

The San Joaquin Valley Unified Air Pollution Control District administers air quality regulations developed at the federal, state, and local levels. For Tulare County, ozone, carbon monoxide, and particulate matter are of particular concern. Ozone is considered a regional pollutant; carbon monoxide and particulate matter are considered project-level pollutants.

Regional Air Quality Conformity

The proposed project is fully funded and is in the 2004/2005 Tulare County Regional Transportation Plan, which was found to conform by the Tulare County Association of Governments on August 9, 2004. The Federal Highway Administration and Federal Transit Administration adopted the air quality conformity finding on July 24, 2006. The project is also included in the Tulare County Association of Governments constrained 2004/2005 Regional Transportation Improvement Program, pages 3-101 and 3-102. The Tulare County Association of Governments' 2004/2005 Regional Transportation Improvement Program was found to conform by the Federal Highway Administration and Federal Transit Administration on December 12, 2005. The design concept and scope of the proposed project is consistent with the project description in the 2004/2005 Regional Transportation Plan, the 2004/2005 Regional Transportation Improvement Program, and the assumptions in the Tulare County Association of Governments' regional emissions analysis. The project description in the Regional Transportation Plan and the Federal Transportation Improvement Program of the State Route 216/Houston Avenue 4-Lane Widening project will be modified before Caltrans, as assigned by the Federal Highway Administration, approves the Finding of No Significant Impact to reflect the fact that the area east of post mile 2.99 will remain a two-lane conventional highway.

Project Level Air Quality Conformity

For federal standards, Tulare County is considered non-attainment/severe for ozone, attainment/unclassified for carbon monoxide, and non-attainment for particulate

matter. For state standards, Tulare County is considered non-attainment for ozone and particulate matter, and attainment for carbon monoxide (see Table 2.9).

Table 2.9 Air Quality Standards and Conformity Status

Criteria Pollutant	Federal Standard (National Ambient Air Quality Standards)	Federal Attainment Status	State Standard	State Attainment Status
Carbon Monoxide (CO)	35 ppm (1-hour average)	Attainment/ Unclassified	0.0	Attainment
Nitrogen Dioxide (NO_2)	0.053 ppm	Attainment/ Unclassified	-	Attainment
Ozone (O_3)	0.12 ppm (1-hour average)	Severe	0.09 ppm (1-hour average)	Non-attainment
	0.08 ppm (8-hour average)	Non-attainment	0.07 ppm (8-hour average)	Non-Attainment
Particulate Matter ($PM_{2.5}$)	15 ug/m^3 (24-hour average)	Non-attainment	12 ug/m^3 (24-hour average)	Non-attainment
Particulate Matter (PM_{10})	150 micrograms (24-hour average)	Non-attainment	50 micrograms (24-hour average)	Non-attainment
Sulfur Dioxide (SO_2)	0.03 ppm (annual average) 0.14 ppm (24-hour average)	No federal standard	-	Attainment

ppm = part per million

Carbon Monoxide

The project is located in an attainment/unclassified area for the federal carbon monoxide standard. The ambient carbon monoxide levels monitored at the Visalia-N. Church Street station (the closest station with monitored carbon monoxide data) showed no violations in the last three years. Therefore, hot spot analysis is not warranted.

Particulate Matter Hot Spot Analysis

Particles less than 10 micrometers (PM_{10}) pose a potential public health concern because these small particles can be inhaled and accumulated in the respiratory system. Particles less than 2.5 micrometers ($PM_{2.5}$) are thought to be the greatest health risk because of their small size.

The Environmental Protection Agency has designated Tulare County as a non-attainment area for PM_{10}. The PM_{10} monitoring station nearest the project area is the Visalia, N. Church Street station. Between 2003 and 2005, the monitored PM_{10}

particulate matter concentrations have not exceeded the federal PM_{10} (150 micrograms per cubic meter) standards.

The Environmental Protection Agency has designated Tulare County as a non-attainment area for PM $_{2.5}$. The $PM_{2.5}$ monitoring station nearest the project area is the Visalia-N Church Street monitoring station. Between 2003 and 2005, the monitored $PM_{2.5}$ particulate matter concentrations have not exceeded the federal standards (15 micrograms per cubic meter).

Caltrans prepared a PM_{10} and $PM_{2.5}$ Hot Spot Conformity Assessment for the Tulare 216/Houston Avenue 4-Lane Widening project for consultation with the San Joaquin Valley Modeling Coordinating Committee. On January 26, 2007, the Committee concurred with Caltrans' finding that future new or worsened $PM_{2.5}$ and PM_{10} violations of any standards are not anticipated in the project area.

The proposed project is in compliance with the San Joaquin Valley Unified Air Pollution Control District standards for $PM_{2.5}$ and PM_{10}. The project would provide for better traffic circulation and would reduce idling time throughout the project limits.

Mobile Source Air Toxics

The Federal Highway Administration has developed a tiered approach for analyzing mobile source air toxics. The Federal Highway Administration has identified three levels of analysis depending on specific project circumstances:

- No analysis for exempt projects with no potential for meaningful mobile source air toxic effects;
- Qualitative analysis for projects with low potential mobile source air toxic effects; or
- Quantitative analysis to differentiate alternatives for projects with higher potential for mobile source air toxic effects.

The proposed project is considered to be a project with no meaningful impacts because it does not significantly increase vehicle miles traveled. The proposed project widens a small segment of State Route 216, which will relieve traffic congestion and improve traffic flow, which will reduce emissions of volatile organic carbon-based mobile source air toxics.

Environmental Consequences

The proposed project would not result in any local carbon monoxide hot spot. None of the projected carbon monoxide concentrations, with or without the project changes, would exceed state or federal standards.

It is not anticipated that this project would create a new violation or worsen an existing violation of carbon monoxide. Therefore, based on the above analysis, no major local carbon monoxide impacts would occur as a result of the proposed project.

Under the new transportation conformity rule criterion (Code of Federal Regulations 93.123(b)(1)), the Houston Avenue 4-Lane Widening project is not considered a Project of Air Quality Concern. Caltrans prepared a PM_{10} and $PM_{2.5}$ Hot Spot Conformity Assessment for the Tulare 216/Houston Avenue 4-Lane Widening project for consultation with the San Joaquin Valley Modeling Coordinating Committee. On January 26, 2007, the Committee concurred with Caltrans' finding that future new or worsened $PM_{2.5}$ and PM_{10} violations of any standards are not anticipated in the project area.

During construction, the proposed project would generate air pollutants. Construction equipment exhaust contains hydrocarbons, oxides of nitrogen, carbon monoxide, suspended particulate matter, and odors. However, the largest percentage of pollutants would be windblown dust generated during excavation, grading, hauling, and various other activities. The impacts of these activities would vary each day as construction progresses. Occasional dust and odors at some residences close to the right-of-way could cause occasional annoyance and complaints.

Avoidance, Minimization, and/or Mitigation Measures

The provisions of Caltrans Standard Specifications, Section 7-1/OF "Air Pollution Control" and Section 10 "Dust Control" requires the contractor to comply with the San Joaquin Valley Unified Air Pollution Control District's rules, ordinances, and regulations. With respect to diesel emissions during construction, Caltrans will take all minimization measures that are listed in Caltrans Standard Specifications to reduce particulate emissions. A dust control plan is required for this project and would be submitted to the San Joaquin Valley Unified Air Pollution Control District before construction begins. Typical dust and emission control methods include watering the construction site, cleaning paved streets, providing runoff and erosion control, using traps on diesel exhaust systems, and using emission control retrofits on older, higher polluting vehicles.

2.2.5 Climate Change under the California Environmental Quality Act

Regulatory Setting

While climate change has been a concern since at least 1988 as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change, the efforts devoted to greenhouse gas emissions reduction and climate change research and policy have increased dramatically in recent years. In 2002, with the passage of Assembly Bill 1493, California launched an innovative and proactive approach to dealing with greenhouse gas emissions and climate change at the state level. Assembly Bill 1493 requires the Air Resources Board to develop and implement regulations to reduce automobile and light truck greenhouse gas emissions; these regulations will apply to automobiles and light trucks beginning with the 2009-model year. Greenhouse gases related to human activity include carbon dioxide, methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (1,1,1,2-tetrafluoroethane), and HFC-152a (difluoroethane).

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this executive order is to reduce California's greenhouse gas emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020, and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32, the Global Warming Solutions Act of 2006. Assembly Bill 32 sets the same overall greenhouse gas emissions reduction goals while further mandating that the Air Resources Board create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06, signed on October 17, 2006, further directs state agencies to begin implementing Assembly Bill 32, including the recommendations made by the state's Climate Action Team.

Climate change and greenhouse gas reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing greenhouse gas emissions reductions and climate change.

Affected Environment

According to *Recommendations by the Association of Environmental Professionals on How to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), an individual project does not generate enough greenhouse gas emissions to significantly influence global climate change. Global climate change is a cumulative impact; a project participates in this potential impact

through its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases.

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing greenhouse gas emissions reduction and climate change. Recognizing that 98 percent of California's greenhouse gas emissions are from the burning of fossil fuels and 40 percent of all human-made greenhouse gas emissions are from transportation, Caltrans has created and is implementing the Climate Action Program at Caltrans (December 2006).

One of the main strategies in Caltrans' Climate Action Program to reduce greenhouse gas emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0 to 25 miles per hour) and speeds over 55 miles per hour. Relieving congestion by enhancing operations and improving travel times in high congestion travel corridors will lead to an overall reduction in greenhouse gas emissions.

Environmental Consequences

The purpose of the proposed project includes improving the operation of State Route 216 from Lovers Lane in the city of Visalia to Road 152 in Tulare County and increasing the capacity of State Route 216 from Lovers Lane in the city of Visalia to just east of the city limits near Post Mile 2.99.

The City of Visalia expects substantial urban growth in the project area in the coming years. The anticipated growth in the community, as well as projected increased traffic volumes, is expected to affect the operation of State Route 216, causing the Level of Service of the existing highway to deteriorate.

No-Build Alternative

Traffic volumes in Segment 1 would increase more than 250 percent between 2005 and 2011 and increase an additional 40 percent between 2011 and 2031(Table 1.1), causing the Level of Service to deteriorate to a Level of Service "F" in 2031 (Table 1.2). Intersections at Lovers Lane and McAuliff Road in Segment 1 would also fail during the 20-year planning horizon. Level of Service at the Comstock Street intersection would decrease from Level of Service "B" to a Level of Service "E" during the 20-year design period for the segment. This is below the minimum Level of Service "D" designated for this roadway.

Within Segment 2, traffic volumes are projected to increase 39 percent from 5,600 vehicles per day (year 2011) to 7,800 vehicles per day (year 2031) during the 20-year design period. Level of Service on the existing highway would decrease from Level of Service "B" to a Level of Service "E" during the 20-year design period for the segment. This is below the minimum Level of Service "D" designated for this roadway.

Build Alternatives

With the proposed improvements in Segment 1, this portion of State Route 216 would improve to a Level of Service B on opening day (year 2011) and would remain at a Level of Service C through the end of the 20-year planning horizon. This is also true for the intersections of State Route 216 with Lovers Lane and with McAuliff Road.

Segment 2, which would stay a two-lane highway but with added shoulders, would continue to operate at acceptable Levels of Service throughout the 20-year planning horizon.

Because the proposed project would reduce vehicle hours traveled and improve traffic flow, carbon dioxide emissions should be reduced despite an increase in vehicle miles traveled.

Caltrans recognizes the concern that carbon dioxide emissions raise for climate change. However, modeling and gauging the impacts associated with an increase in greenhouse gas emission levels, including carbon dioxide, at the project level is not currently possible. No federal, state, or regional regulatory agency has provided methodology or criteria for greenhouse gas emissions and climate change impact analysis. Therefore, Caltrans is unable to provide a scientific- or regulatory-based conclusion regarding whether the project's contribution to climate change is cumulatively considerable.

Avoidance, Minimization, and/or Mitigation Measures

Caltrans continues to be actively involved on the Governor's Climate Action Team as the Air Resources Board works to implement Assembly Bills 1493 and 32. As part of the Climate Action Program at Caltrans (December 2006), Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, transit-oriented communities, and high-density housing along transit corridors. Caltrans is working closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority. Caltrans is also supporting efforts to improve the energy efficiency of the

transportation sector by increasing vehicle fuel economy in new cars and light and heavy-duty trucks. However, it is important to note that control of fuel economy standards is held by the United States Environmental Protection Agency and the Air Resources Board. Lastly, the use of alternative fuels is also being considered; Caltrans is participating in funding for alternative fuel research at the University of California Davis.

2.2.6 Noise and Vibration

Regulatory Setting

The National Environmental Policy Act of 1969 and the California Environmental Quality Act provide the broad basis for analyzing and abating the effects of highway traffic noise. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between the National Environmental Policy Act and the California Environmental Quality Act.

California Environmental Quality Act

The California Environmental Quality Act requires a strictly no-build versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under the California Environmental Quality Act, then the act dictates that mitigation measures must be incorporated into the project unless such measures are not feasible.

National Environmental Policy Act and 23 Code of Federal Regulations 772

For highway transportation projects with Federal Highway Administration involvement, (and Caltrans as assigned), the Federal-Aid Highway Act of 1970 and the associated implementing regulations (23 Code of Federal Regulations 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 criterion for residences (67 decibels) is lower than the criterion for commercial areas (72 decibels). The following table lists the noise abatement criteria for use in the National Environmental Policy Act and 23 Code of Federal Regulations 772 analysis and Table 2.11 shows the noise levels of typical activities.

Table 2.10 Activity Categories and Noise Abatement Criteria

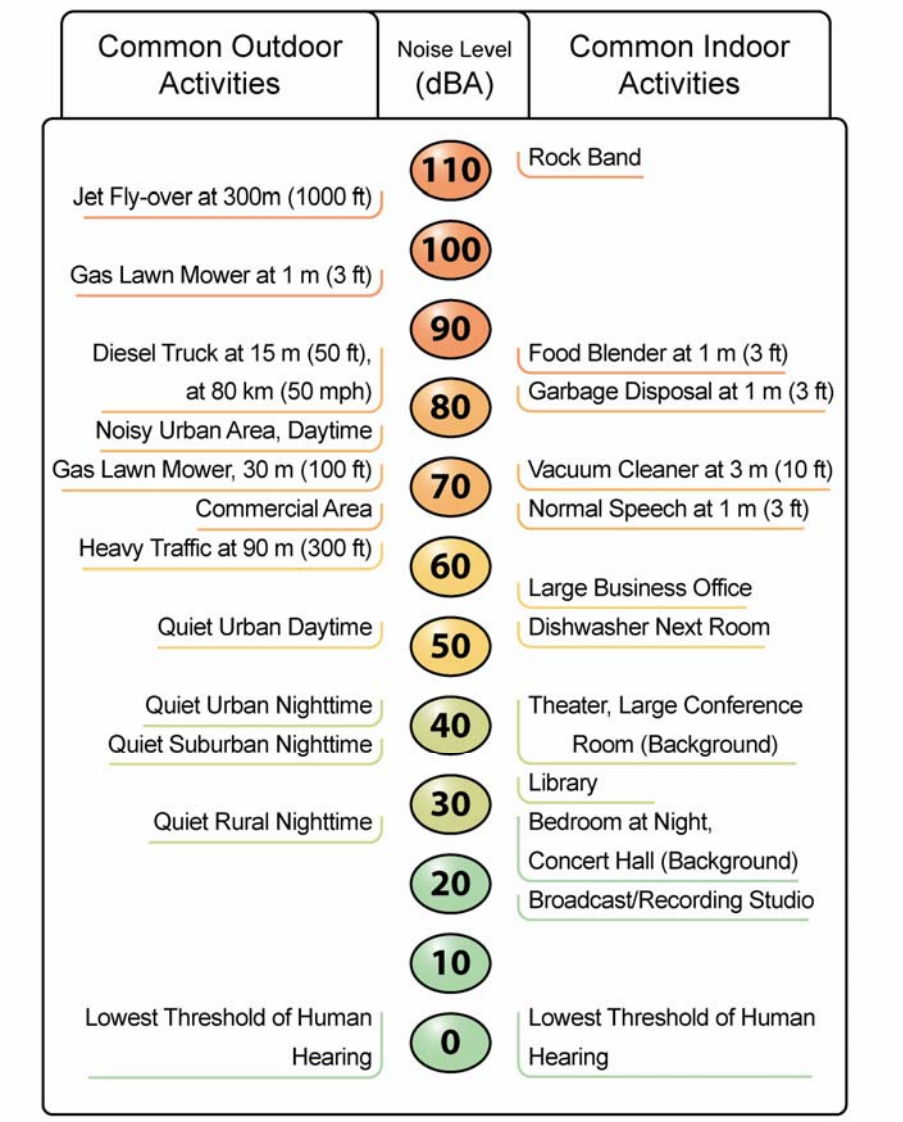
Activity Category	Noise Abatement Criteria, A-weighted Noise Level, Leq(h)	Description of Activities
A	57 Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose
B	67 Exterior	Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals
C	72 Exterior	Developed lands, properties, or activities not included in Categories A or B above
D	--	Undeveloped lands
E	52 Interior	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums

Source: Caltrans Traffic Noise Analysis Manual, 1998
A-weighted decibels are adjusted to approximate the way humans perceive sound. Leq(h) is the steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual time-varying levels over one hour.

In accordance with Caltrans' *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, October 1998*, a noise impact occurs when the future noise level with the project results in a substantial increase in noise level (defined as a 12-decibel or more increase) or when the future noise level with the project approaches or exceeds the noise abatement criteria. Approaching the noise abatement criteria is defined as coming within 1 decibel of the criteria.

If it is determined that the project would have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

Table 2.11 Typical Noise Levels



Caltrans' *Traffic Noise Analysis Protocol* sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. A minimum 5-decibel reduction in the future noise level must be achieved for an abatement measure to be considered feasible. Other considerations include topography, access requirements, other noise sources, and safety considerations. The reasonableness determination is basically a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include residents' acceptance, the absolute noise level, build versus

existing noise, environmental impacts of abatement, public and local agencies input, newly constructed development versus development pre-dating 1978, and the cost per benefited residence.

Affected Environment

Caltrans prepared a Noise Study Report for this project dated August 9, 2006.

The traffic noise analysis for the proposed project was prepared according to the Caltrans Traffic Noise Analysis Protocol. Caltrans identified nine sensitive noise receptors within the project limits.

In Segment 1, the Golden Oak Elementary School, Visalia Adult School, Burgundy House Apartments (representing six multiple-family units), Village Preschool, and three single-family residences (representing multiple single-family homes) were identified as sensitive receptors. See Figure 2-4.

One receptor representing a mobile home park with four mobile homes and a second receptor representing two single-family residences adjacent to the mobile home park were identified as sensitive receptors in Segment 2. See Figure 2-4.

Table 2.12 gives the existing noise level for each receptor as well as the predicted noise levels for the year 2031 with the project. For the purpose of the noise analysis it was assumed that all build alternatives would have the same impacts due to the minimal difference in distance from the highway.

Table 2.12 Existing and Predicted Noise Levels for Segment 1 and 2

Receptor Number	Type of Development	Existing Noise Level Leq (decibels)	Predicted Noise Levels (2031) without Project Leq (decibels)	Predicted Noise Levels (2031) with Project Leq (decibels)*	Noise Increase (decibels)	Predicted Noise Level with Abatement (dBA)**	Reasonable and Feasible
1	Golden Oak Elementary School	57.5 (Exterior)	60.9 (Exterior) 40.9 (Interior	60.9 (Exterior) 40.9 (Interior)	+3.4	Not Applicable	Not Applicable
2	Visalia Adult School	55.3 (Exterior)	62.2 (Exterior) 42.2 (Interior)	62.2 (Exterior) 42.2 (Interior)	+6.9	Not Applicable	Not Applicable
3	Burgundy House Apartments	58.2	63.6 (Exterior)	63.6	+5.4	Not Applicable	Not Applicable
4	3143 E. Houston Avenue	62.7	71.9	71.9	+9.2	61.9	No***
5	1341 Simon Court	59.9	64.1	64.1	+4.2	Not Applicable	Not Applicable
6	Village Preschool 1414 N. McAuliff Road	35.4 (Interior)	43.0 (Interior)*	43.0 (Interior)	+7.6	Not Applicable	Not Applicable
7	1416 N. Sumter Court.	55.1	63.0	63.0	+7.9	Not Applicable	Not Applicable
8A	15026 Ivanhoe Drive.	72.1	72.9	72.9	+0.8	67.9	No***
8B	15040 Ivanhoe Drive	68.3	69.1	69.1	+0.8	64.1	No***

*Since there would be no significant difference in traffic volumes for build or no-build options, the predicted noise levels for the build and no-build scenario are assumed to be the same.
**The Noise Level with Abatement is based on using a six-foot soundwall.
***No soundwall is recommended as it restricts access to residences.
Leq = A measure of the average noise level during a specified period of time.
Source: Caltrans' Noise Analysis Study, dated February 15, 2007

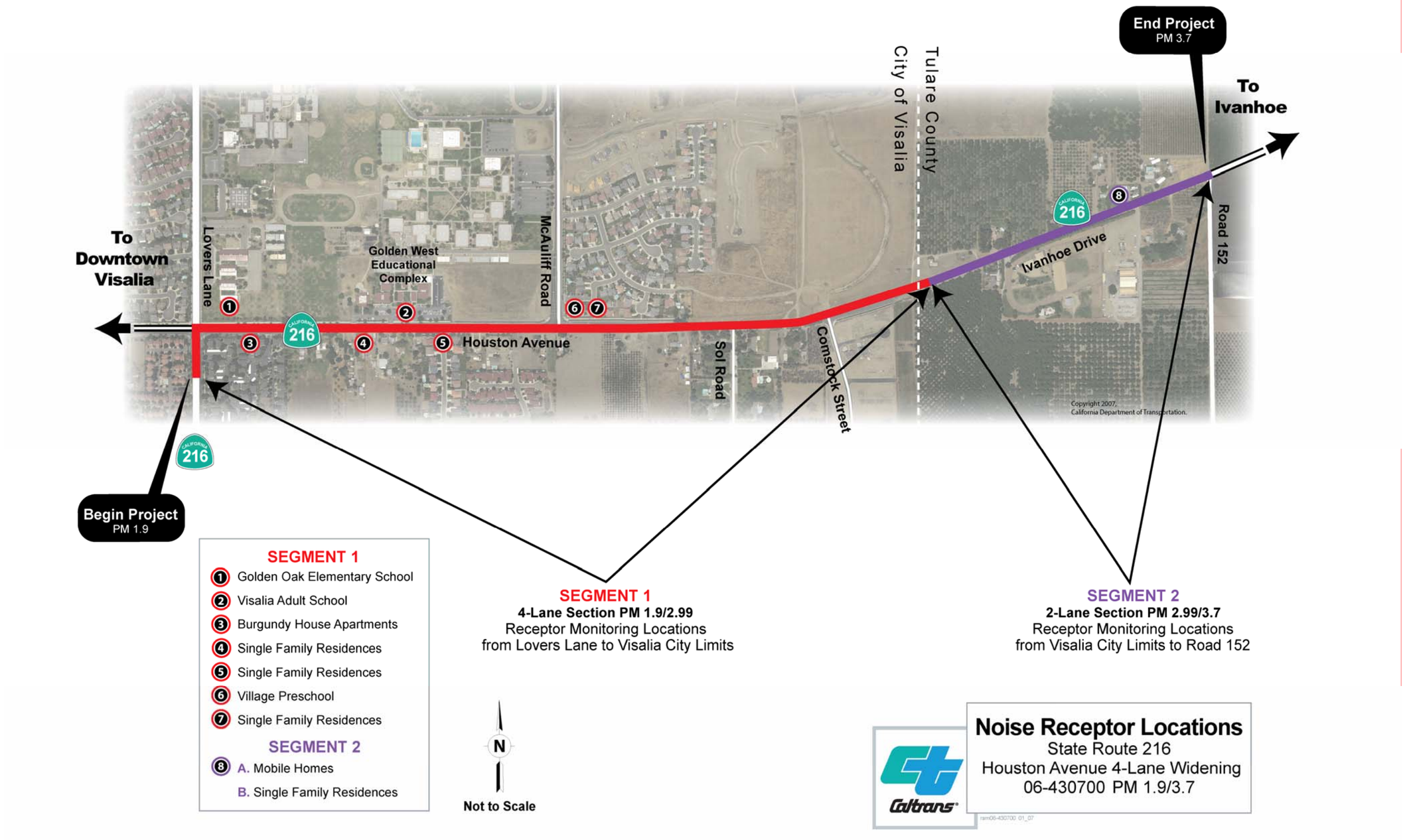


Figure 2-4 Noise Receptor Location Map

Environmental Consequences Under the National Environmental Policy Act

Existing and predicted noise levels at all nine sensitive receptors shown in Figure 2-4 are described below. Three residential locations, representing 11 homes and four mobile homes were identified that exceed the Noise Abatement Criteria. One of the receptors is located in Segment 1 and the other two are located in Segment 2.

Receptor 1 – Golden Oak Elementary School

Golden Oak Elementary School is located about 186 feet north of the existing edge of the roadway. The current exterior noise level is 57.5 decibels. Future exterior noise levels for the design year, 2031, are predicted to be 60.9 decibels. Noise attenuation provided by the existing structure and windows is typically 20 decibels, so the predicted future interior noise level within the classroom would be 40.9 decibels. Noise abatement is not necessary at this location because existing and future noise levels are projected to be below the Noise Abatement Criteria of 67 decibels (exterior) and 52 decibels (interior). See Table 2.12.

Receptor 2 – Visalia Adult School

The Visalia Adult School is located about 134 feet north of the existing edge of the roadway for State Route 216. The current exterior noise level is 55.3 decibels. Future exterior noise levels for the design year, 2031, are predicted to be 62.2 decibels. Noise attenuation provided by the existing structure and windows is typically 20 decibels, so the predicted future interior noise level within the classroom would be 42.2 decibels. Noise abatement is not necessary at this location because existing and future noise levels are projected to be below the Noise Abatement Criteria of 67 decibels (exterior) and 52 decibels (interior). See Table 2.12.

Receptor 3 – Burgundy House Apartments

The Burgundy House Apartments are located on the south side of State Route 216. A 6-foot masonry wall surrounds the apartment complex. The receptor, located about 51 feet from the existing edge of the roadway represents six multiple-family residential units closest to the project area. This receptor also represents three similarly situated single-family residences under construction in the Madison Heights subdivision immediately to the east of the Burgundy House Apartments. The existing noise level is 58.2 decibels. The exterior noise level for 2031 with the 6-foot masonry wall in place is predicted to be 63.6 decibels. See Table 2.12. Noise abatement is not necessary at this location because the Noise Abatement Criterion of 67 decibels would not be approached or exceeded.

Receptor 4 – Single-Family Residence

Receptor 4 is a single-family residence located on the south side of State Route 216. This receptor represents nine residences in the project area and is located about 35 feet from the existing edge of the roadway. The current noise level of 62.7 decibels is expected to increase to 71.9 decibels by the design year 2031, an increase of 9.2 decibels. See Table 2.12. Since the receptor is predicted to exceed the Noise Abatement Criteria of 67 decibels, abatement must be considered.

Caltrans concluded that a soundwall, six feet high and 1,000 feet long along the right-of-way line would decrease noise levels by 10 decibels. However, a soundwall would not be feasible for these single-family residences because it would block access to the homes, creating a need for access breaks in the wall. Breaks in the wall would make it ineffective for noise abatement.

Receptor 5 – Single-Family Residence

Receptor 5 is a single-family residence located on the south side of State Route 216. This receptor represents two residences in the project area and is located about 52 feet from the existing edge of the roadway. The existing noise level is 59.9 decibels. The predicted future noise level for this receptor by the design year 2031 is predicted to be 64.1 decibels. See Table 2.12. Noise abatement is not necessary at this location because the Noise Abatement Criterion of 67 decibels would not be approached or exceeded.

Receptor 6 – Village Preschool

The Village Preschool is located at the northeast corner of State Route 216 and McAuliff Road. A 6-foot masonry wall surrounds the preschool. The preschool is located about 65 feet from the existing edge of the roadway. The existing interior noise level was measured at 35.4 decibels. Future noise levels for the design year, 2031, were predicted to be 43.0 decibels. See Table 2.12. Noise abatement is not necessary at this location because existing and future noise levels are projected to be below the Noise Abatement Criteria of 67 decibels (exterior) and 52 decibels (interior).

Receptor 7 – Single-Family Residence

Receptor 7 represents three single-family residences located on the north side of State Route 216. A 6-foot masonry wall surrounds the subdivision. This receptor is located about 30 feet from the existing edge of the roadway. The existing noise level is 55.1 decibels. Future noise levels for the design year, 2031, were predicted to be 63.0

decibels. See Table 2.12. Noise abatement is not necessary at this location because the Noise Abatement Criterion of 67 decibels would not be approached or exceeded.

Receptor 8A – Mobile Home Park and Receptor 8B – Single-Family Residence
Receptor 8A represents a mobile home park located on the north side of State Route 216 about 22 feet from the existing edge of the roadway. The existing noise level of 72.1 decibels at this receptor is expected to increase to 72.9 decibels for the design year 2031, an increase of 0.8 decibels. See Table 2.12. The difference between the predicted noise level with the project and the predicted noise level without the project would not be distinguishable by the human ear, but since the existing noise level exceeds the Noise Abatement Criteria of 67 decibels, abatement must be considered.

Receptor 8B is a single-family residence adjacent to the mobile home park. The residence is located on the north side State Route 216 about 44 feet from the existing edge of the roadway. This receptor represents two residences in the project area. Future noise levels for the design year, 2031, were predicted to be 69.1 decibels, an increase of 0.8 decibels from the existing noise level of 68.3 decibels. See Table 2.12. The difference between the predicted noise level with the project and the predicted noise level without the project would not be distinguishable by the human ear, but since the noise level exceeds the Noise Abatement Criteria of 67 decibels, abatement must be considered.

A soundwall 285 feet long and 6 feet high would reduce the predicted noise levels by five decibels for Receptors 8A and 8B. However, Caltrans concluded that a soundwall would not be feasible for these residences because it would block access to the properties, creating the need for access breaks within the wall. Breaks in the wall would make it ineffective for noise abatement.

Environmental Consequences Under the California Environmental Quality Act

In accordance with Caltrans' *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, October 1998*, a noise impact occurs when the future noise level with the project results in a substantial increase in noise level (defined as a 12-decibel or more increase).

The traffic noise analysis for the proposed project was prepared according to the Caltrans Traffic Noise Analysis Protocol. Caltrans identified eight sensitive noise

receptors (two schools, an apartment complex, a pre-school, and five single-family residences) within the project limits.

None of the sensitive noise receptors identified for the project were predicted to have a noise increase of 12 decibels or more, therefore; construction of the proposed project would not result in a significant noise impact under the California Environmental Quality Act.

Construction Noise

Construction noises include temporary noise from equipment and machinery during each phase of construction. The project would remove the existing street/sidewalk and relocate utilities. Grubbing and earthwork are necessary for constructing the new lanes/shoulders, relocating utilities, and constructing new sidewalks. The project would involve intermittent construction activities, so no single location would experience an extended period of construction-related noise. Construction would last for about six months.

Avoidance, Minimization, and/or Noise Abatement under the National Environmental Policy Act

Although noise levels at Receptors 4, 8A, and 8B would exceed the Noise Abatement Criteria, Caltrans determined that soundwalls at these locations would not be feasible because breaks in the wall would be required for access. Therefore, noise abatement measures, other than those recommended for construction noise, are not recommended for this project.

Construction noise emissions would be controlled by local noise ordinances and noise control measures that may include, but are not limited to the following:

1. Nighttime and weekend work is not anticipated.

2. Compliance with Caltrans Standard Specifications Section 7-01I “Sound Control Requirements” would be required. Section 7-01I refers to mandatory mufflers for all internal combustion engines operated with the project and mandatory compliance with local noise ordinances.

Implementation of these noise control measures would effectively reduce community construction noise impacts.

Avoidance, Minimization, and/or Noise Abatement under the California Environmental Quality Act

No impacts are expected under the California Environmental Quality Act; therefore, no abatement is required.

2.3 Biological Environment

2.3.1 Natural Communities

Regulatory Setting

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Affected Environment

A Natural Environment Study covering natural communities, animals, plants, invasive, and threatened and endangered species was completed for the project in November 2006.

The project is located in the northeast portion of the City of Visalia and the adjoining unincorporated area to the east, in west-central Tulare County. The City of Visalia sits at an elevation of about 330 feet.

The climate of the Visalia area is semiarid and is characterized as Mediterranean with long, hot, dry summers. Winters are cool and have varying periods of rain, fog, and clear frosty weather. The average maximum temperature ranges from 55 degrees Fahrenheit to 97 degrees Fahrenheit. The average low temperature ranges from 37 degrees Fahrenheit to 64.5 degrees Fahrenheit. Average rainfall in the area is just over 10 inches per year.

Three vegetation types and associated wildlife habitats occur within the biological study area:

- Non-native grasslands/fallow agricultural lands
- Orchards

- Irrigated row crops

The remaining land is classified as "urban/developed land" and is not considered a vegetation type, but does provide limited wildlife habitat for common species. All habitats within the biological study area have been substantially altered by human activity and generally support non-native plant species with a low diversity of native wildlife.

Non-native Grasslands/Fallow Agricultural Lands

Non-native grasslands within the biological study area are composed primarily of annual grasses and forbs. Common plant species include wild oats *(Avena fatua)*, ripgut brome *(Bromus diandrus)*, filaree *(Erodium cicutarium)*, common groundsel *(Senecio vulgaris)*, yellow star-thistle *(Centaurea solstitialis)*, bermudagrass *(Cynodon dactylon)*, and common Russian thistle *(Salsola tragus)*.

Fallow agricultural fields provide habitat for the mourning dove *(Zenaida macroura)*, western scrub jay *(Aphelocoma californica)*, northern mocking bird *(Mimus polyglottos)*, and the house finch *(Carpodacus mexicanus)*. This habitat also supports small mammals such as the California ground squirrel *(Spermophilus beecheyi)*, deer mouse *(Peromyscus maniculatus)*, house mouse *(Mus musculus)*, Botta pocket gopher *(Thomomys bottae)*, and other burrowing mammals. Non-native roof rats *(Rattus rattus)* and feral cats *(Felis catus)* may also use this habitat for foraging and refuge.

Orchards

Walnut, plum, and citrus orchards are present within the biological study area. Wildlife habitat provided by this type of habitat varies greatly with the management practices used. The orchards in the biological study area appear to be heavily managed. Lack of cover makes the orchards less suitable for small mammals occurring in the disturbed areas. Intensive management practices also make the orchards unsuitable for most bird species common to the area.

Irrigated Row Crops

Irrigated row crops such as cotton, corn, and alfalfa exist within the biological study area. Non-native grasses and forbs are confined to narrow strips near the edge of the fields. Wildlife species are not likely to use these areas except for occasional foraging and movement.

Urban and Residential Development

The remaining portion of the biological study area is dominated by urban and residential development. Buildings, parking lots, and roads that support very little natural vegetation occupy these areas. These areas are not suitable for most wildlife species due to frequent disturbance, the presence of cats and dogs *(Canis familiaris)*, and the lack of foraging, nesting, and breeding habitats. Wildlife species that use this habitat type include the opossum *(Didelphis virginiana)*, common crow *(Corvus brachyrhynchos)*, European starling *(Sturnus vulgaris)*, and various sparrow species.

Migration Corridors

A literature search and a field survey were conducted for the project and it was determined that the biological study area is not within any migration corridors. A search of the U.S. Fish and Wildlife Service list and California Department of Fish and Game Natural Diversity Database concluded that no special-status natural communities were within the biological study area or adjacent lands. A field survey of the biological study area was conducted, and no natural habitat was observed.

Waterways

No aquatic resources, including wetlands or other waters of the United States, exist within the project area.

Environmental Consequences

No natural communities of special concern or critical habitat would be affected by the proposed project.

Avoidance, Minimization, and/or Mitigation Measures

No natural communities of special concern or critical habitat exist within the project area. Therefore, no mitigation is anticipated.

2.3.2 Animal Species

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Fisheries 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. Species listed or proposed for listing as threatened or endangered are discussed in

Section 2.3.3. All other special-status animal species are discussed here, including California Department of Fish and Game fully protected species and species of special concern, and the U.S. Fish and Wildlife Service or National Oceanic and Atmospheric Fisheries Service candidate species.

Federal laws and regulations pertaining to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act
- Marine Mammal Protection Act

State laws and regulations pertaining to wildlife include the following:

- California Environmental Quality Act
- Sections 1601 – 1603 of the Fish and Game Code
- Sections 4150 and 4152 of the Fish and Game Code

In addition to state and federal laws regulating impacts to wildlife, there are often local regulations (example: county or city) that need to be considered when developing projects. If work is being done on federal land (Bureau of Land Management or Forest Service, for example), then those agencies' regulations, policies, and Habitat Conservation Plans are followed.

Affected Environment

According to the sensitive-species lists obtained from the Sacramento Field Office of the U.S. Fish and Wildlife Service and the California Department of Fish and Game Natural Diversity Database list, a total of 65 special-status animal species have the potential to occur within the Exeter and Visalia 1:24,000 U.S. Geological Survey topographical quadrangles.

Two special-status animal species are likely to occur within the biological study area: the San Joaquin kit fox (*Vulpes macrotis mutica*) and the valley elderberry longhorn beetle *(Desmocerus californicus dimorphus)*. The San Joaquin kit fox and the valley elderberry longhorn beetle are discussed in Section 2.3.3 Threatened and Endangered Species.

In addition to these two special-status species, the listings obtained from the U.S. Fish and Wildlife Service and the California Department of Fish and Game contain 23 bird

species subject to protection under the Migratory Bird Treaty Act (15 U.S. Code 703 - 711).

Environmental Consequences

No direct, indirect, or cumulative effects to animal species are anticipated due to the following:

- Current records of listed species do not exist within the biological study area or adjacent lands.
- No observations of special-status species were made during field surveys and visits.
- Pre-construction surveys would be performed to confirm the findings of the Natural Environment Study.

Avoidance, Minimization, and/or Mitigation Measures

Protection measures for migratory birds would be included in the construction contract special provisions. Pre-construction surveys would be performed to confirm the findings of the Natural Environment Study.

2.3.3 Threatened and Endangered Species

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act: 16 United States Code, Section 1531, et seq. See also 50 Code of Federal Regulations Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems on which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration, are required to consult with the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Fisheries Service to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 is a Biological Opinion or an incidental take statement. Section 3 of the Federal Endangered Species Act defines take as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or any attempt at such conduct.”

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

Affected Environment

A Natural Environment Study was completed for the proposed project in November 2006. There are two special-status species that occur within the project area: San Joaquin kit fox and valley elderberry longhorn beetle.

San Joaquin Kit Fox

The San Joaquin kit fox is a small, nocturnal fox resembling a small lanky dog with disproportionately large ears. It is a federally endangered and state threatened animal. For cover and denning, the San Joaquin kit fox may dig its own den in loose soil, use existing dens, or use human-made structures such as culverts and pipes.

This species' current range consists of suitable habitat on the San Joaquin Valley floor and in the surrounding foothills of the Coast Range and the Sierra Nevada and Tehachapi mountains. The San Joaquin kit fox lives in the following plant communities: valley sink scrub, interior Coast Range saltbush scrub, upper Sonoran subshrub scrub, annual grasslands, and the remaining native grasslands.

The proposed project lies in the central portion of the San Joaquin kit fox range. Large portions of this area have been converted into agricultural lands. In these areas, the San Joaquin kit fox is known to inhabit grazed, non-irrigated grasslands. The San

Joaquin kit fox may also live next to and forage in tilled or fallow fields, irrigated row crops, orchards, and vineyards.

Surveys for San Joaquin kit fox occurred in September 2002. The surveys were conducted in accordance with the *California Department of Fish and Game, Region 4 Approved Survey Methodologies for Sensitive Species, San Joaquin kit fox (1990).* A California Natural Diversity Database search of the Exeter and Visalia U.S. Geological Surveys quadrangles done before the San Joaquin kit fox surveys indicated no recorded occurrences of San Joaquin kit fox near the project area. No sign of San Joaquin kit fox was recorded during the daytime transect surveys or nighttime spotlight surveys.

Transect surveys were conducted in two portions of the project area. Both areas were isolated and small in size and consisted of disturbed non-native vegetation that was mowed and disked.

The first area surveyed had been mowed to ground level. No burrows large enough to support San Joaquin kit fox and no kit fox sign were found during the transect survey. The area is surrounded by urban development, including private residences and two schools.

The second survey site, east of the first, contained disturbed non-native vegetation during the survey, but the site has since been disked. The city limit bisects this site. Private residences lie to the west, and walnut orchards to the south and east. High voltage transmission lines cross the site near the eastern boundary, and a large portion of the site to the north is currently being developed for a private housing tract. Several California ground squirrel burrows were found during transect surveys; there was no sign of San Joaquin kit fox.

Valley Elderberry Longhorn Beetle

The valley elderberry longhorn beetle lives and depends on its host plant, blue elderberry *(Sambucus mexicana).* Although primarily associated with riparian habitats, elderberries grow in a variety of upland sites. Valley elderberry longhorn beetles depend on elderberry shrubs for all of their life stages: egg, larva, pupa, and adult. Females lay their eggs on the bark and, after hatching, the larvae burrow into the stems where they live and feed for up to two years, before entering the pupal stage and transforming into adults. Adult beetles are active from March to June, feeding

and mating. Frequently, the only exterior evidence of this species is the presence of exit holes created by the larvae just before the start of the pupal stage.

Six elderberry shrubs were identified adjacent to the proposed project impact area. The six shrubs were examined and no valley longhorn beetles or their exit holes were observed.

Environmental Consequences

San Joaquin Kit Fox

None of the alternatives proposed for the project, including the No-Build Alternative, would affect potential San Joaquin kit fox habitat. Most of the proposed project area has been developed for housing or for agricultural use. The one parcel of undeveloped land left in the project area contains disturbed, non-native vegetation that has subsequently been disked. Although California ground squirrels are present, none of the burrows are of sufficient size to provide refuge to the San Joaquin kit fox. There is no recent documentation of San Joaquin kit fox in the project vicinity (California Natural Diversity Database 2006). The proposed project would have no effect on the San Joaquin kit fox.

Valley Elderberry Longhorn Beetle

Six elderberry shrubs were identified in Segment 2, adjacent to the proposed project impact area. Elderberry shrubs one, two, and three are located on private property, more than 40 feet from the edge of pavement and would not be directly or indirectly affected by the project. Elderberry shrubs four and five are located within the existing Caltrans right-of-way for State Route 216. Elderberry shrub four is nine feet from the existing edge of pavement and elderberry shrub five is 7.5 feet from the existing edge of pavement. Elderberry shrub six is located on private property about 24 feet from the edge of pavement and would not be directly or indirectly affected by the project.

Elderberry shrubs four and five are located within the existing Caltrans right-of-way and would be protected with the implementation of Environmentally Sensitive Areas. The proposed project would have no effect on the valley elderberry longhorn beetle.

Avoidance, Minimization, and/or Mitigation Measures

San Joaquin Kit Fox

All of the build alternatives proposed for the project would avoid potential San Joaquin kit fox foraging habitat found within the project area. No additional avoidance or minimization efforts would be required for this project.

Valley Elderberry Longhorn Beetle

Environmentally Sensitive Areas would be established, so there would be no direct or indirect effects to the valley elderberry longhorn beetle. No elderberry shrubs in the proposed project area would be removed or affected. No compensatory mitigation requirements are necessary for this project.

The alternatives developed for this project would avoid the elderberry shrubs found within the project area. Environmentally Sensitive Areas would be established to protect six elderberry shrubs during construction.

Elderberry shrubs one, two, three, and six are located on private property more than 20 feet from the edge of pavement. As a precaution, a linear Environmentally Sensitive Area would be established along the Caltrans right-of-way and would extend 20 feet to the east and west of the elderberry shrubs' drip lines. Elderberry shrub four is located nine feet from the edge of pavement. No ground disturbance would be allowed from the edge of pavement to the elderberry shrub's drip line; a minimum 20-foot Environmentally Sensitive Area would be established to the east and west of the elderberry shrub's drip line. Elderberry shrub five is located 7.5 feet from the edge of pavement. No ground disturbance would be allowed from the edge of pavement to the elderberry shrub; a minimum 20-foot Environmentally Sensitive Area would be established to the east and west of the elderberry shrub's drip line.

A qualified biologist would perform pre-construction surveys to confirm the findings of the Natural Environment Study.

2.3.4 Invasive Species

Regulatory Setting

On February 3, 1999, President Bill Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration guidance issued August 10, 1999 directs the use of the State's noxious weed list to define the invasive plants that must be considered as part of the National Environmental Policy Act analysis for a proposed project.

Affected Environment

The following invasive plant species were found within the biological study area: yellow-star thistle, common Russian thistle, bermudagrass, Johnsongrass (*Sorghum halepense*), and puncturevine *(Tribulus terrestris)*. These species were identified on the State of California Department of Food and Agriculture Noxious Weed List. Common Russian thistle, bermudagrass, Johnsongrass, and puncturevine are classified as category "C" species, which means that they are not subject to state enforcement except to provide cleanliness in nurseries. No invasive species from the federal weed list were identified.

Environmental Consequences

Five invasive plant species were identified in the project area during the biological studies. Some of these invasive plant species may be removed due to construction of the project.

Avoidance, Minimization, and/or Mitigation Measures

In compliance with the Executive Order on Invasive Species, Executive Order 13112, and subsequent guidance from the Federal Highway Administration, the landscaping and erosion control included in the project would not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions would be taken if invasive species were found in or adjacent to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

Chapter 3 Comments and 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. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including project development team meetings, and interagency coordination meetings. This chapter summarizes the results of Caltrans efforts to identify, address, and resolve project-related issues through early and continuing coordination.

Early Coordination

Since early 2000, Caltrans project managers and various members of the project development team have met with the City of Visalia, County of Tulare, and the Visalia Unified School District. All agencies are interested in this project and support its construction.

California Department of Fish and Game

On June 10, 2003, Caltrans staff discussed the project with the California Department of Fish and Game Associate Wildlife Biologist for the Visalia District. Caltrans staff and Fish and Game staff discussed occurrences of the San Joaquin kit fox in the Visalia area.

California State Historic Preservation Officer

The California State Historic Preservation Officer concurred on April 27, 2006, that 17 properties within the proposed State Route 216 (Houston Avenue 4-Lane Widening) project were not eligible for the National Register of Historic Places. See the letter in Appendix H.

City of Visalia

City of Visalia staff provided information on land use, zoning, circulation, proposed development, public works projects, transit service, emergency services, Williamson Act parcels in the project area, and the City's Oak Tree Preservation Ordinance and permit process.

Native American Groups

A Caltrans archaeologist sent a letter about the project to the Native American Heritage Commission. The response from the Native American Heritage Commission stated that no Native American cultural resources were known within the project vicinity.

San Joaquin Valley Modeling Coordinating Committee

Under the new transportation conformity rule criterion (Code of Federal Regulations 93.123(b)(1)), the Houston Avenue 4-Lane Widening project is not considered a Project of Air Quality Concern. Caltrans prepared a PM_{10} and $PM_{2.5}$ Hot Spot Conformity Assessment for the Tulare 216/Houston Avenue 4-Lane Widening project for consultation with the San Joaquin Valley Modeling Coordinating Committee. On January 26, 2007, the Committee concurred with Caltrans' finding that future new or worsened $PM_{2.5}$ and PM_{10} violations of any standards are not anticipated in the project area.

Tulare County Planning Department

Tulare County staff provided information on land use and zoning on unincorporated parcels in the project area, circulation, proposed development, and parcels under Williamson Act contract in the project area.

U.S. Natural Resources Conservation Service

On April 28, 2006, Caltrans staff mailed a Farmland Conversion Impact Rating, Form NRCS-CPA-106, for the project to the Natural Resources Conservation Service, District Conservationist in Visalia. The appropriate sections of the form were completed and it was returned to Caltrans. See the form in Appendix F.

Visalia Unified School District

Visalia Unified School District staff provided information on the Golden West Educational Complex, including the number of existing parking spaces, ownership of the sidewalk, and uses of the play fields and the grass area on the south side of the complex. In addition, the District also provided information on future school sites.

Public Information Meeting

Caltrans held a Public Information Meeting/Open House on February 23, 2006. Invitations were sent to federal, state, and local officials as well as property owners and businesses located within the project area. The announcement for the public information meeting was advertised in both English and Spanish in the *Visalia Times-*

Delta on February 9, 2006. Thirty people attended the public information meeting/open house.

The comments covered a number of subjects. Many of the comments expressed concerns about the potential impacts to existing rural housing in Segment 2.

Members of the public asked Caltrans if it would be possible to construct an eight-foot shoulder in Segment 2 without acquiring additional right-of-way for construction of a four-lane conventional highway in this portion of the project. Caltrans agreed with the request because construction of four lanes in Segment 2 would not occur for about 20 years.

Additional concerns expressed included:

- Displacement of one home-based business
- Displacement of single- and multi-family housing (i.e. Burgundy House Apartments)
- Impacts to parking at the Visalia Adult School
- Removal of trees along Segment 2
- Removal of producing trees from an orchard, and replacing an agricultural well

There appears to be no open opposition to the construction of the proposed project at this time.

Chapter 4 List of Preparers

The following Caltrans Central Region staff prepared this document:

Allam Alhabaly, Transportation Engineer, B.S., Industrial Engineering, California State University, Fresno; 3 years environmental technical studies experience. Contribution: Air, Noise, and Water Quality Assessment.

Abdul Baker, Senior Transportation Engineer, B.S., Civil Engineering, University of Nebraska, Omaha; 20 years engineering design experience and 6 years of engineering management experience. Contribution: Design team supervisor.

Louis L. Birdwell, Associate Right-of-Way Agent, B.A., Banking and Finance, Texas Technology University; 18 years with Caltrans Right-of-Way. Contribution: Draft Relocation Impact Report and the Project Right-of-Way Cost Estimate.

Christopher Brewer, Associate Environmental Planner (Architectural Historian). M.A., Public Administration, California State University, Bakersfield; 25 years experience in architectural history. Contribution: Historic Architectural Survey Report/Historical Resource Compliance Report.

Abdul Rahim Chafi, Transportation Engineer. PhD., Engineering Management, California Coast University, Santa Ana; 10 years environmental technical studies experience. Contribution: Wrote the Air Quality technical report.

Rajveev Dwivedi, Associate Engineering Geologist. Ph.D., Environmental Engineering, Oklahoma State University, Stillwater; 15 years environmental technical studies experience. Contribution: Noise Study and Water Quality Report.

Theresa Goewert, Air Quality Specialist. B.S., Food Science, Colorado State University; 3 years environmental planning experience, 8 years air quality experience. Contribution: Wrote the $PM_{2.5}$ and PM_{10} Hot Spot Conformity Assessment.

Peter Hansen, P.G. Engineering Geologist. B.S., Geology, California State University, Fresno; 1 year hazardous waste experience; 4 years paleontology/geology experience. Contribution: Paleontology coordinator. Wrote the Initial Paleontology Study.

Hashim Khalid, Design Engineer. B.S., Electrical Engineering, University of Khartoum, 5 years civil engineering experience. Contribution: Design Engineer.

Rachel Kleinfelter, Associate Environmental Planner (Natural Sciences). B.A., Environmental Studies, Mills College; 11 years biology experience. Contribution: Conducted biological studies and wrote the Natural Environment Study.

Joseph Llanos, Graphic Designer I. B.A., Graphic Design, California State University, Fresno; 10 years visual design and public participation experience. Contribution: Prepared graphics.

Bao Luong, P.E., Transportation Engineer. M.S., Civil Engineering, Portland State University; 7 years traffic engineering experience. Contribution: Wrote the Operational Analysis and the Safety Analysis.

Duc Ken Ly, P.E., Transportation Engineer. M.S., Civil Engineering, California State University, Fresno; 9 years transportation engineering experience. Contribution: Wrote the Transportation Management Plan.

Darshan Mann, Transportation Engineering Technician. B.S., Panjab University, 6 years experience in civil engineering. Contribution: Drafted plans, calculated and measured right-of-way.

Annie McCuen, Graphic Designer III. Fine Arts, Graphic Design, Fresno City College, California State University, Fresno; 23 years visual design and public participation experience. Contribution: Prepared graphics.

Karen Nissen, Associate Environmental Planner (Archaeology). Ph.D., Anthropology, University of California, Berkeley; 34 years professional experience in anthropology/archaeology. Contribution: Native American Coordination.

Alfredo V. Osuna, Transportation Engineering Technician. B.S. Mechanical Engineering, FEATI University, Manila, Philippines; 3 years Traffic Engineering experience. Contribution: Safety Analysis.

Steven Ptomey, Associate Environmental Planner. B.A., Anthropology, California State University, Bakersfield; 13 years California and Great Basin

archaeology. Contribution: Cultural Resources Evaluation. (Negative Archaeological Survey Report and the Negative Historic Property Survey Report).

Richard Putler, Associate Environmental Planner. M.A., City and Regional Planning, California State University, Fresno; 6 years environmental planning experience. Contribution: Wrote the Initial Study/Environmental Assessment.

Gloria Ramirez, Landscape Associate. M.A., Landscape Architecture, University of California, Berkeley; B.A. Landscape Architecture, University of California, Berkeley; 5 years landscape associate experience. Contribution: Scenic Resource Evaluation.

Michael C. Robbins, Transportation Engineer. B.S.C.E. Oregon State University, 1982. 20 years project design experience. Contribution: Design Engineer.

Minerva Rodriguez, Assistant Caltrans Administrator, P.E., B.S., Civil Engineering, California Polytechnic University, Pomona; 14 years transportation engineering experience. Contribution: Assistant Project Manager.

Victor Shaw, Project Manager. PE, PMP, B.S., Civil Engineering, California State University, Sacramento; 17 years engineering experience. Contribution: Technical Oversight.

Lea Spann, Associate Environmental Planner. B.A., Environmental Studies, University of California, Santa Barbara; 9 years hazardous waste/materials experience. Contribution: Initial Site Assessment.

Roger Valverde, Graphic Designer II. Certificate of Multimedia, Mount San Jacinto and California State University, Fresno; 23 years visual design and public participation experience. Contribution: Prepared graphics.

Juergen Vespermann, Senior Environmental Planner. Engineering Degree, Fachhochschule Muenster, Germany; 18 years transportation planning/environmental planning. Contribution: Environmental Unit Supervisor.

Fong Vue, Transportation Engineer. B.S., Civil Engineering, California State University, Fresno. Eighteen years experience in civil engineering and hydraulics. Contribution: Location Hydraulics Study.

Gordon Watkins, Associate Right-of-Way Agent. B.S., Real Estate and Urban Land Economics, California State University, Fresno. Public and county (10 years) experience in real estate and urban land economics; 7 years experience in Right-of-Way for Caltrans. Contribution: Draft Relocation Impact Report.

Appendix A California Environmental Quality Act Checklist

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

Supporting documentation of all California Environmental Quality Act checklist determinations is provided in Chapter 2 of this Initial Study/Environmental Assessment. Documentation of “No Impact” determinations is provided at the beginning of Chapter 2. Discussion of all impacts, avoidance, minimization, and/or mitigation measures is under the appropriate topic headings in Chapter 2.

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
AESTHETICS - Would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?		X		
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				X
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?			X	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
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?				X
AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	X
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)?	☐	☐	☐	X
d) Expose sensitive receptors to substantial pollutant concentration?	☐	☐	☐	X
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	X
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?	☐	☐	☐	X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	☐	X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	X	☐	☐

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	X
CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☐
	Archaeological resources are considered "historical resources" and are covered under (a).			
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	X
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	X
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:	☐	☐	☐	X
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.	☐	☐	☐	X
ii) Strong seismic ground shaking?	☐	☐	☐	X
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	X
iv) Landslides?	☐	☐	☐	X
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	X
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	☐	☐	☐	X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	☐	X
c) Emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	X
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	☐	X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	X
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?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	X
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or offsite?	☐	☐	☐	X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite?	☐	☐	☐	X
e) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	X
f) Otherwise substantially degrade water quality?	☐	☐	☐	X
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?	☐	☐	☐	X
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	X
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?	☐	☐	☐	X
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	X
LAND USE AND PLANNING - Would the project:				

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
a) Physically divide an established community?	☐	☐	☐	X
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?	☐	☐	☐	X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	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?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	X	☐
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	☐	X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	X	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	X	☐
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?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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?	☐	☐	☐	X
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)?	☐	☐	☐	X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	X	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	X	☐
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?	☐	☐	☐	X
Police protection?	☐	☐	☐	X
Schools?	☐	☐	☐	X
Parks?	☐	☐	☐	X
Other public facilities?	☐	☐	☐	X
RECREATION -				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	X
TRANSPORTATION/TRAFFIC - Would the project:				
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	X
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	X
c) Result in a change in air traffic patters, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	X
e) Result in inadequate emergency access?	☐	☐	☐	X
f) Result in inadequate parking capacity?	☐	☐	☐	X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	X
UTILITY AND SERVICE SYSTEMS - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	X
e) Result in determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	X
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	X
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, or 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?	☐	☐	☐	X
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)?	☐	☐	☐	X
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	X

Appendix B 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.

WILL KEMPTON
Director

"Caltrans improves mobility across California"

Appendix C Summary of Relocation Benefits

California Dept. of Transportation Relocation Assistance Program

Relocation Assistance Advisory Services

The California Department of Transportation (Caltrans) would provide relocation advisory assistance to any person, business, farm, or non-profit organization displaced as a result of Caltrans' acquisition of real property for public use. Caltrans would assist residential displacees in obtaining comparable decent, safe, and sanitary replacement housing by providing current and continuing information on sales prices and rental rates of available housing. Non-residential displacees would receive information on comparable properties for lease or purchase.

Residential replacement dwellings would be in equal or better neighborhoods, at prices within the financial means of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, displacees would be offered comparable replacement dwellings that are open to all persons regardless of race, color, religion, sex, or national origin, and are consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance would also include supplying information concerning federal- and state-assisted housing programs, and any other known services being offered by public and private agencies in the area.

Residential Relocation Payments Program

For more information or a brochure on the residential relocation program, please contact Richard Putler at richard_putler@dot.ca.gov, 559-243-8300, or:

California Department of Transportation
2015 E. Shields Avenue, Suite 100
Fresno, CA 93726-5308.

The brochure on the residential relocation program is also available in English at http://www.dot.ca.gov/hq/row/pubs/residential_english.pdf and in Spanish at http://www.dot.ca.gov/hq/row/pubs/residential_spanish.pdf.

If you own or rent a mobile home that may be moved or acquired by Caltrans, a relocation brochure is available in English at

http://www.dot.ca.gov/hq/row/pubs/mobile_eng.pdf and in Spanish at http://www.dot.ca.gov/hq/row/pubs/mobile_sp.pdf.

The Business and Farm Relocation Assistance Program

For more information or a brochure on the relocation of a business or farm, please contact Richard Putler at richard_putler@dot.ca.gov, 559-243-8300, or:

California Department of Transportation
2015 E. Shields Avenue, Suite 100
Fresno, CA 93726-5308.

The brochure on the business relocation program is also available in English at http://www.dot.ca.gov/hq/row/pubs/business_farm.pdf and in Spanish at http://www.dot.ca.gov/hq/row/pubs/business_sp.pdf.

Additional Information

No relocation payment received would 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 would 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 would 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 Caltrans, or believes that the payments are inadequate, may appeal for a hearing before a hearing officer or the Caltrans' 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 Caltrans' Relocation Advisors.

The information above is not intended to be a complete statement of all of Caltrans' 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 Caltrans' 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 6
Relocation Assistance Program
Tower Building, 855 "M" Street, 3rd Floor
Fresno, California 93721

Appendix D Minimization and/or Mitigation Summary

Parks and Recreation

The Visalia Unified School District would be compensated the fair market value for any land or improvements required for the proposed project.

Caltrans would coordinate construction activities with the Visalia Unified School District to minimize disruption of their activities and services. This would include scheduling construction in this portion of the project during school vacations to the degree that this is feasible. Otherwise night construction may be necessary to lessen impacts on the school district.

The 16 trees along the south side of the school playground would be replaced at a 1:1 ratio.

Relocations

Funding would be available to relocate or re-establish any home or business affected by the project. The Residential Relocation Payment Program would help eligible residential occupants by paying certain costs and expenses necessary for or incidental to the purchase or rental of replacement housing and actual reasonable moving expenses to a new location within 50 miles of the displacement property.

The Non-Residential Relocation Assistance Program provides assistance to businesses, farms, and nonprofit organizations in locating suitable replacement property and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program would provide current lists of properties offered for sale or rent, suitable for a particular business' specific needs.

Agricultural parcels reduced in size by the proposed project would receive compensation if the reduction negatively affected their farming operation. If farm and business displacements incur increased costs as a result of being relocated, they would be given the opportunity to file a claim for loss of goodwill. 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 the California Department of Transportation from the real property required for a transportation project is eligible for "Relocation Assistance."

All activities would be conducted in accordance with Title VI of the Civil Rights Act of 1964 and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (see Appendices B and C). The Uniform Relocation Assistance and Real Property Acquisition Policies Act is a requirement of the project. Caltrans, as assigned by the Federal Highway Administration, must comply with all requirements of the act.

Parking

Alternative 1 would remove about 53 parking spaces at the Visalia Adult School. A field review of the project indicated that these stalls could be replaced onsite. Space next to the northeast portion of the existing adult school parking lot could be designated for new stalls to replace all of the stalls that would be removed. Detailed design would be closely coordinated with the Visalia Unified School District during the next phase of the project.

Utilities/Emergency Services

Before construction, public utilities affected by the project would be relocated. During construction, one to two lanes of traffic would remain open. Emergency vehicles would be given priority.

Scheduling construction work that would require lane closures during non-peak hours would minimize traffic delay. Pre-construction meetings with emergency services agencies and the local school district would be conducted. Meetings would continue throughout construction of the project as needed.

A Transportation Management Plan would be required for the project before construction. Transportation Management Plans are prepared for projects on the state highway system to reduce traffic delays and congestion associated with construction activities. Emergency providers would be asked to participate in developing the plan, which would describe how emergency responders would handle detours or delays. Emergency vehicles would receive preference through the detour and lane closures.

Traffic and Transportation/Pedestrian and Bicycle Facilities

During construction, a traffic management plan would be implemented to help reduce traffic delays, congestion, and accidents. Standard Caltrans construction practices including providing information on roadway conditions, portable changeable message signs, lane and road closures, advance warning signs, alternate routes, reverse and alternate traffic control, and a traffic contingency plan for unforeseen circumstances and emergencies. The Caltrans Public Affairs Office would keep the local media

informed of construction progress and information pertaining to delays, closures, and major changes in traffic patterns with information provided by the resident engineer.

A Construction Zone Enhanced Enforcement Program may be appropriate during portions of this project. The program involves the continuous presence of the California Highway Patrol in construction zones to serve as a reminder to motorists to slow down and use caution when traveling through work areas. The Caltrans Construction Division would be consulted to determine if the program is warranted for this project.

Improvements would be constructed in conformance with the requirements of the American with Disabilities Act.

Visual/Aesthetics

Existing vegetation would be preserved and protected to the maximum extent feasible in accordance with the Highway Design Manual. Appropriate replacement planting would be provided when native or specimen trees are removed or planting installed by others is damaged or removed by state highway construction activity.

Caltrans would replace planting installed by others in conformance with the Encroachment Permits Manual, Chapter 506.3, including irrigation modification and/or replacement.

If mitigation replacement planting is not installed with this project it must be accomplished within two years of its completion. Funds would be set aside for the mitigation replacement planting. A plant establishment period would be provided and a cooperative/maintenance agreement would be required with the City of Visalia to ensure the survival of the newly planted landscaping.

The proposed landscape concept for this project consists of landscape and irrigation design as allowed by the Highway Design Manual. Trees and grass could be planted along the sidewalk planting strips on both sides of State Route 216 in Segment 1.

In addition, Caltrans would also provide aesthetic treatment of the raised median, which could include tree planting and textured paving. Between Lovers Lane and McAuliff Road, the raised median could include stamped concrete paving and/or landscaping. Caltrans would work with the City of Visalia and the Visalia Unified School District to develop an acceptable design for the improvements.

Tree Replacement

In Segment 1, trees with a diameter at breast height ranging from 3 inches to 14 inches would be removed for the project: about 108 trees for Alternative 1, about 92 trees for Alternative 2 and about 92 trees for Alternative 3. The Caltrans Landscape Architecture Branch would determine the need for replacement planting to mitigate for the removal of trees. Replacement planting should be done within the project limits or as close to the project site as possible.

Heritage Oak Replacement

Mitigation for the removal of the two heritage Valley oak trees would also be included in the project. Oak trees would be incorporated in the proposed landscape concept where possible.

Heritage oak trees would be replaced in accordance with the City of Visalia's Oak Tree Preservation Ordinance (Municipal Code 12.24). The ordinance applies to oak trees with a diameter at breast height of 2 inches or greater.

Section 12.24.120 of the Oak Tree Preservation Ordinance addresses the preservation and maintenance of existing oak trees through implementation of measures to ensure protection of the root zone. As a state agency, Caltrans is not subject to the city ordinance, but would make an effort to be consistent with it.

Water Quality and Storm Water Runoff

Management measures and best management practices would need to be addressed during the planning, design, construction, operation, and maintenance stages.

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. A Storm Water Management Plan would be implemented after construction was completed (refer to Section 2.2.2).

Standard Specifications, Section 7-1.01G requires the construction contractor to implement pollution control practices related to construction projects via a Water Pollution Control Plan and Storm Water Pollution Prevention Plan.

Presently, when a project is expected to disturb more than one acre of soil, the following is required:

1. A Notification of Construction is to be submitted to the appropriate Regional Water Quality Control Board at least 30 days prior to the start of construction. The Notice of Construction forms ask for tentative start date and duration, location, description of project, estimate of affected area, resident engineer with telephone number, etc.

2. A Storm Water Pollution Prevention Plan is to be prepared and implemented during construction to the satisfaction of the Resident Engineer.

3. A Notice of Construction Completion is to be submitted to the Regional Water Quality Control Board upon completion of the construction and stabilization of the site. A project will be considered complete when the criteria for final stabilization in the State General Construction Permit is met.

Caltrans would ensure that abandonment or destruction of the existing water well near the intersection of State Route 216 and Road 152 is done in accordance with Department of Water Resources Bulletin Number 74-81: "Water Well Standards: State of California" and Bulletin Number 74-90: "California Well Standards."

Tulare County has standards equal to or more stringent than those in the bulletins. A well destruction permit may be required from the County and a report that the well has been properly abandoned needs to be filed with Tulare County and the California Department of Water Resources.

Hazardous Waste

Prior to any excavation or soil disturbance within project boundaries, a project specific Lead Compliance Plan must be developed and implemented for earthwork as part of Caltrans non-standard special provisions.

Steps would be taken to reduce or eliminate any airborne dust. Water should be available at all times where work activities are being performed.

The contractor should use proper health and safety measures to minimize the exposure of workers to potential asbestos or lead-based paint from affected buildings and structures.

The demolition of water wells within the project limits must be in accordance with standards prepared by the Department of Water Resources (Bulletins 74-90) Title 23, California Code of Regulations and local regulatory standards.

Where yellow thermo plastic paint is to be removed, the contractor shall comply with standard special provision 15-300.

Noise

Construction noise emissions would be controlled by local noise ordinances and noise control measures that may include, but are not limited to the following:

1. Nighttime and weekend work is not anticipated.

2. Compliance with Caltrans Standard Specifications Section 7-01I "Sound Control Requirements" would be required. Section 7-01I refers to mandatory mufflers for all internal combustion engines operated with the project and mandatory compliance with local noise ordinances.

Threatened and Endangered Species

During construction, six Environmentally Sensitive Areas would be established to protect existing elderberry shrubs, the host plant of the valley elderberry longhorn beetle.

Elderberry shrubs one, two, three, and six are located on private property more than 20 feet from the edge of pavement. As a precaution, a linear Environmentally Sensitive Area would be established along the Caltrans right-of-way and would extend 20 feet to the east and west of the elderberry shrubs' drip lines. Elderberry shrub four is located nine feet from the edge of pavement. No ground disturbance would be allowed from the edge of pavement to the elderberry shrub's drip line; a minimum 20-foot Environmentally Sensitive Area would be established to the east and west of the elderberry shrub's drip line. Elderberry shrub five is located 7.5 feet from the edge of pavement. No ground disturbance would be allowed from the edge of pavement to the elderberry shrub; a minimum 20-foot Environmentally Sensitive Area would be established to the east and west of the elderberry shrub's drip line.

A qualified biologist would perform pre-construction surveys to confirm the findings of the Natural Environment Study.

Invasive Species

The landscaping and erosion control included in the project would not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions would be taken if invasive species were found in or adjacent to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

Special Provisions

In addition, the following special provisions would be implemented before and/or during construction of this project and are available for review at: California Department of Transportation, 1352 W. Olive Avenue, Fresno, CA:

- ***Cultural Resources***

  Archaeology Special Provisions in regards to the discovery of artifacts and/or human remains during construction.

  If cultural materials were discovered during construction, all earth-moving activity within and around the immediate discovery area would be diverted until a qualified archaeologist could assess the nature and significance of the find.

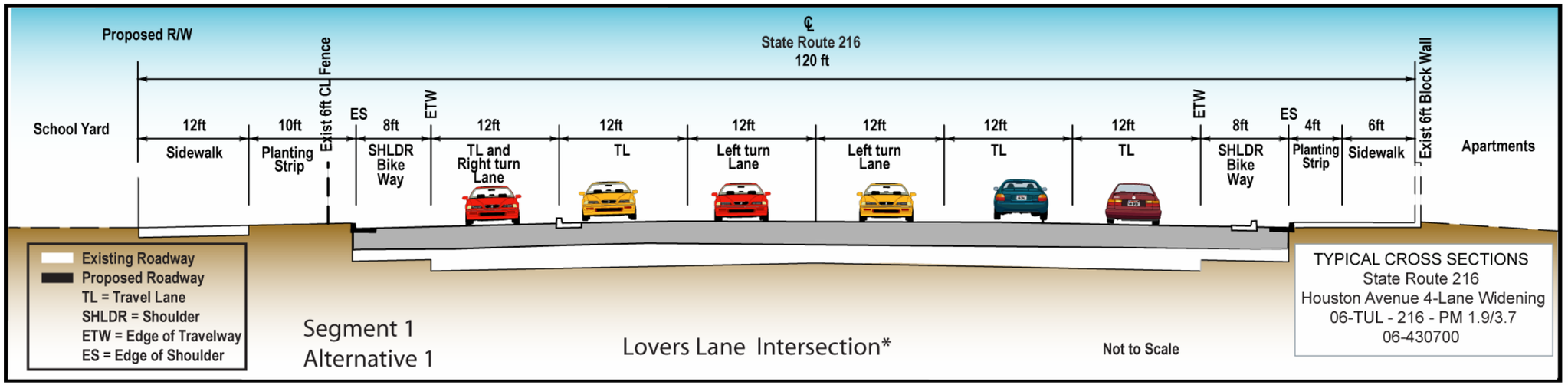
  If human remains were discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities would stop in any area or nearby area suspected to overlie remains, and the County Coroner would be contacted. Pursuant to Public Resources Code Section 5097.98, if the remains were thought to be Native American, the coroner would notify the Native American Heritage Commission, who would then notify the Most Likely Descendent. At this time, the person who discovered the remains would contact Caltrans Archaeologist Steven Ptomey, of the Central Region, so that he may work with the Most Likely Descendent on the respectful treatment and disposition of the remains. Further provisions of Public Resources Code Section 5097.98 are to be followed as applicable.

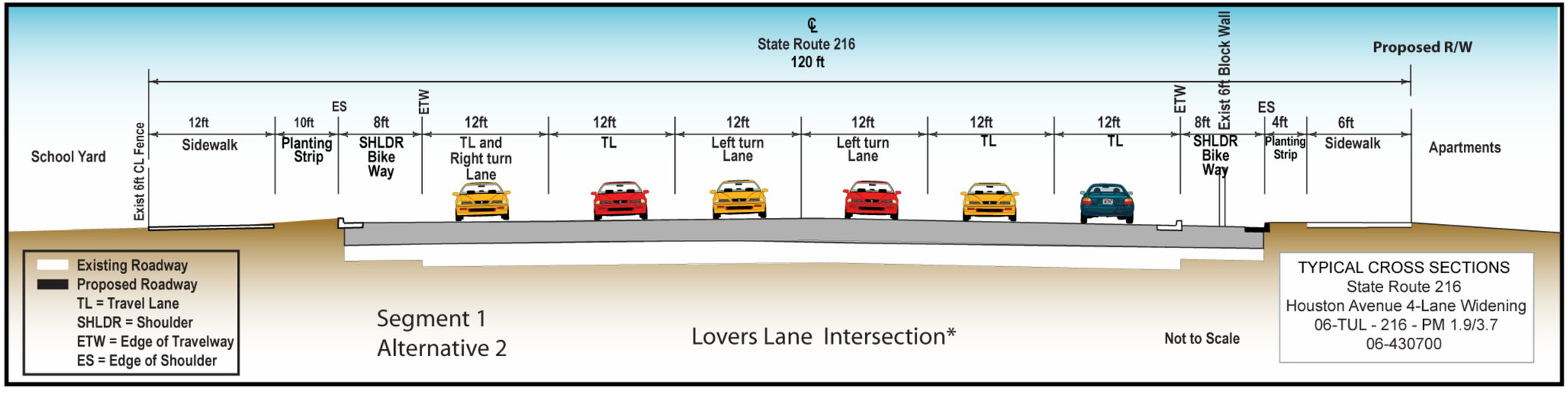
- ***Air Quality***

  The provisions of Caltrans Standard Specifications, Section 7-1/OF "Air Pollution Control" and Section 10 "Dust Control" requires the contractor to comply with the San Joaquin Valley Unified Air Pollution Control District's rules, ordinances, and regulations. With respect to diesel emissions during construction, Caltrans will take all minimization measures that are listed in Caltrans Standard Specifications to reduce particulate emissions. A dust control plan is required for this project and would be submitted to the San Joaquin Valley Unified Air Pollution Control District before construction begins. Typical dust and emission control methods include watering the construction site, cleaning paved streets, providing runoff and erosion control, using traps on diesel exhaust systems, and using emission control retrofits on older, higher polluting vehicles.

- ***Animals***

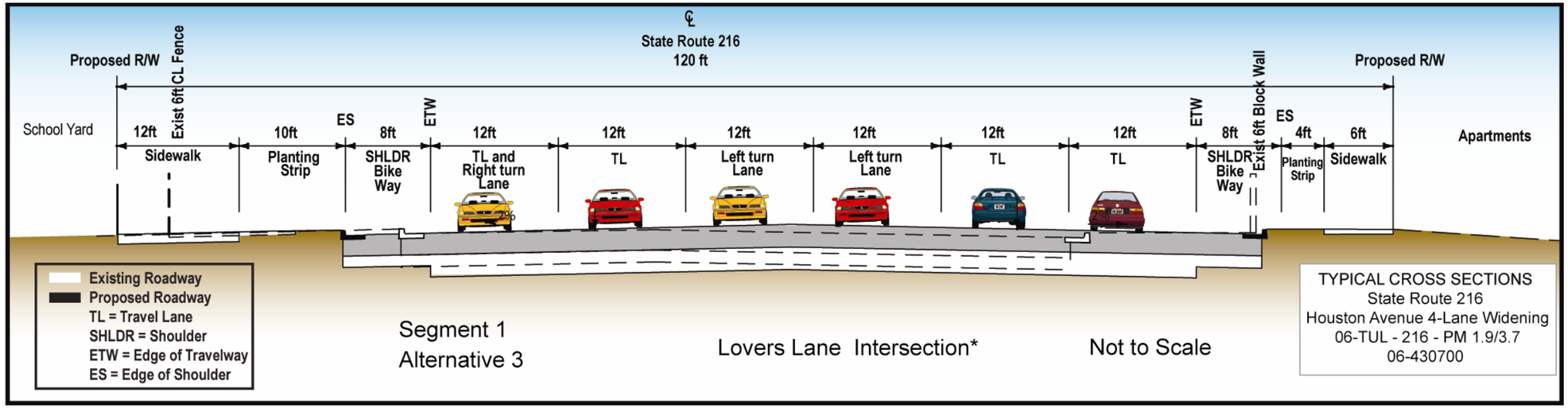
  General Migratory Bird Treaty Act Special Provisions to protect migratory birds, their occupied nests, and their eggs from disturbance or destruction would be included in the construction contract special provisions. Pre-construction surveys would be performed to confirm the findings of the Natural Environment Study.

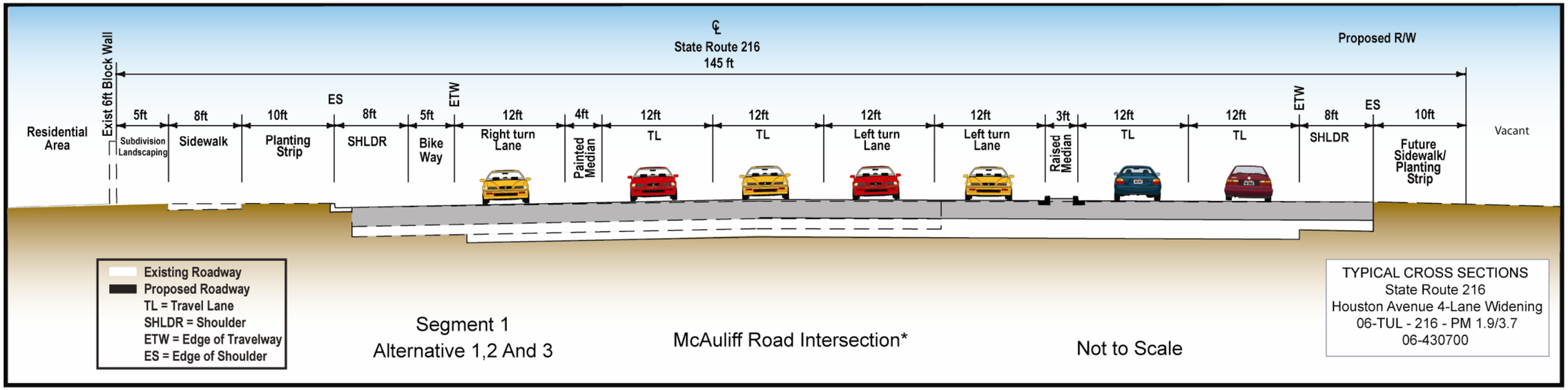




*The median width for each cross-section varies from 0 to 23 feet to accommodate dual left-turn lanes

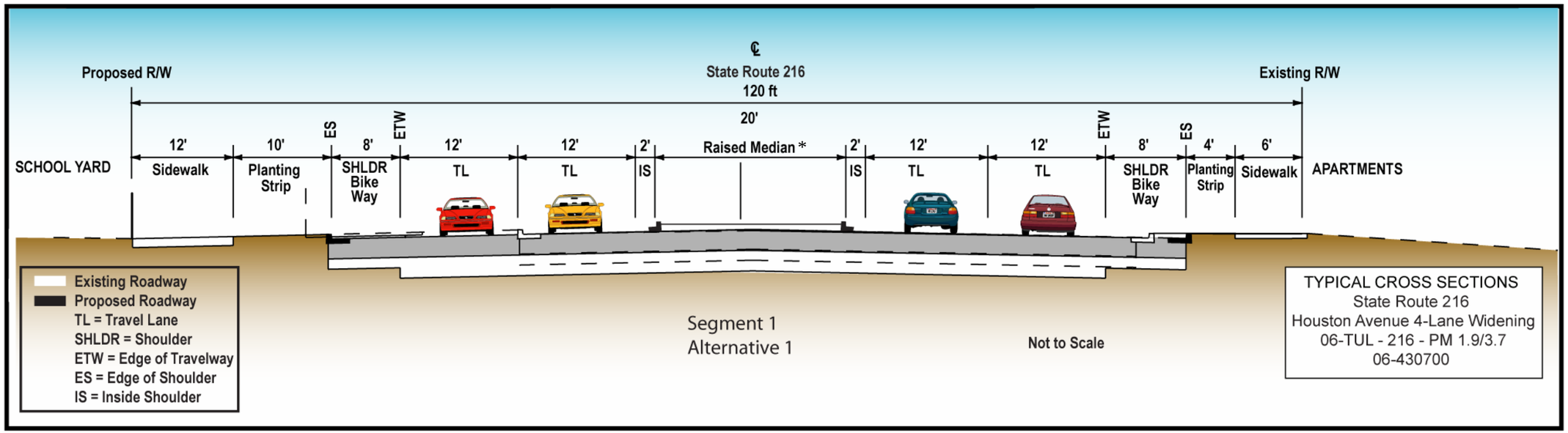
Figure E-1 Typical Cross-Sections Lovers Lane Intersection Alternatives 1 and 2

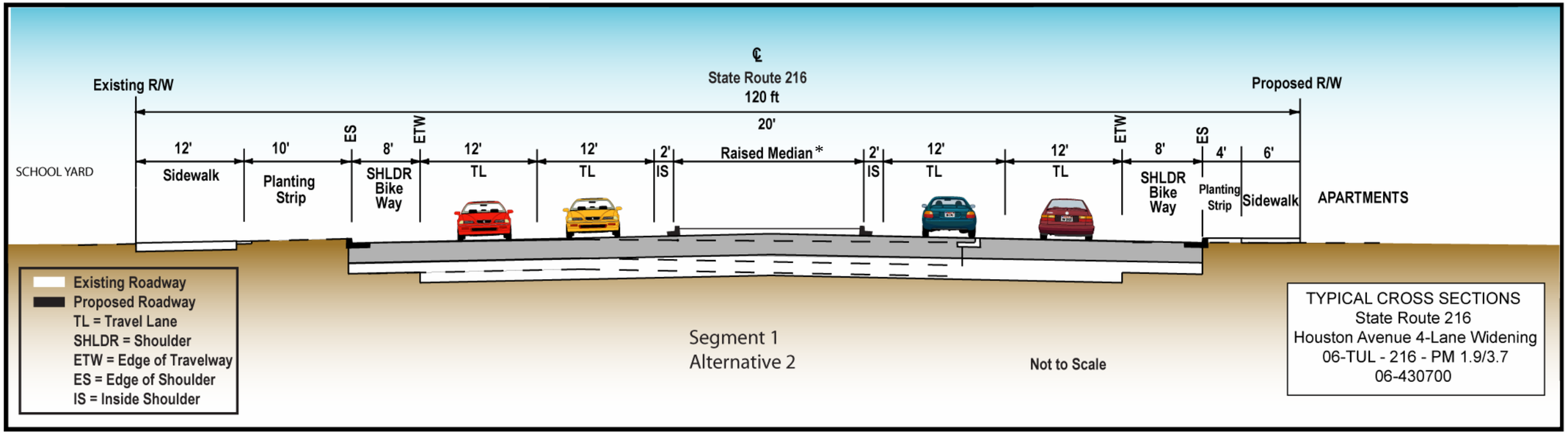




*The median width for each cross-section varies from 0 to 23 feet to accommodate dual left-turn lanes.

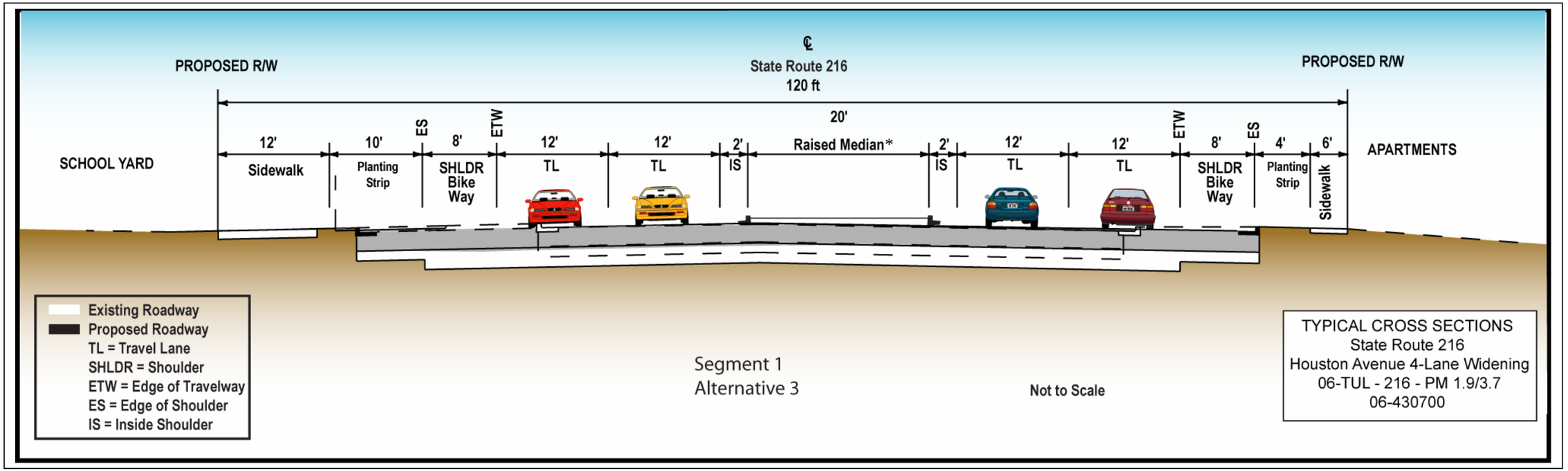
Figure E-2 Typical Cross-Sections Lovers Lane Intersection Alternative 3 and McAuliff Road Alternatives 1 – 3





The median for each cross-section varies and may be as wide as 23 feet in some locations.

Figure E-3 Typical Cross-Sections for Segment 1, Alternatives 1 and 2



*The median varies and may be as wide as 23 feet in some locations.

Figure E-4 Typical Cross-Section for Segment 1, Alternative 3

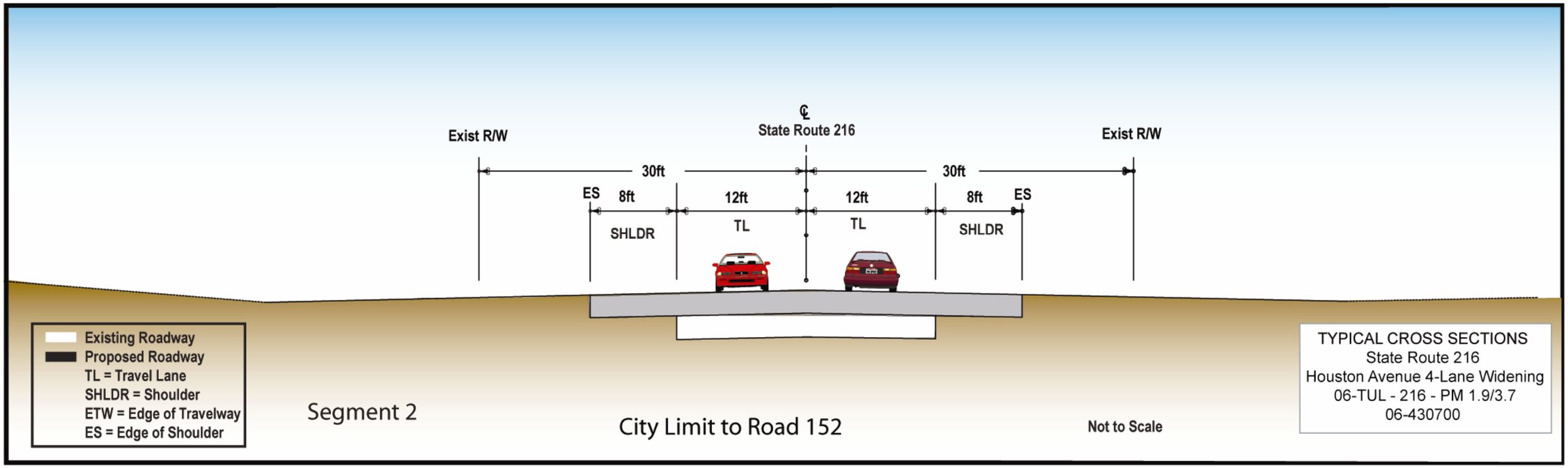
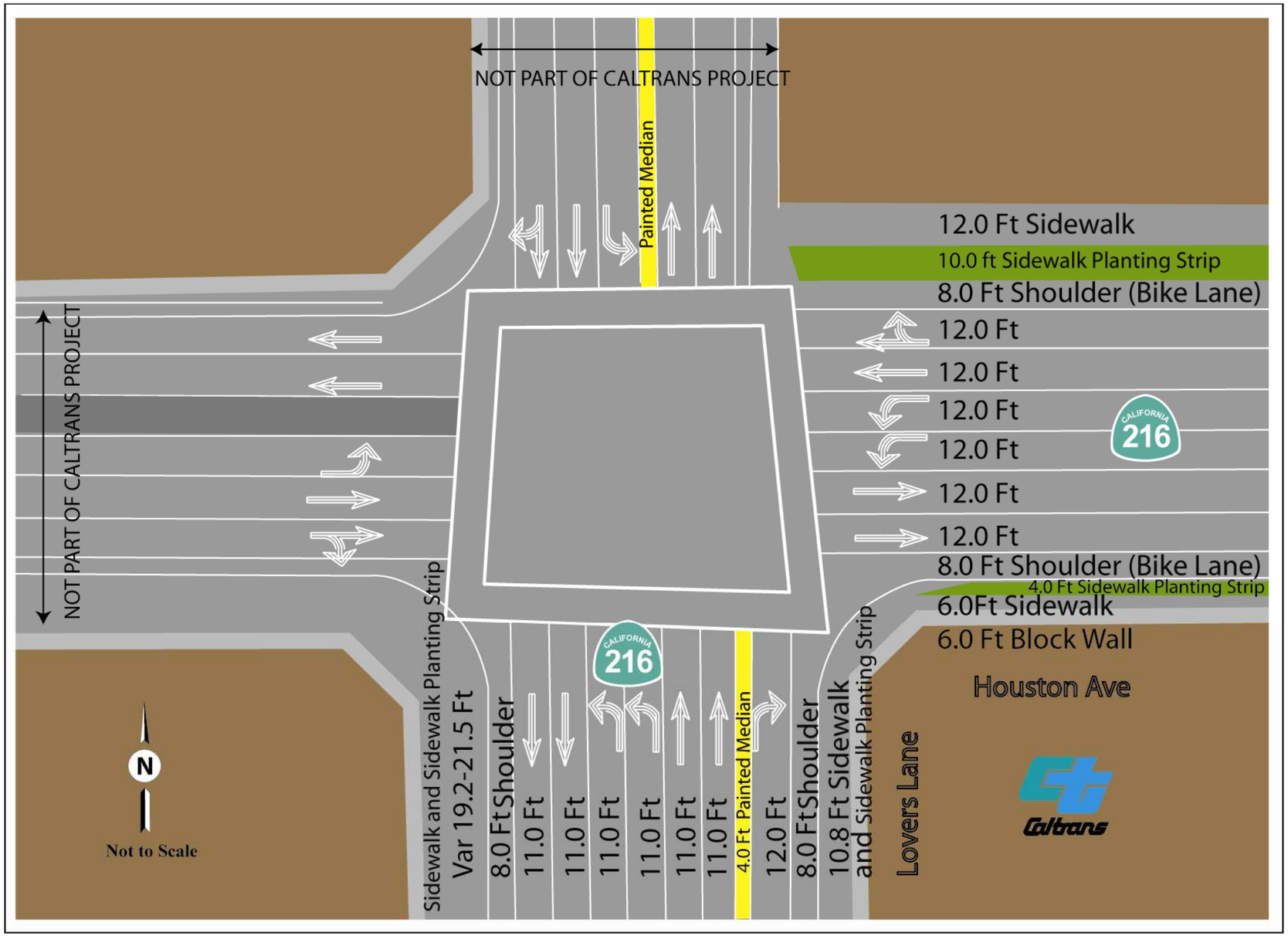
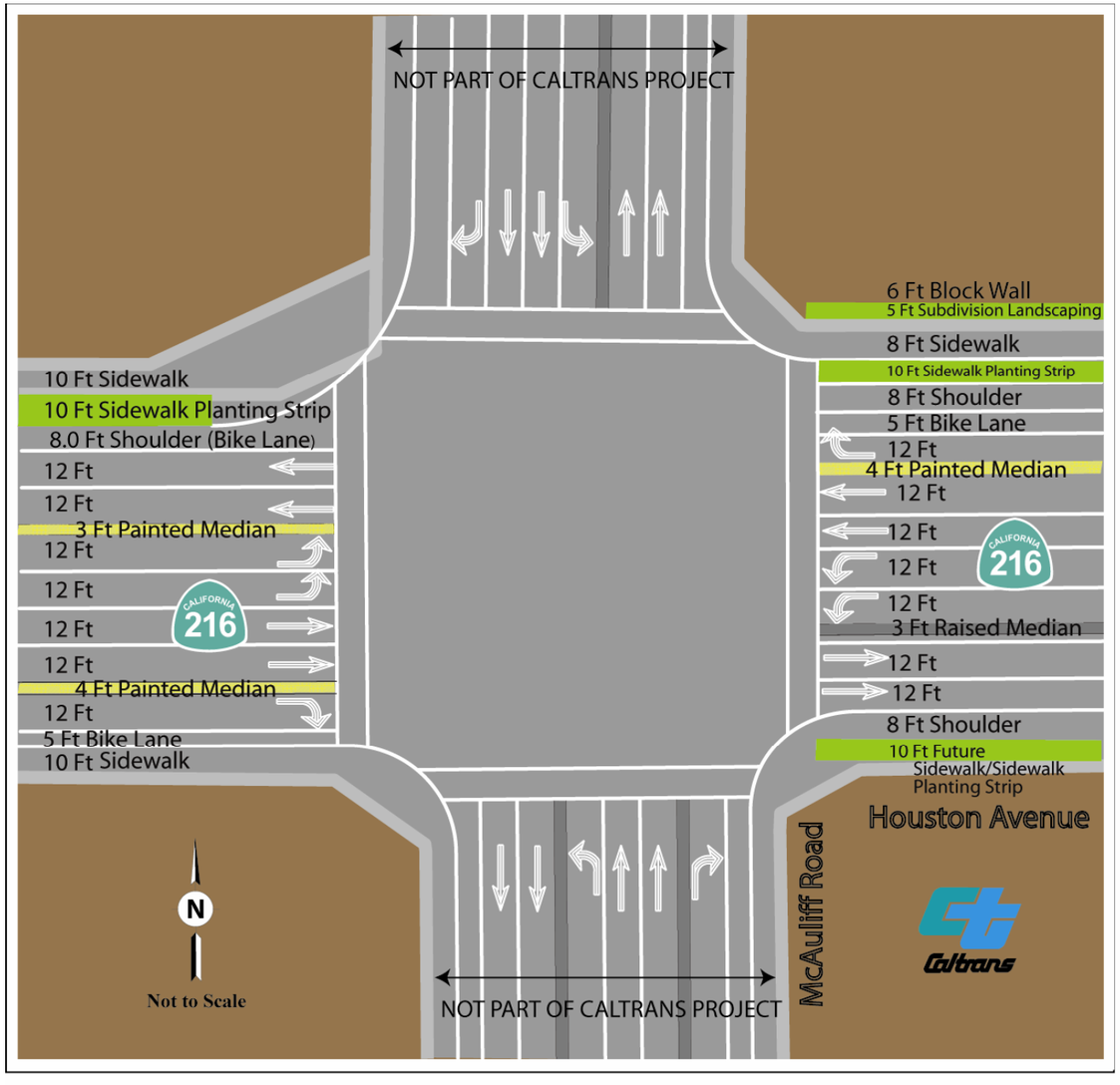


Figure E-5 Typical Cross-Section Segment 2



Alternative 1
Layout of the Intersection of
State Route 216 and Lovers Lane

Figure E-6 Layout of the Intersection of State Route 216 and Lovers Lane



Alternative 1
Layout of the Intersection of
State Route 216 and McAuiff Road

Figure E-7 Layout of the Intersection of State Route 216 and McAuliff Road

Appendix F Farmland Conversion

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(REV 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*

3. Date Of Land Evaluation Request: 04/28/2006 | 4. Sheet 1 of 1

1. Name of Project: **06-State Route 216/Houston Ave Widening**
5. Federal Agency Involved: FHWA
2. Proposed Land Use: 4-lane and 2 Lane Widening
6. County and State: Tulare County, California

PART II *(To be completed by NRCS)*

1. Date Request Received By NRCS | 2. Person Completing Form:

3. Does the corridor contain prime, unique, statewide or local important farmland? YES [X] NO [ ]
(If no, the FPPA does not apply - do not complete additional parts of this form)

4. Acres Irrigated: 625,070 | Average Farm Size: 240

5. Major Crop(s): Walnuts
6. Farmable Land In Government Jurisdiction: Acres: 703295 22.7%
7. Amount of Farmland As Defined in FPPA: Acres: NA %

8. Name of Land Evaluation System Used: California Storie System
9. Name of State or Local Site Assessment System: none
10. Date Land Evaluation Returned by NRCS

PART III *(To be completed by Federal Agency)*

	Alternatives: Alt. 1	Alt. 2	Alt. 3	No built
A. Total Acres To Be Converted Directly	.577	.577	.577	0
B. Total Acres To Be Converted Indirectly	0	0	0	
C. Total Acres In Site	0	0		

PART IV *(To be completed by NRCS)* Land Evaluation Information

A. Total Acres Prime And Unique Farmland	0.577			
B. Total Acres Statewide Important or Local Important Farmland	0			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0.000082%			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	NA			

PART V (To be completed by NRCS) Land Evaluation Criterion
Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points): 74

PART VI *(To be completed by Federal Agency)* Corridor Assessment Criteria
(Criteria are explained in 7 CFR 658.5 b & c. For Non-Corridor project use form AD-1006)

	Maximum Points	Corridor A	Corridor B	Corridor C	Corridor D
1. Area In Non-urban Use	(15)	7.5			
2. Perimeter In Non-urban Use	(10)	0			
3. Percent Of Corridor Being Farmed	(20)	0			
4. Protection Provided By State and Local Government	(20)	0			
5. Size Of Present Farm Unit Compared To Average	(10)	3			
6. Creation Of Non-farmable Farmland	(25)	0			
7. Availability Of Farm Support Services	(5)	5			
8. On-Farm Investments	(20)	10			
9. Effects Of Conversion On Farm Support Services	(25)	0			
10. Compatibility With Existing Agricultural Use	(10)	5			
TOTAL CORRIDOR ASSESSMENT POINTS	160				

PART VII *(To be completed by Federal Agency)*

Relative Value Of Farmland *(From Part V)*	100	50.5		
Total Corridor Assessment *(From Part VI above or local site assessment)*	160	74		
TOTAL POINTS ***(Total of above 2 lines)***	260	124.5		

1. Corridor Selected:
2. Total Acres of Farmlands to be Converted by Project:
3. Date Of Selection
4. Was A Local Site Assessment Used? YES [ ] NO [ ]

5. Reason For Selection:

Signature of Federal agency representative completing this form: | Date:

NOTE: Complete one form for each segment with more than one Alternate Corridor

(See Instructions on reverse side)

Form NRCS-CPA-106 (03-02)

Appendix G Sensitive Plant and Animal Species

Common and Scientific Name	Status	General Habitat	Habitat Present / Absent	Rationale
AMPHIBIANS				
western spadefoot toad *Scaphiopus hammondii*	FSC CSC	Found in grassland, scrub, chaparral, and oak woodlands. Requires aquatic habitat for reproduction near upland habitats.	A	**No effect.** No suitable habitat exists within the project area.
California red-legged frog *Rana aurora draytonii*	FT CSC	Prefers permanent water source with extensive vegetation. Requires 11-20 weeks of permanent water for larval development.	A	**No effect.** No suitable habitat exists within the project area.
foothill yellow-legged frog *Rana boylii*	FSC CSC	Occurs in foothills surrounding the Central Valley in partly shaded shallow streams with cobble substrate.	A	**No effect.** No suitable habitat exists within the project area.
California tiger salamander *Ambystoma californiense*	FT CSC	Needs underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding.	A	**No effect.** No suitable habitat exists within the project area.
BIRDS				
bald eagle *Haliaeetus leucocephalus*	FT (FPD) SE (FP)	Typically nests in large trees within short distance of rivers and lakes with abundant fish.	A	**No effect.** No suitable habitat exists within the project area.
Northern goshawk *Accipiter gentiles*	FSC CSC	Prefers mid to high elevation dense coniferous forest.	A	**No effect.** No suitable habitat exists within the project area.
mountain plover *Charadrius montanus*	FPT CSC	Associated with short grass and shrub steppe landscapes throughout its breeding and wintering range. Also inhabits heavily grazed sites, prairie dog colonies, and some cultivated fields. Winters in the Central Valley of California.	A	**No effect.** No suitable habitat exists within the project area.
tricolored blackbird *Agelaius tricolor*	FSC CSC	Breeds in freshwater marshes, croplands, and often in tules near or over water.	A	**No effect.** No suitable habitat exists within the project area.

Common and Scientific Name	Status	General Habitat	Habitat Present / Absent	Rationale
western burrowing owl *Athene cunicularia hypugaea*	FSC CSC	Subterranean nester that is dependent upon burrowing mammals, most notably the California ground squirrel.	P	**No effect.** Suitable habitat exists within the project area, however, no owls or owl sign (i.e., guano, feathers, prey remains, etc.) were observed. There were several ground squirrel burrows seen in areas adjacent to the project area. There are no California Natural Diversity Database (CNDDB) occurrences within or adjacent to the Biological Survey Area. Pre-construction surveys and migratory bird provisions would reduce potential impacts to this species.
Swainson's hawk *Buteo swainsoni*	ST	Requires large, open grasslands with abundant prey in association with suitable nest trees. Suitable foraging areas include native grasslands or lightly grazed pastures. Nesting habitat found in mature riparian forest, lone trees or groves of oaks, other trees in agricultural fields, and mature roadside trees.	A	**No effect.** Rarely sighted in Tulare County. No suitable habitat exists within the project impact area.
Aleutian Canada goose *Branta Canadensis leucopareia*	FD	Wintering habitat in California consists of pastures and grain fields in northern California and the Central Valley. Breeding habitat is on treeless islands on the Aleutian Chain.	A	**No effect.** No suitable habitat exists within the project area.
ferruginous hawk *Buteo regalis*	FSC CSC	Found in uncultivated pastures on the prairies and arid grasslands of western North America. Winter resident in California.	A	**No effect.** No suitable habitat exists within the project area.
Costa's hummingbird *Calypte costae*	FSC	Inhabits southern California, western Nevada, and Arizona. Breeding habitat consists of successional scrub.	A	**No effect.** No suitable habitat exists within the project area.
Lawrence's goldfinch *Carduelis lawrencei*	FSC	Breeds in a variety of habitats ranging from pinyon-juniper to arid oak woodlands with available water nearby.	A	**No effect.** No suitable habitat exists within the project area.
Vaux's swift *Chaetura vauxi*	FSC CSC	Species is fairly rare in the Sierra. Nests in natural tree cavities in coniferous and mixed oak-coniferous forests.	A	**No effect.** No suitable habitat exists within the project area.
white-tailed kite *Elanus leucurus*	FSC FP	Breeds in savannas, riparian woodlands, and grassy foothills.	A	**No effect.** No suitable habitat exists within the project area.
little willow flycatcher *Empidonax traillii brewsteri*	SE	Requires dense willow thickets for nesting/roosting. Low, exposed branches are used for singing posts/hunting perches	A	**No effect.** No suitable habitat exists within the project area.
black swift *Cypseloides niger*	FSC CSC	Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above surf.	A	**No effect.** No suitable habitat exists within the project area.
American peregrine falcon *Falco peregrinus anatum*	FD SE (FP)	Nests on high, isolated cliffs near water.	A	**No effect.** No suitable habitat exists within the project area.
loggerhead shrike *Lanius ludovicianus*	FSC CSC	Inhabits areas of open country especially meadows, pastures, thickets, and hedges. Breeding habitat consists of open fields and woodlands with scattered trees.	P	**No effect.** Suitable habitat exists within the project area, however, none were observed during surveys and there are no CNDDB occurrences within 16 kilometers (10 miles) of the project area. Pre-construction surveys and migratory bird provisions would reduce potential impacts to this species.
Lewis' woodpecker *Melanerpes lewis*	FSC	Breeding habitat can be found in a number of different types of habitats that have an open canopy, a brushy understory offering ground cover and abundant insects, dead or downed woody material, and available perches.	A	**No effect.** No suitable habitat exists within the project area.
Nuttall's woodpecker *Picoides nuttallii*	SLC	Inhabits oak woodlands, deciduous trees alongside streams in arid areas and in oak scrublands, and chaparral.	A	**No effect.** No suitable habitat exists within the project area.
greater sandhill crane *Grus canadensis tabida*	ST	Breeding habitat in wetlands and foraging habitat consists of meadows, irrigated pastures, grain fields, bogs, fens, marshes, and nearby fields. Winter resident in the Central Valley.	A	**No effect.** No suitable habitat exists within the project area.
Long-billed curlew *Numenius americanus*	FSC CSC	Inhabits tidal flats and other coastal habitats and inland grassland and agricultural habitats including the Central Valley. Breeding habitat consists of short-grass communities, preferring native prairies and grazed mixed grass communities and scrub prairie. Winters in the Central Valley.	A	**No effect.** No suitable habitat exists within the project area.
white-faced ibis *Plegadis chihi*	FSC CSC	Found in freshwater marshes, rice fields, ponds, river, and swamps.	A	**No effect.** No suitable habitat exists within the project area.
rufous hummingbird *Selasphorus rufus*	FSC	Inhabits mountain meadows and forest edges. When migrating or wintering, frequents gardens with hummingbird feeding stations.	A	**No effect.** Suitable habitat does not exist within the project area.

Common and Scientific Name	Status	General Habitat	Habitat Present / Absent	Rationale
California spotted owl *Strix occidentalis occidentalis*	FSC CSC	Found in coniferous forests in the Sierra Nevada and along the Coast Range. Prefers mature forests with a canopy closure of 40 percent or greater.	A	**No effect.** Suitable habitat does not exist within the project area.
FISH				
Delta smelt *Hypomesus transpacificus*	FT ST	Found in the lower reaches of the Sacramento River below Isleton, the San Joaquin River below Mossdale, through the Delta and into Suisun Bay; occur in open surface waters and shoal areas; ideal spawning areas are those with moderate to fast flows (including tidal action) and thriving aquatic vegetation.	A	**No effect.** Suitable habitat does not exist within the project area.
Sacramento splittail *Pogonichthys macrolepidotus*	FSC CSC	Mostly confined to the Delta, Suisun Bay, Suisun Marsh, and Napa Marsh and are rarely found more than 8 to 16 kilometers (5 to 10 miles) above the upstream boundaries of the Delta; adults deposit adhesive eggs over flooded stream banks of aquatic vegetation.	A	**No effect.** Suitable habitat does not exist within the project area.
longfin smelt *Spirinchus thaleicthys*	FSC CSC	Generally found in Suisun Bay, Montezuma Slough, lower reaches of Sacramento and San Joaquin rivers, and the Delta.	A	**No effect.** Suitable habitat does not exist within the project area.
Kern brook lamprey *Lampetra hubbsi*	FSC CSC	Restricted to the San Joaquin River Basin. Inhabits the Friant-Kern Canal, lower Merced, Kaweah, Kings, and San Joaquin rivers.	A	**No effect.** Suitable habitat does not exist within the project area.
INVERTEBRATES				
vernal pool fairy shrimp *Branchinecta lynchi*	FT	Inhabits a variety of different vernal pool habitats from small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools. Most commonly found in grass or mud bottomed swales, or basalt flow depression pools in unplowed grasslands.	A	**No effect.** Suitable habitat does not exist within the project area.
vernal pool tadpole shrimp *Lepidurus packardi*	FE	Inhabit vernal pools and swales in the Central Valley.	A	**No effect.** Suitable habitat does not exist within the project area.
California linderiella fairy shrimp *Linderiella occidentalis*	FSC	Found in large, fairly clear vernal pools and lakes. They can survive in clear to turbid water with a pH of 6.1 to 8.5.	A	**No effect.** Suitable habitat does not exist within the project area.
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT	Obligate species found with valley elderberry plants.	P	**No effect.** Suitable habitat does exist within the project area, however, no bore holes or beetles were observed in the elderberries. Environmentally Sensitive Areas will be established to protect elderberries (potential valley elderberry longhorn beetle habitat) during construction.
San Joaquin tiger beetle *Cicindela tranquebarica* ssp.	FSC	Inhabits clay or sandy soils and include sand dunes, prairies, alkali flats, gravel pits, eroded slopes, beaches, and roads.	A	**No effect.** Suitable habitat does not exist within the project area.
Molestan blister beetle *Lytta molesta*	FSC	All collected specimens found in vernal pool vegetation. Little is known about this species.	A	**No effect.** Suitable habitat does not exist within the project area.
Hopping's blister beetle *Lytta hoppingi*	FSC	Commonly occurs on the flowers and foliage of various plants in foothills at the southern end of the Central Valley.	P	**No effect.** Suitable habitat does not exist within the project area.
MAMMALS				
Tipton kangaroo rat *Dipodomys nitratoides nitratoides*	FE SE	A subspecies of the San Joaquin kangaroo rat, it is restricted to arid land communities occupying the valley floor of the Tulare Basin.	A	**No effect.** Suitable habitat does not exist within the project area.
San Joaquin kit fox *Vulpes macrotis mutica*	FE ST	Found in grassland and scrubland communities in the San Joaquin Valley. Denning habitat consists of burrows constructed in flat ground in areas of low to moderate relief.	P	Surveys resulted in no detection within the Biological Survey Area and there are no CNDDB occurrences within or adjacent to the Biological Survey Area. Suitable habitat does not exist within the project impact area.
San Joaquin antelope squirrel *Ammospermophilus nelsoni*	ST	Permanent resident of the western San Joaquin Valley from 60 to 360 meters (200 to 1,200 feet) elevation on dry sparsely vegetated, loamy soils.	A	**No effect.** Suitable habitat does not exist within the project area.
Pacific western big-eared bat *Corynorhinus townsendii townsendii*	FSC CSC	Found primarily in rural areas in a variety of habitats, including oak woodlands in California's inner Coast Range and Sierra Nevada foothills. Associated with caves and abandoned mines.	A	**No effect.** Suitable habitat does not exist within the project area.
spotted bat *Euderma maculatum*	FSC CSC	Closely associated with rocky cliffs in a variety of habitats.	A	**No effect.** Suitable habitat does not exist within the project area.

Common and Scientific Name	Status	General Habitat	Habitat Present / Absent	Rationale
greater western mastiff bat *Eumops perotis californicus*	FSC CSC	Found in a variety of habitats up to 2,438 meters (8,000 feet) elevation; distribution linked to presence of significant rock features for roosting.	A	**No effect.** Suitable habitat does not exist within the project area.
small-footed myotis *Myotis ciliolabrum*	FSC	Roosts in mines and trees in a variety of habitats greater than 1,829 meters (6,000 feet) elevation.	A	**No effect.** Suitable habitat does not exist within the project area.
fringed myotis bat *Myotis thysanodes*	FSC	Found from coast range to at least 1,951 meters (6,400 feet) elevation in the Sierras. Year-round resident. Roost sites include mines, caves, old buildings, and trees. Widely distributed, but rare.	A	**No effect.** Suitable habitat does not exist within the project area.
long-legged myotis *Myotis volans*	FSC	Inhabits pinyon-juniper, Joshua tree woodland, and montane coniferous forests. Day roosts in hollow trees, also uses rock crevasses, mines, and buildings.	A	**No effect.** Suitable habitat does not exist within the project area.
Yuma myotis *Myotis yumanensis*	FSC CSC	Found throughout California at lower to mid-elevations in a variety of habitats.	A	**No effect.** Suitable habitat does not exist within the project area.
southern grasshopper mouse *Onychomys torridus ramona*	FSC CSC	Found in arid desert habitats of the Mojave Desert and southern Central Valley of California.	A	**No effect.** The project occurs outside of the current known range for this species.
Tulare grasshopper mouse *Onychomys torridus tularensis*	FSC CSC	Inhabits arid grassland and shrub land associations, including blue oak woodlands, upper Sonoran subshrub-scrub community, alkali sink, and mesquite associations on the valley floor, and grassland associations on the sloping margins of the San Joaquin Valley and Carrizo Plain region.	A	**No effect.** Suitable habitat does not exist within the project area.
San Joaquin pocket mouse *Perognathus inornatus inornatus*	FSC CSC	Inhabits dry, open grasslands or scrub areas on fine textured soils between 350 and 600 meters (1,100 and 2,000 feet) in the Central and Salinas Valleys. Found in open, sandy areas with grasses and forbs.	A	**No effect.** Suitable habitat does not exist within the project area.
American badger *Taxidea taxus*	CSC	Inhabit arid communities consisting of shrub and forest habitat with friable soils. They prey on burrowing rodents and dig their own burrows.	A	**No effect.** Suitable habitat does not exist within the project area.
PLANTS				
Earlimart orache *Atriplex erecticaulis*	FSC CNPS 1B	Found in valley and foothill alkali grasslands.	A	**No effect.** Suitable habitat does not exist within the project area.
brittlescale *Atriplex depressa*	FSC CNPS 1B	Found in alkaline or clay soils less than 200 meters (650 feet) elevation in the San Joaquin Valley and southern Sacramento Valley.	A	**No effect.** Suitable habitat does not exist within the project area.
lesser saltscale *Atriplex minuscula*	FSC CNPS 1B	Found in sandy, alkaline soils less than 200 meters (650 feet) elevation in the southern San Joaquin Valley.	A	**No effect.** The project occurs outside the known range of this plant and none were observed during surveys.
subtle orache *Atriplex subtilis*	SLC CNPS 1B	Found in valley and foothill grasslands 40 to 100 meters (130-320 feet) elevation.	A	**No effect.** Suitable habitat does not exist within the project area.
Hoover's spurge *Chamaesyce hooveri*	FT CNPS 1B	Found in vernal pools, and valley and foothill grasslands.	A	**No effect.** Suitable habitat does not exist within the project area.
spiny-sepaled button-celery *Eryngium spinosepalum*	FSC CNPS 1B	Found in vernal pools, and valley and foothill grasslands.	A	**No effect.** Suitable habitat does not exist within the project area.
San Joaquin adobe sunburst *Pseudobahia peirsonii*	FT SE CNPS 1B	Found in heavy adobe clay soils in grasslands dominated by non-native annual plants, wild oats, charlock, soft chess, red brome, and redstem filaree.	A	**No effect.** Suitable habitat does not exist within the project area.
San Joaquin Valley orcutt grass *Orcuttia inaequalis*	FT SE CNPS 1B	Species endemic to vernal pools in the San Joaquin Valley.	A	**No effect.** Suitable habitat does not exist within the project area.
REPTILES				
blunt-nosed leopard lizard *Gambelia sila*	FE SE (FP)	Found only in the San Joaquin Valley in open, sparsely vegetated areas of low relief on the valley floor and the surrounding foothills. They also use alkali playa and valley saltbush scrub. They require small rodent burrows for shelter.	A	**No effect.** Suitable habitat does not exist within the project area.

Common and Scientific Name	Status	General Habitat	Habitat Present / Absent	Rationale
giant garter snake *Thamnophis gigas*	FT ST	Inhabits agricultural wetlands and other waterways such as irrigation and drainage canals, sloughs, ponds, small lakes, low gradient streams, and adjacent uplands in the Central Valley. They also inhabit rice fields. They use small mammal burrows and other soil crevices throughout their winter dormancy period.	A	**No effect.** Suitable habitat does not exist within the project area.
northwestern pond turtle *Clemmys marmorata marmorata*	FSC CSC	Inhabits ponds, marshes, rivers, and streams with rocky or muddy bottoms with cattails, water lilies, watercress, and other aquatic vegetation.	A	**No effect.** Suitable habitat does not exist within the project area.
southwestern pond turtle *Clemmys marmorata pallida*	FSC CSC	Inhabits ponds, marshes, rivers, and streams with rocky or muddy bottoms with cattails, water lilies, watercress, and other aquatic vegetation.	A	**No effect.** Suitable habitat does not exist within the project area.
California horned lizard *Phrynosoma coronatum frontale*	FSC CSC	Inhabits sandy washes, floodplains, and wind-blown deposits. Forages on ants in open areas between shrubs.	A	**No effect.** Suitable habitat does not exist within the project area.
NATURAL COMMUNITIES OF CONCERN				
Great Valley Valley Oak Riparian Forest		Consists of broad-leafed deciduous trees dominated by valley oaks.	P	**No effect.** This community type is present within the Biological Survey Area, however, it occurs outside of the construction footprint, and therefore, will not be affected as a result of the proposed project.
Valley Sacaton Grassland	--	Consists of bunch grasses dominated by (*Sporobolus airoides*).	P	**No effect.** This community type is present within the Biological Survey Area, however, it occurs outside of the construction footprint, and therefore, will not be affected as a result of the proposed project.

FE = Federal Endangered
FT = Federal Threatened
FSC = Federal Species of Concern
FD = Federal Delisted
FPD = Federal Proposed for Delisting

SE = State Endangered
ST = State Threatened
CSC = State Species of Concern
FP = Fully Protected
SLC = Species of Local Concern

CNPS 1B = Plants considered to be rare and endangered in California and elsewhere
CNPS 4 = Watch List
CNDDB = California Natural Diversity Database

Appendix H State Historic Preservation Officer Concurrence Letter

STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov

April 27, 2006 Reply To: FHWA060407A

Kelly Hobbs, Acting Chief
Central California Cultural Resources Branch
Department of Transportation
2015 E Shields Ave, Suite A-100
Fresno, CA 93726-5428

Re: Determination of Eligibility for the Proposed Houston Avenue Widening Project on State Route 216, Tulare County, CA

Dear Mr. Hobbs:

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

The California Department of Transportation is requesting my concurrence, pursuant to Stipulation VIII.C.5 of the PA, that the following properties are not eligible for the National Register of Historic Places:

- 3143 E Houston Avenue, Visalia, CA
- 3203 E Houston Avenue, Visalia, CA
- 3227 E Houston Avenue, Visalia, CA
- 3223 E Houston Avenue, Visalia, CA
- 3307 E Houston Avenue, Visalia, CA
- 3321 E Houston Avenue, Visalia, CA
- 3349 E Houston Avenue, Visalia, CA
- 3347 E Houston Avenue, Visalia, CA
- 3631 E Houston Avenue, Visalia, CA
- 3933 E Houston Avenue, Visalia, CA
- 3944 E Houston Avenue, Visalia, CA
- 14657 Ivanhoe Drive, Visalia, CA
- 14871 Ivanhoe Drive, Visalia, CA
- 14892 Ivanhoe Drive, Visalia, CA
- 14962 Ivanhoe Drive, Visalia, CA
- 15026 Ivanhoe Drive, Visalia, CA
- 15059 Ivanhoe Drive, Visalia, CA
- 30312 Road 152, Visalia, CA

Mr. Hobbs
April 27, 2006
Page 2

Based on my review of the submitted documentation, I concur.

Thank you for considering historic properties during project planning. If you have any questions, please contact Natalie Lindquist of my staff at (916) 654-0631 or e-mail at nlind@ohp.parks.ca.gov.

Sincerely,

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

Appendix I Programmatic Section 4(f) Evaluation

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S. Code 327.

This programmatic Section 4(f) evaluation has been prepared for projects that improve existing highways and use minor amounts of publicly owned public parks, recreation lands, or wildlife and waterfowl refuges that are adjacent to existing highways. This programmatic Section 4(f) evaluation satisfies the requirements of Section 4(f) for all projects that meet the applicability criteria listed below. No individual Section 4(f) evaluations need be prepared for such projects.

This programmatic evaluation does not change the existing procedures for project compliance with the National Environmental Policy Act (NEPA) or with public involvement requirements.

Applicability

This programmatic Section 4(f) evaluation may be applied by Caltrans, as assigned by the Federal Highway Administration, only to projects meeting the following criteria:

The proposed project is designed to improve the operational characteristics, safety, and/or physical condition of existing highway facilities on essentially the same alignment. This includes "4R" work (resurfacing, restoration, rehabilitation, and reconstruction), safety improvements, such as shoulder widening and the correction of substandard curves and intersections; traffic operation improvements, such as signalization, channelization, and turning or climbing lanes; bicycle and pedestrian facilities; bridge replacements on essentially the same alignment; and the construction of additional lanes. This programmatic Section 4(f) evaluation does not apply to the construction of a highway on a new location.

The proposed improvements to State Route 216 are designed to improve the operation, safety, and capacity of the highway. Elements of the project would provide restoration of the existing highway; improve safety by adding 8-foot shoulders and correcting substandard intersections; provide operational improvements by adding additional left-turn channelization (lanes) and bicycle lanes; and improve capacity by

adding an additional lane in each direction of travel. All proposed improvements to State Route 216 would be made on the existing alignment. For additional information see Sections 1.2 and 1.3.

The Section 4(f) lands are publicly owned public parks, recreation lands, or wildlife and waterfowl refuges located adjacent to the existing highway.

The Section 4(f) land is a part of the 154-acre Golden West Educational Complex owned by the Visalia Unified School District and located on the north side of State Route 216 between Lovers Lane and McAuliff Road in Visalia, California (See Figures I-1). The Section 4(f) land is made up of three areas: the Golden Oak Elementary School playground; a grass area between Golden Oak Elementary School and the Visalia Adult School; and a high school soccer practice field between the Visalia Adult School and McAuliff Road. See Section 2.1.1.3 for additional information.

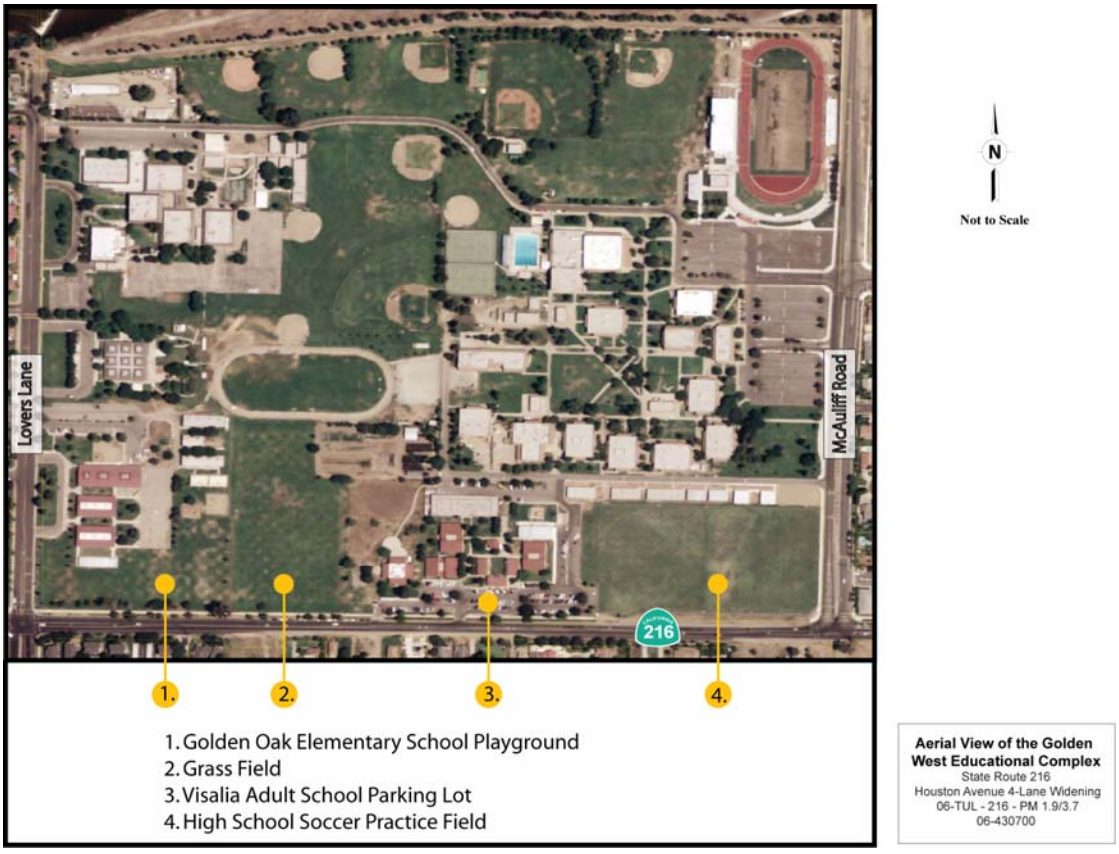


Figure I-1 Aerial of Golden West Educational Complex

The total amount of land to be acquired from any Section 4(f) site when using this programmatic evaluation, shall not exceed the values below:

Total Size of Section 4(f) Site	Maximum to be Acquired
< 10 acres	10 percent of site
10 acres - 100 acres	1 acre
> 100 acres	1 percent of site

Table I shows that all of the proposed build alternatives would acquire land from three areas at the Golden West Educational Complex that are less than 10 acres in size. All of the proposed build-alternatives would require less than ten percent from any of the three areas affected by the project (Table I). In addition, the largest total acreage that would be required from all three areas (.69 acre for Alternative 1) is less than one percent of the total site (154 acres).

Table I Acreage Required from Golden West Educational Complex

Alternative	Golden Oak Elementary School Playground			Grass Area			High School Soccer Practice Field		
	Total Area (acres)	Total Acreage Acquired	Percent of Area Acquired	Total Area (acres)	Total Acreage Acquired	Percent of Area Acquired	Total Area (acres)	Total Acreage Acquired	Percent of Area Acquired
1	4.20	.16	4%	7.74	.21	3%	7.27	.32	4%
2	4.20	0	0	7.74	0	0	7.27	0	0
3	4.20	.04	1%	7.74	.05	0.6%	7.27	.08	1%

* Total acreage does not include the sidewalk area.

The proximity impacts of the project on the remaining Section 4(f) land shall not impair the use of such land for its intended purpose. This determination is to be made by Caltrans, as assigned by the Federal Highway Administration, in concurrence with the officials having jurisdiction over the Section 4(f) lands, and will be documented with regard to noise, air and water pollution, wildlife and habitat effects, aesthetic values, and/or other impacts deemed relevant.

No proximate impacts would result to the remaining Section 4(f) land and the project would not impair the use of the remaining land for recreational purposes. For additional information see the sections for visual/aesthetic values (2.1.7), water quality (2.2.2), air quality (2.2.4), noise (2.2.6), and wildlife and habitat effects (2.3.1, 2.3.2 and 2.3.3).

The officials having jurisdiction over the Section 4(f) lands must agree, in writing, with the assessment of the impacts of the proposed project on, and the proposed mitigation for, the Section 4(f) lands.

Caltrans has coordinated with the Visalia Unified School District on the use of school district property for the project. The District provided a letter (Figure I-3) dated November 28, 2006 that stated the District recognizes that some of the alternatives would require property from the Golden West Educational Complex. The District stated they would be able to accommodate this requirement and anticipate that with avoidance, mitigation, or enhancement measures incorporated into the project it would not adversely impact operations at the site. All of the measures requested by the District would be incorporated into the project design. See the sections for parks and recreation (2.1.1.3), parking (2.1.4.4), pedestrian and bicycle circulation (2.1.6) and visual/aesthetics (2.1.7), for additional information.

Does the project use land from a site purchased or improved with funds under the Land and Water Conservation Fund Act, the Federal Aid in Fish Restoration Act (Dingell-Johnson Act), the Federal Aid in Wildlife Act (Pittman-Robertson Act), or similar laws, or are the lands otherwise encumbered with a federal interest (e.g., former federal surplus property)?

The site of the Golden West Educational Complex has not been purchased or improved with funds under the Land and Water Conservation Fund Act, the Federal Aid in Fish Restoration Act (Dingell-Johnson Act), the Federal Aid in Wildlife Act (Pittman-Robertson Act), or similar laws, and the lands are not otherwise encumbered with a federal interest.

Stan A. Carrizosa
Superintendent

Robert Gröeber
Assistant Superintendent
Administrative Services

Visalia UNIFIED SCHOOL DISTRICT

"Raising Expectations"

November 28, 2006

Mr. Juergen Vespermann, Chief
South Sierra Environmental Analysis Branch
Department of Transportation
2015 East Shields Avenue, Suite 100
Fresno, California 93726

Mr. Vespermann:

Thank you for meeting with our staff to review the proposed project for State Route 216/Houston Avenue (EA: 06-430700) and its potential impacts on the 100-acre Golden West educational complex. As discussed, the playing fields located at Golden Oak Elementary School and the Visalia Adult School are used for recess, after school sports (i.e. AYSO) and are open to the community during non-school hours for recreational activities. The open field at the northwest corner of Houston Avenue/McAuliff Road currently serves for excess parking and as an additional playing field, if needed.

We have carefully reviewed the three proposed build-alternatives and support Alternative 1. We recognize that this alternative would require property from our Golden West complex. We would be able to accommodate this requirement and anticipate that with avoidance, mitigation or enhancement measures incorporated into the project, it will not adversely impact the operations of our program at that site. Completion of the project is expected to improve traffic circulation and access for our Golden West site.

The school district would appreciate the following items to be incorporated in the design:

- Replacement of the contiguous greenbelt along the Golden West educational complex.
- Replacement of the 10-foot sidewalk on the north side of Houston Avenue.
- Replacement of parking at the adult school.
- Preference that construction takes place during non-school months to minimize impacts to the school.

Yours truly,

Robert Gröeber
Assistant Superintendent
Administrative Services
Visalia Unified School District

5000 W. Cypress Avenue • Visalia, California 93277
(559) 730-7529 • FAX (559) 730-7346

Figure I-2 Visalia Unified School District Letter

This programmatic evaluation does not apply to projects for which an environmental impact statement (EIS) is prepared, unless the use of Section 4(f) lands is discovered after the approval of the final EIS.

An Environmental Assessment is being prepared for this project.

Alternatives and Findings

The following alternatives avoid any use of the public park land, recreational area, or wildlife and waterfowl refuge:

1. *Do nothing.*

2. *Improve the highway without using the adjacent public park, recreational land, or wildlife and waterfowl refuge.*

3. *Build an improved facility on a new location without using the public park, recreation land, or wildlife or waterfowl refuge.*

This list is intended to be all-inclusive. The programmatic Section 4(f) evaluation does not apply if a feasible and prudent alternative is identified that is not discussed in this document. The project record must clearly demonstrate that each of the above alternatives was fully evaluated before Caltrans, as assigned by the Federal Highway Administration, concluded that the programmatic Section 4(f) evaluation applied to the project.

In order for this programmatic Section 4(f) evaluation to be applied to a project, each of the following findings must be supported by the circumstances, studies, and consultations on the project:

Do Nothing Alternative

The Do Nothing Alternative is not feasible and prudent because the existing two-lane highway and intersections would remain unchanged. The Do Nothing Alternative would result in continued higher-than-average accident rates and traffic congestion in Segment 1. This alternative would not meet the purpose and need for the project.

Operational deficiencies would not be corrected. Traffic volumes in Segment 1, the area between Lovers Lane and just east of the Visalia city limit near post mile 2.99, would increase more than 250 percent between 2005 and 2011 and increase an additional 40 percent between 2011 and 2031, causing the Level of Service to deteriorate to a Level of Service “F” in 2031. Intersections at Lovers Lane and

McAuliff Road, which bound the Golden West Educational Complex on, the west and the east respectively, would also fail during the 20-year planning horizon.

The accident history for Segment 1 for the most recent three-year study period from April 1, 2003 to March 31, 2006 indicates that the actual fatal-plus-injury accident rate is lower than the statewide average accident rate. However, the actual fatal and total accident rates are higher than the statewide average accident rates. During the three-year study period, 15 accidents occurred on this highway section. See Chapter 1 for additional information.

Improvements Without Using the Adjacent Section 4(f) Lands

Alternative 2 is the only build alternative under consideration that would avoid the Section 4(f) lands, by shifting the highway centerline about 20 feet to the south.

However, Alternative 2 would displace 36 residential units, including 13 single-family residences and 23 multi-family residential units. Alternative 2 would also displace one home-based business. See Section 2.1.4.2, Relocations, for more information.

In addition, Alternative 2 would cause disproportionately high and adverse effects on a minority or low-income population as per Executive Order 12898 regarding environmental justice. The 23 multi-family units would be taken from the Burgundy House Apartment complex, which provides a source of affordable housing in the community by renting to residents who receive Section 8 assistance. See Section 2.1.4.3, Environmental Justice, for more information.

Alternatives on New Location

It is not feasible and prudent to avoid Section 4(f) lands by constructing on a new alignment because the new location would not solve existing transportation, safety, or maintenance problems and the new location would result in substantial adverse social, economic, or environmental impacts.

Constructing the proposed improvements on a new alignment would not solve the existing transportation problem. Congestion on Houston Avenue and at the intersections with Lovers Lane and McAuliff Road would remain a problem due to the continued construction of planned development in the area. Continued growth in the area without the construction of the project would cause the operation of Houston Avenue as well as the intersections at Lovers Lane and McAuliff Road to fail.

Houston Avenue, Lovers Lane, and McAuliff Road would continue to provide all of the access to the Golden West Educational Complex.

Construction of improvements to State Route 216 on a new alignment would have environmental consequences as well. Construction to the south of the existing alignment would require the removal of homes and businesses and the severance of agricultural properties. In addition, the road network at the east end of the project is incomplete, which would make it difficult to return the highway back to the existing alignment without taking more farmland or severing agricultural properties.

Construction to the north of the existing alignment would require crossing the Saint Johns River to avoid severing the Golden West Educational Complex. Continuing State Route 216 north along Lovers Lane would require construction of a new bridge across the Saint John's River which, would require obtaining a California Regional Water Quality Board Section 401 Certification, a California Department of Fish and Game Section 1602 Streambed Alteration Agreement, and an Army Corps of Engineers Section 404 Nationwide Permit. In addition, the Saint Johns River Parkway, an area with bicycle and walking trails that follows the river, is a Section 4(f) resource that would need to be evaluated. A new route north of the river would also require taking agricultural land and perhaps severing farms, which is the primary land use in that area.

Measures to Minimize Harm

This programmatic Section 4(f) evaluation and approval may be used only for projects where Caltrans, as assigned by the Federal Highway Administration, in accordance with this evaluation, ensures that the proposed action includes all possible planning to minimize harm. This has occurred when the officials having jurisdiction over the Section 4(f) property have agreed, in writing, with the assessment of impacts resulting from the use of the Section 4(f) property and with the mitigation measures to be provided. Mitigation measures shall include one or more of the following:

1. Replacement of lands used with lands of reasonably equivalent usefulness and location and of at least comparable value.

2. Replacement of facilities affected by the project including sidewalks, paths, benches, lights, trees, and other facilities.

3. Restoration and landscaping of disturbed areas.

4. Incorporation of design features (e.g., reduction in right-of-way width, modifications to the roadway section, retaining walls, curb and gutter sections, and minor alignment shifts); and habitat features (e.g., construction of new, or enhancement of existing, wetlands or other special habitat types); where necessary to reduce or minimize impacts to the Section 4(f) property. Such features should be designed in a manner that will not adversely affect the safety of the highway facility. Flexibility in the application of the American Association of State Highway and Transportation Officials' geometric standards should be exercised, as permitted in 23 Code of Federal Regulations 625, during such design.

5. Payment of the fair market value of the land and improvements taken or improvements to the remaining Section 4(f) site equal to the fair market value of the land and improvements taken.

6. Such additional or alternative mitigation measures as may be determined necessary based on consultation with the officials having jurisdiction over the parkland, recreation area, or wildlife or waterfowl refuge.

Caltrans has agreed to the following mitigation measures:

1. Replace the existing vegetation and irrigation system and provide aesthetic treatment of the raised median, which could include tree planting and textured paving. Caltrans would work with the Visalia Unified School District to develop an acceptable design for the improvements. See the Avoidance, Minimization, and/or Mitigation Measures in Section 2.1.7, Visual/Aesthetics, for more information.

2. Replace the 16 trees along the south side of the school playground at a 1:1 ratio. See the Avoidance, Minimization, and/or Mitigation Measures in Section 2.1.1.3, Parks and Recreation, for more information.

3. Schedule construction in the area of the Golden West Educational Complex during non-school months to the degree that this is feasible. Otherwise night construction may be necessary to lessen impacts on the school district. See the Avoidance, Minimization, and/or Mitigation Measures in Section 2.1.1.3, Parks and Recreation, for more information.

4. Replace the 53 parking stalls onsite that would be removed by Alternatives 1 and 3. Detailed design would be closely coordinated with the Visalia Unified School District. See the Avoidance, Minimization, and/or Mitigation Measures in Section 2.1.4.4, Parking.

5. Pay fair market value for the land and improvements taken or make improvements to the remaining Section 4(f) site equal to the fair market value of the land and improvements taken. See the Avoidance, Minimization, and/or Mitigation Measures in Section 2.1.1.3, Parks and Recreation, and Section 2.1.4.2, Relocations.

6. Replace the existing sidewalk and add new sidewalk in front of the school where there is none now. See Section 1.3, Alternatives, in Chapter 1.

Coordination

A public information meeting was held on February 23, 2006 at Golden Oak Elementary School. Maps showing the alternatives under consideration were available for review by the public. No comments were received about the use of land from the recreational areas at the Golden West Educational Complex for the project.

On April 27, 2006, Caltrans staff met with administrators from the Visalia Unified School District to discuss the use of land from the recreational areas at the Golden West Educational Complex for the project and impacts to the remaining property. The District provided a letter (Figure I-3) dated November 28, 2006 that stated the District agreed, with the assessment of the impacts of the proposed project on, and the proposed mitigation for, the Section 4(f) lands. There has been continued coordination with the school district during project development.

A public hearing will be held during the circulation of the Initial Study/Environmental Assessment to allow comments on the project, including the use of land from the recreational areas at the Golden West Educational Complex for the project.

Approval

Caltrans, under its assumption of responsibility pursuant to 23 U.S. Code 327 has:

1. Determined that the project meets the applicability criteria set forth above;

2. Determined that all of the alternatives set forth in the Findings section have been fully evaluated;

3. Determined that the findings in this document (which conclude that there are no feasible and prudent alternatives to the use of the publicly owned public park, recreation area, or wildlife or waterfowl refuge) are clearly applicable to the project;

4. Determined that the project complies with the Measures to Minimize Harm section of this document;

5. Determined that the coordination called for in this programmatic evaluation has been successfully completed;

6. Assured that the measures to minimize harm will be incorporated in the project; and

7. Documented the project file clearly identifying the basis for the above determinations and assurances.

Based on the above considerations, there is no feasible and prudent alternative to the use of land from the Golden Oak Elementary School playground; a grass area between Golden Oak Elementary School and the Visalia Adult School; and a high school soccer practice field between the Visalia Adult School and McAuliff Road and the proposed action includes all possible planning to minimize harm to the Golden Oak Elementary School playground; a grass area between Golden Oak Elementary School and the Visalia Adult School; and a high school soccer practice field between the Visalia Adult School and McAuliff Road resulting from such use.

List of Technical Studies that are Bound Separately

Air Quality Studies

- Air Quality Analysis
- Consultation on PM_{10} and $PM_{2.5}$ Hot-Spot Conformity Assessment for the State Route 216/Houston Avenue 4-Lane Widening and Realignment (CTIPS ID# 11500000077)

Hazardous Waste Reports

- Aerially Deposited Lead Investigation Report
- Initial Site Investigation

Historic Property Survey Report

- Archaeological Survey Report
- Historic Resource Evaluation Report

Initial Paleontology Study

Location Hydraulic Study

Natural Environment Study

Noise Study Report

Draft Relocation Impact Report

Traffic Study

- Operational Analysis
- Transportation Management Plan and Lane Closure Recommendations

Visual Assessment/Scenic Resource Evaluation

Water Quality Report