Intersection Improvement and Curve Realignment at State Route 76 and Valley Center Road

SAN DIEGO COUNTY, CALIFORNIA
DISTRICT 11 – SD – 76 (PM 32.6-33.2)
EA: 405700 PID: 1100020265

Final Initial Study with Mitigated Negative Declaration / Environmental Assessment with Finding of No Significant Impact

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 Caltrans under its assumption of responsibility pursuant to 23 USC 327.

October 2014

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SCH# 2014061026

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Intersection Improvement and Curve Realignment at State Route 76 and Valley Center Road

INITIAL STUDY with Mitigated Negative Declaration / Environmental Assessment with Finding of No Significant Impact

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

THE STATE OF CALIFORNIA
Department of Transportation

10/28/2014
Date of Approval

Bruce L. April
Deputy District Director
California Department of Transportation
NEPA/CEQA Lead Agency

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CALIFORNIA DEPARTMENT OF TRANSPORTATION
FINDING OF NO SIGNIFICANT IMPACT (FONSI)

State Route 76 and Valley Center Road Intersection Improvement Project, San Diego County

FOR

The California Department of Transportation (Caltrans) has determined that the Roundabout Alternative will have no significant impact on the human environment. This FONSI is based on the attached Environmental Assessment (EA) which has been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached EA.

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 USC 327.

12/28/2014
Date

Bruce L. April
Deputy District Director

SCH: 2014061026

MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to improve the safety on State Route 76 (SR-76) at and near its intersection with Valley Center Road, in an unincorporated area of San Diego County, California, about sixteen miles east of Interstate 15. The proposed project extends from postmile 32.6 to 33.2. There are two Build Alternatives for the proposed project, one involving a signalized interchange and another involving a modern-day roundabout. There is one No Build alternative for the project, under which no construction would occur.

Determination

Caltrans has prepared an Initial Study for this proposed project and has determined from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no effect on the following:

- Coastal Zone
- Wild and Scenic Rivers
- Parks and Recreational Facilities
- Timberlands
- Environmental Justice
- Growth
- Hydrology and Floodplain
- Noise
- Paleontology
- Section 4(f)

In addition, the proposed project would have less than significant effects to the following:

- Land Use
- Farmlands
- Community Impacts
- Community Character and Cohesion
- Relocations and Real Property Acquisition
- Utilities/Emergency Services
- Traffic and Transportation/Pedestrian and Bicycle Facilities
- Cultural Resources
- Water Quality and Storm Water Runoff
- Hazardous Waste/Materials
- Air Quality
- Natural Communities
- Plant Species
- Threatened and Endangered Species
- Invasive Species
- Climate Change

The project would have no significantly adverse effect on visual/aesthetics or animal species because the following mitigation measures would reduce potential effects to less than significant:

Visual/Aesthetics

- Highway planting removed during construction would be replaced with appropriate, maintainable highway planting.
- For Alternative 1, the inner shoulder of the roundabout would receive integrally colored concrete with a textured surface treatment or interlocking brick pavers.

Animal Species

- Should migratory birds or other sensitive species be located within 100 feet of the project footprint, appropriate measures may include designation of the location as an Environmentally Sensitive Area (ESA) and delay or restriction of project activities until nesting and fledging is completed.

Bruce L. April
Deputy District Director
District 11, Environmental
California Department of Transportation

10/28/2014
Date

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Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) is the lead agency under the National Environmental Policy Act (NEPA), and under the California Environmental Quality Act (CEQA).

Caltrans proposes to perform safety improvements on State Route 76 (SR-76) at and near Valley Center Road in an unincorporated area of San Diego County, California, about sixteen miles east of Interstate 15 (I-15). The regional location and project vicinity maps are shown in Figure 1.1.1 and 1.1.2 below. There are two Build Alternatives proposed for the project, one involving a signalized intersection and another involving a single-lane roundabout. There is a No-Build Alternative under which no improvements would occur.

The project is proposed to be funded from the 2012 State Highway Operational Protection Program (SHOPP) Collision Reduction Program in the 2015/2016 fiscal year (FY). Total project costs (including construction, right-of-way, and support costs) are estimated at $17.5 million for Alternative 1 and $15.3 million for Alternative 2.

The SR-76 corridor can be divided into three distinct facilities: west of South Mission Road it is classified as an Expressway; from South Mission Road to I-15 it is a Prime Arterial; and from I-15 to its terminus at State Route 79 (SR-79) it is a Major Road. Between I-15 and SR-79, SR-76 is a two-lane roadway with one lane of travel in each direction, with additional capacity at key intersections provided by additional turn lanes.

Within these limits, SR-76 services interregional, intraregional, commuter, and recreational travel. Park-and-Ride lots are provided at the I-15/SR-76 interchange, Maxson Street and Mission Avenue/Frontier Drive in Oceanside, and Sweetgrass Lane in Bonsall. Bus service is provided by Metropolitan Transit System (MTS) via Route 388, which is operated along SR-76 from County Road 16 to Valley Center Road, running three times daily on both weekdays and weekends. Transfers from SR-76 to commuter rail and Express bus are available at the Oceanside Transit Center and the Escondido Transit Center, respectively.

Route 76 traverses the City of Oceanside and the unincorporated communities of Bonsall, Fallbrook, Pala, Pauma Valley, Rincon, and Lake Henshaw. The western portion of the route in the City of Oceanside and eastern portion to I-15 serves as a major commuter route. In addition, many commuters from areas in southwestern Riverside County (i.e. Temecula, Murrieta, Rancho California, and Menifee) utilize I-15, SR-76, and State Route 78 (SR-78) to travel to jobs in northern San Diego County, including Camp Pendleton, Carlsbad, and Oceanside. The remainder of the route east of I-15 in San Diego County serves outlying rural communities and a number of Tribal Reservations (including Pala, Pauma, San Pasqual, Rincon, La Jolla Amago and Mesa Grande). SR-76 intersects a number of State routes, including Interstate 5 (I-5), I-15, and SR-79. The closest parallel State Route to SR-76 in San Diego County is SR-78, which varies between 3 and 15 miles to the south.

Figure 1.1.1 Regional Location Map

Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2012

Figure 1.1.2 Project Vicinity Map

1.2 Purpose and Need

1.2.1 Purpose

The purpose of this proposed project (project) is to improve the safety on SR-76 at and near Valley Center Road.

Project Objectives:

- Improve the safety of the intersection at SR-76 and Valley Center Road.
- Reduce the number and severity of accidents on SR-76 in the project area.
- Improve sight distance within the project area.
- Maintain or improve current movement and travel times through the intersection.

1.2.2 Need

Safety

The project vicinity has a higher-than-average accident history, with 35 accidents occurring between 2005 and 2009 within the project area. The existing accident rate from postmile 32.6 to 33.2 is 5.39 accidents per million vehicles, about four times higher than the statewide average of 1.30 accidents per million vehicles (CHP 2001-2005). Without the project, it is anticipated that the accident rate would stay the same or may increase slightly, due to the increased traffic that is expected to follow planned and ongoing development in the area.

Roadway Deficiencies

In the vicinity of the proposed project, SR-76 is characterized by curves which do not meet current design standards for the posted speed limit of 55 miles per hour (mph). Valley Center Road approaches SR-76 from the south and terminates at SR-76 at a diagonal northwest angle in the middle of a curve on SR-76. Due to the angle and the intersection curves, the sight distance for motorists approaching SR-76 from Valley Center Road does not meet current design standards for the speed limit of 50 mph.

Improved safety can be accomplished through modifying the curve east of the intersection, adjusting the angle at which Valley Center Road approaches SR-76, and through upgrading the intersection to current design standards per the 2012 Caltrans Highway Design Manual (HDM).

In December 2009, Caltrans submitted a Project Initiation Request for a safety project at the SR-76 / Valley Center Road intersection. The request was pursuant to a Traffic Investigation Report (TIR) conducted in August 2009, which found that the intersection met the following traffic signal warrants:

- Warrant 1: 8-hour Vehicular Volume
- Warrant 2: 4-hour Vehicular Volume
- Warrant 7: Crash Experience

Warrants 1 and 2 identify locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal. The volumes used are from any 4- or 8-hour window. Warrant 7 identifies locations where the severity or frequency of crashes is the principal

reason to consider installing a traffic control signal, and where five or more accidents have occurred and been reported within a 12-month period.

1.2.3 Independent Utility and Logical Termini

"Independent Utility" means that the project is a reasonable and usable expenditure even if no additional transportation improvements in the area are made. "Logical Termini" are defined as rational end points for a transportation improvement, and rational end points for review of the environmental impacts.

Per Federal Highway Administration (FHWA) regulations, potential projects must connect logical termini and be of sufficient length to address environmental matters with a broad scope. They must also have independent utility or independent significance, meaning that they must be usable and require a reasonable expenditure even if no additional transportation improvements in the area are made. Finally, projects must not restrict consideration of alternatives for other reasonably foreseeable transportation improvements. Segmentation may arise if a transportation need extends throughout an entire corridor, but environmental issues and transportation need are discussed for only a segment of the corridor.

The boundaries of the proposed project include the SR-76/Valley Center Road intersection (postmile 32.87) and extend west to postmile 32.6 and east to postmile 33.2 to correct for non-standard curves. These boundaries are logical because they encompass the area flagged for a higher-than-average accident history. The boundaries connect the essential elements of the proposed project and contain the area potentially affected by project construction and operation. Together, the curve corrections, intersection upgrade, and Valley Center Road realignment create a project that has independent use.

1.3 Project Description

Caltrans proposes to improve the safety of the SR-76/Valley Center Road intersection by increasing sight distance for vehicles entering the intersection, upgrading the intersection, and realigning the curve just east of the intersection to meet current design standards.

The SR-76/Valley Center Road intersection receives commuter, recreational, interregional, and intraregional travel, and is adjacent to residences, businesses, agricultural land, and municipal facilities. The project is listed in the 2012 Regional Transportation Improvement Program (RTIP) under "Grouped Projects for Safety Improvements – SHOPP Collision Reduction Program" (see Section 2.1.2: Consistency with State, Regional, and Local Plans and Programs for more information).

The posted speed limit on SR-76 is 55 mph. SR-76 is a two-lane conventional highway with two 12-foot lanes and 0-ft to 4-ft shoulders. Valley Center Road is a north-south road which terminates at SR-76 approximately 15.4 miles east of I-15. Valley Center Road is part of the San Diego County road system, and consists of two 12-foot lanes, one 4-foot shoulder for each direction, and a posted 50 mph speed limit. Approaching SR-76, Valley Center Road has a 280-foot radius curve followed by a 72-foot straight section, and ultimately connects to a 700-foot curved section of SR-76. As it approaches SR-76, Valley Center Road has a skew angle of 67 degrees.

The intersection of SR-76 and Valley Center Road is a one-way stop at Valley Center Road. Valley Center Road ends at SR-76 in a Y-intersection. Valley Center Road approaches SR-76 at a skewed northwest angle, intersecting SR-76 on a curved portion of the highway. The curve section is 700 feet long and does not meet current design standards for the speed limit of 55

mph. Vehicles approaching SR-76 from Valley Center Road must stop at the intersection and yield to eastbound and westbound SR-76 traffic. The corner sight distance from Valley Center Road looking east onto SR-76 does not meet current design standards.

Westbound SR-76 is a through road with a left turn pocket onto southbound Valley Center Road. Vehicles using the turn pocket to turn left must yield to eastbound traffic. East of the intersection on SR-76 are two reversing curves with 490-foot and 400-foot radii, separated by a 185-foot tangent section. These curves do not meet current design standards for the speed limit of 55 mph.

The proposed project would correct the features outlined above, modifying the curve just east of the intersection, and adjusting the angle at which Valley Center Road approaches SR-76 to improve sight distance. It would also upgrade the existing intersection to either a roundabout or a signalized intersection to improve safety and efficiency. To maintain access for the businesses and residence located northeast of the existing intersection, both build alternatives propose to retain the existing SR-76 alignment from postmile 32.9 to 33.05, as a frontage road. The frontage road would tie directly into the new intersection, creating a four-legged intersection with Valley Center Road at the south end, SR-76 running from west to east, and the old alignment of SR-76 at the north end.

1.4 Alternatives

This section describes the proposed action and design alternatives developed to meet the identified need. Alternatives should accomplish a defined purpose while avoiding or minimizing environmental impacts. Alternatives considered for study were selected based on ability to meet the project's purpose. They were then evaluated for safety, capacity and transportation demand, cost, and environmental impacts. There are two Build Alternatives proposed for the project and a No Build Alternative.

Both build alternatives would perform the following work:

Under both build alternatives, the SR-76/Valley Center Road intersection would be moved 75 feet eastward to correct the skew, bringing Valley Center Road to SR-76 at a right angle. Valley Center Road would be realigned to approach SR-76 pointing directly north. Just east of the intersection, the curve in SR-76 would be realigned to reduce the 490-foot curve radius. A mandatory design exception would be required to retain the subsequent curve, which has a 400-foot radius.

To maintain access for the businesses and residence located northeast of the existing intersection, both build alternatives propose to retain the existing SR-76 alignment from postmile 32.9 to 33.05, as a frontage road. The frontage road would tie directly into the new intersection at the west end, creating a four-legged intersection with Valley Center Road at the south end, SR-76 running from west to east, and the old alignment of SR-76 at the north end. The eastern end of the frontage road would become a cul-de-sac, as shown in Figures 1.5.1 and 1.5.2.

Both build alternatives would relocate overhead electrical, telephone and telecommunications lines, power poles, and water lines. Utility easements may have to be provided to the utility owners. Caltrans would also make changes to the existing drainages, diverting runoff to Yuima Creek. The drainage system would be modified and upgraded to current standards. To prevent scour and erosion from the additional runoff, Caltrans would install rip-rap at the creek slopes. Bridge rails over Yuima Creek would be upgraded.

Both build alternatives would include the addition of sidewalks, curb ramps, and north- and southbound bus pullouts on Valley Center Road south of the intersection. The project would

also include up to 5-foot shoulders (Alternative 1) within the project limits. Shoulder widths of up to 8 feet are under design consideration in certain locations within the project area.

Realignment of Valley Center Road would require a full acquisition of the parcel immediately southeast of the intersection. The parcel and building are currently used to operate a fruit stand and gift shop.

Finally, both alternatives would incorporate a high friction surface treatment in roadway pavement on westbound SR-76 approaching the intersection. It is anticipated that this surface treatment would aid vehicles in reducing speed as they approach the intersection. High friction surface products use aggregates that are both polish- and wear-resistant and develop channels to prevent water buildup on wet surfaces (FHWA 2012).

Motorists may notice rougher riding surfaces in treated areas; however, they also would experience greater pavement friction resulting in better control of their vehicles. The treatment would be applied under both alternatives for approximately 1500 feet on SR-76 and 450 feet on Valley Center Road. Friction improvement projects have been well received by the public and elected officials because the results are measurable, the costs are relatively low, and the products produce negligible environmental impacts (FHWA 2012).

The sections below discuss the unique features of each alternative.

1.4.1 Alternative 1: Roundabout Intersection (Preferred Alternative)

Modern Roundabouts

The following discussion draws upon the Federal Highway Administration report *Roundabouts: An Informational Guide,* dated June 2000.

For many individuals, the term “roundabout” calls to mind the traditional traffic circles which have been in the United States since 1905. These traffic circles enabled high-speed merging and weaving, giving priority to vehicles entering the circle. In modern roundabouts, traffic entering the roundabout must yield to circulating traffic.

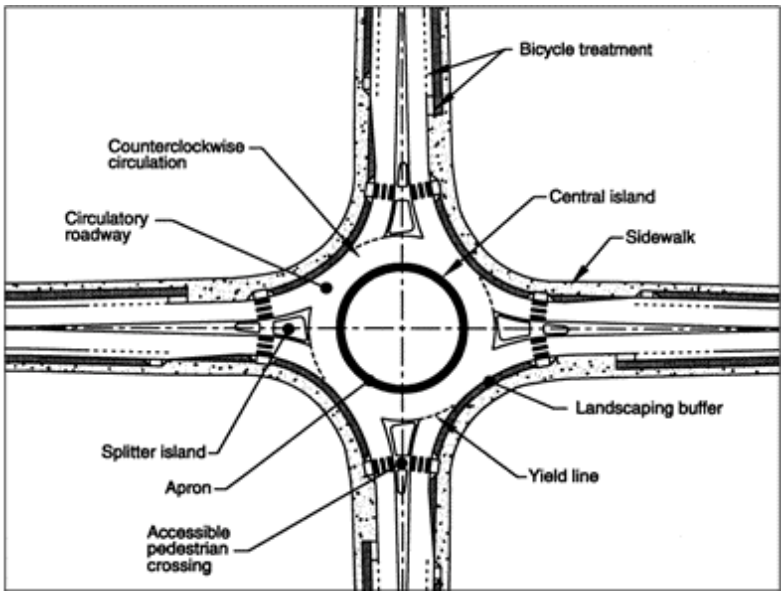

Figure 1.4.1: Typical Parts of a Roundabout (TalkingTraffic.org)

The modern roundabout has several components, including a raised *central island* around which traffic circulates, a *splitter island* to separate entering traffic from exiting traffic, and a *circulatory roadway*, through which vehicles travel within the intersection (see Figure 1.4.1 above). Modern roundabouts also often feature an *apron* (a mountable portion of the island which accommodates the wheel tracking of large vehicles), a *yield line* (to indicate vehicles' entry point), and *accessible pedestrian crossings* (generally set back from the yield line, with a cut in the splitter island) (FHWA 2000).

There are many safety and efficiency advantages to the modern roundabout (hereafter referred to as "roundabout") as opposed to conventional signalized intersections. Roundabouts have fewer conflict points than do conventional intersections, due to fewer instances of two or more vehicles crossing paths. While minor and single-vehicle collisions may still occur in roundabout intersections, the number of high-severity impacts is significantly diminished, due to the decreased number of high-angle conflict points and lower travel speed within the intersection (FHWA 2000).

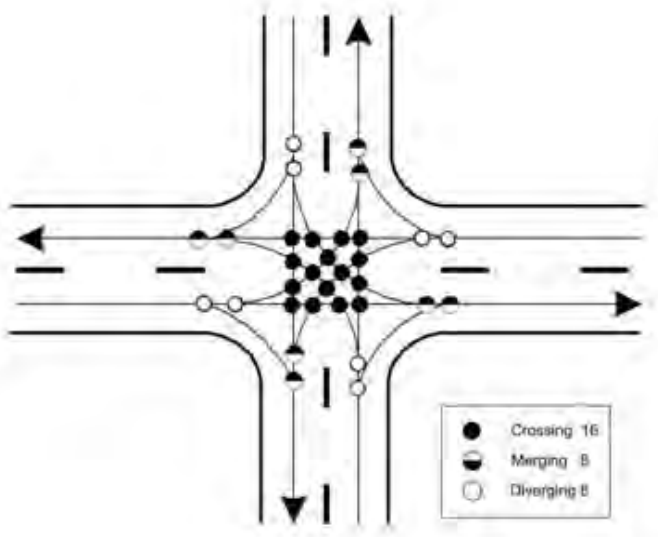

Figure 1.4.2: Conflict points of a four-legged at-grade intersection (FHWA 2009)

In summary, roundabouts have demonstrated safety and other benefits compared to traditional intersections, such as:

- Improved safety
    - Reduced fatalities, injuries, and crashes
    - Reduced head-on and high-speed right angle collisions
    - Improved safety for pedestrians through slower speeds
- Reduced congestion
    - Increased efficiency during on- and off-peak hours
- Typically lower delays
- Quieter operation
- Reduced pollution and fuel use
    - Less idling of vehicles

- Less signal equipment to install, power, and maintain

Project Design

Per Revised Design Information Bulletin 80: Roundabouts (DIB-80), “Districts are encouraged to consider the roundabout as a strategy … to optimize intersection safety and operations.” As such, the project development team has elected to consider a roundabout alternative to address the purpose and need of the project. The roundabout alternative would improve sight distance while simultaneously continuing to provide a consistent traffic flow through the intersection.

This alternative proposes to remove the skew of the intersection of SR-76 and Valley Center Road by realigning Valley Center Road approximately 75 feet eastward (and southward) to intersect SR-76 at a right angle, and realigning the curve of SR-76 just east of the intersection. The alternative would also construct a modern roundabout at the intersection. As discussed above, a portion of the existing SR-76 alignment would remain, with its entrance at the north leg of the roundabout, to maintain accessibility for the businesses and residence located at the northeast quadrant of the intersection.

The existing posted speed limits are 55 mph on SR-76 and 50 mph on Valley Center Road. However, the roundabout alternative would reduce the operating speed to 20-25 mph within the intersection.

The roundabout alternative requires approximately 3.90 acres of new right of way and 1.4 acres of construction easement. It would also require two full property acquisitions, relocation of utilities, and upgrading and modification of the existing drainage system.

Earthwork

Construction of the roundabout alternative would require roadway excavation and bringing offsite material to the project area in order to accommodate grading changes. Offsite material, or “imported borrow”, is earthen material brought from other locations.

Access and Staging Areas

All project staging would occur within State right of way. Access through the intersection and to adjacent destinations would remain available at all times throughout construction.

Mandatory Design Exceptions

Current design standards are from the 2012 Highway Design Manual. Mandatory design exceptions would be required for the following features, which do not meet current standards:

- Exceed the maximum 5% grade east of the proposed roundabout
- Maintain the 400-foot radius curve on the east end of the project
- Maintain the curve’s 6% superelevation rate
- Include reduced shoulder widths of up to 5 feet
- Exceed the maximum slope ratio of 4:1 to include design side slopes of 2.5:1 (two and a half horizontal to one vertical) to alleviate right of way impacts

1.4.2 Alternative 2: Signal Intersection

Traffic control signals that are properly designed, located, operated, and maintained can have the following advantages:

- Provide for orderly flow of traffic
- May reduce the severity and frequency of right-angle and left-turn crashes
- Provide increased safety and reduced response time for emergency vehicles when pre-emption devices are installed
- May interrupt heavy traffic to allow non-motorized traffic to cross
- Minimize delay for specific traffic movements

Project Design

This alternative proposes to remove the skew of the intersection by realigning Valley Center Road approximately 75 feet eastward to intersect SR-76 at a right angle. The alternative would also upgrade the intersection by adding right and left turn lanes, installing signal lights at the intersection, and realigning the curve just east of the intersection. A portion of the existing SR-76 alignment, from postmile 32.9 to 33.05, would remain in place, and would directly connect to the northern leg of the intersection for accessibility to businesses. The existing roadway would also be widened according to Highway Design Manual standards.

The signal alternative requires approximately 1.75 acres of new right of way and 0.9 acres of construction easement. It would also require two full property acquisitions, relocation of utilities and modification of the existing drainage system.

Earthwork

Construction of the signal alternative would require roadway excavation and imported borrow.

Access and Staging Areas

All project staging would occur within State right of way. Access through the intersection and to adjacent destinations would remain available at all times throughout construction.

Mandatory Design Exceptions

- Exceed the maximum 5% grade east of the proposed signal
- Maintain the 400-foot radius curve on the east end of the project
- Build a 400-foot radius curve with a 6% superelevation on Valley Center Road approaching the intersection
- Maintain a 6% superelevation on the curve west of the signal

1.4.3 No-Build (No-Action) Alternative

Under NEPA, the no-build alternative can be used as the baseline for comparing environmental impacts; under CEQA, the baseline for environmental impact analysis is the existing conditions at the time at which environmental studies commenced. The No-Build Alternative proposes no

improvements to the project area. This alternative would not alleviate the frequency and severity of accidents at the SR-76/Valley Center Road, and would not prevent an increase in delay times at the intersection. The no-build alternative is therefore not consistent with the purpose and need of this project.

Table 1.4.1 Project Impacts by Alternative

Alternative/Impacts	Alternative 1: Roundabout	Alternative 2: Signal	No build Alternative
Land Use	Minimal impact	Minimal impact	No impact
Farmlands	0.58 acres	0.37 acres	No impact
Community Impacts	Minimal impact	Minimal impact	No impact
Emergency Services; Traffic and Transportation	Potential impacts include minor delays during construction, as well as a change in the roadway and intersection speed during operations. The project is expected to improve traffic flow through the intersection, thus potentially reducing delays and improving response times for emergency services.		No impact
Bicycle and Pedestrian Facilities	The project would include the addition of sidewalks, crosswalks, bus pullout, up to 5-8 ft shoulders, and Americans with Disabilities Act (ADA) curb ramps.		No impact
Utilities	Potential conflicts with Yuima Municipal Water lines, SDGE electrical overhead lines, and AT&T and MediaCom telecommunication lines. Utilities may be replaced in-kind, relocated, or left in place with easements.		No impact
Required right-of-way	3.9 acres + 1.4 acres construction easement	1.7 acres + 0.9 acres const. easement	No impact
Visual/Aesthetics			
Character and Scale	Slightly alters	Slightly alters	No impact
Quality	Slightly alters	Slightly alters	No impact
Viewshed	Minor impacts	Minor impacts	No impact
Cultural Resources	Impacts avoided	Impacts avoided	No impact
Water Quality and Storm Water Runoff	The project would add 0.23 acres of new impervious surface.		No new impervious surface
Geology / Soils / Seismic / Topography	Minor grading and excavation is proposed. Minimal impacts are anticipated.		No impact
Hazardous Waste	An Initial Site Assessment (ISA) has been conducted and any recognized environmental conditions would be avoided.		No impact
Air Quality	No exceedances	No exceedances	No impact
USACE and CDFG Jurisdictional Waters Impacts	0.1 acres (permanent); 0.0 acres (temporary)		No impact
Vegetation Communities	3.32 acres (permanent); 4.52 acres (temporary)[1]	3.1 acres (permanent); 2.78 acres (temporary)[1]	No impact

[1] No special status plant species are present within the project area.

Alternative/Impacts	Alternative 1: Roundabout	Alternative 2: Signal	No build Alternative
Animal Species			
Arroyo toad suitable aestivation habitat	1.8 acre (permanent) / 0.7 acre (temporary)	0.5 acre (permanent) / 0.5 acre (temporary)	No impact
Coastal California gnatcatcher suitable habitat	0.9 acre (permanent) / 0.4 acre (temporary)	0.7 acre (permanent) / 0.04 acre (temporary)	No impact
Total Cost	$17.5 million	$15.3 million	None

1.5 Permits and Approvals Needed

Table 1.5.1 below summarizes the permits and approvals that may be required for project approval and construction.

Table 1.5.1: Permits and Approvals Required

Agency	Permit/Approval	Status
U.S. Army Corps of Engineers	Section 404 Nationwide Permit	Pending
California Department of Fish and Wildlife	1602 Agreement for Streambed Alteration	Pending
California Water Resources Board	Water Discharge Permit	Pending
Regional Water Quality Control Board	401 Certification Section 402 Permit for point source discharge of pollutant	Pending

1.6 Identification of a Preferred Alternative

After full consideration of project design, safety improvements, technical studies prepared, input from the project development team, and public comments, the Roundabout Alternative has been selected as the preferred alternative. The Roundabout Alternative would provide greater safety improvements due to fewer vehicle conflict points.

According to the FHWA, the frequency of accidents at an intersection can be related to the number of conflict points, and the severity of a collision is determined largely by the speed and angle of impact. The higher the number of conflict points, the higher the potential frequency of accidents. The higher the speed or angle of impact, the more severe the collision.

A single lane roundabout has only eight vehicle-to-vehicle conflict points in comparison to 32 conflict points for a traditional four-legged intersection. Roundabouts eliminate vehicle-to-vehicle crossing conflicts by converting all movements into right turns. Fewer conflict points result in fewer opportunities for collisions. Roundabouts have been demonstrated to be more effective than reliance on driver obedience to traffic control devices in reducing conflicts. Roundabouts include geometric features that create appropriate vehicular speed and direction. The slower speeds and smaller angles at conflict points created by these geometric features reduce the potential severity of collisions. Studies have shown that roundabouts substantially reduce fatality and injury related crashes at rural locations, including those with greater than 55 mph approaches.

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Figure 1.5.1 Alternative 1 Project Features

Figure 1.5.2 Alternative 2 Project Features

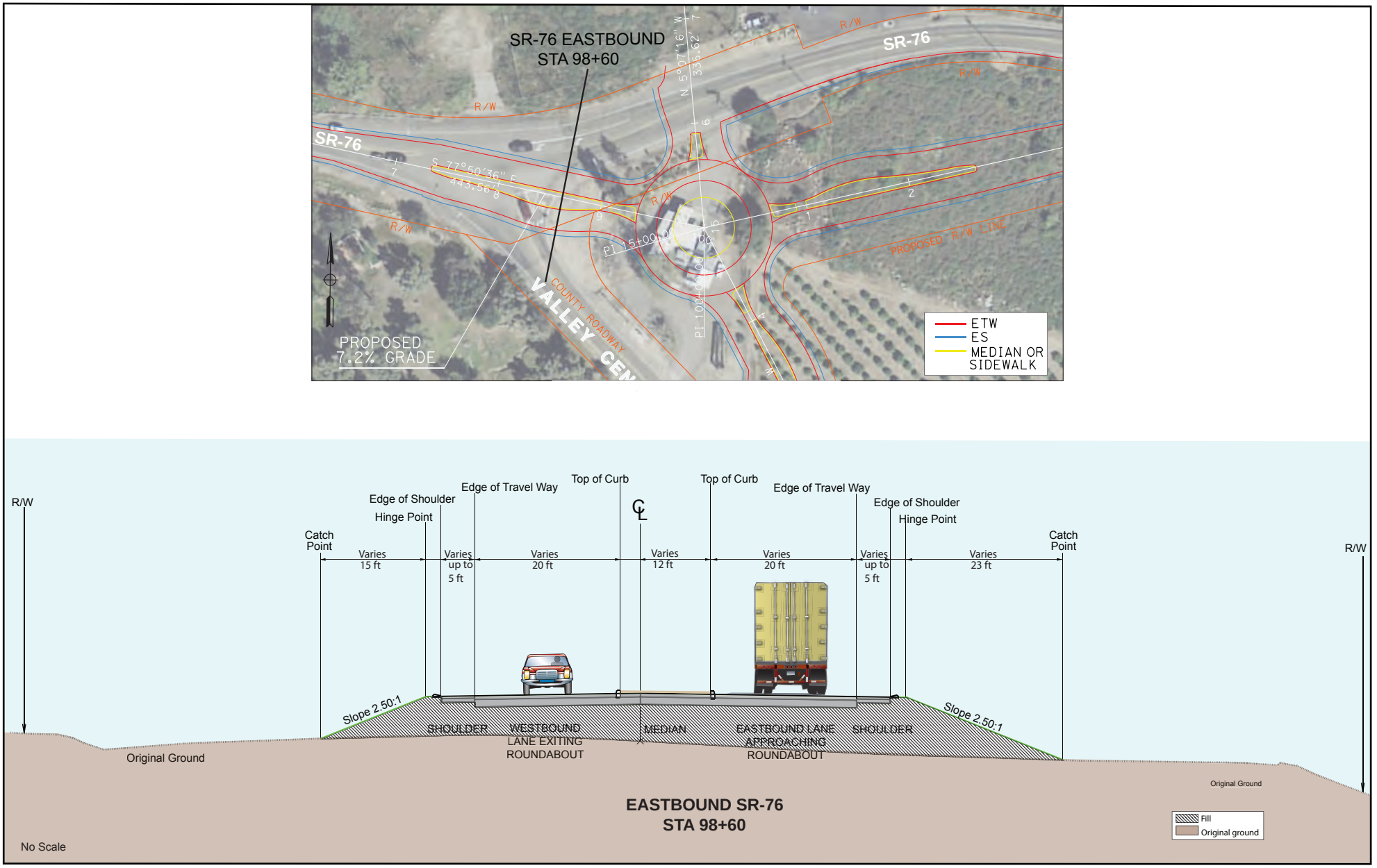


Figure 1.5.3 Cross Section of Roundabout Alternative

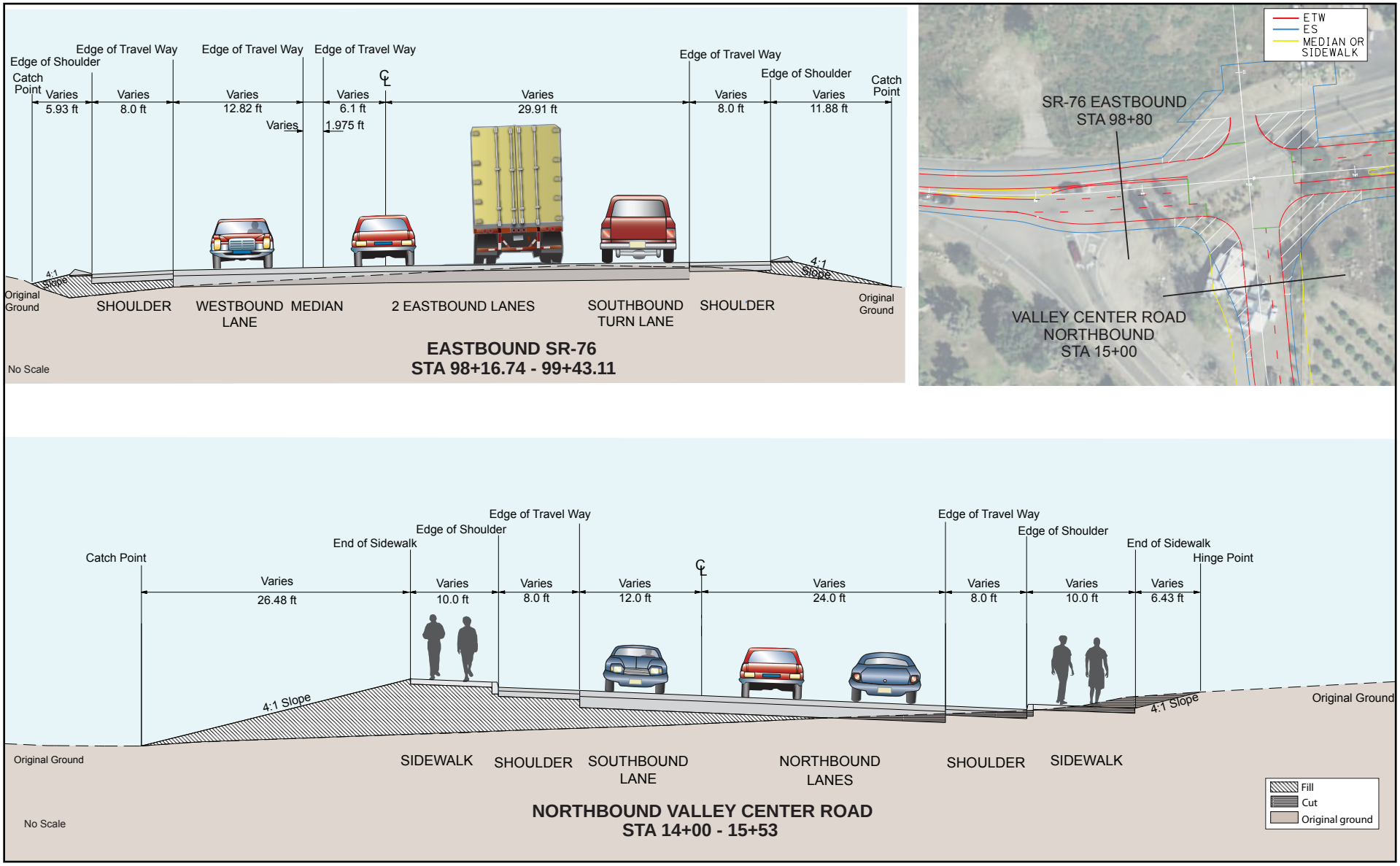


Figure 1.5.4 Cross Section of Signal Alternative

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

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

Coastal Zone

The project site is not located within the coastal zone.

Wild and Scenic Rivers

No Wild and Scenic designated rivers exist within the project footprint.

Parks and Recreational Facilities

The project would not impact any parks or recreational facilities.

Timberlands

The project would not impact any forest resources.

Growth

The project would not impact growth within the project vicinity.

Environmental Justice

The project would not result in disproportionately high and adverse effects to low-income or minority populations. All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have been included in this project. Caltrans' commitment to upholding the mandates of Title VI is demonstrated by its Title VI Policy Statement, which can be found in Appendix C .

Paleontology

The project is not located near anticipated paleontological resources; therefore, no paleontological analysis was conducted.

Hydrology and Floodplain

No adverse effects on hydrology or floodplains would occur since the project site is not situated within a floodplain and would not substantially alter existing drainage patterns.

Noise

The proposed project is not considered a capacity increasing project; therefore, noise impacts are not anticipated to occur. Per the requirements of 23 CFR 772.5(h), no noise analysis was conducted.

Section 4(f)

A resource eligible for the National Register of Historic Places is located in close proximity to the project location. However, the proposed project design would avoid the resource and no "use" of this resource would occur. Therefore, Section 4(f) impacts are not anticipated for this project.

Human Environment

2.1 Land Use

This section identifies adopted land use plans applicable to the project and discusses potential land use related impacts. Information in this section is drawn from the Community Impact Assessment prepared for this project, dated February 2014.

2.1.1 Existing and Future Land Use

The study area is located within the unincorporated Pala/Pauma Subregional Planning Area of San Diego County. Most of the land within the Pala/Pauma community planning area is rural, with large pockets of undeveloped land, as well as large areas devoted to tribal lands. Both the Pala Band of Mission Indians and Pauma Band of Mission Indians are located near the proposed project.

The project area is zoned Rural Commercial and Semi-Rural Commercial. Existing land uses in the general project vicinity are agriculture, scattered residences, commercial buildings, and undeveloped areas including native and non-native vegetation and grasslands. One government-owned and two commercial structures lie immediately adjacent to the project footprint. Land uses immediately adjacent to the project footprint are described in Table 2.1.1.

Table 2.1.1: Study Area Land Uses

Northwest of SR-76/VCR* Intersection • vacant and undeveloped land • farmland, including orchards and vineyards	Northeast of SR-76/VCR Intersection: • liquor store and taco shop • farmland, including orange orchard • informal bus stop for children enrolled in Valley Center-Pauma Unified School District
Southwest of SR-76/VCR Intersection: • olive groves • vacant and undeveloped land • Yuima Municipal Water District office • farmland, including orchards and vineyards	Southeast of SR-76/VCR Intersection: • orange and avocado orchards • MTS bus stop • vacant and undeveloped land • fruit and gift shop

*VCR = Valley Center Road

Development Trends and Developable Land

Projected population growth statistics from SANDAG suggest that population and its associated development will continue to grow within the study area and in the Region. Growth projections estimated by SANDAG between 2008 and 2050 show that growth in the study area is expected to be higher than the Region at 134% and 82% (Census Tracts 191.01 and 191.06, respectively) compared to 40% for the Region.

Expected population growth within the study area and the Region is typically outlined in the relevant general or community plan for a given jurisdiction. Since the entire study area is located within unincorporated areas of the County, the *San Diego County General Plan* is the primary document that identifies these issues. A community planning area has been developed for the Pala-Pauma area that addresses issues more specific to the study area. Some Land Use goals regarding future development in the *Pala-Pauma Subregional Plan* include the following:

- Orderly, planned growth [shall be] provided as needs arise and essential services such as water, sewer, fire protection, and schools are made available;
- Urban levels of development shall be accommodated within the designated Pauma Valley Village Boundary. Expansion of the Village Boundary shall be contingent on: availability of all necessary services at village levels for the subject area; a demonstrated need for additional village levels of development within the subregion; and environmental factors which may constrain village levels of development for the subject area;
- Protect sensitive biological resources through the resource conservation area designation. Apply low density plan designations and zoning to resource conservation areas; and
- Limit the intrusion of incompatible land uses into existing agricultural areas.

Future Land Uses

As mentioned above, development in the vicinity must be accommodated within the Pala-Pauma Community Planning area per County land use goals. Planned land uses between Interstate 15 and State Route 79 are described in Table 2.1.2.

Table 2.1.2: Planned development in the project vicinity

Name	Jurisdiction	Proposed Uses	Status
Rincon Casino Resort Expansion / Renovation	County of San Diego	14,871 square feet of new gaming floor, a 23,285-square-foot multi-purpose room, a 10,000-square-foot nightclub, expanded restaurant and ancillary facilities, a new 21-story hotel tower, a pool area, and an additional surface parking area	Final Environmental Evaluation approved in August 2012. In construction.
Warner Ranch	County of San Diego	534 single-family detached homes, 246 multi-family condominiums, a small park, and a fire station	Notice of Preparation: 2010. Project undergoing environmental analysis.
Shadow Run Ranch	County of San Diego	Residential development with approximately 44 units on 248 acres (the minimum lot size is 2 acres per unit). The land is currently in agricultural groves.	Project in planning stage. County scoping letter sent 2006. Technical documents and meetings in process.
Campus Park West	County of San Diego	355 residential units, 400,000 square feet of commercial, 347,000 square feet of industrial, 50,000 square feet of office space, 11 acres of common open space, and 47 acres of natural open space	DEIR circulated in August 2013. Project in construction.
Meadowood	County of San Diego	858 single- and multi-family homes on nearly 400 acres, with approximately 200 acres designated permanent open space. Includes natural open space areas, four miles of hiking and equestrian trails and walkways, an 8.5-acre community park, pocket parks and a 12.4-acre elementary school site.	Approved January 2012; currently working with local agencies.

Name	Jurisdiction	Proposed Uses	Status
Gregory Canyon Landfill	County of San Diego	17,770 acre landfill	Project on hold.
Pala Casino	County of San Diego	Addition of 1,500 parking spaces, 50 hotel rooms, 70,000 square feet of casino	Project completed in 2009.
Pauma Valley Estates	County of San Diego	Residential development with approximately 31 units.	In construction.

2.1.2 Consistency with State, Regional, and Local Plans and Programs

This section identifies state, regional, and local plans and programs, and describes how the project is consistent with or conforms to relevant plan and program elements. Plans discussed include the San Diego Regional Transportation Plan and Regional Transportation Improvement Program, the San Diego County General Plan, the Pala/Pauma Subregional Plan, and the Community Trails Master Plan. Consistency with these plans is summarized in Table 2.1.4 below.

Consistency with the San Diego Regional Bicycle Plan and the County of San Diego Bicycle Transportation Plan is discussed in Section 2.5: Traffic and Transportation / Pedestrian and Bicycle Facilities, on page 45.

SANDAG Regional Transportation Plan

The San Diego Association of Governments (SANDAG) adopted the 2050 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) on Friday, October 28, 2011. The Plan provides “a balanced vision for the evolution of the region’s transportation system over the next 40 years.” (SANDAG 2011)

The RTP provides a long-range plan for each region’s transportation system, as well as a listing of projects for implementation within the region. Many of the capital projects outlined in the RTP are now in development phases. The proposed project is not included in the RTP, but is included in the Grouped Project listings for Safety Improvement in the RTIP below.

SANDAG Regional Transportation Improvement Program (RTIP)

The RTIP is developed and adopted by each region’s Metropolitan Planning Organization (MPO) and/or Regional Transportation Planning Agency (RTPA). SANDAG, as the MPO for the San Diego Region, approved the 2012 RTIP on September 28, 2012, and received federal approval for the Plan on December 14, 2012.

The RTIP is a multi-billion dollar, multi-year listing of proposed projects for major highway, arterial, transit, and bikeway projects. Any transportation projects funded with federal, state or by TransNet Ordinance must be included in an approved RTIP. The RTIP covers five fiscal years, incrementally implementing the long-range 2050 RTP for the San Diego region.

Although all transportation projects with federal, state, or TransNet funding must be listed in the RTIP, Federal regulations allow MPOs to group or combine projects that are not considered to be of appropriate scale for individual listing. Such projects may be grouped by function, work type, or geographical area and must be consistent with the exempt project classification

contained in EPA's "Transportation Conformity Regulations (40 CFR part 93)." These grouped projects are often referred to as "Lump Sum Projects Listings." The proposed project falls under such a listing and is grouped under "Grouped Projects for Safety Improvements – State Highway Operation and Protection Program (SHOPP) Collision Reduction Program (CAL 46B)" with the following description:

Table 2.1.3: Project RTIP Listing

Project ID	Project Title	Project Description	Lead Agency	Fiscal Year	Total Cost
CAL295	San Diego County - Rincon Springs Rd and Water Mountain Rd	In San Diego County at Rincon from 0.2 mile west of Rincon Springs Road to 0.1 mile west of Water Mountain Road, construct roundabout and realign curve.	Caltrans	2016	$11,297,000

The project can be found in the 2012 RTIP Group Project Listings web page.

San Diego County General Plan

The San Diego County General Plan (Plan) was adopted in 1978 and revised between 2009 and 2010. The latest version was adopted on August 3, 2011. The Plan contains specific elements that pertain to the project; these elements are discussed below.

Land Use

The Land Use element describes San Diego County as having diverse unincorporated communities and rural lands. The Plan "recognizes and encourages these unique identities by providing sufficient flexibility within a countywide framework to respect the character of the individual communities, neighborhoods, and landscapes" (County of San Diego 2011). The Plan emphasizes the focus of development near existing communities in order to maximize infrastructure efficiency and preserve the rural landscape.

The central principle for unincorporated San Diego County is "a development pattern that balances the land requirements of residential growth with those of commerce, agriculture, recreation, and wildlife habitats." The Land Use Element "establishes a model for community development based on a physical structure defining communities by a 'village center' surrounded by semi-rural or rural land."[4] In this way, San Diego County encourages centralized development adjacent to the services necessary to sustain it, with greenbelts, agricultural uses, or other rural lands located outside developed areas.

The project area is zoned Rural Commercial, a designation that "provides for small-scale commercial and civic development." The designation provides that "mixed-use development may take the form of small offices or residences [with a density of] up to two units per gross acre…." The Rural Commercial designation encourages a wide variety of commercial and civic uses, including retail stores, visitor services, dining establishments, professional offices, automotive sales and services, and parks, libraries, and other community facilities.

Mobility

The Mobility Element of the San Diego County General Plan states that its primary objective is "a balanced multimodal transportation system with adequate capacity to support the land uses and development patterns in the Land Use element" (County of San Diego 2011). The Mobility

Element identifies the road classifications of various transportation corridors in the county, the existing major road system, and the planned road system intended to meet the needs of the land use element and growth projections. The Mobility Element Network map shows SR-76 and Valley Center Road classified as "Community Collector with Improvement Options" within the project area. The Community Collector series roadways have higher design speeds with minimal non-motorized traffic. Roadways designated "Community Collector with Improvement Options" have a wider right-of-way for added flexibility to accommodate improvement options such as turn lanes, medians, or passing lanes. Project compatibility with specific Mobility Element policies is discussed in Table 2.1.4.

Safety

The Safety Element of the General Plan provides policy direction in support of safety-related laws and regulations. It supports the General Plan, and addresses public safety with relation to wildfires, geological and seismic hazards, flooding, hazardous materials, law enforcement, and airport hazards. Specific Safety Element goals and project compatibility are discussed in Table 2.1.4.

Conservation and Open Space

The Conservation and Open Space Element of the San Diego County General Plan emphasizes the "conservation, management, and utilization of natural and cultural resources," and the protection of open space, parks, and recreation resources. The Open Space Element aims to conserve the resources listed above through careful direction of growth and development. Specific Conservation and Open Space Element policies and project compatibility are discussed in Table 2.1.4.

Pala/Pauma Subregional Plan

The Pala/Pauma Subregional Plan is a component of the San Diego County General Plan. It was adopted in 1979 and amended in 2011. The Plan is divided into five sections which discuss goals pertaining to Land Use, Commercial Development, Public Services and Facilities, Mobility, and Conservation and Parks. The Plan also identifies the zoning and the Resource Conservation Areas for the Subregion.

2.1.3 Environmental Consequences

Specific project impacts and their consistency with the policies set forth in the General Plan and other local plans are discussed in Table 2.1.4 below. The project is expected to remain consistent with the majority of plan policies.

Table 2.1.4: Consistency with local plans

Policy	Alternative 1	Alternative 2	No-Build Alternative
County General Plan – Mobility Element			
M-2.2: **Access to Mobility Element Designated Roads.** Minimize direct access points to Mobility Element roads from driveways and other non-through roads to maintain the capacity and improve traffic operations.	**Consistent.** The project would retain the existing alignment of SR-76 east of the intersection for approximately 0.5 miles as an access road for three local businesses and one residence. This would minimize direct access points and improve traffic operations.		**Not consistent.** The existing portion of SR-76 within the project area contains three direct access points to businesses and residences.

Policy	Alternative 1	Alternative 2	No-Build Alternative
M-2.3: **Environmentally Sensitive Road Design.** Locate and design public and private roads to minimize impacts to significant biological and other environmental and visual resources. Avoid road alignments through floodplains to minimize impacts on floodplain habitats and limit the need for constructing flood control measures. Design new roads to maintain wildlife movement and retrofit existing roads for that purpose. Utilize fencing to reduce road kill and to direct animals to undercrossings.	**Consistent.** The project has been designed to minimize impacts to environmental resources. The project area is not located within the 100- or 500-year floodplain.		**Consistent.** The No-Project Alternative would retain the current alignment of SR-76, which is consistent with preservation of existing environmental and visual resources.
M-2.5: **Minimize Excess Water Runoff**. Require road improvements to be designed and constructed to accommodate stormwater in a manner that minimizes demands upon engineered stormwater systems and to maximize the use of natural detention and infiltration techniques to mitigate environmental impacts.	**Consistent.** Neither build alternative would result in the addition of more than 1 acre of impervious surface. Further, both alternatives would modify existing flows through the intersection to improve existing runoff and improve the efficiency of the existing stormwater system.		**Consistent.** The No Build alternative would make no changes to the intersection and would add no impervious surface.
M-4.3: **Rural Roads Compatible with Rural Character.** Design and construct public roads to meet travel demands in Semi-Rural and Rural Lands that are consistent with rural character while safely accommodating transit stops when deemed necessary, along with bicyclists, pedestrians, and equestrians. Where feasible, utilize rural road design features (e.g., no curb and gutter improvements) to maintain community character.	**Not consistent.** Both build alternatives would include sidewalks, curb, and gutter. While the design of Alternative 1 and 2 increases multi-modal mobility, the sidewalk and curb and gutter features are inconsistent with the rural character of the community. However, the features are a required component of Americans with Disabilities Act (ADA) compliance. Further, it is expected that both build alternatives would improve safety for vehicles, pedestrians, and cyclists.		**Consistent.** The existing intersection alignment is consistent with the existing rural character of the area. No curbs, gutters, or ADA facilities would be constructed.
M-4.4: **Accommodate Emergency Vehicles.** Design and construct public and private roads to allow for necessary access for appropriately-sized fire apparatus and emergency vehicles while accommodating outgoing vehicles from evacuating residents.	**Consistent.** The Roundabout alternative would improve safety and visibility for all roadway users, and has been designed to accommodate emergency vehicles. The design includes a truck apron for oversize vehicles to mount the center island to accommodate a larger turning radius.	**Consistent.** The signal intersection proposed in Alternative 2 would increase the ease of access for emergency vehicles by improving safety and visibility for all traffic. The intersection and curve corrections are intended to facilitate crossing the intersection, and may reduce the time taken for emergency vehicles to pass through the intersection.	**Consistent.** The No-Build alternative would make no changes to the existing intersection.
M-4.5: **Context Sensitive Road Design.** Design and construct roads that are compatible with the local terrain and the uses, scale and pattern of the surrounding development. Provide wildlife crossings in road design and construction where it would minimize impacts in wildlife	**Consistent.** Both build alternatives would be compatible with the local terrain and the uses, scale, and pattern of the surrounding development.		**Consistent.** The No Build Alternative would make no changes to the existing intersection, which is consistent with local terrain and land use.

Policy	Alternative 1	Alternative 2	No-Build Alternative
corridors.			
M-4.6**: Interjurisdictional Coordination.** Coordinate with adjacent jurisdictions so that roads within Spheres of Influence (SOIs) or that cross jurisdictional boundaries are designed to provide a consistent cross-section and capacity. To the extent practical, coordinate with adjacent jurisdictions to construct road improvements concurrently or sequentially to optimize and maintain road capacity.	**Consistent.** Caltrans has contacted San Diego County, the managing entity for Valley Center Road, for input on the proposed project. In addition, anticipated interested parties, including local residents, businesses, schools, tribes, agencies, and government officials, will receive a copy of this document along with an opportunity to comment.		**Not Applicable.** The No Build Alternative would make no changes to the project area, and would therefore require no coordination with other jurisdictions.
M-5.2: **Impact Mitigation for New Roadways and Improvements.** Coordinate with Caltrans to mitigate negative impacts from existing, expanded, or new State freeways or highways and to reduce impacts of road improvements and/or design modifications to State facilities on adjacent communities.	**Consistent.** The project design was modified to avoid and minimize impacts to adjacent resources.		**Consistent**. The No Build alternative would constitute no changes to the area, thus resulting in no impacts to resources.
M-9.1: **Transportation Systems Management.** Explore the provision of operational improvements (i.e. adding turn lanes, acceleration lanes, intersection improvements, etc.) that increase the effective vehicular capacity of the public road network prior to increasing the number of road lanes. Ensure operational improvements do not adversely impact the transit, bicycle, and pedestrian networks.	**Consistent.** The project would improve mobility as well as safety due to the increased visibility and ease of turning provided by both alternatives. The alternatives would improve accessibility for pedestrians and transit users through the inclusion of sidewalks and bus pullouts. In addition, the project would increase safety for bicyclists due to the improved visibility through the intersection. Alternative 2 would also include left- and right-turn lanes.		**Not consistent.** The No Build alternative would not result in improvements to the intersection or traffic operations. See the traffic section for projected details about the future transportation system.
M-11.3: **Bicycle Facilities on Roads Designated in the Mobility Element.** Maximize the provision of bicycle facilities on County Mobility Element roads in Semi-Rural and Rural Lands to provide a safe and continuous bicycle network in rural areas that can be used for recreation or transportation purposes, while retaining rural character.	**Consistent.** The roundabout alternative would not provide bicycle-specific passage through the project area; however, the 20-foot circulatory roadway within the intersection and shoulders up to 5-8 feet along the roadways would provide ample room for bicycle passage.	**Consistent.** The signal alternative would include 8-foot shoulders in each direction and 12-foot travel lanes. Bicycle-specific lanes would not be included; however, the shoulders and sidewalks would provide room for bicyclists.	**Not consistent.** The No Build alternative would make no changes to the project area, which currently does not contain bicycle facilities.
County General Plan – Conservation and Open Space Element			
COS-4.3: **Stormwater Filtration.** Maximize stormwater filtration and/or infiltration in areas that are not subject to high groundwater by maximizing the natural drainage patterns and the retention of natural vegetation and other pervious surfaces. This policy shall not apply in areas with high groundwater, where raising the water table could cause septic system failures, moisture damage to building slabs, and/or other problems.	**Consistent.** Both build alternatives would require a net increase of 0.31 acres of new impervious surface, which is below the 1-acre threshold for required treatment. In addition, both build alternatives would redirect existing drainages to their appropriate locations and would install rip-rap to minimize sedimentation downstream.		**Consistent.** The No Build Alternative would make no changes to the existing stormwater filtration system.

Policy	Alternative 1	Alternative 2	No-Build Alternative
COS-5.2: **Impervious Surfaces.** Require development to minimize the use of directly connected impervious surfaces and to retain stormwater run-off caused from the development footprint at or near the site of generation.	**Consistent.** Development of new impervious surface is minimized under both build alternatives. Both build alternatives would require a net increase of 0.31 acres of impervious surface.		**Consistent.** The No Build alternative would not result in any increase to impervious surfaces.
COS-6.2: **Protection of Agricultural Operations.** Protect existing agricultural operations from encroachment of incompatible land uses.	**Not consistent.** The project has been modified to minimize agricultural impacts; however, some acquisition of agricultural land would be required for both alternatives. Alternative 1 would result in acquisition of 0.58 acres of farmland, while Alternative 2 would require 0.37 acres.		**Consistent.** The No Build alternative would result in no impacts to agricultural resources.
COS-7.1: **Archaeological Protection.** Preserve important archaeological resources from loss or destruction and require development to include appropriate mitigation to protect the quality and integrity of these resources.	**Consistent.** Both alternatives have been modified to avoid impacts to archaeological resources. See Section 2.7: Cultural Resources for more information.		**Consistent.** The No Build alternative would result in no impacts to archaeological resources.
COS-11.1: **Protection of Scenic Resources.** Require the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.	**Consistent.** Both build alternatives would result in no impacts to natural features within the project area. The projects would result in non-adverse effects to SR-76 and Valley Center Road.		**Consistent.** The No Build alternative would result in no changes to the project area.
COS-13.1: **Restrict Light and Glare.** Restrict outdoor light and glare from development projects in Semi-Rural and Rural Lands and designated rural communities to retain the quality of night skies by minimizing light pollution.	**Consistent.** The roundabout alternative would increase lighting in the project area, but would direct the lighting downward to avoid light pollution.	**Consistent.** The signal alternative would increase lighting in the project area, but would direct the lighting downward to avoid light pollution.	**Consistent.** The No Build alternative would make no changes to the project area or the level of lighting within the intersection.
COS-13.2: **Palomar and Mount Laguna.** Minimize, to the maximum extent feasible, the impact of development on the dark skies surrounding Palomar and Mount Laguna observatories to maintain dark skies which are vital to these two world-class observatories by restricting exterior light sources within the impact areas of the observatories.			
County General Plan – Safety Element			
S-1: Public Safety. Enhance public safety and the protection of public and private property.	**Consistent.** Both build alternatives are designed to increase the safety of the project area, and would increase ease of access for emergency vehicles, potentially reducing emergency response times.		**Not Applicable.** The no build alternative would make no changes to the project area.

Alternative 1: Roundabout Alternative (Preferred Alternative)

Minor land use impacts would result from Alternative 1. Portions of land would be impacted and converted from existing farmland, commercial, and open space to transportation land use. In total, the acquisition of 3.9 acres of private property would be required for this alternative, which includes 2.57 acres of vacant land, 0.58 acres of farmland, and 0.73 acres of commercial property. As shown above, the project is expected to remain consistent with General Plan and local policies.

Alternative 2: Signal Alternative

In total, the acquisition of 1.69 acres of private property would be required for this alternative. This also includes converting some commercial, farmland, and open space to transportation use.

Cumulative Impacts

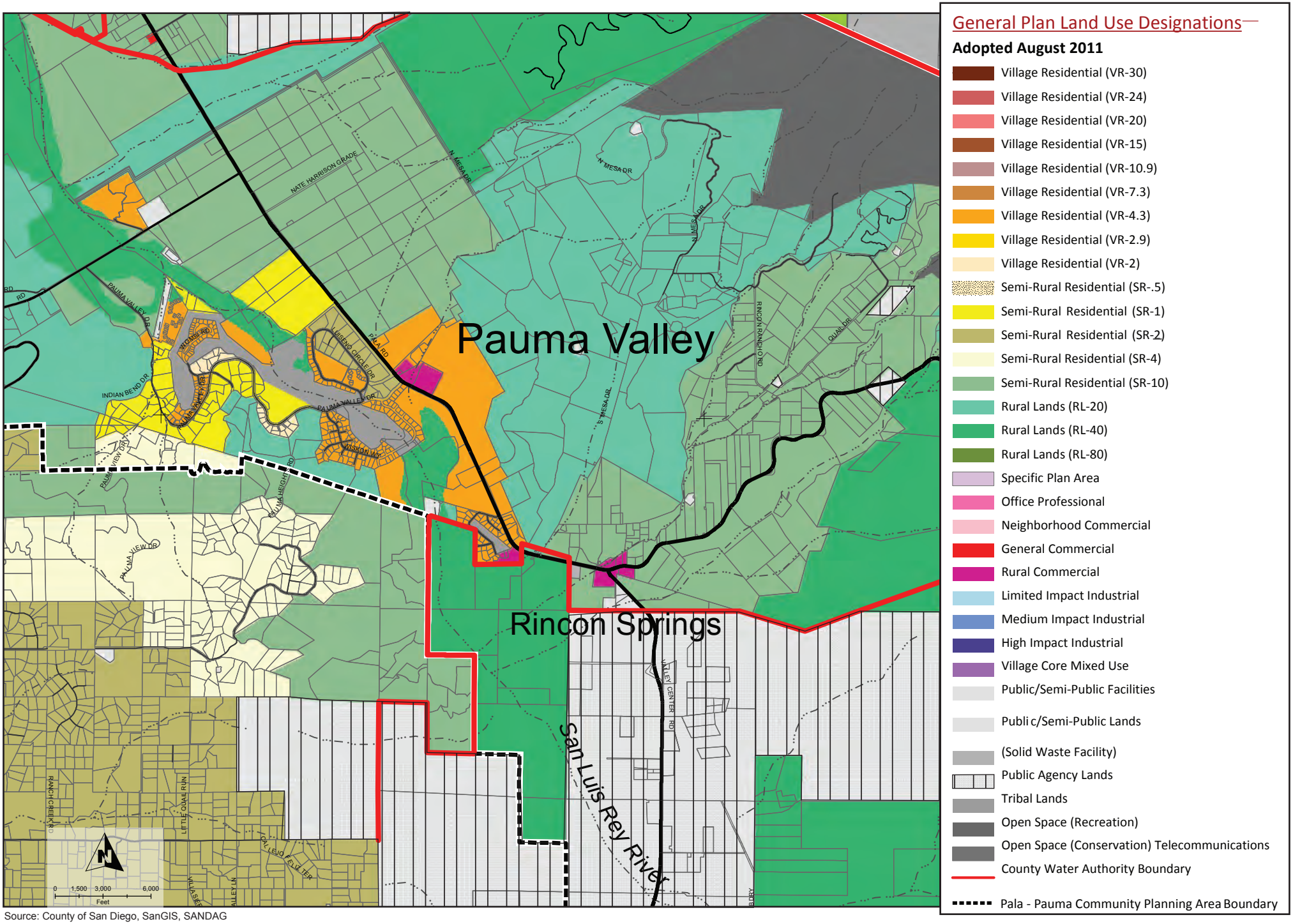
No significant impacts are anticipated for either build alternative. Further, the resource is not declining; therefore, this project is not determined to contribute to cumulative impacts.

No Build Alternative

The No Build Alternative would perform no improvements to the project area; therefore, no land use changes would occur.

2.1.4 Avoidance, Minimization, and/or Mitigation Measures

Both build alternatives have undergone several design iterations, with the goal of minimizing impacts to environmental resources in the area. Several biological and cultural resources exist adjacent to the project area, which constrain the project design. Additional concerns include avoidance of the commercial and agricultural land uses immediately adjacent to the project area. Design exceptions, including modifying standard slope designs and elevations of the roadway, have been implemented to minimize the project footprint, and avoid the above-mentioned environmental resources.



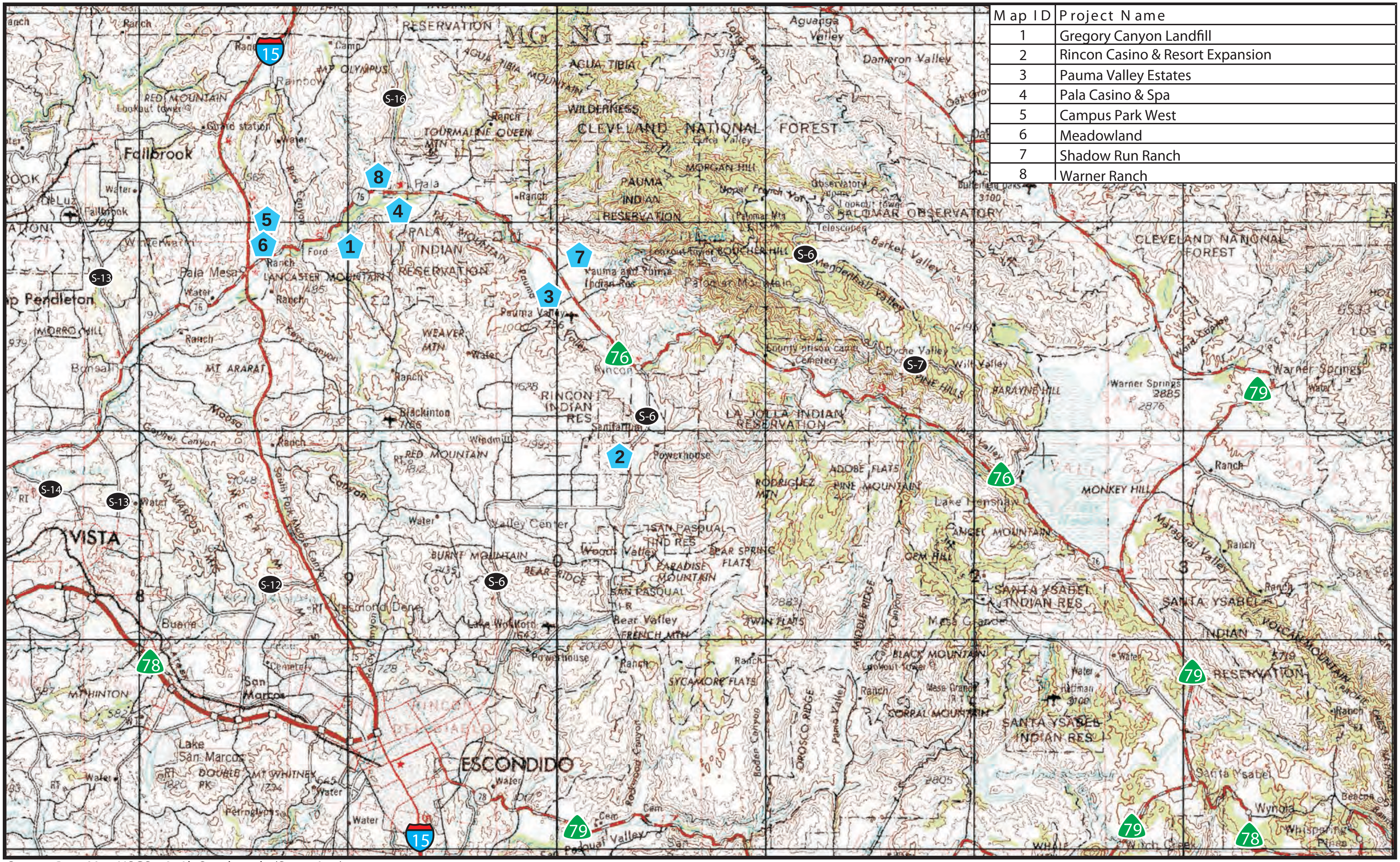
Source: County of San Diego, SanGIS, SANDAG

General Plan Land Use Designations

Adopted August 2011

- Village Residential (VR-30)
- Village Residential (VR-24)
- Village Residential (VR-20)
- Village Residential (VR-15)
- Village Residential (VR-10.9)
- Village Residential (VR-7.3)
- Village Residential (VR-4.3)
- Village Residential (VR-2.9)
- Village Residential (VR-2)
- Semi-Rural Residential (SR-.5)
- Semi-Rural Residential (SR-1)
- Semi-Rural Residential (SR-2)
- Semi-Rural Residential (SR-4)
- Semi-Rural Residential (SR-10)
- Rural Lands (RL-20)
- Rural Lands (RL-40)
- Rural Lands (RL-80)
- Specific Plan Area
- Office Professional
- Neighborhood Commercial
- General Commercial
- Rural Commercial
- Limited Impact Industrial
- Medium Impact Industrial
- High Impact Industrial
- Village Core Mixed Use
- Public/Semi-Public Facilities
- Publi c/Semi-Public Lands
- (Solid Waste Facility)
- Public Agency Lands
- Tribal Lands
- Open Space (Recreation)
- Open Space (Conservation) Telecommunications
- County Water Authority Boundary
- Pala - Pauma Community Planning Area Boundary

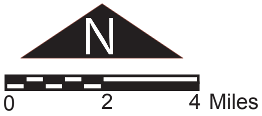
Figure 2.1.1 Pala - Pauma Community Planning Area Zoning



Map ID	Project Name
1	Gregory Canyon Landfill
2	Rincon Casino & Resort Expansion
3	Pauma Valley Estates
4	Pala Casino & Spa
5	Campus Park West
6	Meadowland
7	Shadow Run Ranch
8	Warner Ranch

Source: Base Map USGS 1:250k Quadrangle (Santa Ana)

Figure 2.1.2 Planned Development within Project Vicinity



2.2 Farmlands

2.2.1 Regulatory Setting

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

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

2.2.2 Affected Environment

Analysis in this section is derived from Chapter 2.2 of the *Community Impact Analysis*, dated February 2014.

A project study area was generated by creating a 500-foot buffer around the project limits. Within the 78.3 acre project study area, about 45 acres are actively in use for agricultural purposes. (See Figure 2.2.1 and 2.2.2) The agricultural land consists mainly of orange groves and vineyards. In 2007, San Diego County had a total of 303,889 acres of farmland, about a 25% decrease from 408,003 acres in 2002. According to the *California Farmland Conversion Report 2004-2006,* approximately 345,267 acres of farmland were converted to other uses between 2002 and 2006 throughout the entire state of California (DOC 2008).

2.2.3 Environmental Consequences

The proposed project would convert 0.58 acres of existing farmland under Alternative 1, and 0.37 acres of existing farmland under Alternative 2. Both Alternative 1 and Alternative 2 would impact the same parcel, as shown in Figure 2.2.3 and 2.2.4.

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP), which monitors and documents land use changes that affect California's farmland by conducting a biennial mapping survey and producing farmland and land use maps and statistics through the compilation of aerial photos, land management data, and Natural Resource Conservation Service (NRCS) soil quality data in a geographic information system (GIS). The program produces Important Farmland Maps, which use a classification system partially based on the NRCS soil survey maps and irrigation status to analyze impacts to farmland (California Department of Conservation, 2002). FMMP classifications are outlined in Table 2.2.1. The first four categories are collectively known as Important Farmland.

Table 2.2.1: Farmland Designations

Classification	Definition
Prime Farmland	Land with the best combination of physical and chemical characteristics able to sustain long-term production of agricultural crops.
Farmland of Statewide Importance	Land with a good combination of physical and chemical characteristics for agricultural use, having only minor shortcomings, such as less ability to store soil moisture, compared to Prime Farmland.
Unique Farmland	Land used for production of the state's major crops on soils not qualifying for prime or statewide importance. This land is usually irrigated but may include nonirrigated fruits and vegetables as found in some climatic zones in California.
Farmland of Local Importance	Land that meets all the characteristics of Prime and Statewide, but may not necessarily be irrigated. Farmlands not covered by the above categories, but which are of significant economic importance to the County. They have a history of good production for locally adapted crops. The soils are grouped in types that are suitable for truck crops and soils suited for orchard crops.
Grazing Land	Land on which the existing vegetation is suitable for grazing of livestock. The minimum mapping unit for this category is 40 acres.
Urban and Built-Up Land (non-farmland)	Residential land with a density of at least six units per 10-acre parcel, as well as land used for industrial and commercial purposes, golf courses, landfills, airports, water treatment, and water control structures.
Other Land (non-farmland)	Land does not meet the criteria of any other category. Common examples include low-density rural developments, wetlands, dense brush and timberlands, gravel pits, and small water bodies.

As shown in Figure 2.2.1, Unique Farmland is located adjacent to the proposed project and less than one acre would be directly impacted by both build alternatives. There is no Prime Farmland or Williamson Act land in the project area. Farmlands are located both north and south of the existing SR-76 roadway in small parcels. The primary impact area (the area within a 500 ft buffer around the project area) contains a mix of Unique Farmland and Urban and Built-Up Land.

Natural Resource Conservation Service (NRCS) Coordination

A "Farmland Conversion Impact Rating" form (Form NRCS-CPA-106) has been completed and is included in the appendices; see Appendix D: Forms and Correspondence for Form NRCS-CPA-106. Form NRCS-CPA-106 assesses the agricultural impacts of a given project by determining extent to which the project area is conducive to further agricultural use, and the level of direct impact sustained by the project. Specifically, the form requires the project proponent to rate the project area based on the following characteristics:

- The quality of farmland impacted
- The amount of farmland within the project area
- The size of the impacted farm compared to the local average
- The amount of nearby "non-urban" land

- The presence of farm support services
- The level of on-site investment made by the owner of the parcel.

Higher ratings on the form mean that the project has greater impacts to agricultural resources. When the form is complete, ratings are totaled; projects reaching a threshold of 160 points require further collaboration with the Natural Resource Conservation Service. The following paragraphs discuss completion of form NRCS-CPA-106 for the proposed project, including a general discussion of how points were awarded.

As indicated in the project area description in Section 2.2.1, the SR-76/Valley Center Road intersection and greater area contains a substantial amount of non urban land and farmland (much of which is categorized "unique"); however, implementation of the project would result in a low conversion of farmland within the project area. The project scores on the Farmland Conversion Impact Rating Form are discussed in Table 2.2.2 below. A more detailed discussion of the points and how they were awarded can be found in the Farmland section of the Community Impact Assessment.

Based on the NRCS rating system, the project does not meet the "significance" threshold for impacts to farmland under CEQA. Form NRCS-CPA-106 and project maps were sent to NRCS on January 27, 2014 and they concurred on March 3, 2014.

Farmland Conversion

Approximately 45 acres of farmland are located within the Project Study Area (see Figure 2.2.1 and 2.2.2). Both build alternatives would result in direct impacts to less than one acre of farmland.

According to the Farmland Monitoring and Mapping Program (FMMP), the farmland within the project area is classified "unique", due to its use in production of one of the state's major crops, including oranges. The project would not affect any "prime" farmland.

Under Alternative 1, approximately 0.58 acres of farmland would be converted into Caltrans right of way. Under Alternative 2, 0.37 acres would be converted. No agricultural parcels would be bisected or otherwise rendered not viable for agricultural uses under either alternative. The project would not impact Williamson Act contract land.

Table 2.2.2: Farmland Conversion by Alternative

Alternative	Land Converted (acres)	Prime & Unique farmland (acres)	Percent of farmland in County	Percent of farmland in State	Farmland Conversion Impact Rating
1 (Roundabout) (Preferred Alternative)	0.58	0.58	.0002%	.000001%	62
2 (Signal)	0.37	0.37	.0001%	.000001%	60
(No Build)	0	0	0	0	0

Cumulative Impacts

Both build alternatives would require acquisitions of existing farmland as shown in Table 2.2.2 above. Both Alternative 1 and Alternative 2 would require acquisitions of less than 2% of each affected parcel. Although the acreage of active farmland is decreasing throughout San Diego

County, the minor level of farmland acquisition in this project does not represent a cumulative impact to this resource.

No Build Alternative

The No Build Alternative would result in no changes to the project area. Therefore, no farmland impacts would occur as a result of the project.

2.2.4 Avoidance, Minimization, and/or Mitigation Measures

In order to minimize the project footprint and reduce impacts to the farmland adjacent to the roadway, both build alternatives have received design exceptions, including modifying standard slope designs and roadway elevations. Under each build alternative, 0.58 or 0.37 acres of farmland would be acquired as state right of way.

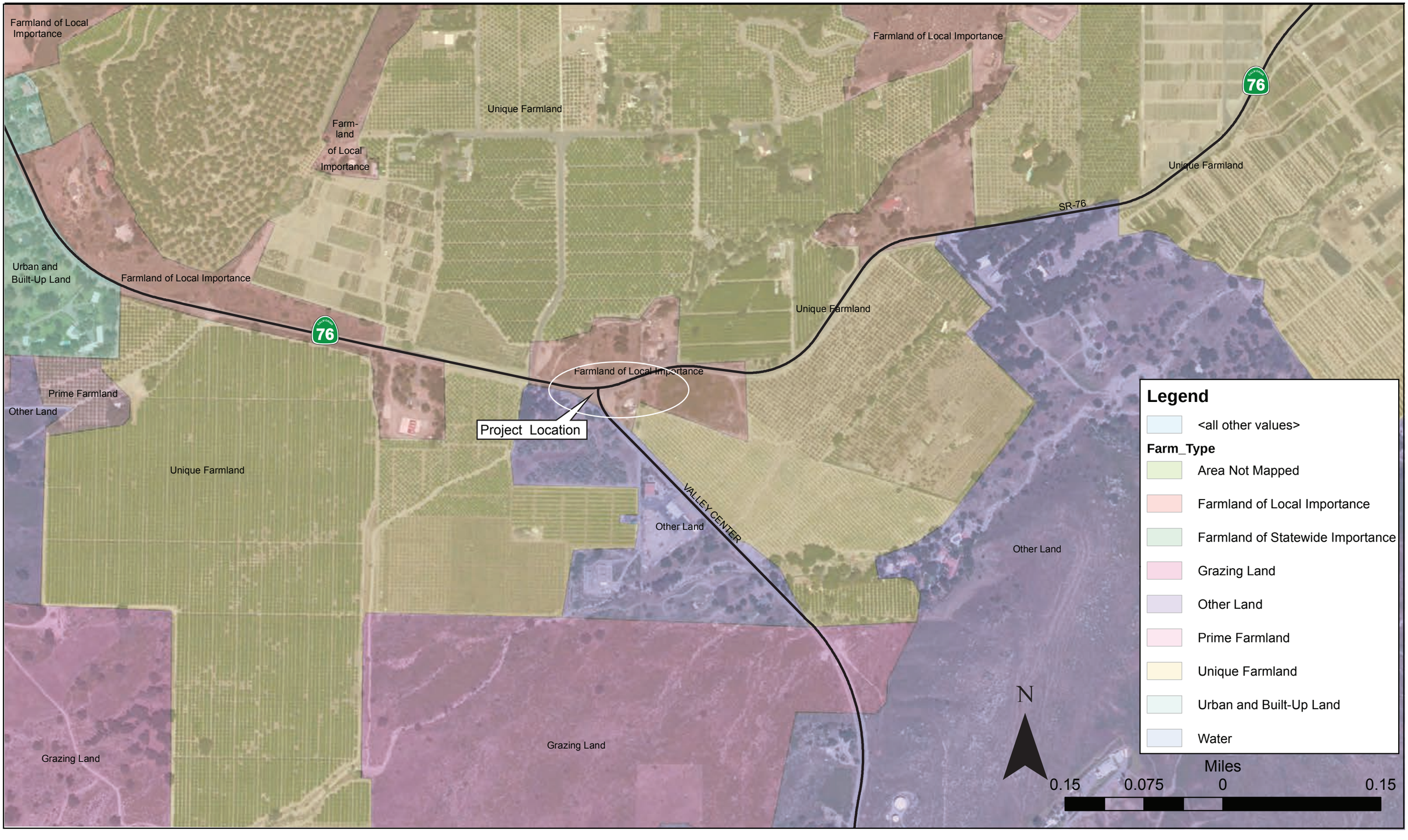


Figure 2.2.1 Farmland Designations within Project Vicinity

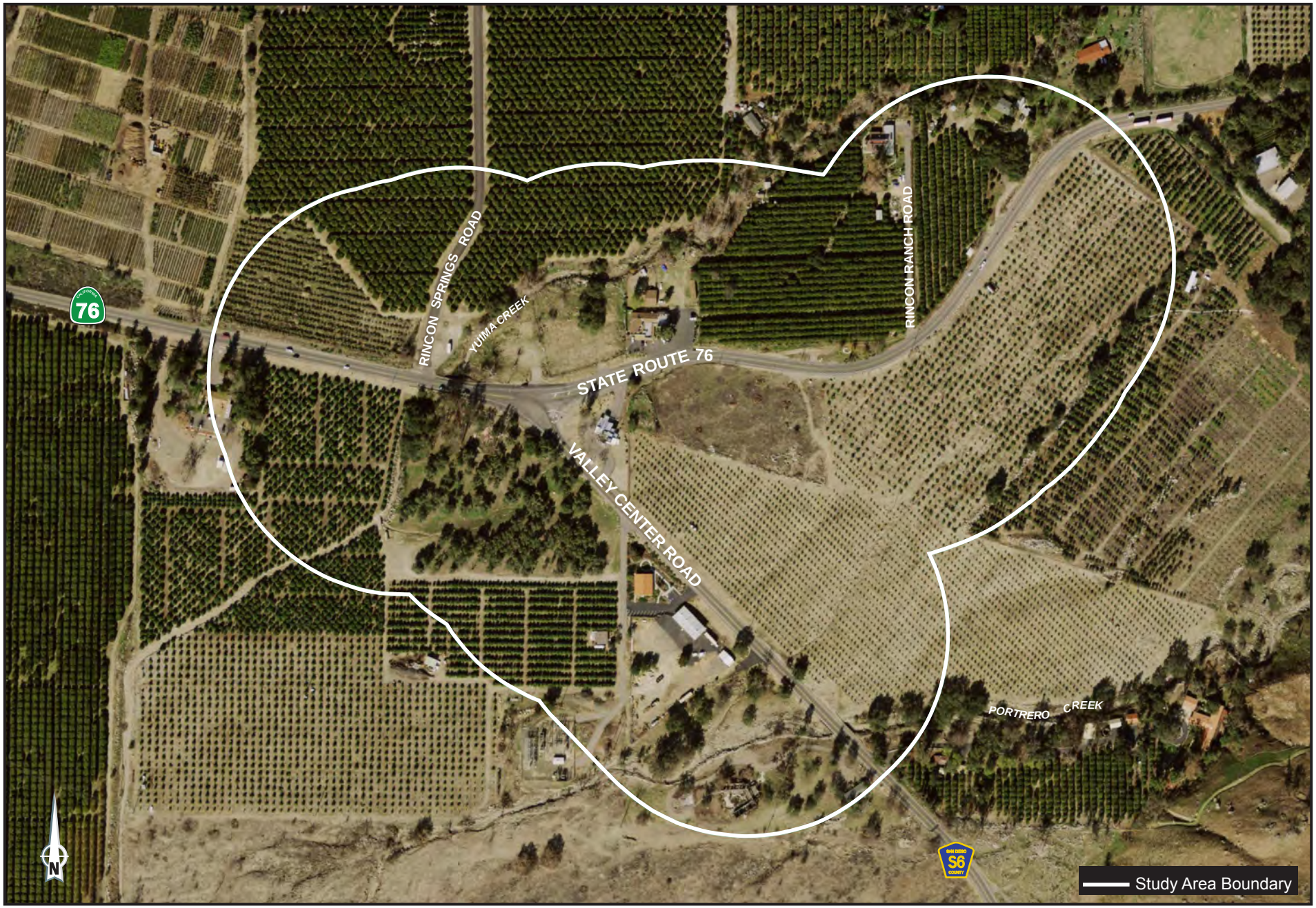


Figure 2.2.2 Farmland Study Area

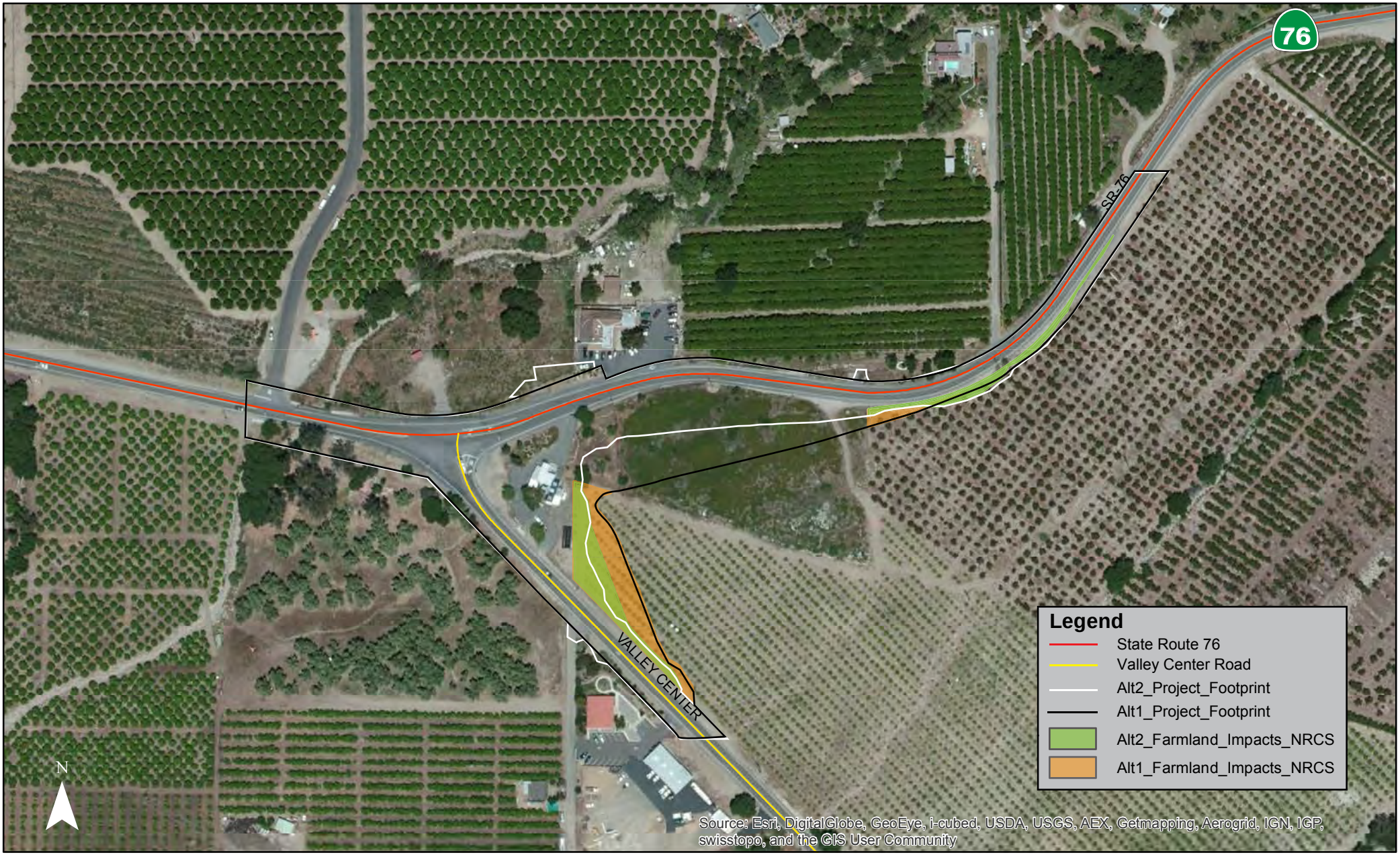


Figure 2.2.3 Farmland Impacts of Build Alternatives

2.3 Community Impacts

2.3.1 Community Character and Cohesion

2.3.1.1 Regulatory Setting

The National Environmental Policy Act of 1969 (NEPA), as amended, established that the federal government use all practicable means to ensure that all Americans have safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). The Federal Highway Administration in its implementation of NEPA (23 United States Code [USC] 109[h]) directs that final decisions on 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 (CEQA), an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

2.3.1.2 Affected Environment

Analysis in this section is drawn from the *Community Impact Analysis*, dated February 2014.

This section provides an overview of the communities surrounding the project site, including local activity centers such as schools and parks within the project study area. Demographics of the communities are summarized, and community character and factors related to community cohesion are discussed.

This section provides an overview of population growth, race and ethnicity, age, and housing. Regional comparisons of the demographic data are made to provide a sense of the qualities unique to the study area. Analysis of community character is based upon the study area derived from the boundaries of Census Tracts 191.01 and 191.06 (see Figure 2.3.1). Census-based data are presented in this section for the study area and the San Diego Region.

Population Growth

It is anticipated that population in the San Diego region will continue to grow. The San Diego Association of Governments (SANDAG) *2050 Regional Growth Forecast* predicts that by 2050, the region's population will increase by 40% compared to 2008 levels, while the population of the project study area, will increase by 134% and 82%, in Census Tracts 191.01 and 191.06, respectively. (See Table 2.3.1). (SANDAG 2010)

Population density within the study area varies. The area located immediately adjacent to the project footprint has a very low density, as land uses consist of farmland, commercial, and vacant land. The portion of Census Tract 191.06 that lies southwest of the project footprint is more suburban in nature and has a higher density of housing. The northern portion of Census Tract 191.01 is less dense, with small pockets of housing occurring throughout the census tract.

Table 2.3.1: Forecasted Population Growth in Study Area and the San Diego Region

	2008	2020	2030	2040	2050	% Change 2008-2050
CT 191.01	5,271	5,908	7,668	10,554	12,349	134%
CT 191.06	8,162	9,633	12,664	14,677	14,833	82%
Region	3,131,552	3,535,000	3,870,000	4,163,688	4,384,867	40%

Source: SANDAG Data Warehouse: 2050 Forecast

Demographics

Community cohesion can be evaluated by looking at the demographic characteristics of age, ethnicity, household size, and length of residency for those residing in the area. Selected demographic data for the Project Study Area is presented in Table 2.3.2 below.

Table 2.3.2: Selected Demographic Data for Project Study Area

Category	CT 191.01	CT 191.06	San Diego Region
Population Characteristics			
Total Population	7,458	9,131	3,095,313
Persons in Household	7,433	9,104	2,993,347
In Group Quarters	25	27	101,966
Household Population Characteristics			
Persons Per Household	3.12	3.12	2.75
White	3,101 (42%)	4,972 (54%)	1,500,047 (48%)
Black	97 (1%)	72 (1%)	146,600 (5%)
American Indian	1,082 (15%)	687 (8%)	14,098 (0.5%)
Asian	283 (4%)	231(3%)	341,562 (11%)
All Other	198 (3%)	279 (3%)	101,658 (3%)
Hispanic	2,697 (36%)	2,890 (32%)	991,348 (32%)
Median Age	34.5	39.9	34.7
Persons 65+ Years of Age	693	1,133	351,425
Under 18	2,093	2,397	724,168
Housing Characteristics			
Total Housing Units	2,653	3,251	1,164,786
Percent Owner-Occupied	75%	76%	54%
Percent Renter-Occupied	25%	24%	46%
Single Family	2,265	2,761	561,890
Multi-Family	41	104	553,545
Mobile Home or Other	139	128	42,641
Occupied housing units	2,386	2,916	1,086,865
Vacant housing units (percent)	10%	10%	7%
Income Characteristics			
Median household income	$65,424	$82,596	$44,772
Unemployment rate	5%	5%	6%
Percent below poverty level	5%	4%	9%

Source: SANDAG Profile Warehouse: U.S. Census Bureau: Census 2010 & American Factfinder

2.3.1.3 Environmental Consequences

Community Character and Cohesion

Impacts to community cohesion, under Federal guidelines, are expected to occur when any of the following occur as a result of the project:

- A disruption or division of the physical arrangement of an established community
- A conflict with established recreational, educational, religious, or scientific uses of the area

The immediate project area is not determined to have a defined community character or cohesion. It consists of scattered businesses and residences, mixed amongst open space and farmland. Neither build alternative would divide the community or conflict with established community facilities.

Alternative 1: Roundabout (Preferred Alternative)

Alternative 1 would moderately impact the existing visual character of the project area (*Visual Impact Assessment* December 2013). It would have the greatest visual impact of the three alternatives. The roundabout would include island dividers, a raised central island in the intersection, and colored concrete or pavers. Some mature trees may also be removed for this alternative. The scale of the existing roadway junction would almost double in size with this alternative.

Alternative 2: Signal Intersection

Alternative 2 would have a lower level of impact on the existing visual character of the project area. The overall visual impact would be low because this alternative would only have a slight change from the existing alignment. This alternative includes installation of traffic signals and street lights. Some mature trees may also be removed for this alternative.

Cumulative Impacts

Community cohesion within the project area is not diminishing and neither build alternative would divide the community or conflict with community facilities. Community character is not diminishing, and although the roundabout alternative would present a slight difference in character from the existing intersection, neither build alternative would significantly alter future development patterns. Therefore, cumulative impacts are not anticipated for this resource.

No Build Alternative

The No Build Alternative would perform no improvements to the project area. Therefore, no changes to community character or cohesion would occur.

2.3.1.4 Avoidance, Minimization, and/or Mitigation Measures

Both alternatives include the installation of street lighting. Since the project area is located in close vicinity to the Mount Palomar Observatory, night-time light pollution would be minimized. All street illumination would be projected or reflected downward per County of San Diego Dark Skies Guidelines.

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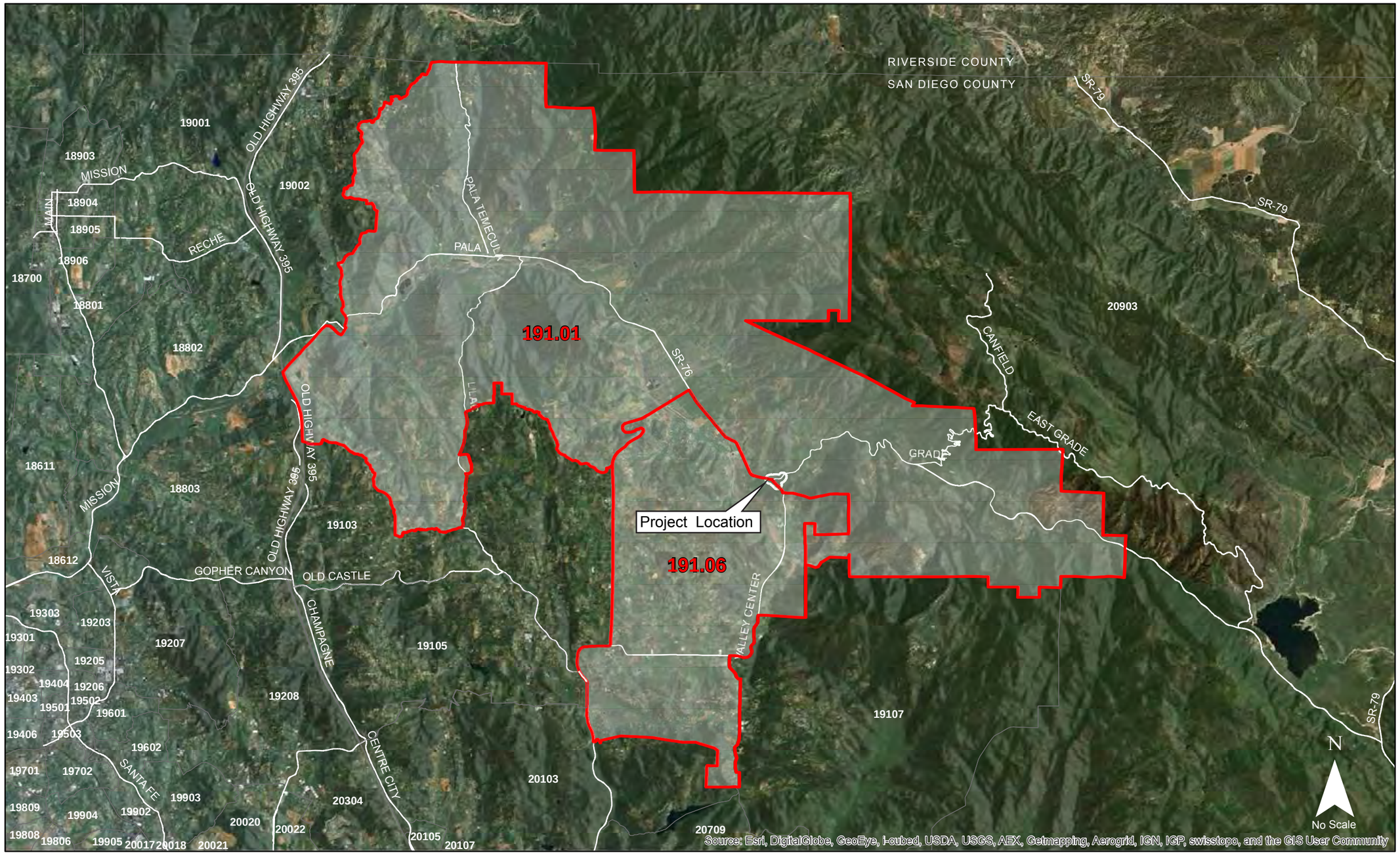

Figure 2.3.1: Community Impact Study Area (Census Tracts 191.06 and 191.01)

2.3.2 Relocations and Real Property Acquisition

2.3.2.1 Regulatory Setting

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

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

A Draft Relocation Impact Memorandum was completed on February 4, 2014. It found that there is no significant impact to owners, tenants, businesses or persons in possession of real property to be acquired who would qualify for relocation assistance benefits or entitlements under the Uniform Relocation Assistance and Real Property Act of 1970.

A field review of the proposed project was conducted to determine the potential impact on the residential and nonresidential units. There are no residential dwelling units within the project area. There is one nonresidential commercial building that would need to be acquired requiring the displacement of a business for both alternatives. The business is a fruit stand and gift shop which should be able to find a suitable replacement site in the area if relocation is desired.

2.3.2.2 Affected Environment

The project study area is rural with farmland, and three commercial businesses located adjacent to the project footprint. Both proposed Build Alternatives would impact adjacent properties. Impacts include partial acquisition of various land uses, including farmland, open space, and commercial property. Two full property acquisitions may be required. More details regarding this displacement are below.

2.3.2.3 Environmental Consequences

The Draft Relocation Impact Memorandum (DRIM) prepared in February 2014 forms the preliminary basis for the analysis of relocation impacts (See Appendix D: Forms and Correspondence for more information). Implementation of either build alternatives would result in the displacement of one commercial building. The business is a fruit stand and gift shop. According to the DRIM, it would be possible for this business to find a suitable replacement site in the area.

The following table identifies the proposed right-of-way acquisitions necessary to construct both build alternatives of the project. While most of the acquisitions would be partial and would not affect existing uses, the project may require full acquisition of two properties.

Table 2.3.3: Anticipated Property Acquisition

APN / Parcel #	Type of use	Type of acquisition	Acreage of acquisition (Alt 1) (Preferred Alternative)	Acreage of acquisition (Alt 2)	Acreage of parcel
133-050-19	Farmland	Partial acquisition	0.04 acres	0.11 acres	10.56 acres
133-050-21	Farmland	Partial acquisition	0.54 acres	0.26 acres	14.03 acres
133-050-23	Business	Full acquisition	0.73 acres	0.73 acres	0.73 acres
133-050-24	Vacant	Full acquisition	2.57 acres	2.57 acres	2.57 acres

No Build Alternative

Under the No Build Alternative, no property would be acquired because no construction would occur.

2.3.2.4 Avoidance, Minimization, and/or Mitigation Measures

The project has been designed to minimize impacts to residents and businesses by minimizing right of way acquisition and limiting project grading while still meeting project objectives. There would be no relocation for the full acquisition of the business; however, in all right of way acquisitions, property owners shall receive offers commensurate with market value for their properties (or portions thereof).

Any person (individual, family, corporation, partnership, or association) is eligible for “Relocation Assistance” if the person:

- moves from real property as a result of the acquisition of real property,
- moves personal property from real property as a result of the acquisition of real property, or
- is required to relocate, as a result of a written notice from Caltrans, from real property required for a transportation project.

All activities would be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Relocation resources shall be available to all displacees free of discrimination.

2.4 Utilities/Emergency Services

2.4.1 Affected Environment

Utilities

Within the proposed project area are several utilities that could be affected by construction of the project. These include telephone, telecommunication, and cable television lines owned and operated by AT&T and MediaCom, water facilities operated by Yuima Water, and electrical service provided by San Diego Gas and Electric (SDG&E).

Emergency Services

Emergency services include fire protection, emergency medical services (EMS), and police protection. Emergency service providers within 10 miles of the project footprint are identified in Table 2.4.1.

Table 2.4.1: Emergency Service Providers within 10 miles of project

Service	Address	Distance from Project
California Department of Forestry and Fire Protection (CAL FIRE) – Rincon Station	16971 California 76, Pauma Valley, CA 92061	0.2 miles
Pala Fire Station	34884 Lilac Road Pala, CA 92059	7.8 miles
Valley Center Fire Protection District (Station 73)	28205 North Lake Wohlford Road Valley Center, CA 92082	4.4 miles
San Diego County Sheriff	28205 North Lake Wohlford Road Valley Center, CA 92082	4.4 miles
San Pasqual Reservation Fire	16150 Kumeyaay Way Valley Center, CA 92082	5.2 miles
California Department of Forestry and Fire Protection (CAL FIRE) – Valley Center Station	14946 Vesper Road Valley Center, CA 92082	4.6 miles
La Jolla Tribe Fire Station	22299 Pala Road Pauma Valley, CA 92061	8.5 miles
Rincon Reservation Fire Station	33485 Valley Center Road Valley Center CA, 92082	2.5 miles

2.4.2 Environmental Consequences

Utilities

The utilities are located within the alignment of SR-76 by easement. Any relocation of existing utilities should be minor and would locate utilities within existing state right-of-way. See Table 2.4.2 below for a complete listing of utilities located within the project area.

Environmental effects resulting from ground disturbance within the proposed right of way, including removal and/or relocation of the facilities, have been assessed under the respective environmental issue sections in this document. The relocation of underground water or wastewater lines would be coordinated with Yuima Municipal Water District.

Table 2.4.2: Affected utilities within project area

Owner	Facility	Location	Potential Conflict	Proposed Resolutions
Yuima Municipal Water District (Yuima Water)	Water - 14" CMLC	Sta. 94+00 to 102+00 - "76" Alignment	Grading Changes	• Lower or leave in place and create easement; OR • Relocate portions into state right of way
Yuima Water	Water - 16" CMLC	Sta. 94+00 to 98+00 - "76" Alignment	Grading Changes	
Yuima Water	Water - 6" CMLW	Sta. 10+00 to 16+00 - "Valley Center" Alignment	Grading Changes	
Yuima Water	Water - 6" PVC	Sta. 10+00 to 16+00 - "Valley Center" Alignment	Grading Changes	
SDGE	Electrical OH	Sta. 94+00 to 108+00 - "76" Alignment	Grading Changes	• Leave portions in place and create easements (including guy wire); OR • Relocate remaining, including additional guy wire
ATT	Telecommunication OH	Sta. 94+00 to 108+00 - "76" Alignment	Grading Changes	
MediaCom	Telecommunication OH	Sta. 101+00 to 108+00 - "76" Alignment	Grading Changes	
SDGE	Electrical OH	Sta. 10+00 to 14+50 - "Valley Center" Alignment	Grading Changes	
ATT	Telecommunication OH	Sta. 10+00 to 16+00 - "Valley Center" Alignment	Grading Changes	
SDGE	Electrical OH	Sta. 10+00 to 16+00 - "Valley Center" Alignment	Grading Changes	
SDGE	Electrical OH	Sta. 100+50 - "76" Alignment	Grading Changes	

Emergency Services

Construction of either build alternative may include temporary lane closures or other delays that would temporarily disrupt travel within the project intersection, potentially affecting response time during construction. However, one lane of traffic would be open at all times for travel through the project area.

The potential project upon completion could improve emergency response times through sight distance improvements for emergency vehicles entering the intersection, as well as for improving other motorists' awareness of the presence of emergency vehicles.

Refer to Chapter 3: Comments and Coordination for a full list of utilities, emergency service providers, and regulatory authorities contacted within the project area about the proposed project.

Cumulative Impacts

Neither utilities nor emergency services are becoming degraded within the project area or vicinity. Neither build alternative would cause the resources to degrade. Therefore, cumulative impacts are not anticipated for these resources.

No Build Alternative

No utility conflicts or impacts to emergency services would result from the No Build Alternative, since no construction would occur. However, implementation of the No Build Alternative would also not result in safety or potential emergency response time improvements within the intersection.

2.4.3 Avoidance, Minimization, and/or Mitigation Measures

- Access to emergency services during construction would be maintained at all times, and a transportation management plan would be implemented to provide passage for emergency vehicles on roadways that are temporarily affected.
- Emergency response service providers would be notified in advance of the proposed locations, nature, timing, and duration of any construction activities. They would be advised in advance of any access restrictions.
- Any required utility relocations or protection measures would be coordinated with the utility owners during the design process.
- The transportation management plan would include a public awareness campaign prior to and during construction. The campaign would include motorist information strategies, including signage and public notices.
- A waste management plan would be implemented during project construction to minimize generation of construction debris and solid waste throughout the construction phase of the project.

2.5 Traffic and Transportation/Pedestrian and Bicycle Facilities

2.5.1 Regulatory Setting

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

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

2.5.2 Affected Environment

Traffic and Transportation

This project was initiated by the Caltrans District 11 Traffic Operations division after it was determined that the highway segment of postmile 32.6-33.2 had an annual collision average of 5.39 accidents per 1 million vehicles, which is higher than the statewide average of 1.30 accidents per million vehicles on rural highways (CHP 2001-2005). The analysis concluded that the observed collision patterns would be best addressed with curve and sight distance improvements and an intersection upgrade.

Pedestrian and Bicycle Access

Information and analysis in this section is drawn from the *County of San Diego Bicycle Transportation Plan* dated December 2003, and the Mobility Element of the 2011 San Diego County General Plan Update, dated August 2011.

The Pala-Pauma community does not have any existing bikeways at this time. However, bicycles are allowed on the paved areas of SR-76 for the entire length of the route.

Bicycle facilities are categorized based on the amount of infrastructure provided to bicyclists. A Class III bike route consists of signage designating a “bicycle route”, or otherwise notifying motorists of bicycle presence. Class II bike lanes are lines painted on the ground. Both Class II and III bicycle facilities involve bicyclists sharing the same roadway as motorists. Class I bike paths, which are generally paved alongside motorways or feature physical barriers such as fences or concrete railing, completely separate bicyclists from automobiles.

The County of San Diego Bicycle Transportation Plan “serves as a policy document to guide the development and maintenance of a bicycle network.” The Plan aims to “create the foundation for a bicycle friendly environment to serve commuter and recreational riders.” The Bicycle Transportation Plan recommends projects based on the following criteria:

- Regional connectivity
- Closing gaps in the bikeway network
- Input from the public and community workshops
- Availability of street width or right of way
- Existing street improvement plans

Based on the above criteria, sections of SR-76 and Valley Center Road were designated for planned bicycle facilities in the 2003 Bicycle Transportation Plan. The 2003 Bicycle Transportation Plan has been accompanied by the Mobility Element of the 2011 San Diego County General Plan update. The Mobility Element states that SR-76 is planned as a Class II bicycle facility for its entire alignment within the Pala/Pauma Community. Valley Center Road, which was planned as a Class III bicycle facility within the project area under the 2003 Bicycle Transportation Plan, has no bicycle designation in the 2011 General Plan Update.

Public Transportation

The North County Transit District (NCTD) operates Breeze bus route 388, which passes through the project area. Route 388 travels along SR-76 and Valley Center Road, passing through the communities of Pala and Rincon as well as the City of Escondido. The route runs on weekdays,

Saturdays, Sundays, and holidays from 5:00 am to 7:00 pm with headways every two hours, in a 90-minute loop between the Escondido Transit Center and Pala Casino.

2.5.3 Environmental Consequences

Pedestrian and Bicycle Access

Portions of SR-76 within the project area are listed as planned Class II bicycle facilities, or areas designated for future bicycle lanes. Alternative 2 would include 8-foot shoulders within the project area. Alternative 1 would include 5- to 8-foot shoulders, and could accommodate cyclists within the roadway or the 5-foot sidewalks, and within the intersection in the 20-foot circulatory of the roundabout, or within crosswalks.

Under both build alternatives, the proposed project would include the installation of sidewalks along Valley Center Road and SR-76. In compliance with the Americans with Disabilities Act (ADA), the proposed project would also include ADA-approved accessible curb ramps and painted crosswalks for pedestrians.

Transit Access

Both build alternatives would retain compatibility with bus service, and service would continue throughout construction. For both alternatives, a bus pullout would be constructed on both sides of Valley Center Road for northbound and southbound use by the NCTD and the Valley Center-Pauma Unified School District. The sidewalks and crosswalks to be constructed within the project area would increase safety for transit users.

Traffic and Transportation

Neither build alternative would reduce or increase capacity within the project area. However, northbound vehicles on Valley Center Road turning left onto westbound SR-76 currently experience average delays of 37.2 seconds and average queues of 8.3 vehicles (based on Caltrans traffic surveys; see Section 2.20: Climate Change for more information). Traffic study results shown in Table 2.20.2 and Table 2.20.3 in the Climate Change section illustrate that under both build alternatives, delay times may be reduced.

The project would increase the safety of ingress and egress points for adjacent businesses and residents, and would also reduce the number of driveways directly connected to the highway.

Cumulative Impacts

According to traffic studies, traffic within the project area is expected to increase over the next twenty years. Both build alternatives are expected to improve operations for vehicles as well as pedestrians, cyclists, and transit vehicles. Therefore, there would be no negative cumulative impacts under either build alternative.

No Build Alternative

The No Build Alternative would result in no improvements to the project area. It would therefore have no construction impacts, and would result in no improvements to pedestrian mobility, transit access, or level of service for vehicles.

2.5.4 Avoidance, Minimization, and/or Mitigation Measures

Avoidance, minimization, and mitigation measures are discussed in Section 2.18: Construction Impacts. Coordination with local groups is discussed in Chapter 3: Comments and Coordination.

2.6 Visual/Aesthetics

2.6.1 Regulatory Setting

The National Environmental Policy Act of 1969 as amended (NEPA) 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 [USC] 4331[b][2]). To further emphasize this point, the Federal Highway Administration (FHWA) in its implementation of NEPA (23 USC 109[h]) directs that final decisions on 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.

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

2.6.2 Affected Environment

Information and analysis in this section is drawn from the Visual Impact Assessment dated October 2013.

The project area's viewshed, or area visible by observers in the vicinity of the project site, is the area visible from and adjacent to State Route 76 from postmile 32.6 to 33.2, and visible from Valley Center Road beginning at SR-76 and ending about 200 feet south of the highway. The viewshed is characterized by scenic naturalized chaparral and woodland-vegetated mountainsides, as well as rolling hills planted with citrus and avocado groves.

The six principal steps required to assess visual impacts were performed. The steps are:

1. Define the project setting and viewshed.
2. Identify key views for visual assessment.
3. Analyze existing visual resources and viewer response.
4. Depict the visual appearance of project alternatives.
5. Assess the visual impacts of project alternatives.
6. Propose methods to mitigate adverse visual impacts.

Existing Visual Character

The existing SR-76 alignment is eligible for Scenic Highway Designation by the State of California, which would protect the highway from incompatible land uses such as junkyards, dumps, concrete plants, gravel pits, etc. The visual character of the project site is composed of a variety of existing visual elements that give the project site a unique setting. The scenic chaparral, citrus groves, mature trees, rolling hills, and mountainsides contribute to a rural and natural visual environment.

Existing Visual Quality

Visual quality is evaluated by identifying the vividness, intactness, and unity present in the viewshed.

Vividness is the memorability of the visual impression received from contrasting landscape elements as they combine to form a striking and distinctive visual pattern. Within the project viewshed, the existing views of distant ridgelines, native landscape, and agricultural groves combine to create a memorable visual experience. The orchards at both sides of the highway create a pattern that makes this area vivid and creates a memorable impression. The rolling hills surrounding the project vicinity, along with the mature oak and sycamore trees, contribute to a lasting impression. Overall, the vividness of the project area is moderately high.

Intactness is the integrity of visual order in the natural and man-built landscape, and the extent to which the landscape is free from visual encroachment. While the rural and natural surroundings are intact, the visual encroachment of the highway facility, roadside structures, and utility service lines reduce the existing intactness to moderate. The background features nearly uninterrupted ridgeline views of distant mountain ranges.

Unity is the degree to which the visual resources of the landscape join together to form a coherent, harmonious visual pattern. The view of the distant ridgelines combined with the patterns and textures of the agricultural groves and natural landscape create a unified rural setting. While highway and other related structures and features may detract from the unity of the setting, the curvilinear form of the roadway visually reinforces the existing topography. The consistent agricultural and natural vegetation throughout the viewshed contribute to a moderate-moderately high sense of unity along the corridor.

The collective rating of vividness, intactness, and unity establishes an existing visual quality rating of moderate to moderately high.

Existing View Groups, Viewer Exposure, and Viewer Awareness

For the evaluation of viewer groups and viewer awareness, the following general viewer groups were considered: single-family home owners, residential renters, retail workers or customers, recreational users, pedestrians or cyclists, local drivers, arterial drivers, and transit users. Viewer exposure is based on:

- Viewer groups that may see the project
- Number of individuals in the groups exposed to project elements
- Length of time individuals in these groups are exposed to the Project
- Viewer distance from the Project
- Sensitivity of viewers to changes in the visual environment

<u>Single-Family Home Owners</u>

Single-family home owners have a long viewing duration to the project corridor and a variable viewing distance from the project. The nearest residence is directly adjacent; however, there are no views to the highway from the residence. All other single-family homeowners located within the project vicinity are outside the project limits. Thus, single-family homeowners make up a small number of viewers; however, their investments in the land make this group highly sensitive to changes to adjacent land.

Residential Renters

Depending on the area rented and the duration of the lease, a renter's viewing distance and duration from the project is variable. Exposure time is generally long-term. The nearest residential renter is less than 0.5 miles from the project; however, there are no direct views to the project area from the residence. Unlike an owner who has an invested interest in the long-term development of adjacent land, this group has the ability to relocate and reduce its exposure; therefore, this group has a moderate sensitivity to changes to adjacent land.

Retail Workers and Customers

Retail workers' and customers' views to the site would be moderate and short, respectively. Both groups are considered to be located near the project due to the businesses located directly north of the project area. Changes to adjacent areas would moderately influence this group.

Recreational Users

Individuals recreating in the various parks and entertainment facilities throughout the project vicinity have a brief exposure to the project (depending on the trip origin and destination). Viewing distances from potential recreation locations to the project would generally be great, given the small scale of the project. Therefore, the group's sensitivity to changes related to the project is relatively low.

Pedestrians and Cyclists

The number of cyclist and pedestrian individuals viewing the site is low. However, individuals using or passing through the intersection would experience the project at a close distance. Therefore, this group would be moderately sensitive to changes.

Local Drivers

For many local drivers, there are no routes other than the project area for the majority of trips. The quantity of these viewers is relatively low compared to the Arterial Drivers group; however, due to the frequency of trips made by this group, as well as its proximity to the project area, the group is highly sensitive to changes in the project area.

Arterial Drivers

For drivers traveling between Valley Center and coastal areas, the project vicinity is one of only two corridor choices for travel. The quantity of these viewers can be relatively high due to entertainment and recreational opportunities in the area. Depending on trip origin and destination, a substantial portion of these travelers are expected to pass through the project area. For this group, proximity to the project is high, but viewing duration is low. Therefore, this group is considered moderately sensitive to the project.

Transit Users

A low number of transit users are exposed to the site for a short period of time. The number of riders, the length of time they are exposed, and their proximity to the site make the sensitivity to change for this group moderate.

Key Views

Key views were selected for each alternative of the proposed project. These views were selected based on consideration of viewer groups, viewing duration, and viewer sensitivity. Consideration was given to different alternatives and field observations were conducted to determine the key views. These key views have been represented in visual simulations for the Build Alternatives. They represent the viewpoints that would most likely show the changes affected by the project and have the most influence on viewer awareness. These views are listed in Table 2.6.1 below and shown in Figure 2.6.1 and 2.6.2 below.

Table 2.6.1: Key View Summary

Key View	General Description	Existing Visible Elements	Visible Project Elements
1	WB on SR-76, approaching Valley Center Road (Alternative 1)	Valley Center Road stop sign and striping, Left-turn lane for traffic entering Valley Center Road, street lights, dirt pull-out area at southeast quadrant of intersection; fruit and gift shop south of intersection	Roundabout and associated signage; center islands on SR-76 and Valley Center Road approaching intersection; lighting; SR-76 frontage road north of intersection
2	EB on SR-76, approaching Valley Center Road (Alternative 1)	Valley Center Road stop sign and striping, Left-turn lane for traffic entering Valley Center Road, street lights, dirt pull-out area at southeast quadrant of intersection; fruit and gift shop south of intersection	Roundabout and associated signage; center islands on SR-76 and Valley Center Road approaching intersection; lighting; SR-76 frontage road north of intersection
1	EB on Valley Center Road, approaching SR-76 (Alternative 2)	Valley Center Road stop sign and striping, Left-turn lane for traffic entering Valley Center Road, street lights, dirt pull-out area at southeast quadrant of intersection; fruit and gift shop south of intersection	Traffic signal lights and associated striping; SR-76 frontage road north of intersection
2	WB on SR-76, approaching Valley Center Road (Alternative 2)	Valley Center Road stop sign and striping, Left-turn lane for traffic entering Valley Center Road, street lights, dirt pull-out area at southeast quadrant of intersection; fruit and gift shop south of intersection	Traffic signal lights and associated striping; SR-76 frontage road north of intersection

2.6.3 Environmental Consequences

Although the project is mostly compatible with the existing visual character, it is anticipated that the development of the project will alter the immediate visual character of the setting.

Alternative 1: Roundabout Alternative (Preferred Alternative)

While Alternative 1 would introduce an expanded highway connection to the intersection area, the feature will not be outside the visual context of the existing highway facility. The project would result in a moderately low impact to the existing vividness and intactness rating, and no

or low changes to the existing unity rating. Therefore, Alternative 1 would result in a moderately low change to the existing visual quality.

Key View 1

Figure 2.6.3 shows Key View 1, looking westbound at SR-76, approaching and continuing past Valley Center Road. This view is representative of what a traveler on westbound SR-76 currently would see while passing through the project area. The existing dominant features in the view are distant rolling hills, oak and olive trees adjacent to the roadway, and disturbed vegetation, all of which add to the uniformity and vividness of the community character.

The roundabout alternative proposes to remove the skew of Valley Center Road as it approaches SR-76 from the south, correct the radius of the curve of SR-76 east of the intersection, construct a roundabout to replace the one-way stop sign, and retain a portion of the old SR-76 alignment as access for the businesses and residence located north of the intersection.

These architectural changes would contrast slightly with the forms and details of the existing visual setting. Figure 2.6.3 depicts the proposed improvements in a visual simulation. The proposed project would be mostly compatible with the scale and character of the area; the changes are modest in scale, geometrically aligned with the existing elements, and approach the intersection in a compatible manner. The reduction in travel speeds would increase the viewer's response to and the awareness of the visual changes associated with the project. While navigating the roundabout would possibly be difficult for some drivers due to unfamiliarity, the increased line of sight and the corrected curves would result in an overall improvement to the road user experience. The mountable apron at the center of the roundabout would allow trucks to navigate the roadway easily. For viewers in general, Alternative 1 would have a moderately low impact on Key View 1 due to the placement of a feature not typical to the area.

Key View 2

Figure 2.6.5 shows Key View 2, looking eastbound at SR-76, approaching and continuing past Valley Center Road. The view depicts what a traveler on eastbound SR-76 would see while passing through the project area. Dominant features include the fruit and gift shop, the Valley Center Road stop sign, street lights, and the dirt pull-out area at the southeast quadrant of the intersection.

The roundabout features would be visible from Key View 2, as shown in Figure 2.6.5. Overall, Alternative 1 would have a moderately low impact on the viewer experience from Key View 2.

Alternative 2: Signal Alternative

Alternative 2 would introduce a similar highway feature to the intersection with a similar scale to the existing environment. The project would result in a low impact to the existing vividness, intactness, and unity ratings. As a result, Alternative 2 would constitute a low change to the existing visual quality.

Key View 1

Figure 2.6.7 shows Key View 1, looking westbound on SR-76, approaching and continuing past Valley Center Road. The view depicts the perspective of an individual passing through the project area. The existing dominant features in the view are distant rolling hills, oak and olive

trees adjacent to the roadway, and disturbed vegetation, all of which add to the uniformity and vividness of the community character.

The signal alternative proposes to remove the skew of Valley Center Road as it approaches SR-76 from the south, correct the radius of the curve of SR-76 east of the intersection, install traffic signals to replace the one-way stop sign, and retain a portion of the old SR-76 alignment as access for the businesses and residence located north of the intersection.

These architectural changes would contrast slightly with the forms and details of the existing visual setting. Figure 2.6.7 depicts the proposed improvements in a visual simulation. The proposed project would be mostly compatible with the scale and character of the area; the changes are modest in scale, geometrically aligned with the existing elements, and approach the intersection in a compatible manner. The largest impact to the project area would be the visual imposition of the traffic signals. The project would increase viewers' exposure to the intersection due to stopping traffic with the signal light. While the traffic signal would occasionally constitute a reduction in convenience for some drivers, the increased line of sight and the corrected curves would result in an overall improvement to the road user experience. For viewers in general, Alternative 2 would have a low impact on Key View 1.

Key View 2

Figure 2.6.9 shows Key View 2, looking eastbound from SR-76 and approaching and continuing past Valley Center Road. This view is representative of what a traveler on eastbound SR-76 would see while passing through the project area. The existing dominant features in the view are distant rolling hills, oak and olive trees adjacent to the roadway, disturbed vegetation, and the fruit and gift shop and dirt parking lot to the east of Valley Center Road. The existing visual features contribute to the uniformity and vividness of the community character.

The features of the signal alternative (listed above) would also be visible from Key View 2. The architectural changes would contrast slightly with the forms and details of the existing visual setting. Figure 2.6.9 depicts the proposed improvements in a visual simulation. Overall, Alternative 2 would have a low impact on Key View 2.

Cumulative Impacts

Visual resources are neither declining nor expected to decline within the project areas or vicinity. While both build alternatives would cause a moderate impact, they are not expected to cause the resource to degrade. Therefore, cumulative impacts are not anticipated for visual resources.

No Build Alternative

The No Build Alternative would include no changes to the project area. Therefore, no visual impacts would occur.

2.6.4 Avoidance, Minimization, and/or Mitigation Measures

The following measures are intended to avoid, minimize, and/or mitigate adverse visual impacts.

- Where existing asphalt is removed, disturbed soils would receive treatment complying with the storm water best management practices for stabilization of all disturbed areas.
- Highway planting removed during construction will be replaced with appropriate, maintainable highway planting.

- All exposed retaining walls would be textured with decorative design patterns to discourage and avoid graffiti.
- The intersection will be illuminated in compliance with state highway safety standards and regulations. To help reduce direct and ambient light pollution, and avoid and minimize any conflict with the nearby Mount Palomar Observatory, all street light illumination shall be projected or reflected downward.
- To ensure healthy and vigorous plant growth, a three (3) year plant establishment period may be needed for maintenance of highway planting constructed within State right of way. The project contract will include a one (1) year plant establishment. Caltrans may also pursue an additional two (2) year supplemental service contract to aid in the plant establishment effort. Additional agreements may be required for establishment of vegetated areas located outside highway right of way.
- (Roundabout Alternative) The inner shoulder of the roundabout shall receive integrally colored concrete with a textured surface or interlocking brick pavers.
- During clearing and grubbing it is recommended that the existing plant materials be compiled into a duff material which would remain on site and be applied as mulch ground cover during the erosion-control phase.

Figure 2.6.1 Alternative 1 Key View Locations

Figure 2.6.2 Alternative 2 Key View Locations

Figure 2.6.3 Key View 1 – Proposed view to the West (Alternative 1)

Figure 2.6.4 Key View 1 – Existing view to the West

Figure 2.6.5 Key View 2 – Proposed view to the East (Alternative 1)

Figure 2.6.6 Key View 2 – Existing view to the East

Figure 2.6.7 Key View 1 – Proposed view to the West (Alternative 2)

Figure 2.6.8 Key View 1 – Existing view to the West

Figure 2.6.9 Key View 2 – Proposed view to the East (Alternative 2)

Figure 2.6.10 Key View 2 – Existing view to the East

2.7 Cultural Resources

2.7.1 Regulatory Setting

The term “cultural resources” as used in this document refers to all “built environment” resources (structures, bridges, railroads, water conveyance systems, etc.), culturally important resources, and archaeological resources (both prehistoric and historic), regardless of significance. Laws and regulations dealing with cultural resources include the National Historic Preservation Act, the California Environmental Quality Act, and California Public Resources Code (PRC) Section 5024.

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation [36 Code of Federal Regulations (CFR) 800]. On January 1, 2014, an amended Section 106 Programmatic Agreement (PA) between Caltrans, the Advisory Council, the Federal Highway Administration (FHWA), and the State Historic Preservation Officer (SHPO) went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA implements the Advisory Council’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The FHWA’s responsibilities under the PA have been assigned to Caltrans as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

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

2.7.2 Affected Environment

Reports prepared for the proposed project include a Historic Property Survey Report (HPSR), an Archaeological Survey Report (ASR), and an Environmentally Sensitive Area (ESA) Action Plan. These reports are confidential and are not for public review.

An Area of Potential Effects (APE) was established for the project by Caltrans archaeological staff and was determined as the direct impact footprint within and adjacent to the existing right of way. The APE includes right of way takes, temporary construction easements, staging, and temporary impact areas. Numerous archival sources were used to assist in the identification of resources within the APE, including the California Historical Resources Information System (CHRIS) repository at San Diego State University, the Caltrans Cultural Resource Database (CCRD), a local historical society, Native American tribes and individuals, historical maps and photographs, and discussions with long-time area residents. Consultation with Native American organizations and individuals was conducted during development of the HPSR.

The HPSR, accompanying technical study, and ESA Action Plan were submitted to the State Historic Preservation Office (SHPO) pursuant to PRC Section 5024 on February 25, 2014 to document Native American consultation efforts, identify cultural resources within the Project APE, seek its concurrence on National Register of Historic Places (NRHP) and California Register of Historic Resources (CRHR) eligibility determinations, and identify project effects to

eligible resources within state right of way. A response of concurrence from SHPO was received on April 2, 2014 (see Appendix F). The HPSR package was concurrently submitted to Caltrans Headquarters pursuant to Stipulation X.B.1.a of the First Amended Section 106 Programmatic Agreement. The Cultural Studies Office reviewed the HPSR on May 15, 2014 and did not object to the Finding of No Adverse Effect with Standard Conditions ESA.

Archaeological Resources

The following historic archaeological site is considered eligible for the NRHP/CRHR, and will be protected as an Environmentally Sensitive Area:

- CA-SDI-17259H is a historic period house foundation and associated landscape. Luiseño ethnographer Phillip Sparkman lived in an adobe at this site. The adobe was later incorporated into the Rincon Springs Cafe, a local restaurant popular from 1930 to 1962. The cafe was abandoned in 1964 and destroyed by a fire in 1976. Today only the foundations, garden ruins, fence posts, and olive orchard are visible on the parcel.

Caltrans avoided the site through project redesign; therefore, it will not be impacted by the undertaking.

Built Environment Resources

There are no built environment cultural resources within the APE. Yuima Creek Bridge, #570197, was built in 1948 and is not eligible for the National Register of Historic Places in accordance with Caltrans Statewide 1987 historic bridge inventory, which was reconfirmed with the 2006 update. All other buildings in the APE are not eligible for inclusion on the NRHP or CRHR.

2.7.3 Environmental Consequences

Build Alternatives

Effects to cultural resources would apply equally under both build alternatives. Project effects to historic properties/historical resources are determined to assess whether the proposed undertaking would adversely affect the qualities that make each eligible for the NRHP/CRHR. An historic property could either be not affected, not adversely affected, or adversely affected, depending on the resource type and the nature of project impacts to that resource. Not affecting an historic property means the project is avoiding the resource completely.

It is Caltrans policy to avoid cultural resource impacts whenever possible. As such, impacts to CA-SDI-17259H will be avoided through implementation of an Environmentally Sensitive Area (ESA). With avoidance of CA-SDI-17259H, no effects to known and eligible cultural resources will occur as a result of project activities. Therefore, the provisions of Section 4(f) will not apply to this project.

No Build Alternative

Under the No Build Alternative, no effects would occur to cultural resources because no work is proposed.

2.7.4 Avoidance, Minimization, and/or Mitigation Measures

No adverse effects to known cultural resources will occur with implementation of the proposed project. It is Caltrans and FHWA policy to avoid cultural resources. The following avoidance and minimization measures will be implemented to minimize project impacts to known and unknown resources:

- Environmentally Sensitive Areas (ESAs) shall be delineated on plans and layout sheets. Within the boundaries of the ESA, as indicated on the project plans, or where designated by the Resident Engineer, no construction or related activities that involve ground disturbance are permitted.
- A Contractor Environmental Training Program meeting will be held and shall include district archaeological staff. All responsible parties will ensure that ESAs are discussed during the pre-construction meeting. The importance of ESAs will be discussed with construction personnel.
- The ESA for CA-SDI-17259H shall be delineated in the field prior to initiating any work in these areas. Any ESA temporary fencing will be installed by hand. The Caltrans Archaeologist will coordinate this activity with the Environmental Construction Liaison and Resident Engineer, and be present to supervise and monitor fence installation. A photographic record of the newly installed ESA fence will be documented by the Caltrans Archaeologist.
- No construction activity (including storage or staging of equipment or materials) shall occur within the ESAs. Workers must remain outside of the ESAs at all times. The Contractor will notify the Caltrans Resident Engineer and Archaeologist prior to any work adjacent to the ESA.
- In the event that subsurface deposits are found outside the ESA boundaries, the Contractor and the Engineer shall halt work in the vicinity of the deposit and contact the Caltrans Archaeologist, who will follow the Programmatic Agreement for Post Review Discoveries.
- The Environmental Construction Liaison will inform the Caltrans Archaeologist when construction is complete. The Contractor, under supervision of the Environmental Construction Liaison and/or Caltrans Archaeologist, will remove temporary fencing at the conclusion of construction.
- If human remains are discovered, State Health and Safety Code Section 7050.5 states that all activities shall stop in all areas suspected to overlie remains, and the County Coroner shall be contacted. Pursuant to California Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), which would notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the Caltrans District 11 Environmental Division so that they may work with the MLD on respectful treatment of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

Physical Environment

2.8 Water Quality and Storm Water Runoff

2.8.1 Regulatory Setting

Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source (defined by the U.S. Environmental Protection Agency as “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, etc”) unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

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

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

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

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

permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent[2] standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in Section 2.13: Wetlands and other Waters (page 93).

State Requirements: Porter-Cologne Water Quality Control Act

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

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect these uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

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

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

National Pollutant Discharge Elimination System (NPDES) Program

Municipal Separate Storm Sewer Systems (MS4)

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

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

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

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

Construction General Permit

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

sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

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

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the United States must obtain a 401 Certification, which certifies that the project would be in compliance with state water quality standards. The most common federal permits triggering 401 Certification are CWA Section 404 permits issued by the USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before the USACE issues a 404 permit.

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

2.8.2 Affected Environment

Information and analysis in this section is drawn from the Water Quality and Storm Water Runoff Memorandum dated March 2014, and from the Long-Form Storm Water Data Report dated May 2014.

The project study area is located within the San Diego Basin, in Storm Water Regional Quality Control Board Region 9 and the San Luis Rey Hydrologic Unit, the Monserate Hydrologic Area, and the Pauma Hydrologic Sub-Area.

The climate within the project vicinity is mild with temperatures ranging from an average annual max temperature of 66.2 degrees Fahrenheit to an average annual minimum temperature of 45.8 degrees Fahrenheit. The annual precipitation average is 28.48 inches per year with the rainy season occurring through the months of November and March. Rainfall intensities calculated by Caltrans hydraulics specialists are 3.43 inches/hour for a 10-year return and 5.71 inches/hour for a 100-year return period.

Land use within the project study area varies between farmland, including orchards, vineyards, and open space. The terrain varies between flat stretches of land and rolling hills.

Local Hydrology

The project site receiving water body is Yuima Creek, which discharges into the San Luis Rey River approximately one mile south of the project location. The 303 (d) list of pollutants for the San Luis Rey River is listed in Table 2.8.1 below.

Within the project area, the existing drainage system consists of two roadway runoff areas. The first runoff area is approximately 0.57 acre and drains to two existing over-side drains (at Yuima Creek Bridge), which drain to Yuima Creek north of the bridge. The second runoff area is approximately 0.85 acres and drains to a ditch on the north side of SR-76 at the southeast corner of a parking lot. The runoff then drains into a 24-inch corrugated metal pipe (CMP) that crosses SR-76. Runoff passes from the CMP to an unlined ditch, and then to another 24-inch CMP that crosses Valley Center Road and outlets to a private property on the southwest quadrant of the intersection.

Table 2.8.1: Pollutants to Adjacent Waters

Receiving Body	303d Listed Pollutant	Potential Source	TMDL Requirement Status Date
San Luis Rey River, Lower (West of Interstate 15)	Chloride	Unknown Point/Nonpoint Source Urban Runoff/Storm Sewers	2019
	Enterococcus	Unknown Point/Nonpoint Source	2021
	Fecal Coliform	Unknown Point/Nonpoint Source Urban Runoff/Storm Sewers	2021
	Phosphorus	Unknown Point/Nonpoint Source Urban Runoff/Storm Sewers	2021
	Total Dissolved Solids	Agriculture-storm runoff Flow Regulation/Modification Golf course activities Natural Sources Surface Mining Unknown Point/Nonpoint Source Urban Runoff/Storm Sewers	2019
	Total Nitrogen as Nonattainment	Unknown Point/Nonpoint Source Urban Runoff/Storm Sewers	2021
	Toxicity	Unknown Point/Nonpoint Source Urban Runoff/Storm Sewers	2021
San Luis Rey River, Upper (East of Interstate 15)	Total Nitrogen as Nonattainment	Unknown Nonpoint Source	2021

Soil Characteristics and Erosion Potential

The Natural Resources Conservation Service (NRCS) identifies the soils in the project vicinity as Soboba Stony Loamy Sand (SsE). Slopes associated with the construction of this project would be 2.5:1 (horizontal to vertical, or H:V). Detailed soil characterization will be provided once geotechnical studies for the project have been completed.

Erosion is defined as the process by which the surface of the earth is worn away by the action of water, glaciers, winds, waves, etc. The NRCS Web Soil Survey was used to estimate the

erodibility, or susceptibility to erosion, of the site. This is also known as the K-factor, which expresses the susceptibility of a particular soil to erode based on texture, structure, organic matter, and permeability (Goldman et al. 1986; Mitchell and Bubenzer 1980). The K-factor ranges in value from 0.02 (less erodible) to 0.69 (more erodible). SsE has an erosion K-factor of 0.1 overall ("whole soil") and 0.2 for fine-earth soil (comprised only of the particles less than 2.0 millimeters in diameter).

2.8.3 Environmental Consequences

Temporary Impacts

Temporary impacts would occur primarily during construction and for the first four to six months of operations, before soil stability and vegetative cover have re-established. Construction of any of the proposed build alternatives would involve site grading. This would expose unprotected soil to erosion by wind, rain, and runoff. During and after construction, exposed slopes could erode until stabilized by vegetative or mechanical means. A combination of sheet and concentrated flows could erode and transport the soil, causing suspended fine-grain soil particles to enter Yuima Creek. These suspended particles could increase turbidity, settle, and cause siltation downstream, potentially resulting in adverse effects on aquatic habitats.

Permanent Impacts

Permanent impacts to existing drainage patterns are assessed in terms of total impervious surface with implementation of the proposed project. The project would result in an increase in storm water runoff due to an increase of 0.23 acres of impervious groundcover within the project area. There would be additional volume and velocity at the pipe outlet in the Yuima Creek due to increased impervious drainage area. While the project is designed to maintain existing drainage patterns whenever possible, localized runoff would be concentrated through collection in pipes or ditches and discharged directly or indirectly into creeks. This change in runoff characteristics and volume could lead to stream bank erosion and increased scour within unlined drainage ditches. The result could be an increase in sediment and turbidity in receiving waters.

Additional impervious roadway surfaces may also contribute to water quality impairment through the collection and subsequent runoff of sediment, oil, grease, lubricants, paint, and other pollutants. Associated potential water quality impacts include increased concentrations of any of the following types of pollutants entering surface waters or groundwater: total suspended solids (TSS), nutrients (nitrogen/phosphorus), pesticides, metals, pathogens, trash, biochemical oxygen demand (BOD), and total dissolved solids (TDS). An increase in TSS may also result from increased soil erosion associated with greater storm water runoff, causing downstream siltation and water quality impairment. While suspended, these TSS particles can prevent sunlight from reaching aquatic plant and benthic, or bottom-dwelling, communities; impair respiration and reproductive habitat for aquatic organisms including fish; and would be proportional to the increase in storm water runoff from increased impervious (paved) surfaces. The effects would depend greatly on ground slope, soil erodibility, rainfall intensity (runoff flow rate and volume), and vegetative ground cover.

The roadway runoff would be collected using a drainage system comprised of inlets, curb & gutter, dikes and 24" culverts. The runoff would outlet into Yuima Creek on the north side of the box culvert bridge. Yuima Creek would be protected with 6" rip rap to prevent soil erosion in the creek. Roadway runoff would not be further treated, since the project is adding less than 1 acre of new impervious surface.

Construction of the project would require the disturbance of existing soils. The amount of soil disturbance is represented by the disturbed soil area (DSA) and is used as an indicator of the temporary impacts. The computer aid design Micro-station was used to aid measurements. The total disturbed soil area (DSA) to build the proposed project would be 3.51 acres. The existing impervious surface, which consists of asphalt concrete pavement, is 2.17 acres. The total impervious area after completion would be 2.4 acres, resulting in a 0.23-acre increase of new impervious area (See Table 2.8.2 below).

Acquisitions of an orange farm and an avocado farm (0.54 and 0.04 acres, respectively) would be cleared and grubbed. Work would be from edge of existing pavement to 5 feet outside of the cut and fill slopes for the new pavement. Contractors would be required to work within the boundaries of clearing and grubbing since private property is located beyond those limits.

Table 2.8.2: Soil Surfaces

	Disturbed Soil Area	Impervious Surface
Existing	N/A	2.17
Future	3.51 acres	2.40
Net increase	N/A	0.23

There are no urban MS4 areas, drinking water reservoirs, or recharge facilities within the project limits. A 401 and 404 permit may be required for the rip rap installation.

Cumulative Impacts

Water quality and storm water are not being degraded in the project area. Neither build alternative is expected to substantially affect the resource. Therefore, cumulative impacts are not anticipated.

No Build Alternative

Under the No Build Alternative, no changes would be made and no impacts to water quality or storm water runoff would occur.

2.8.4 Avoidance, Minimization, and/or Mitigation Measures

- The roadway runoff would be collected to combine the two drainage areas into one using a drainage system comprising of inlets, curb & gutter, dikes and 24" culverts. The runoff would outlet into Yuima Creek on the north side of the box culvert bridge. The outfall would be protected with 6" rip rap to prevent soil erosion in the creek.
- Current slopes are very mild and represent minimal concern. The new cut and fill slopes would be at 2.5:1 (H:V) and would require compost socks, compost blankets and hydroseeding for permanent erosion control.
- The project would incorporate Best Management Practices (BMPs) during design to be implemented during construction, therefore minimizing the potential for erosion during and after project construction.
- This project would be designed and constructed in compliance with State Water Resources Control Board adopted Order No. 2012-0011-DWQ NPDES No. CAS000003 National Pollutant Discharge Elimination System (NPDES) permit, and if applicable, the State Water Resources Control Board adopted Order No.2012-0006-DWQ NPDES No.CAS000002

NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.

- For temporary erosion control, Fiber rolls and hydraulic mulch would be used along the 4:1 (H:V) slopes. In addition the existing drainage inlet would be protected with fiber rolls.

2.9 Geology/Soils/Seismic/Topography

2.9.1 Regulatory Setting

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

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. The Caltrans Office of Earthquake Engineering is responsible for assessing the seismic hazard for Department projects. Structures are designed using Caltrans' Seismic Design Criteria (SDC). The SDC provides the minimum seismic requirements for highway bridges designed in California. A bridge's category and classification will determine its seismic performance level and which methods are used for estimating the seismic demands and structural capabilities. For more information, please see Caltrans' Division of Engineering Services, Office of Earthquake Engineering, Seismic Design Criteria.

2.9.2 Affected Environment

Information and analysis in the following section is drawn from the *District Preliminary Geotechnical Report*, dated August 27, 2012. The following analysis is based on geologic, soils, seismic, and topographic issues for the two build alternatives and adjacent areas that may potentially affect or be affected by project implementation.

Physical Setting

The following section describes the physical setting of the project including: the climate, topography and drainage, regional geology and seismicity, and soil survey mapping. No man-made or natural features that would present an unusual engineering or construction challenge were found within the project limits.

Regional Geology and Seismicity

The project lies within the Peninsular Range Geomorphic Province of California. The province is characterized by Mesozoic age crystalline (typically granite) basement rock, mountainous terrain, and sediment filled basins. The province is transected by numerous northwest trending ridges and valleys, and similarly trending strike-slip and dip-slip faults.

San Diego County sits upon the eastern margin of the Pacific Tectonic Plate. The region is seismically active as a result of relative movement between the Pacific Plate and North American Plate. Relative to the North American Plate the Pacific Plate moves northwest at an annual rate of about 2.5 centimeters per year. Tectonic stresses and strains associated with these plate movements have created a complex system of active, northwest trending faults typical to the region.

Major fault systems near the project include the San Andreas, San Jacinto, Elsinore, and Rose Canyon Fault Zones. Additionally, complex systems of northwest trending faults occur offshore from San Diego. These offshore faults include the Coronado Banks and San Diego Trough Faults. All of these faults, as well as faults more distant from the project, are potential seismic sources that could cause minimal to moderate shaking at the project site.

Topography, Drainage, and Site Geology

The topography of the project area is relatively flat with gentle sloping. The site is comprised of alluvial deposits of undetermined thickness overlying granitic rock. The surface alluvium is comprised of sub-rounded to well-rounded boulders, gravels, sands, and silt. These features are consistent with that of coalescing alluvial fans and/or braided stream deposits.

Climate

The project lies within a transitional climate zone between inland and ocean areas. The winters are mild and wet and the summers are moderate and dry. The mean yearly rainfall in the project area is about 15 inches. Rainfall usually occurs between the months of November and April. Monsoonal downpours are common in August and September when tropical storms can deliver short, intense rainfall. The driest month of the year is typically July and the wettest is typically January. Dense, maritime valley fog occurs frequently in the fall, spring, and early summer.

Temperature variations between night and day tend to be moderate during summer with a difference of up to 27 degrees Fahrenheit. During winter, the night and day average difference is about 25 degrees Fahrenheit. The warmest month of the year is August with an average maximum temperature of 89 degrees Fahrenheit, while the coldest month of the year is December with an average minimum temperature of 42 degrees Fahrenheit. Temperatures of 100 degrees Fahrenheit can occur any time of the year but usually last a few days or less. The extreme temperatures for this site are as high as 115 degrees Fahrenheit and as low as 22 degrees Fahrenheit.

Exploration

No drilling, soil sampling, geologic mapping, geophysical studies, or geotechnical testing was conducted for this project or report. All data contained within this preliminary report were obtained from available archived resources and field observations.

Geotechnical Conditions

The following section describes the geotechnical conditions at the project site including the geology, subsurface conditions, surface water, and seismicity.

Lithology

The formations found at the site are described as follows:

Alluvium: The project area contains a layer of alluvium which consists of sand, silt, gravel, cobbles, and boulders. The boulders, cobbles and gravel were derived from granitic rock (coarse grained, hard, light colored, and consisting mostly of quartz) and metamorphic (influenced by heat or pressure) rock.

Granitic Rock of the Southern California Batholith: The Cretaceous aged granitic rock occurs extensively throughout the region and comprises the original bedrock. These rocks vary from

decomposed to fresh, from soft to extremely strong, and from slightly fractured to very intensely fractured.

Stability of Existing Slopes

Cut or fill slopes do not currently exist at the project site. The current SR-76 alignment was built upon the existing terrain.

Subsurface Conditions

The following sections describe the geotechnically relevant conditions that impact project design and excavations. No permanent surface water bodies exist in proximity to the proposed project. A scour evaluation is not applicable and was not conducted for the project.

Soil

The site is comprised of alluvial (sand, silt, gravel, cobble, and boulder) deposits of undetermined thickness overlying bedrock comprised of weathered granitics. The gradation of the alluvial deposits is highly variable and large boulders are likely to be present in the alluvial materials.

Groundwater

The Natural Resources Conservation Service (NRCS) defines groundwater as occurring at a depth greater than 230 inches. The groundwater table is not expected to impact the project. However, it should be noted that the project site is in close proximity to a number of orange groves that feed water to the subsurface soil strata. Therefore, it is possible that perched water, or water above the water table in the unsaturated zone, may be encountered at the interface of the alluvium and granitic rock.

Erosion

The granular, non cohesive soils underlying the project foot print are susceptible to erosion from concentrated flows of storm water.

Project Site Seismicity and Ground Motions

Although no active faults lay within the project limits, the project is located in proximity to several active fault zones. Ground motion caused by nearby and distant seismic events should be anticipated during the life of the highway facilities. The closest active fault zone is the Elsinore Fault Temecula Section, trending in a northwesterly direction and laying roughly three miles east of the project site. This Fault Zone has a Maximum Moment Magnitude of 7.6 and a horizontal Peak Ground Acceleration of approximately 0.40g where “g” represents the acceleration due to gravity.

Ground Rupture

The project is located outside of any State of California Alquist Priolo Special Study Zone. No active fault trace crosses the project site. Therefore, ground surface rupture caused by active faulting is considered unlikely.

2.9.3 Environmental Consequences

Based on the discussions provided above, no substantial impacts related to geology, soils, seismicity, or topography would occur under either build alternative due to incorporation of appropriate design considerations.

Preliminary Geotechnical Analysis and Design

The following section describes the geotechnical analyses, parameters, and design criteria that should be utilized by project planners and designers in the continued development of proposed project features.

There are no structures or significant cut and fill slopes proposed for this project. The alluvial and granitic materials that are predominantly present at the site are not considered to be susceptible to liquefaction. Therefore, parameter selection and dynamic and liquefaction analyses are not required.

The native soils are well suited for both roadway cut and roadway fill embankments. No adverse geotechnical conditions were discovered during this study. Liquefaction is not likely to occur at the project site because of the absence of a shallow groundwater table.

Cuts and Excavations

Grading is anticipated to be minimal and no major cuts and excavations are proposed for this project. Any cut slopes are expected to be relatively shallow in height. This section presents a discussion with regard to the rippability and grading factors of materials in proposed cuts or excavations.

There are no earth retaining systems, new culverts, minor structures, or embankments greater than 5 feet proposed for this project.

Rippability

Rippability is defined as the measure of the ability to excavate rock with conventional excavation equipment. The alluvium that would be encountered in project excavations can be excavated using conventional excavation equipment such as backhoes and excavators. Occasional large boulders may be encountered in the excavations and would require heavy construction equipment such as D9 and D11 bulldozers. Large boulders would need to be fragmented, or broken down, to facilitate loading and hauling. Fragmentation methods could include hoe-rams, hydraulic hammers, and splitters. It is unlikely that weathered granitic rock would be encountered in the excavations.

Grading Factors

The grading factor for the alluvial soils is estimated to be about 0.95. For granitic rock the grading factor is estimated to be in the range of 1.1 to 1.3 depending on the degree of weathering of the rock.

Material Sources

No off site material sources have been identified for this project. The volume of material generated from project excavations would likely be more than sufficient to satisfy the material needs of the project. The excavated material would consist mostly of silt, sand, gravel, cobbles and boulders derived from the alluvium and the weathered granitic rock at the project site.

These soils would be generally suitable for placement as embankment fill provided the boulders are fragmented as discussed above.

Material Disposal

Material generated during construction that is found to be unsuitable for use as roadway subgrade, embankment fill, or topsoil should be placed in a suitable location within the project limits or properly disposed. Examples of material unsuitable for embankment subgrade or fill include organic mud, highly expansive clay, stockpiled trash, and debris. The preliminary geotechnical site review suggests that this type of unsuitable material is not present within the project limits. Further review for the presence or extent of unsuitable material should be conducted during later stages of project development.

No locations were identified that would be adversely impacted by the placement of excess material within the project limits.

2.9.4 Avoidance, Minimization, and/or Mitigation Measures

The following types of standard design and construction measures may be considered for either build alternative, based on recommendations in the project plans and applicable regulatory/industry standards. Implementation of these or other appropriate measures identified during detailed investigations would avoid or minimize any potential impacts related to geology, soils, or topography for either build alternative.

- Potential impacts related to scour at the Yuima Creek Bridge would be addressed or avoided through conformance with associated geotechnical recommendations, including the use of riprap.

2.10 Hazardous Waste/Materials

2.10.1 Regulatory Setting

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

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

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)

- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

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

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

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

2.10.2 Affected Environment

Information and analysis in this section is based upon the Initial Site Assessment (ISA) prepared on September 25, 2013 and the Site Investigation Report prepared on January 17, 2014 to evaluate potential hazardous waste issues within the project area.

Records Review

Public records sources were reviewed to identify documented hazardous waste impacts located on or adjacent to the project area. Records reviewed included federal, state, local, and regional environmental regulatory agency public records databases, as well as online regulatory databases, historic reports, and other reference materials. Results of the records review pertaining to agriculture, structures, oil and gas wells, and water supply are described below.

The history of the project area was reviewed to supplement regulatory agency database records. Aerial photographs, topographic maps, and city directories were available for review during this assessment. Based on historical documents, SR-76 and Valley Center Road were constructed prior to 1903. The project area was primarily undeveloped from 1903 to approximately 1975. Orchards have been located on parcels within the project area boundaries since at least 1975.

Agriculture

The majority of the proposed project improvements are located along public right-of-way or on portions of parcels that did not appear to be used for agricultural purposes. However, portions of the proposed project improvements are occupied by or adjacent to an orchard. Sampling and analysis was conducted to determine the presence and levels of pesticides and hydrocarbons. Additionally, buried asbestos-containing cementitious pipe (“transite”), commonly used for water transportation as part of historical agricultural practices, may be present within the project area.

Structures

The property at the southwest corner of SR-76 and Valley Center Road was covered with trees (although it did not appear to be agricultural) since at least 1939, and a structure was apparent closer to the intersection. Two structures on this property were apparent near the intersection of SR-76 and Valley Center Road in a 1963 aerial photograph that resembled a typical gasoline station configuration, but these structures were no longer apparent by 1975. The main building did not appear to be present by 2005, but remnants of the building presently remain. This property was reported to have been a gasoline station historically. Hazardous materials and underground storage tank (UST) records at the San Diego Department of Environmental Health (SDDEH) were purged for this property, and it is not known whether a UST remains. The potential presence of a UST in the vicinity of the affected area of the parcel represents a recognized environmental condition (REC) to the project area.

Oil and Gas Wells

According to the California Department of Conservation: Division of Oil, Gas, and Geothermal Resources' Regional Wildcat Map W1-7 (dated December 2007), there are no oil or gas wells located within the immediate project vicinity.

Water Supply

A water supply well search indicated the presence of a Federal United States Geologic Survey (USGS) well, which appears to be located within the project area, north of SR-76. Measurements have been recorded from this well since 1946. The most recent measurement was taken in 1978 with a depth to groundwater of 213.97 feet below the surface. Another Federal USGS and a State well are also depicted at this same location, but groundwater measurements were not indicated. Two Federal USGS wells are depicted south of the project area. No groundwater level measurements are reported from these wells. Water wells were observed at the time of the site reconnaissance at two additional locations within the project area. Other wells are located outside the project boundaries greater than one-eighth of a mile from the project area (EDR 2013a).

Site Reconnaissance

A site reconnaissance was performed on September 17, 2013 to assess and photograph present project area conditions. Land use in the vicinity of the project area was a mix of agricultural (orchards), vacant land, commercial, and public utilities. The following observations were noted that may suggest the potential presence of hazardous involvement in the project area:

- Agricultural use on portions of or adjacent to the project area
- Building remnants and asphalt pavement in an area that may have been occupied by a former gasoline station
- An approximately 10,000-gallon to 20,000-gallon above-ground storage tank (AST) within approximately 25 feet of the SR-76 pavement edge. Although the AST was not labeled, a small area of staining was observed on the ground beneath a valve at the end farthest from the roadway and a diesel odor was noted. Information regarding this AST was not available in regulatory agency records reviewed. Based on the proximity of this AST to the proposed project areas, this AST represents a recognized environmental condition (REC), which means that it would have to be further screened as project development continues,

unless it can be avoided. Sampling and analysis should be performed for potential petroleum hydrocarbon constituents within the affected areas along SR-76 in the vicinity of the AST.

- An empty, rusted and crushed 55-gallon drum observed on a vacant property located south of SR-76, east of Valley Center Road
- Several pole-mounted transformers were noted along SR-76 and Valley Center Road. Transformers appeared to be in good condition with no visible signs of leakage.
- A SDG&E electrical substation was observed south-southwest of the project area. However, this substation is located within an area that would not be affected by the proposed project.
- Two unidentified pipes were observed. The first pipe was observed on the vacant property located north of the intersection of SR-76 and Valley Center Road. This property is located in an area that would be directly affected by the proposed project. Therefore, this unidentified pipe represents a REC. The other pipe was observed on the southern portion of a parcel near what appears to be a former building location. This pipe is not located within an area that is affected by the proposed project, and is therefore not considered an environmental concern.
- A water well, two water ASTs, and at least three 550-gallon diesel ASTs (associated with windmills), were observed throughout two orchard properties. However, these features were observed to be located outside the affected areas of the proposed project and are not considered an environmental concern.
- Flammable storage ASTs were observed outside a garage/warehouse building at the Yuima Municipal Water District property, located south of SR-76 and east of Valley Center Road. The building and ASTs were observed to be outside the affected areas associated with the proposed project and are not considered to be environmental concerns.

Adjoining Properties

A walking survey was performed September 17, 2013 on the project area parcels for which permits to enter the property were granted. A windshield survey of those properties for which access had not yet been granted was also performed from the public right-of-way. A summary description of the surrounding properties is presented in Table 2.10.1.

Table 2.10.1: Properties adjacent to project area

North • Yuima Creek • vacant land • land developed for agricultural use, including orchards	**East** • land developed for agricultural use • rural residential developments • fruit and gift shop
South • orchards • rural residential development • Yuima Creek.	**West** • land developed for agricultural use (orchards) • California Department of Forestry fire station

Hazardous materials and petroleum products were not observed to be stored on the adjoining properties in the areas that would be affected by the proposed project.

Further Environmental Investigation

Additional study of the presence of pesticides/herbicides was conducted on December 6, 2013. Recognized Environmental Conditions (RECs) were identified during the sampling activities. Hazardous concentrations of organochlorine pesticides (chlordane) were detected in one hand-augured boring onsite at depths of 0.5 and 1.0 foot. Remediation of this hazardous waste issue includes excavating out the impacted soil to a depth of 1.5 feet and in an area 10 feet by 10 feet around the impacted boring location. The impacted soil shall be transported to a Class I landfill facility within California. A Soil Management Plan entitled ”Soil Management Plan, State Route 76 Intersection Improvements, State Route 76 at Valley Center Road, Pauma Valley, California” dated February 5, 2014, for remediation of the pesticide issue has been prepared and shall be used during construction activities.

Recognized Environmental Conditions

The study area Recognized Environmental Conditions (RECs) were identified through records searches, site reconnaissance, and soil sampling. These RECs include USTs, unidentified pipes located on various parcels, pesticide impacted soil, and current and previous uses within the project area. Contaminants of potential concern associated with the RECs include asbestos containing materials (ACMs), pesticides including chlordane, lead-based paint (LBP), aerially deposited lead (ADL), and treated wood waste.

As design of the project proceeds, any impact to RECs that has not been analyzed would result in further testing.

Limitations

Access to portions of the project area was not granted during preparation of this report. Therefore, current conditions could not be assessed for the entire project area. However, the lack of assessment of specific conditions does not represent a significant data gap. Current conditions should be assessed once access has been granted.

Environmental assessments are non-comprehensive by nature and are unlikely to identify all environmental problems or eliminate all risk. Land use, conditions (both on-site and off-site) and other factors will change over time. Additionally, observations of project area conditions for parcels where access has not been granted were limited to readily-apparent environmental conditions observed from the roadway.

Coordination with Regulatory Entities

The following agencies were contacted for information about project area conditions:

- San Diego Air Pollution Control District (SDAPCD)
- San Diego County Environmental Health Department (SDDEH)
- County of San Diego, Department of Agriculture, Weights, and Measures
- State of California, RWQCB, San Diego Region / State Water Resources Control Board (SWRCB) GeoTracker

- State of California, Office of the State Fire Marshal, Pipeline Safety Division
- State of California, Department of Toxic Substances Control (DTSC)

2.10.3 Environmental Consequences

The project would include removal of the structure located at the southeast corner of SR-76 and Valley Center Road. Survey and sampling for ACMs and LBP would be performed prior to demolition of this structure, or other structures which may be affected by the proposed project. The surveys should be performed in conformance with the US EPA NESHAPs 40 CFR, and SDAPCD Regulation XI, Subpart M. Additionally, in accordance with Rule 361.145 of SDAPCD Regulation XI, Subpart M, notification should be made to SDAPCD at least 10 working days prior to any structure renovation that disturbs asbestos-containing materials or any structure demolition.

Multiple pole-mounted transformers were observed in the project area and on adjoining properties. The transformers appeared to be in good condition, with no visible leaks and no visible soil staining. Many of these transformers are unlikely to be impacted by the proposed development. However, based on proposed project plans, transformer removal north of the intersection of SR-76 and Valley Center Road, and along the south side of SR-76, east of Valley Center Road may be required. Should it be deemed that transformer removal be required, SDG&E should be contacted prior to handling or removing electrical transformers. In addition, should wooden utility poles require removal, it is recommended that additional sampling and analysis be conducted to assess the presence of creosote (often associated with the preservation of wooden utility poles) and resultant waste managed appropriately.

No Build Alternative

Under the No Build Alternative, there would be no hazardous waste impacts because no construction would occur.

2.10.4 Avoidance, Minimization, and/or Mitigation Measures

- Current Federal and State regulations indicate that asbestos containing materials (ACMs) are not a hazardous waste if they are not disturbed. However, if the ACMs are disturbed such that powder or dust is emitted by hand pressure when dry, they would be considered hazardous waste and should be handled, removed, and disposed as such. If disturbed, the ACMs would be disposed as a hazardous waste at the proper disposal facility.
- Paint striping or thermoplastic paint would be removed in accordance with Caltrans standard special provisions. A Lead Compliance Plan (LCP) would be required for conducting the paint removal activities, and it should describe proper handling methods of the paint material and should provide information regarding limiting exposure to lead chromate containing paint materials. The material may be disposed as a non-hazardous waste.
- Since there may be non hazardous ADL in shallow subsurface soils at the subject location, there may be a health concern to workers onsite when exposed soil adjacent to the edge of paving is disturbed. The project activities at the subject location would follow Caltrans standards. No excavated soil would be relinquished to the contractor for offsite disposal.

- Treated wood waste is wood that has been treated with a chemical preservative. If guardrail posts and sign posts would be removed, the treated wood should be properly stored and disposed at a solid waste landfill facility permitted to accept such wastes.
- Based on the potential for encountering impacted soil, or for soil vapor migration, it is recommended that the Caltrans Unknown Hazard Procedures be implemented during construction activities in the vicinity of the facilities that represent a potential impact to the project. The resident engineer overseeing construction should ensure that the contractor maintains field monitoring equipment at the project site to facilitate timely detection of potentially hazardous conditions.
- Excavation activities associated with the proposed project are not likely to encounter groundwater. Should groundwater be encountered during construction/excavation activities and dewatering become necessary, regulatory compliance and permitting consistent with SDRWQCB and NPDES requirements should be adhered to, and groundwater sampling should be conducted.
- It is recommended that removal of hazardous waste (pesticides in soil) be conducted as early as possible so that potential special handling, treatment, or disposal provisions associated with hazardous wastes do not interrupt construction.
- If signs of transite piping are observed during construction activity, sampling and analysis should be conducted.

2.11 Air Quality

2.11.1 Regulatory Setting

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality while the California Clean Air Act is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and California Air Resources Board (ARB), set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and state ambient air quality standards have been established for six transportation-related criteria pollutants that have been linked to potential health concerns:

- Carbon monoxide (CO)
- Nitrogen dioxide (NO_2)
- Ozone (O_3)
- Particulate matter (PM)
    - Broken down for regulatory purposes into particles of 10 micrometers or smaller (PM_{10}) and particles of 2.5 micrometers and smaller ($PM_{2.5}$)
- Sulfur dioxide (SO_2)
- Lead (PB)

In addition, state standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H_2S), and vinyl chloride. The NAAQS and state standards are set at levels that protect public health with a margin of safety, and are subject to periodic review and revision. Both state and federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under the National Environmental Policy Act (NEPA). In addition to this environmental analysis, a parallel "Conformity" requirement under the FCAA also applies.

Conformity

The conformity requirement is based on Federal Clean Air Act Section 176(c), which prohibits the U.S. Department of Transportation (USDOT) and other federal agencies from funding, authorizing, or approving plans, programs or projects that do not conform to the State Implementation Plan (SIP) for the NAAQS. "Transportation Conformity" applies to highway and transit projects and takes place on two levels: the regional (planning and programming) level and the project level. The proposed project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and "maintenance" (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. U.S. EPA regulations at 40 Code of Federal Regulations (CFR) 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS, and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), and in some areas (although not in California) sulfur dioxide (SO_2). California has attainment or maintenance areas for all of these transportation-related "criteria pollutants" except SO_2, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the FCAA to be covered in transportation conformity analysis. Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years (for the RTP) and 4 years (for the FTIP). RTP and FTIP conformity uses travel demand and emission models to determine whether or not implementation would conform to emission budgets or other tests at various analysis years. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA) make determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the FCAA. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept, scope, and completion schedule of a proposed transportation project are the same as described in the RTP and FTIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Conformity analysis at the project-level includes verification that the project is included in the regional conformity analysis and a "hot-spot" analysis if an area is "nonattainment" or "maintenance" for carbon monoxide (CO) and/or particulate matter (PM_{10} or $PM_{2.5}$). A region is "nonattainment" if one or more of the monitoring stations in the region measures a violation of the relevant standard. The U.S. EPA is in charge of official designation. Areas that were previously designated as nonattainment areas but later meet the standard may be officially redesignated to attainment by U.S. EPA and are then called "maintenance" areas. "Hot-spot" analysis is essentially the same, for technical purposes, as CO or particulate matter analysis performed for NEPA purposes. Conformity does include some specific procedural and documentation standards for projects that require a hot-spot analysis. In general, projects must not cause the "hot-spot" related standard to be violated, and must not cause any increase in the number and severity of violations in nonattainment areas. If a known CO 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.

2.11.2 Affected Environment

Information and analysis in this section is drawn from the SR-76/Valley Center Road Air Quality Report, dated February 2014.

Environmental Setting, Climate, and Meteorology

The project is located in the San Diego Air Basin (SDAB), uses the same jurisdictional boundaries as San Diego County. The climate of San Diego County is characterized by warm, dry summers and mild, wet winters. One of the main determinants of the climatology is a semipermanent high pressure area (the Pacific High) in the eastern Pacific Ocean. In the summer, this pressure center is located well to the north, causing storm tracks to be directed north of California. This high pressure cell maintains clear skies for much of the year. When the Pacific High moves southward during the winter, this pattern changes, and low pressure storms are brought into the region, causing widespread precipitation.

The SDAB currently meets the federal standards for all criteria pollutants except O_3. In July 1997, the U.S. Environmental Protection Agency (USEPA) established a new federal 8-hour standard for O_3 of 0.085 parts per million (ppm). The USEPA designated 15 areas in California that violate the federal 8-hour O_3 standard on April 15, 2004. Each nonattainment area's classification and attainment deadline is based on the severity of its O_3 problem. San Diego's nonattainment area deadline was 2009. The San Diego County SIP was approved by the California Air Resources Board (ARB) on May 24, 2007. The EPA approved the submittal dated December 28, 2012, for the Redesignation Request and Maintenance plan for the 1997 National Ozone Standard for San Diego County, as a revision to the SIP, final rule effective July 5, 2013. The SDAB currently falls under a federal "maintenance plan" for CO, following a 1998 redesignation as a CO attainment area.

For the California standards, the SDAB is currently classified as a nonattainment area for O_3, $PM_{2.5}$, and PM_{10} (ARB 2014a).

Table 2.11.1: State and Federal Pollutant Designations

Pollutant	Federal Designation	State Designation
1-hour Ozone	N/A	Nonattainment
8-hour Ozone	Nonattainment	Nonattainment
Carbon Monoxide	Maintenance	Attainment
PM-10 (use subtext)	Unclassifiable	Nonattainment
PM-2.5	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfur Oxides	N/A	Attainment
Hydrogen Disulfide	N/A	Unclassifiable
Visibility-reducing particles	N/A	Unclassifiable

The concentrations and assessment methods for common pollutants are expressed in Table 2.11.2 below for California and national standards. Information in Table 2.11.2 is provided by the California Air Resources Board and was updated in June 2013.

Table 2.11.2 National and California Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM_{10})[8]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		-		
Fine Particulate Matter ($PM_{2.5}$)[8]	24 Hour	-	-	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 µg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 µg/m^3)	-	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 µg/m^3)		9 ppm (10 µg/m^3)	-	
	8 Hour (Lake Tahoe)	6 ppm (7 µg/m^3)		-	-	
Nitrogen Dioxide (NO_2)[9]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemi-luminescence	100 ppb (188 µg/m^3)	-	Gas Phase Chemilumines cence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[10]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	-	Ultraviolet Fluorescence; Spectrophotom etry (Pararosaniline Method)
	3 Hour	-		-	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[10]	-	
	Annual Arithmetic Mean	-		0.030 ppm (for certain areas)[10]	-	
Lead[11,12]	30 Day Average	1.5 µg/m^3	Atomic Absorption	-	-	High Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	-		0.15 µg/m^3		
Visibility Reducing Particles[13]	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[11]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			
See footnotes below.						

California Air Resources Board (6/4/13)

California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24 hour standard is attained when the expected number of days per calendar year with a 25-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For $PM_{2.5}$, the 24 hour standard is attained when 98 percent of the daily concentration, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25° and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

Reference method as described by US EPA: An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM_{10} standards (primary and secondary) of 150 $\mu g/m^3$ were also retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not equal 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

On June 2, 2010, a new 1-hour SO_2 standard was established and the exisitng 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

> Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

The ARB has identified lead and vinyl chloride as “toxic air contaminants” with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are “extinction of 0.23 per kilometer” and “extinction of 0.07 per kilometer” for the statewide and Lake Tahoe Air Basin standards, respectively.

2.11.3 Environmental Consequences

The proposed project is a safety project and is listed in Table 2-Exempt Projects, 40 CFR § 93.126, under Safety Improvement Program. It is therefore exempt from regional and project level conformity.

Although exempt, a discussion of construction emissions, potential impacts, and measures to avoid or minimize the impacts is included in this analysis. Recommended pollution abatement

measures are included in the analysis. All Caltrans standard specifications for construction mitigation, and air district rules, would be implemented.

Criteria Pollutants

"Air Pollution" is a general term that refers to one or more chemical substances that degrade the quality of the atmosphere. Individual air pollutants may adversely affect human or animal health, reduce visibility, damage property, and reduce the productivity or vigor of crops and natural vegetation.

Seven air pollutants have been identified by the USEPA as being of concern nationwide: carbon monoxide (CO); ozone (O_3); nitrogen dioxide (NO_2); PM_{10}, also called respirable particulate and suspended particulate; $PM_{2.5}$; sulfur dioxide (SO_2); and lead. These pollutants are collectively referred to as criteria pollutants. The sources of these pollutants, their effects on human health and the nation's welfare, and their final deposition in the atmosphere vary considerably. Information about the criteria pollutants and their effect on public health is located in the SR-76 /Valley Center Road Air Quality Report.

Toxic Air Contaminants (TAC)

Most TACs originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners) and stationary sources (e.g., factories or refineries). There are no known TAC sources located within or near the project footprint.

Diesel Exhaust Particulate

In 1999, the ARB identified particulate emissions from diesel-fueled engines as a TAC. Once a substance is identified as a TAC, the ARB is required by law to determine if there is a need for further control. In February 2001, the USEPA issued new rules requiring cleaner diesel fuels in 2006 and beyond. However, since 1993 California's regulations have required cleaner diesel fuel than the federal requirements. The 1993 federal regulations reduced particulate emissions by 5 percent, while the California regulations reduced particulate emissions by 25 percent.

Some air districts have issued preliminary project guidance for projects with large or concentrated numbers of trucks, such as warehouses and distribution facilities. No standards exist for quantitative impact analysis for diesel particulates.

Naturally Occurring Asbestos (NOA) -bearing Serpentine

According to the report "A General Location Guide for Ultramafic Rocks in California-Area Likely to Contain Naturally Occurring Asbestos" (CDC 2000), the coastal portion of San Diego County NOA is not typically found in the geological formations present on the proposed project site (CDC 2000). Thus, hazardous exposure to asbestos-containing serpentine materials would not be a concern with the proposed project.

Mobile-Source Air Toxics (MSATs)

The proposed project would fall under Category 1: Projects with No Meaningful Potential MSAT Effects, or Exempt Projects.

The SR 76 / Valley Center Road project would fall into category 1 because it is exempt under the Clean Air Act conformity rule under 40 CFR 93.126.

The purpose of this project is to reduce the number and severity of accidents along this segment of SR-76 corridor by realigning the curve, to provide greater sight distance, and constructing a roundabout or a signalized intersection. This project has been determined to generate minimal air quality impacts for CAA criteria pollutants and has not been linked with any special MSAT concerns. As such, this project would not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts of the project from that of the no-build alternative. No further analysis is required.

Cumulative Impacts

The analysis of project impacts to regional air quality, as performed by SANDAG and the APCD in conjunction with the RTP and RTIP process, is a cumulative analysis. However, the proposed project is a safety project and is listed in Table 2-Exempt Projects, 40 CFR § 93.126, under Safety Improvement Program, thus exempting itself from regional and project level conformity. Therefore, the project would not result in a cumulative impact to air quality.

No Build Alternative

Under the No Build Alternative, there would be no impacts to air quality because no construction would occur.

2.11.4 Avoidance, Minimization, and/or Mitigation Measures

Avoidance and minimization measures for Air Quality are discussed in Section 2.18: Construction Impacts.

Biological Environment

Analysis in this section is drawn from the *Natural Environmental Study*, dated November 2013. The Study utilized general field surveys, species-specific field surveys, and vegetation and species mapping for its report.

2.12 Natural Communities

This section of the document discusses natural communities of concern. Its focus 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.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in Threatened and Endangered Species (Section 2.16). Wetlands and other waters are discussed in Section 2.13.

2.12.1 Affected Environment

The Biological Study Area (BSA) for the proposed project consists of the proposed construction limits for build alternatives 1 and 2, with a 500 foot buffer around the limits. The BSA is approximately 81.5 acres, and is shown in Figure 2.12.1 below.

The project area is dominated by agricultural uses and developed land. Small areas of native habitat remain. The majority of the native vegetation within the project area is disturbed,

meaning that there is a high incidence of nonnative species. The riparian corridor is a narrow strip of oak, cottonwood, and sycamore trees. Sections of riparian areas are devoid of trees and shrubs.

Detailed descriptions for each vegetation community are included below.

Table 2.12.1: Vegetation Communities in the BSA

Vegetation Community	Area (acres)
South Coast Live Oak Riparian Forest	1.4
Southern Cottonwood Willow Riparian Forest	0.7
Southern Willow Scrub	0.9
Unvegetated Channel	0.9
Disturbed Coast Live Oak Woodland	7.8
Disturbed Coastal Sage Scrub	2.6
Nonnative Grassland	5.9
Disturbed Habitat	4.0
Orchards and Vineyards	45.2
Urban and Developed Land[3]	12.1
Total	**81.5**

Riparian Vegetation Communities

South Coast Live Oak Riparian Forest

South coast live oak riparian forest contains a dense forest of oaks (*Quercus agrifolia*), sycamores (*Platanus racemosa*), and black willow (*Salix goodingii*) trees. Approximately 1.4 acres of open coast live oak woodland is located along Yuima Creek within the northwest area of the BSA. Other tree species, such as cottonwood (*Populus fremontii*), are also present. Understory plants include poison oak (*Toxicodendron diversilobum*), virgin's bower (*Clematis ligusticifolia*), mugwort (*Artemisia douglasiana*) and western goldenrod (*Euthamia occidentalis*).

Southern Cottonwood Willow Riparian Forest

Southern cottonwood willow riparian forest is a winter-deciduous riparian forest dominated by cottonwood with willow components. Approximately 0.7 acre exists within the BSA. The understory is typically shrubby willows. Typical species include mugwort, mulefat (*Baccharis salicifolia*), sycamore, cottonwood, and willow species.

Southern Willow Scrub

Southern willow scrub consists of winter-deciduous riparian thickets dominated by willow species with occasional cottonwood and sycamore trees. The canopy is dense and closed, not allowing the formation of much of an understory. The common species include willows, arrowweed (*Pluchea sericea*), and cottonwood. Approximately 0.9 acre of southern willow scrub occurs within the BSA.

[3] Developed Areas (including roads, residential, and commercial areas) are included in this tabular summary and shown on vegetation maps but are not considered plant communities.

Unvegetated Channel

Unvegetated channel consists of unvegetated washes or flood channels. Some vegetation may grow on the edge of the variable water line but totals less than 10 percent vegetative cover. Approximately 0.9 acre of unvegetated channel occurs within the BSA.

Upland Vegetation Communities

Disturbed Coast Live Oak Woodland

Disturbed coast live oak woodland is dominated by the coast live oak. There may be a shrubby understory composed of toyon (*Heteromeles arbutifolia*), laurel sumac (*Malosma laurina*), or blue elderberry. A continuous herb layer exists, usually dominated by nonnative grasses. However, the disturbed coast live oak woodland within the BSA is regularly mowed and maintained, keeping the herb layer to a minimum. Approximately 7.8 acres of this vegetation type occurs primarily along the southwest corner of the BSA.

Disturbed Coastal Sage Scrub

Disturbed coastal sage scrub consists of coastal sage scrub species, including California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac, and lemonadeberry (*Rhus integrifolia*). However, there is a high incidence of invasive, nonnative species, such as tocalote (*Centaurea melitensis*), mustard (*Brassica nigra*) and fennel (*Foeniculum vulgare*). Approximately 2.6 acres of disturbed coastal sage scrub occurs within the central portion of the project area.

Nonnative Grassland

Nonnative grassland consists of annual grassland composed primarily of nonnative grasses with some native annual forbs. The common dominant species include wild oats (*Avena* spp.), brome grasses, filaree, and mustards. Approximately 5.9 acres of this vegetation community occurs within the center, eastern and southern areas of the BSA.

Other land use cover types

Disturbed Habitat

Disturbed habitats are areas that have been physically disturbed through human activities such as grading, clearing, grubbing, off-road vehicle trails, etc. These disturbed habitats still have a soil substrate (not paved). The former vegetation community can no longer be discerned and the area is dominated usually by nonnative species: thistles (*Centaurea*, *Carduus*, *Cynara*, *Sonchus* spp.), mustard, and brome grasses. Approximately 4 acres of this cover type occurs in scattered pockets of the BSA, interspersed between developed areas and natural habitats.

Orchards and Vineyards

Orchards and Vineyards are composed of irrigated trees or shrubs planted in rows. Vineyards are single-species crops also planted in rows and usually supported by wood or wire structures. Approximately 45.2 acres of this cover type occurs throughout the BSA. Dominant orchard crops are citrus and domesticated prickly pear.

Urban and Developed Land

Urban and developed lands have been paved or built upon and no longer support native vegetation. This includes permanent or semi-permanent structures, pavement, and landscaped areas. Approximately 12.1 acres of this cover type occurs throughout the BSA in association with paved and unpaved roads, as well as structures and associated land clearing.

Wildlife Movement Corridors

Highways, roads and urban development create barriers to wildlife movement, isolating populations and fragmenting habitats. Wildlife movement corridors are linear landscape features that allow animal movement between patches of comparatively undisturbed habitat, or between a patch of habitat and some vital resources. Regional corridors, such as the San Luis Rey River, link two or more large areas of natural open space, allowing for migration, genetic exchange, and habitat. Smaller, local corridors allow animals to access local critical resources – namely, food, water, and cover. Within the BSA, Yuima and Potrero Creeks potentially enable wildlife to move between uplands and the San Luis Rey River, and between high and low elevations.

2.12.2 Environmental Consequences

Build Alternatives

Permanent and temporary impacts to biological resources were evaluated for each alternative, as shown in Table 2.12.2 below. Due to the small size and scope of the project, indirect and cumulative impacts to biological resources were not evaluated.

Permanent and temporary direct impacts (permanent impacts, temporary impacts) are defined in the federal Endangered Species Act as effects which are caused during project implementation (ESA 1986). Permanent impacts result in the irreversible loss of biological resources; temporary impacts result in effects that are reparable with the implementation of mitigation measures. Impact acreages are based on the project alignment footprint as shown in Figures 2.12.2 and 2.12.3, and include construction activities such as access, stockpiling, grading, and paving.

Table 2.12.2: Vegetation Communities/Habitat Direct Impacts

Vegetation Community/Habitat	Permanent Direct Impacts	Temporary Direct Impacts
	Acres	Acres
Roundabout Alternative		
Nonvegetated Channel	0.10	0.00
South Coast Live Oak Riparian Forest	0.00	0.00
Southern Cottonwood Willow Riparian Forest	0.00	0.00
Southern Willow Scrub	0.00	0.00
Disturbed Coastal Sage Scrub	0.52	1.98
Nonnative Grassland	0.11	0.14
Developed	2.20	1.79
Disturbed Habitat	0.03	0.24
Orchard/Vineyard	0.36	0.37
Total	**3.32**	**4.52**
Signal Alternative		
Nonvegetated Channel	0.10	0.00

Vegetation Community/Habitat	Permanent Direct Impacts	Temporary Direct Impacts
	Acres	Acres
South Coast Live Oak Riparian Forest	0.00	0.00
Southern Cottonwood Willow Riparian Forest	0.00	0.00
Southern Willow Scrub	0.00	0.00
Disturbed Coastal Sage Scrub	0.45	0.99
Nonnative Grassland	0.17	0.17
Developed	2.34	1.12
Disturbed Habitat	0.03	0.08
Orchard/Vineyard	0.01	0.42
Total	**3.10**	**2.78**

Roundabout Alternative (Preferred Alternative)

The Roundabout Alternative would permanently impact a total of 0.63 acres of sensitive vegetation and nonvegetated channel. This alternative would temporarily impact a total of 0.62 acres of sensitive vegetation (Figure 2.12.2).

Signal Alternative

Alternative 2 would permanently impact a total of 0.62 acres of sensitive vegetation and nonvegetated channel, and would temporarily impact a total of 1.16 acres of sensitive vegetation (Figure 2.12.3).

A portion of Yuima Creek, a local wildlife movement corridor, would be impacted by either of the proposed action alternatives. A culvert and riprap would be placed in the creek to the north of the existing bridge. Permanent impacts are not anticipated, as the project would not impede or prevent animal movement. Work within the creek would have temporary impacts on wildlife movement through the riparian area.

Cumulative Impacts

Much of the project area and vicinity is largely undeveloped; therefore, impacts would occur with either build alternative. It is reasonably foreseeable that natural communities could be incrementally impacted within the project area. The following avoidance, minimization, and mitigation measures would be implemented to prevent a decline in the natural communities.

No Build Alternative

The No Build Alternative would not result in impacts to vegetation communities or wildlife movement, as existing conditions and roadway would remain unchanged.

2.12.3 Avoidance, Minimization, and/or Mitigation Measures

Impacts to sensitive habitat types are proposed to be mitigated through a combination of onsite habitat restoration and debiting of mitigation credits at the Rancho San Diego Mitigation Bank (Figure 2.12.4). Table 2.12.3 below describes the proposed mitigation.

Table 2.12.3: Proposed Mitigation Ratios for Impacts to Vegetation Communities

Vegetation Type	Alternative 1 (Preferred Alternative)			Alternative 2		
	Permanent Impact (acres)[5]	Permanent Impact Mitigation Ratio	Temporary Impact (acres)[4]	Permanent Impact (acres)[5]	Permanent Impact Mitigation Ratio	Temporary Impact (acres)[4]
Riparian						
Nonvegetated Channel	0.1	1:1	0	0.1	1:1	0
South Coast Live Oak Riparian Forest	0	N/A	0	0	N/A	0
Southern Cottonwood Willow Riparian Forest	0	N/A	0	0	N/A	0
Southern Willow Scrub	0	N/A	0	0	N/A	0
Total Riparian	0.1	0.1	0	0.1	0.1	0
Upland						
Coast Live Oak trees	15 trees	1:1	0	15 trees	1:1	0
Disturbed Coastal Sage Scrub	0.52	1:1	1.98	0.45	1:1	0.99
Non-native Grassland	0.11	0.5:1	0.14	0.17	0.5:1	0.17
Total Upland	0.63 acres + 15 trees	0.58 acres + 15 trees	2.12	0.62 acres + 15 trees	0.8 acres + 15 trees	1.16

Permanent impacts to riparian vegetation would be offset through enhancement of 0.1 acre of riparian areas within US and state jurisdictional waters. The non-vegetated channel within Caltrans right-of-way up and downstream of permanent impacts would be planted with willows and other riparian species. A plant list and planting plan would be developed for the project. Invasive plants would be removed.

Permanent impacts to coastal sage scrub, nonnative grassland, and coast live oak trees would include debited mitigation credits at Rancho San Diego Mitigation Bank. The Rancho San Diego Mitigation Bank is located in east San Diego County, south of El Cajon, adjacent to the Sweetwater River, and consists of the Rancho San Diego and Sweetwater 2 parcels (Figure 2.12.4). The land comprising the Rancho San Diego Mitigation Bank is owned and managed by the USFWS. The USFWS, SANDAG, and Caltrans have an agreement on the use of the bank (USFWS, et al, 1996). As of November 14, 2013, Caltrans had the following credits remaining at Rancho San Diego: 88 oak trees, 174.5 acres of coastal sage scrub, 18.8 acres of southern mixed chaparral, 69.4 acres of riparian woodland, 2.3 acres of marsh riparian floodplain, 3.2 acres of native grassland, 77.0 acres of disturbed habitat, and four pairs of California

[4] Mitigation for Temporary Impacts will be on-site.
[5] Alternative 1 and 2 Permanent Impacts will be mitigated off-site.

gnatcatchers. The bank's jurisdiction encompasses much of west San Diego County, including Pauma Valley.

Depending on the chosen alternative, Caltrans would debit Rancho San Diego Mitigation Bank credits 1.24 acres or 1.26 acres of coastal sage scrub, and 15 oak trees to mitigate for the loss of these resources.

Temporary impact areas would have temporary irrigation and be planted with native container plants and seeds of similar composition of the adjacent habitats. Revegetation and irrigation would occur as early as possible following grading (where applicable), and be accompanied with at least 3 years of periodic monitoring and maintenance to ensure adequate coverage and prevent erosion and siltation into adjacent biologically sensitive areas. A plan for planting and maintaining these areas will be submitted for review by resource agencies.

To ensure that indirect impacts to biological resources are avoided or minimized during construction, the following measures would be implemented as part of the project.

- To avoid incidental loss of sensitive habitat types during construction activities, Environmentally Sensitive Areas (ESAs) would be delineated along the limits of grading prior to the start of construction, and grading would not occur beyond this limit. Construction crews should be made fully aware of this boundary.
- Spoils, trash, or any debris would be removed offsite to an approved disposal facility.

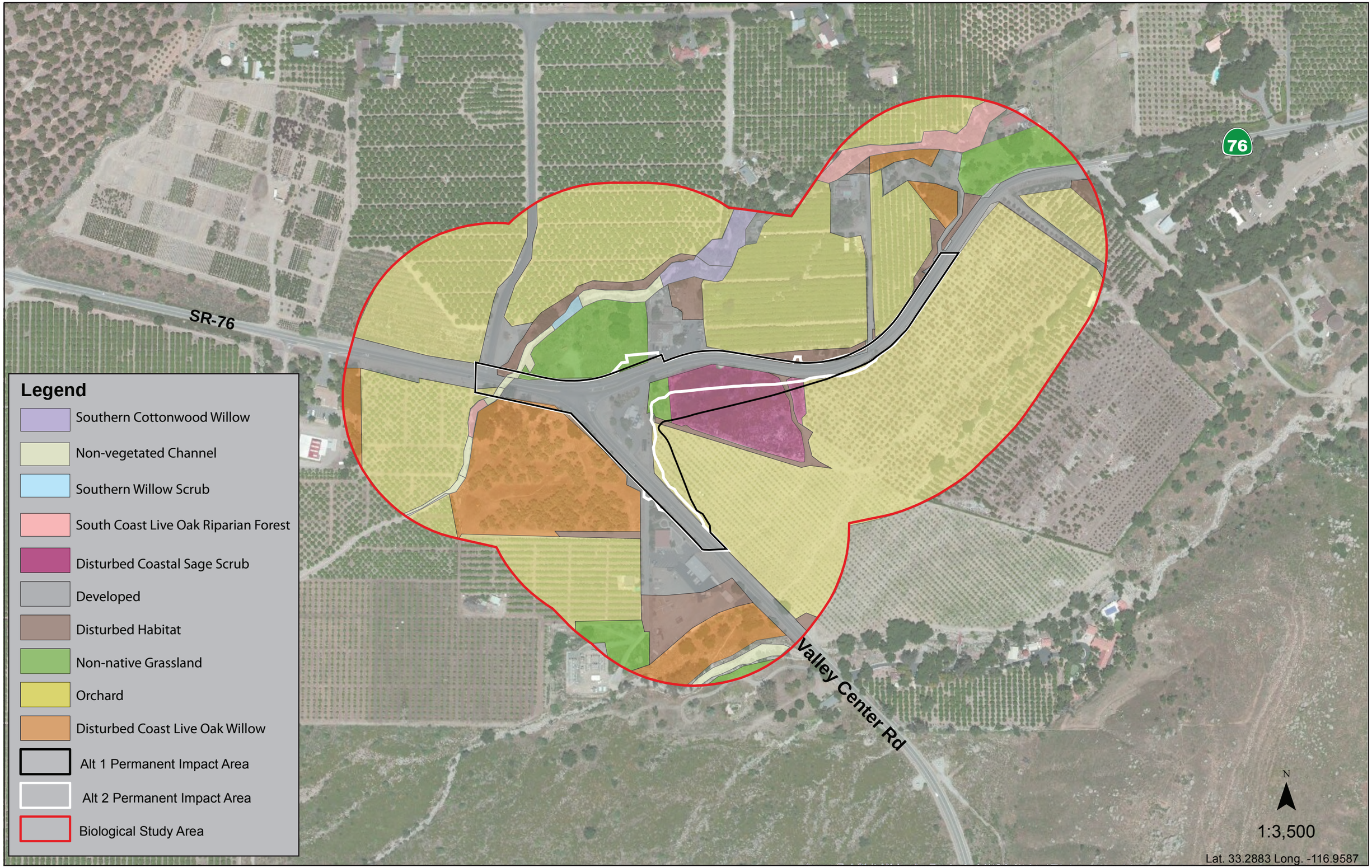

Figure 2.12.1 Vegetation Types within the Biological Study Area

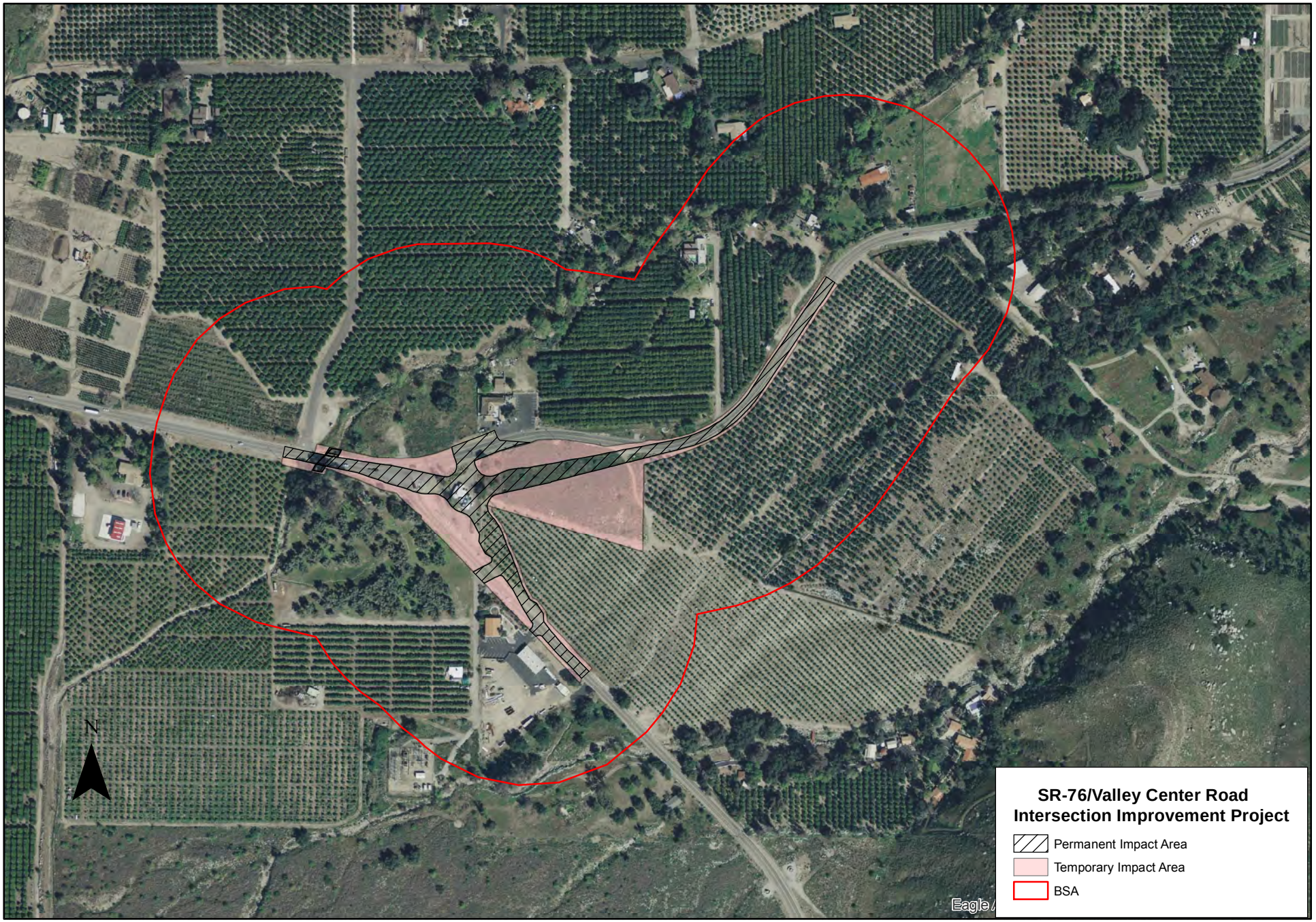

Figure 2.12.2: Alternative 1 Permanent and Temporary Impact Areas

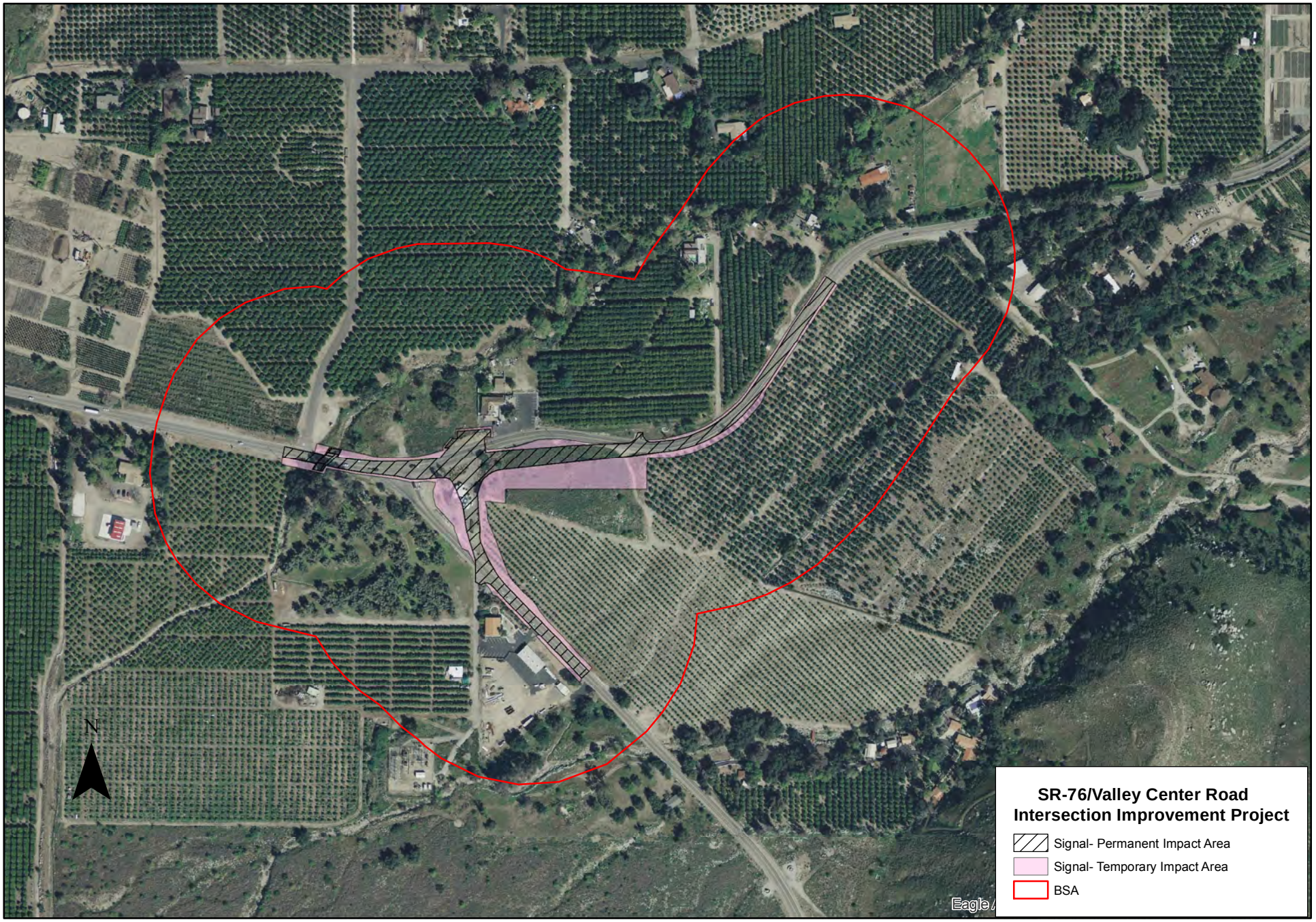

Figure 2.12.3: Alternative 2 Permanent and Temporary Impact Areas

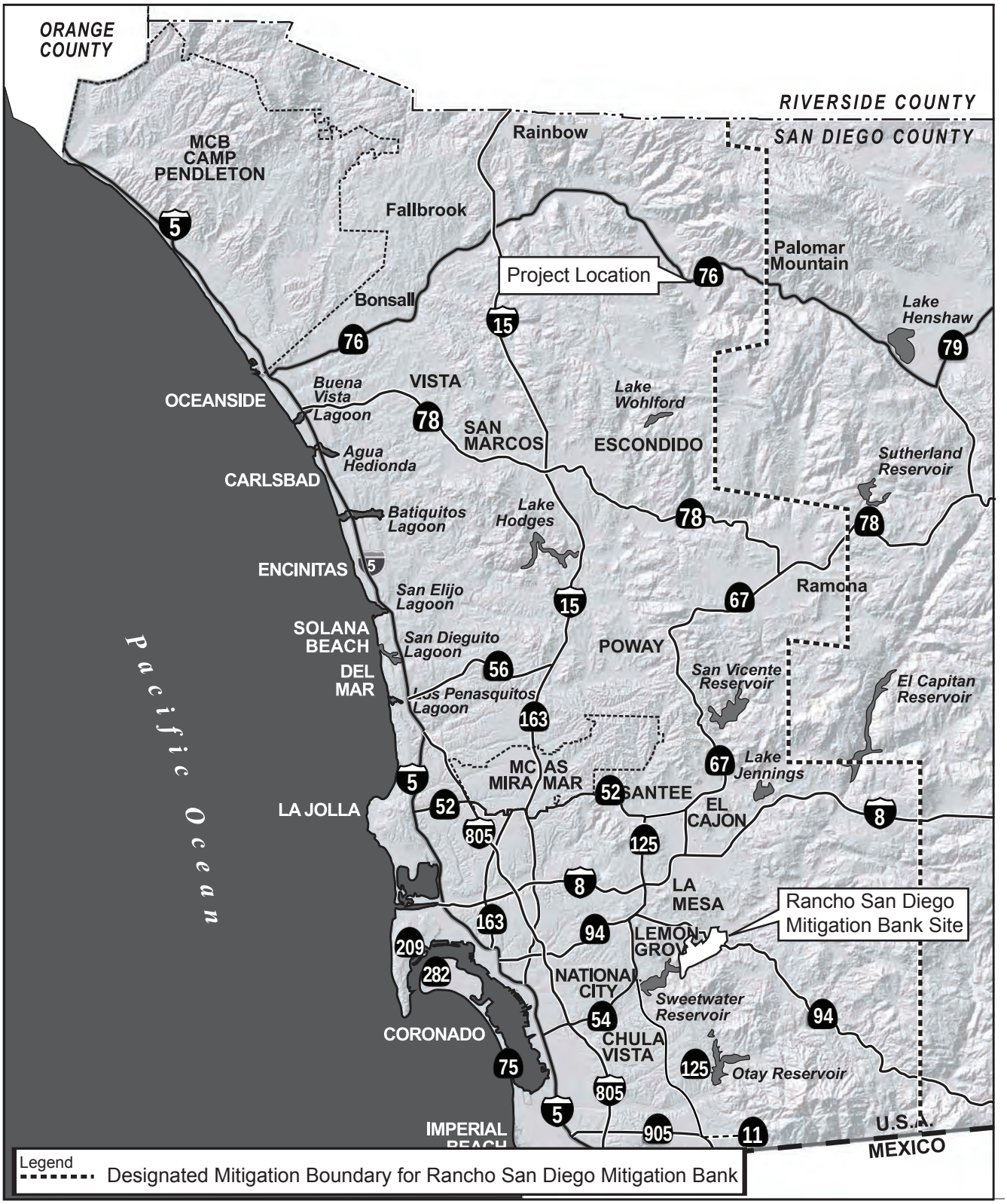

Figure 2.12.4 Rancho San Diego Mitigation Bank Designation

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2.13 Wetlands and Other Waters

2.13.1 Regulatory Setting

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

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

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

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

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

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCB) and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code

require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFW.

The RWQCBs were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA. In compliance with Section 401 of the CWA, the RWQCBs also issue water quality certifications for activities which may result in a discharge to waters of the U.S. This is most frequently required in tandem with a Section 404 permit request. Please see Water Quality (Section 2.8) for additional details.

2.13.2 Affected Environment

Analysis in this section is drawn from jurisdictional determination in the *Natural Environmental Study*, dated November 2013. The study was based upon pre-survey investigations of web-based information systems, U.S. Geological Survey (USGS) topographic quadrangles, and field surveys. The wetland and waters study area for the proposed project consists of the proposed construction limits for build alternatives 1 and 2, and a buffer of 500 feet around the limits. The study area is approximately 81.5 acres. Mapping for the areas described below is shown in Figure 2.13.1 below.

Jurisdictional Waters

A total of 3.1 acres (4,567 linear feet) of jurisdictional waters are located within the Biological Study Area (see Figure 2.12.1). Of these waters, approximately 0.9 acres (2,970 linear feet) of ordinary high water mark (OHWM) non-vegetated channel are within both U.S. and State jurisdiction. The remaining 2.2 acres (1,597 linear feet) are considered only State jurisdictional waters. These areas were lacking in one or more wetland indicators (hydrophytic vegetation, hydric soils, or wetland hydrology); therefore, they do not fall within U.S. jurisdiction.

Riparian areas within the project footprint did not exhibit sufficient wetland field indicators (hydrophytic vegetation, hydric soils, and wetland hydrology) to lead to a positive U.S. Army Corps of Engineer jurisdictional wetland determination. A positive non-wetland jurisdictional “water of the U.S.” determination was made for areas that did not meet all three wetland criteria but are within the lateral extent of the OHWM.

Nonvegetated waters

Nonvegetated waters of the U.S. are regulated by the USACE and include territorial seas, tidal waters, and nontidal waters. Open water and unvegetated channels within the project area are associated with active channels (perennial or seasonal moving water) and occasionally with wetland communities. Although they do not provide cover, unvegetated waters do provide habitat for a variety of wildlife species.

Ordinary High Water Mark (OHWM)

Ordinary High Water Mark (OHWM) is legally defined as “the line on the shore established by fluctuations in water and indicated by a clear natural line impressed on the bank, soil characteristics, destruction of vegetation, or the presence of litter/debris” (USACE). USACE jurisdictional waters in the form of the OHWM generally include hydrology and riparian vegetation.

2.13.3 Environmental Consequences

Impacts to Jurisdictional Waters

Impacts to jurisdictional waters would be the same for both action alternatives. Permanent impacts to jurisdictional waters would result from work occurring within the creek bed, including placement of riprap. Direct permanent impacts would occur to 0.1 acres of waters within State and U.S. jurisdiction in the form of ordinary high water mark (OHWM). Temporary impacts are not anticipated for either alternative.

Table 2.13.1: Impacts to Jurisdictional Waters

Type of Jurisdictional Water	Type of Habitat	Permanent Impacts		Temporary Impacts	
US Army Corps of Engineers and CA Department of Fish and Wildlife (CDFW)		acres	linear feet	acres	linear feet
Ordinary High Water Mark	Nonvegetated Channel	0.1	115	0	0
CDFW-only jurisdictional waters					
Wetland	South coast live oak riparian forest	0	0	0	0
Wetland	Southern cottonwood willow riparian forest	0	0	0	0
Wetland	Southern willow scrub	0	0	0	0
Total		0.1	115	0	0

Cumulative Impacts

Much of the project area and vicinity is largely undeveloped. Jurisdictional waters within the project area are not declining; however, minor impacts would occur with either build alternative. It is reasonably foreseeable that jurisdictional waters could be incrementally impacted within the project area. The following avoidance, minimization, and mitigation measures would be implemented to prevent a decline in the resource.

No Build Alternative

Under the No Build Alternative, there would be no impacts to jurisdictional waters because no construction would occur.

2.13.4 Avoidance, Minimization, and/or Mitigation Measures

To ensure that indirect impacts to biological resources are avoided or minimized during construction, the following measures would be implemented as part of the project.

- The 0.1 acres of ordinary high water mark (OHWM) nonvegetated channel will be mitigated at a one to one ratio through the enhancement of 0.1 acres of riparian areas within U.S. and state jurisdictional waters. The non-vegetated channel within Caltrans right-of-way up- and downstream of permanent impacts would be planted with willows and other riparian species. Invasive plants would be removed.
- Both alternatives are being designed in conformance with National Pollutant Discharge Elimination System (NPDES) requirements. The *Caltrans Storm Water Quality Handbook: Project Planning and Design Guide* (2007) would be used to determine the appropriate best management practices to be implemented throughout the construction process.
- Spoils, trash, or any debris would be removed offsite to an approved disposal facility.
- Soils from construction grading would be stockpiled away from creeks and drainages, which are tributaries of the San Luis Rey River, to minimize potential erosion and sedimentation into the riverbed. Staging/storage areas for construction equipment and materials would be located away from creeks and drainages and no equipment maintenance should be performed near the riverbed to minimize the potential for pollution runoff.

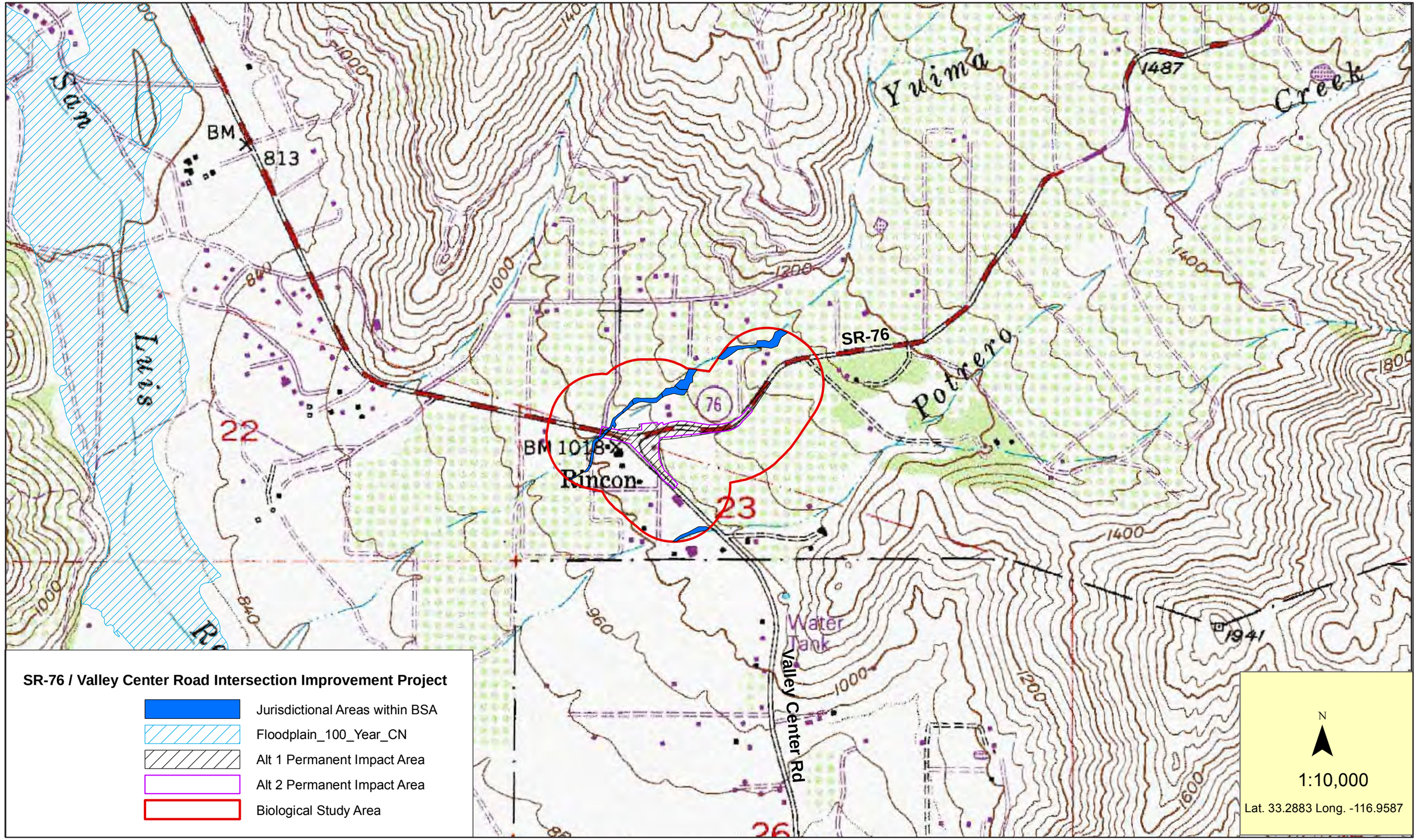


Figure 2.13.1 Hydrology and Jurisdictional Areas

2.14 Plant Species

2.14.1 Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special-status plant species. "Special-status" species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Please see Threatened and Endangered Species (Section 2.16) for detailed information about these species. This section of the document discusses all the other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Caltrans projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act (CEQA), CA Public Resources Code, Sections 21000-21177.

2.14.2 Affected Environment

Analysis in this section is drawn from the *Natural Environmental Study*, dated November 2013.

Plant Species of Concern: Coast Live Oak

Coast Live Oak (*Quercus agrifolia*) is a native California plant. Oak woodlands are one of the most important habitat types in California. Coast Live Oak provides browse for deer, various rodents, and rabbits. Acorn-dependent birds include the acorn woodpecker, yellow-billed magpie, and scrub jay. The Coast Live Oak occurs along Caltrans right of way throughout the project area.

2.14.3 Environmental Consequences

There are no special-status plant species within the project area. Alternatives 1 and 2 could result in direct permanent impacts to various plant species through the permanent loss of individual species during construction activities, and through the permanent loss of habitat necessary to support these species, both during construction activities and after proposed project completion. Impacts to Coast Live Oak would be mitigated through the replanting of trees at a one to one ratio.

Cumulative Impacts

Much of the project area and vicinity is largely undeveloped. Plant species within the project area are not declining; however, minor impacts would occur with either build alternative. It is reasonably foreseeable that plant species could be incrementally impacted within the project area. The following avoidance, minimization, and mitigation measures would be implemented to prevent a decline in the resource.

No Build Alternative

The No Build Alternative would result in no impacts to plant species because construction would not occur.

2.14.4 Avoidance, Minimization, and/or Mitigation Measures

- Impacts to sensitive habitat types are proposed to be mitigated through a combination of onsite habitat restoration and debit of mitigation credits at the Rancho San Diego Mitigation Bank (Figure 2.12.4). The proposed mitigation ratios are shown in Table 2.12.3 in the previous section.
- Temporary impact areas would have temporary irrigation and be planted with native container plants and seeds of similar composition of the adjacent habitats. Revegetation and irrigation would occur as early as possible following grading (where applicable), and be accompanied with one (1) year of plant establishment. Caltrans may also pursue an additional two (2) year supplemental service contract to aid in the plant establishment effort. A plan for planting and maintaining these areas would be submitted for review by resource agencies.
- To avoid incidental loss of sensitive habitat types during construction activities, Environmentally Sensitive Areas (ESAs) would be delineated along the limits of grading prior to the start of construction, and grading would not occur beyond this limit. Construction crews should be made fully aware of this boundary.

2.15 Animal Species

2.15.1 Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.16 below. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

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

State laws and regulations relevant to wildlife include the following:

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

2.15.2 Affected Environment

Analysis in this section is drawn from the *Natural Environmental Study*, dated November 2013.

State Species of Concern

A Cooper's hawk (*Accipiter cooperi*), a CDFW watch list species, was detected flying over the project site. Cooper's hawks breed in deciduous, mixed, and coniferous forests. They winter throughout the United States and Mexico. The Cooper's hawk is a small raptor that feeds on small mammals and various bird species. In southern California, it generally favors extensive riparian bottomlands. There has been a decline in breeding pairs throughout southern California, due to the destruction of nesting habitat within riparian areas. This bird likely utilizes areas of the project footprint to forage, and may nest within the BSA.

CDFW species of special concern, including the southwestern pond turtle (*Clemmys marmorata pallid*), purple martin (*Progne subis*), and southern California rufuous crowned sparrow (*Aimophila ruficeps*), have been documented approximately one mile southwest, southeast, and northeast, respectively, from the intersection and are assumed to be present within the project area.

2.15.3 Environmental Consequences

Alternatives 1 and 2 could have permanent, direct impacts to riparian and upland habitats within the project area known to support the species listed above. They could also have permanent, indirect impacts to the species through increased pollution runoff due to an increase in impermeable surface, increased erosion and sedimentation after the realignment of the roadway, or increased nonnative plant intrusion resulting in a potential loss of the habitats necessary to support these species.

Temporary, direct impacts to the species could also result from construction of either build alternative through construction of the project. However, these impacts would not be expected to substantially reduce the number or restrict the range of these species to a level affecting the species' population stability in the region.

Cumulative Impacts

Much of the project area and vicinity is largely undeveloped. Animal species within the project area are not declining; however, minor impacts would occur with either build alternative. It is reasonably foreseeable that species could be incrementally impacted within the project area. The following avoidance, minimization, and mitigation measures would be implemented to prevent a decline in the resource.

No Build Alternative

The No Build Alternative would result in no impacts to animal species because no construction would occur.

2.15.4 Avoidance, Minimization, and/or Mitigation Measures

- To avoid incidental loss of sensitive habitat types during construction activities, Environmentally Sensitive Areas (ESAs) would be delineated along the limits of grading

prior to the start of construction, and no work would occur beyond this limit. Construction crews should be made fully aware of this boundary.

- All clearing and grubbing would occur between September 30 and January 15, which is outside bird breeding seasons.

2.16 Threatened and Endangered Species

2.16.1 Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA), are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement, a Letter of Concurrence and/or documentation of a No Effect finding. Section 3 of FESA defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

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

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

2.16.2 Affected Environment

Analysis in this section is drawn from the *Natural Environmental Study*, dated November 2013.

State and Federally Listed Species and Designated Critical Habitat

Lists of federal and state proposed, threatened, or endangered species potentially occurring within the project area (USFWS 2013, 2014; CDFW 2013) include the arroyo toad, least Bell's vireo, and southwestern willow flycatcher. Because of the disturbed coastal sage scrub habitat located within the project area, the coastal California gnatcatcher was also added to the list.

The project area is not located within critical habitat for any listed species (Figure 2.16.1).

Federally Listed Endangered Arroyo toad (*Anaxyrus californicus*)

A population of arroyo toads has been documented approximately one mile south of the project location (Figure 2.16.1) (CFWO 2013). Suitable aestivation (summer hibernation) habitat for the species exists within the BSA. Federally designated critical habitat for the arroyo toad is located approximately 0.3 miles to the southwest of the project area. Implementation of the project would result in permanent and temporary impacts to potential aestivation habitat for the arroyo toad. However, the likelihood of arroyo toads utilizing the limit areas of suitable aestivation habitat within the disturbed landscape is highly unlikely. Thus, the project is not likely to affect the arroyo toad.

Federally Listed Threatened Coastal California gnatcatcher (*Polioptila californica caliofornica*)

Suitable habitat for the coastal California gnatcatcher (coastal sage scrub) is located within the project area. However, no detections occurred during protocol surveys. There have been no documented historic detections of gnatcatcher within four miles of the BSA (CNDDB 2013, CFWO 2013).

Implementation of the project could result in permanent and temporary impacts to potential habitat for the coastal California gnatcatcher. However, the small patch size of the habitat affected, lack of critical habitat for the species in the vicinity, and lack of gnatcatchers historically documented or detected during surveys within the project vicinity, leads to the conclusion that the project is not likely to affect the gnatcatcher.

Federal- and State-Listed Endangered Least Bell's vireo; Federally Listed Endangered Southwestern willow flycatcher

Suitable habitat for these species includes southern willow scrub and southern cottonwood willow riparian forest. Though small areas of both habitat types are located within the BSA (0.7 and 0.9 acres, respectively), they are scattered and not found in sufficient acreage amounts to support these species. Further, these habitat types are located outside of the permanent or temporary impact areas. There have been no documented historic detections of least Bell's vireo or southwestern willow flycatcher within six miles of the BSA (CNDDB 2013, CFWO 2013). Critical habitat for the least Bell's vireo (*Vireo bellii pusillus*) is located over 7 miles southwest of the proposed project. Critical habitat for the southwestern willow flycatcher (*Empidonax traillii extimis*) is located approximately 0.6 miles southwest of the proposed project. The project is not likely to affect the least Bell's vireo or the southwestern willow flycatcher.

Other Identified Endangered Species

In addition, the following endangered species were identified as potentially occurring within the regional project location. None of the species had been identified within the biological study

area based on USFWS survey maps. Due to the lack of species identification and critical habitat within the project area, the species listed below were not further evaluated.

- Laguna Mountains skipper (*Pyrgus ruralis lagunae*)
- Nevin's barberry (*Berberis nevinii*)
- Quino Checkerspot butterfly [*Euphydryas editha quino (=e.e. wrighti)*]
- Stephens' kangaroo rat (*Dipodomys stephensi*)

2.16.3 Environmental Consequences

It was determined that the project did not have the potential to affect federally listed threatened or endangered species, candidate species or species proposed for listing. Therefore, no consultation with USFWS was required.

Cumulative Impacts

The majority of land use within the BSA is agricultural. Threatened and endangered species within the project area are not declining; however, minor impacts could occur with either build alternative. It is reasonably foreseeable that threatened and endangered species could be incrementally impacted within the project area. The following avoidance, minimization, and mitigation measures would be implemented to prevent a decline in the resource.

No Build Alternative

Under the No Build Alternative, there would be no impacts to threatened and endangered species because no construction would occur.

2.16.4 Avoidance, Minimization, and/or Mitigation Measures

The following measures would be implemented to avoid, minimize, and mitigate potential impacts to listed species and their habitats.

- All clearing of vegetation would occur between September 30 and February 15, which is outside the breeding seasons for California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, and arroyo toad, to avoid impacts to these species. If activities must occur during the breeding season, a mandatory preconstruction survey by a qualified biologist would be conducted to ensure that no toads or nesting birds are present within the proposed work area. Should toads or a nest site be located, appropriate measures may include designation of the location as an Environmentally Sensitive Area (ESA) and delaying or restricting project activities until nesting and fledging is completed.
- To avoid incidental loss of sensitive habitat types during construction activities, Environmentally Sensitive Areas (ESAs) would be delineated along the limits of grading prior to the start of construction, and grading would not occur beyond this limit. Construction crews should be made fully aware of this boundary.

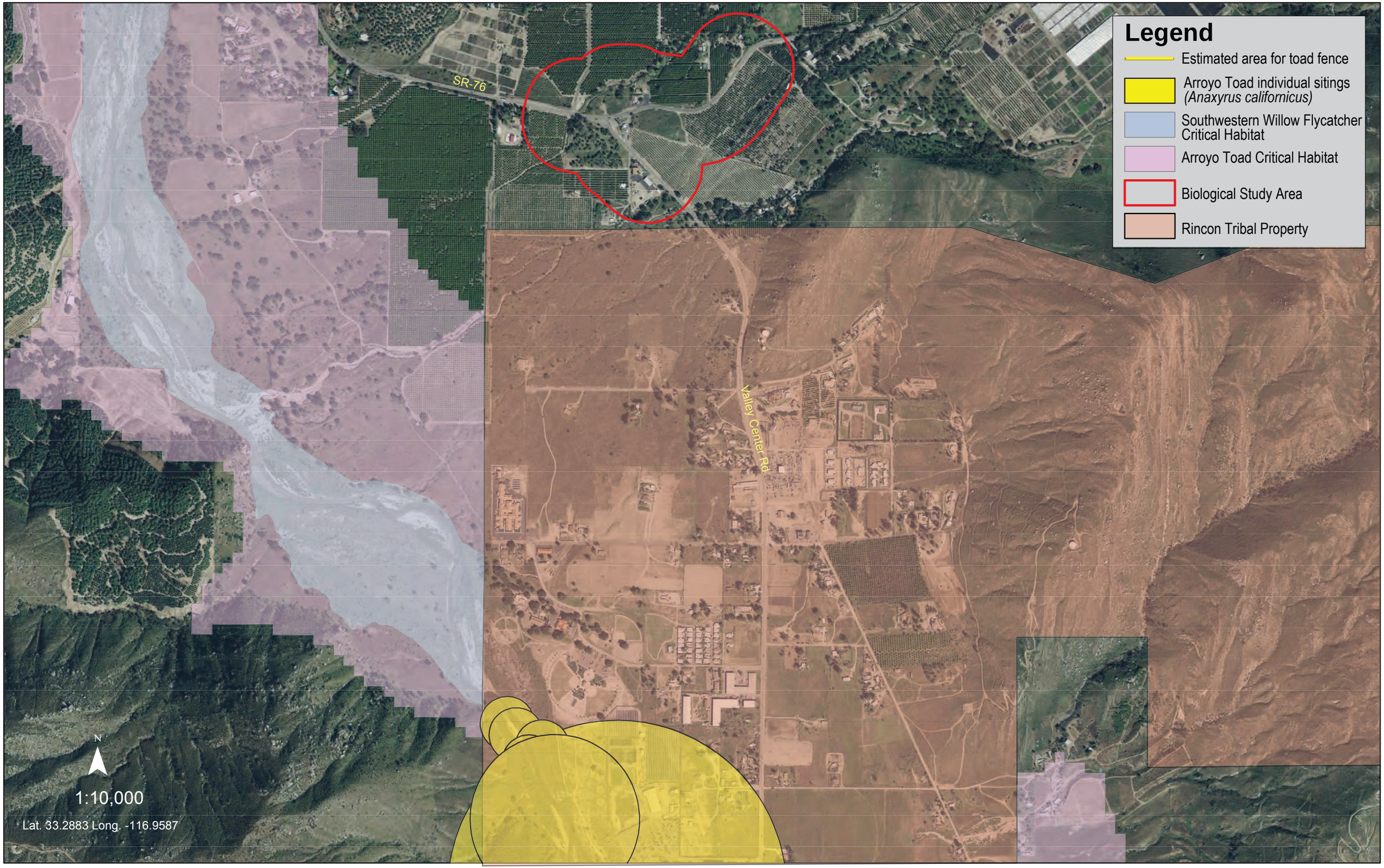


Figure 2.16.1 Critical Habitat within Project Vicinity

2.17 Invasive Species

2.17.1 Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order (EO) 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 (FHWA) guidance issued August 10, 1999 directs the use of the State’s invasive species list maintained by the California Invasive Species Council (Cal-IPC) to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

2.17.2 Affected Environment

There are fourteen invasive species currently within the project limits.

Table 2.17.1: Invasive Species

Common Name	*Scientific Name*	Cal-IPC Rating[6]	Control Measures
Slender Wild Oat	*Avena barbata*	Moderate	Physical and chemical control measures are not practical over large expanses, especially when intermixed with native species.
Black Mustard	*Brassica nigra*	Moderate	None specified
Ripgut Grass	*Bromus diandrus*	Moderate	None directly specified for *B. diandrus*; however, for *Bromus* spp. in general it is recommended to dethatch existing nonnative grass and establish native perennial grasses. Herbicide over such a large area may be detrimental to native species.
Soft Chess	*Bromus hordeaceus*	Limited	None directly specified for *B. hordeaceus*; however, for *Bromius* spp. in general it is recommended to dethatch existing nonnative grass and establish native perennial grasses. Herbicide over such a large area may be detrimental to native species.
Red Brome	*Bromus madritensis*	High	Dethatch existing nonnative grass and establish native perennial grasses. Herbicide over such a large area may be detrimental to native species.

[6] California Exotic Pest Plant Council (Cal-IPC) ratings:
High: Species has severe ecological impacts on physical processes, plant and animal communities, and vegetation structure.
Moderate: Species has substantial and apparent impacts on physical processes, plant and animal communities, and vegetation structure.
Limited: Species is invasive but ecological impacts are minor on a statewide level.

Common Name	*Scientific Name*	Cal-IPC Rating[6]	Control Measures
Italian Thistle	*Carduus pynocephalus*	Moderate	Controlled with application of herbicide.
Tocalote	*Centaurea melitensis*	Moderate	Mowing or weed eating can be used effectively if conducted at a stage where 2 to 5 percent of the seeds are flowering (after bolting and before seed is set) and plant is cut below lowest branch.
Eucalyptus	*Eucalyptus sp.*	Moderate	Control of sprouting achieved by application of triclopyr or glyphosate to outer portion of the stump's cut surface at time of tree felling.
Toothbrush Grass	*Lamarkia aurea*		None specified
Horehound	*Marrubium vulgare*	Limited	None specified
Tree Tobacco	*Nicotiana glauca*	Moderate	None specified
Smilo Grass	*Piptatherum miliaceum*	Limited	None specified
Curly Dock	*Rumex crispus*	Limited	None specified
Goathead	*Tribulus terrestris*		None specified

2.17.3 Environmental Consequences

Both build alternatives could result in impacts to vegetation communities from increased nonnative species intrusion. Contamination to native areas can occur through disturbance and the unintentional importation of nonnative plants and seed from other areas. Many invasive plants have been unintentionally introduced, either through planting of impure seed mixes that contain invasive species, or by unintended transport by vehicle or in cargo. In many cases, where coastal sage scrub soils are mechanically disturbed, the returning vegetation consists of a relatively high number of invasive species, including grasses and forbs (*Centaurea* spp.) Within the project area, much of the existing non-developed land consists of disturbed vegetation.

Cumulative Impacts

Much of the project area and vicinity is largely undeveloped. However, the non-agricultural vegetation in the project area is mostly disturbed and contains several invasive species as discussed in Section 2.17.2. Ground disturbing activities could result in an increase of invasive species as discussed above. However, it is reasonably foreseeable that the proposed project would reduce the amount of invasive species within the project area with implementation of the following avoidance, minimization, and mitigation measures.

No Build Alternative

Under the No Build Alternative, there would be no impacts to invasive species within the project area because no construction would occur. However, there would also be no mitigation of invasive species because no enhancement would occur.

2.17.4 Avoidance, Minimization, and/or Mitigation Measures

- Precautions may be taken if invasive species are found in or adjacent to the construction areas to avoid the inadvertent introduction of invasives. Such precautions may include the inspection and cleaning of construction equipment and eradication strategies.
- Noxious weeds found growing within the project right-of-way during construction would be removed. Heavy equipment such as loaders and motor graders, in areas where noxious plant density is high, may be used. Manual removal would be used in areas with limited populations or large individual plants.
- All plants used in the landscaping and mitigation areas would comply with federal, state, and county laws requiring inspections for infestations. The vendor would supply certification of inspection from the County of San Diego Department of Agriculture.
- Species identified on the California Invasive Plant council's *List of Exotic Pest Plants of Greatest Ecological Concern in California* would not be incorporated into the planning scheme. A qualified biologist would monitor the site immediately prior to and during construction, to identify the presence of noxious weeds and recommend measures to control the spread.
- Graded habitat adjacent to the corridor would be revegetated with an appropriate native plant mix. Revegetation with native plant species would occur as early as possible following grading. To ensure healthy and vigorous plant growth, a three (3)-year plant establishment period may be needed for maintenance of highway planting constructed within Caltrans right of way. The project contract will include one (1) year of plant establishment. Caltrans may also pursue an additional two (2)-year supplemental service contract to aid in the plant establishment effort.

Additional Impacts

2.18 Construction Impacts

Construction activities cause temporary impacts with respect to Air Quality, Noise, Traffic and Transportation, and Pedestrian and Bicycle Facilities. Construction minimization measures are summarized below.

2.18.1 Air Quality

Construction activities would not last for more than 3 years; therefore, construction-related emissions are not required to be included in regional and project-level conformity analysis (40 CFR 93.123(c)(5)). Anticipated construction impacts and appropriate mitigation and minimization measures are discussed below under Avoidance and Minimization.

- During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other construction-related activities.
- Site preparation and roadway construction typically involves clearing, cut-and-fill activities, grading, removing or improving existing roadways, and paving roadway surfaces. Construction-related effects on air quality would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site.
- In addition to dust-related PM_{10} emissions, heavy-duty trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NOx, VOCs and some soot particulate (PM_{10} and $PM_{2.5}$) in exhaust emissions.
- SO_2 is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Under California law and ARB regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel (not more than 15 ppm sulfur), so SO_2-related issues due to diesel exhaust would be minimal.
- Some phases of construction, particularly asphalt paving, may result in short-term odors in the immediate area of each paving site. Such odors would quickly disperse to below detectable levels over time.

Regional Construction Emissions

- The principal criteria pollutants emitted during construction would be PM_{10} and $PM_{2.5}$. The source of the pollutants would be fugitive[7] dust created during clearing, grubbing, excavation, and grading; demolition of structures and pavement; vehicle travel on paved and unpaved roads; and material blown from unprotected graded areas, stockpiles, and haul trucks. These smaller particles also contribute to visibility and nuisance impacts, and include PM_{10} and $PM_{2.5}$, which are potential health hazards.
- An additional important source of pollutants during construction would be engine exhaust from construction equipment. The principal pollutants of concern would be NO_X and ROG emissions that would contribute to the formation of O_3, which is a regional nonattainment pollutant.
- Federal conformity regulations require analysis of construction impacts for projects when construction activities would last for more than 5 years. The proposed project would not require 5 years of construction; therefore, no quantitative estimates of regional construction emissions have been made. However, it is recommended that specific measures to control dust and particulates be incorporated into project specifications. These measures are identified below under Avoidance and Minimization.

Local Construction Emissions

- According to 40 CFR § 93.123 (5), CO, PM_{10}, and $PM_{2.5}$ hot spot analyses are not required for construction-related activities that create a temporary increase in air emissions. *Temporary* is defined as increases that only occur during a construction phase and last 5 years or less at any individual site. The construction phase of the proposed project would last for approximately 2 years and would be considered temporary. Thus, no local hot spot

[7] "Fugitive" is a term used in air quality analysis to denote emission sources that are not confined to stacks, vents, or similar paths.

is anticipated and a hot spot analysis is not required for construction of the proposed project.

- Diesel particulate emissions may be a potential concern, as described in Section 2.11: Air Quality. While there is no formal guidance for impact analysis, potential adverse impacts would be increased if construction equipment and truck staging areas were to be located near schools, active recreation areas, or areas of higher population density. The nearest school to the project alignment, All Tribes Charter School, is approximately 0.71 miles from the eastern most portion of the project. Thus, a measure to reduce this potential impact has been identified below under Avoidance and Minimization.

Avoidance and Minimization Measures

Most of the construction impacts to air quality are short-term in duration and, therefore, would not result in long-term adverse conditions. Implementation of the following measures, some of which may also be required for other purposes such as storm water pollution control would reduce air quality impacts resulting from construction activities:

- The construction contractor shall comply with Caltrans' Standard Specifications in Section 14(2010).
    - Section 14-9.01 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.
    - Section 14-9.02 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18.
- Apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a "no visible dust" criterion either at the point of emission or at the right of way line, depending on local regulations.
- Spread soil binder on any unpaved roads used for construction purposes, and all project construction parking areas.
- Wash off trucks as necessary to control fugitive dust emissions.
- Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment as provided in California Code of Regulations Title 17, Section 93114.
- Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- Locate equipment and material storage sites as far away from schools, residences, and recreational areas as practical. Keep construction areas clean and orderly.
- Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic.
- Cover all transported loads of soils and wet materials prior to transport, or provide adequate freeboard (space from the top of the material to the top of the truck) to minimize emission of dust (particulate matter) during transportation.

- To decrease particulate matter, promptly and regularly remove dust and mud that is deposited on paved, public roads due to construction activity and traffic.
- Route and schedule construction traffic to avoid peak travel times as much as possible, to reduce congestion and related air quality impacts caused by idling vehicles along local roads.
- Install mulch or plant vegetation as soon as practical after grading to reduce windblown particulate in the area. Be aware that certain methods of mulch placement, such as straw blowing, may cause dust and visible emission issues, and may require controls such as dampened straw.
- Locate construction equipment and truck staging and maintenance areas to the extent feasible and nominally downwind of schools, active recreation areas, and other areas of high population density.

2.18.2 Noise

Noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction noise is regulated by 2012 Caltrans Standard Specifications Section 14-8, Noise and Vibration. These requirements state that noise levels generated during construction would not exceed 86 decibels (dBA) L_{MAX} (the magnitudal maximum level of the raw noise source) at 50 feet from the job site from 9 p.m. to 6 a.m., and that all equipment would be fitted with adequate mufflers according to the manufacturers' specifications.

Table 2.18.1: Construction Equipment Noise

Equipment	Maximum Noise Level (dBA at 50 feet)
Scrapers	89
Bulldozers	85
Heavy Trucks	88
Backhoe	80
Pneumatic Tools	85
Concrete Pump	82

Source: Federal Transit Administration, 1995.

Table 2.18.1 above summarizes noise levels produced by construction equipment commonly used on roadway construction projects. Equipment involved in construction is expected to generate noise levels ranging from 74 to 85 dBA at a distance of 50 feet. Noise produced by construction equipment would be reduced over distance at a rate of about 6 dBA per doubling of distance. No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Caltrans Standard Specifications and would be short-term, intermittent, and dominated by local traffic noise. Implementing the following measures would minimize temporary construction noise impacts:

- All equipment should have sound control devices no less effective than those provided on the original equipment. No equipment should have an unmuffled exhaust.
- As directed by the Caltrans resident engineer, the contractor should implement appropriate additional noise abatement measures including, but not limited to, changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction

activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around stationary construction noise sources.

2.18.3 Traffic and Transportation / Pedestrian and Bicycle Facilities

Construction of the proposed project would result in temporary disruption to existing vehicular travel patterns due to lane restrictions, temporary detours, and other construction-related activities. These changes are likely to inconvenience residents along the alignment and for motorists traveling through the project area. However, at this time, no full closures are anticipated during construction. Instead, the existing alignment of SR-76 would be used as a detour road during construction of the roundabout (Alternative 1) or the signalized interchange (Alternative 2). Other portions of the roadway would be partially closed and include flagging, as needed. Residents, business owners and operators, patrons, and public transportation customers would still be able to access their properties, businesses, and facilities during construction of the proposed project.

Construction activities could temporarily delay emergency service response times, school buses, and other users of the highway. Temporary construction impacts to traffic and transportation are considered less than significant and would be reduced with implementation of the following avoidance and minimization measures.

A construction traffic control plan and construction management plan, also known as a transportation management plan (TMP), would be prepared for the proposed project. The TMP is aimed at maintaining safe and efficient movement of vehicles through the construction zone, as well as maintaining access during construction periods. The TMP would be written by Traffic Operations staff and would address potential lane closures associated with road widening, installation, signing, lighting, traffic control device placement, and establishment of work hours outside the peak traffic periods. The TMP would include the following general construction and traffic control measures and would allow required traffic movement to occur with minimal interruption.

- Emergency response service providers would be notified in advance of the proposed locations, nature, timing, and duration of any construction activities. These emergency response providers would be advised of any access restrictions that could impact their effectiveness. Emergency response providers include police and fire departments and ambulance companies. The TMP would include details regarding emergency service coordination and procedures during the construction phase, and copies would be provided to all relevant service providers.
- A public awareness program would be developed to inform the public of the upcoming detours and construction schedule.
- Any traffic impacts to schools in the proposed project area would be noted. All access to schools would be maintained during the construction phase of the proposed project.
- Where partial closures are implemented, flagging would occur to ensure safe passage through the project area during construction.

2.18.4 Temporary Construction Easements

Construction of the proposed project would require acquisition of portions of the properties adjacent to SR-76 for a temporary construction easement. The use of these portions of the property, while temporary, would still have the potential to temporarily reduce the utility of the

parcels for the property owners. To maintain utility for landowners, access to the properties would be maintained at all times throughout construction. Any vegetation removed would be replanted or restored.

2.19 Cumulative Impacts

2.19.1 Regulatory Setting

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

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

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

2.19.2 Affected Environment

A discussion of cumulative impacts is provided in each resource section.

2.19.3 Environmental Consequences

Environmental consequences related to cumulative impacts are discussed individually by resource.

2.19.4 Avoidance and Minimization Measures

Avoidance and minimization measures to minimize cumulative impacts are discussed in each resource section.

2.20 Climate Change

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

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 has led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), HFC-23 (fluoroform), HFC-134a (s, s, s, 2-tetrafluoroethane), and HFC-152a (difluoroethane).

In the U.S., the main source of GHG emissions is electricity generation, followed by transportation. In California, however, transportation sources (including passenger cars, light-duty trucks, other trucks, buses, and motorcycles make up the largest source of GHG-emitting sources. The dominant GHG emitted is CO_2, mostly from fossil fuel combustion.

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

There are four primary strategies for reducing GHG emissions from transportation sources: 1) improving the transportation system and operational efficiencies, 2) reducing travel activity, 3) transitioning to lower GHG-emitting fuels, and 4) improving vehicle technologies/efficiency. To be most effective, all four strategies should be pursued cooperatively. (FHWA 2014)

2.20.1 Regulatory Setting

State

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

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

Executive Order (EO) S-3-05 (June 1, 2005): The goal of this EO is to reduce California’s GHG emissions to:

- year 2000 levels by 2010
- year 1990 levels by 2020
- 80 percent below the year 1990 levels by 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32.

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

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

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

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

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

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

Federal

Although climate change and GHG reduction are a concern at the federal level, currently no regulations or legislation have been enacted specifically addressing GHG emissions reductions and climate change at the project level. Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has issued explicit guidance or methods to conduct project-level GHG analysis. [8] FHWA supports the approach that climate change considerations should be integrated throughout the transportation decision-making process–from planning through project development and delivery. Addressing climate change mitigation and adaptation up front in the planning process will assist in decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project-level decision-making. Climate change considerations can be integrated into many planning factors, such as supporting economic vitality and global efficiency, increasing safety and mobility, enhancing the environment, promoting energy conservation, and improving the quality of life.

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

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

Executive Order 13514 (October 5, 2009): This order is focused on reducing greenhouse gases internally in federal agency missions, programs and operations, but also directs federal

[8] To date, no national standards have been established regarding mobile source GHGs, nor has U.S. EPA established any ambient standards, criteria or thresholds for GHGs resulting from mobile sources.

agencies to participate in the Interagency Climate Change Adaptation Task Force, which is engaged in developing a national strategy for adaptation to climate change.

U.S. EPA's authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six greenhouse gases constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and EPA's assessment of the scientific evidence that form the basis for EPA's regulatory actions. U.S. EPA in conjunction with NHTSA issued the first of a series of GHG emission standards for new cars and light-duty vehicles in April 2010. (C2ES n.d.)

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

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

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

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

2.20.2 Project Analysis

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contributions of all other sources of GHG.[9] In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA

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

Guidelines Sections 15064(h)(1) and 15130). To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects to make this determination is a difficult, if not impossible, task.

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

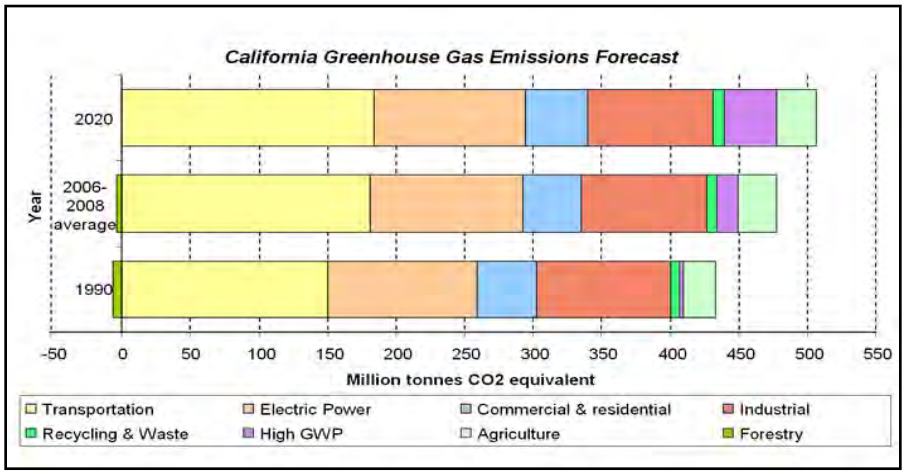


Figure 2.20.1: California Greenhouse Gas Forecast
Source: http://www.arb.ca.gov/cc/inventory/data/forecast.htm

Caltrans and its parent agency, the Transportation Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing the Climate Action Program at Caltrans that was published in December 2006.[10]

Project Design

The purpose of the project is to improve the safety of the SR-76/Valley Center Road intersection. The project's purpose would be carried out through the following non-capacity-increasing safety improvements:

- Curve correction
- Improved lighting and signage
- Installation of a roundabout OR signal light at the intersection

If a Build Alternative is selected, operation of the project would include changes in traffic behavior during movement through the intersection. Currently, traffic passes through the

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

intersection along SR-76 without stopping, while westbound traffic turning left onto southbound Valley Center Road must yield to oncoming eastbound traffic. Northbound vehicles approaching SR-76 from Valley Center Road stop at a stop sign and yield to westbound and eastbound traffic along SR-76.

Roundabout Alternative

Under the Roundabout Alternative, traffic from Valley Center Road, as well as from SR-76, would pass through the intersection without stopping, but all traffic would slow to about 15 to 25 mph. Vehicles would cross the intersection around a raised median, passing through a one-way rotary lane moving counterclockwise, and would exit the roundabout in the direction of their choice. Vehicles entering the roundabout would be required to yield to traffic already in the intersection. Because traffic would not be required to stop and idle under this alternative, there is the potential for the project to decrease GHG emissions.

Signal Alternative

The signal alternative would install traffic signalization lights at the intersection for traffic on SR-76 and Valley Center Road. This would result in the occasional halting of traffic which is currently free-flow, but would also have the potential to reduce wait times for queued northbound traffic on Valley Center Road turning left onto westbound SR-76.

Emissions

Information and analysis in the following section is drawn from the Traffic Study conducted by Caltrans, based on data collected Saturday, October 5, 2013. The study incorporates current conditions and a 2040 projection based on future traffic predictions.

Please note that changes have been made to the tables below. The traffic analysis conducted for the Draft Initial Study contained errors that were discovered after the document's release; all changes are reflected below by a vertical line in the margin to the left of the tables. The No Build scenario estimates have not changed.

The traffic forecasts released in the Draft Initial Study show an increase in traffic through the intersection, but this was based on erroneous inputs. However, although neither build alternative would increase traffic flow through the project area, the study still reflects a minor increase of traffic through the intersection under both build alternatives, as shown in Table 2.20.1, Table 2.20.2, and Table 2.20.3 below. This is to account for vehicles traveling westbound on SR-76 from the east, parking at the restaurant and market east of the intersection, and returning to the east on SR-76. These travelers would not cross Valley Center Road under the No Build Alternative, but would travel through the intersection under both build alternatives since both build alternatives include moving Valley Center Road to the east to connect with the shopping center parking lot.

The project would not increase capacity; therefore, there is a low potential for an increase in GHG emissions. According to the SIDRA traffic study, approximately 958 vehicles per hour currently pass through the intersection (based on October 5, 2013 levels). The following table describes the emission levels that are anticipated for each alternative based on the study.

Table 2.20.1: Anticipated Emission Levels

	Annual Traffic Flow (vehicles/year)		Total Annual Delay (vehicle-hours/year)		Annual CO_2 Emissions (kg/year)	
	2014	2040	2014	2040	2014	2040
Alternative 1	466,560	774,720	1,201	4,418	75,806	141,861
Alternative 2	466,560	774,720	1,740	2,666	69,193	116,027
No Build	459,840	753,600	1,578	128,834	83,222	633,057

A summary of traffic flow information from the study is included in Table 2.20.2 and Table 2.20.3 below. The projected increase in Level of Service, as shown in the Comparison Table, reflects the project's potential to reduce traffic queues, thereby lowering vehicle idling and reducing GHG emissions within the project area.

Table 2.20.2: Traffic Study Counts and Forecast – Year 2014

		Flow (Vehicles/hour)			Average Delay (seconds)			Level of Service (LOS)		
Origin	Destination	Alt 1	Alt 2	No Build	Alt 1	Alt 2	No Build	Alt 1	Alt 2	No Build
NB VCR	WB SR-76 (Left)	194	194	194	7.1	12.1	37.2	A	B	E
	EB SR-76 (Right)	78	78	87	7.1	0.6	37.2	A	A	E
	NB VCR (Thru)	9	9	N/A	7.1	12.1	N/A	A	B	N/A
WB SR-76	SB VCR (Left)	289	289	298	10.1	30.5	4.6	A	C	A
	NB VCR (Right)	7	7	N/A	10.1	5.9	N/A	A	A	N/A
	WB SR-76 (Thru)	60	60	71	10.1	5.9	0.0	A	A	A
EB SR-76	NB VCR (Left)	11	11	N/A	10.5	8.0	N/A	A	A	N/A
	SB VCR (Right)	200	200	200	10.5	0.9	0.0	A	A	A
	EB SR-76 (Thru)	97	97	108	10.5	8.6	0.0	A	A	A
SB VCR	EB SR-76 (Left)	7	7	N/A	6.6	9.3	N/A	A	A	N/A
	WB SR-76 (Right)	11	11	N/A	6.6	9.3	N/A	A	A	N/A
	SB VCR (Thru)	9	9	N/A	6.6	9.3	N/A	A	A	N/A

Table 2.20.3: Traffic Study Counts and Forecast – Year 2040

		Flow (Vehicles/hour)			Average Delay (seconds)			Level of Service (LOS)		
Origin	Destination	Alt 1	Alt 2	No Build	Alt 1	Alt 2	No Build	Alt 1	Alt 2	No Build
NB VCR	WB SR-76 (Left)	288	288	288	13.9	15.3	2009.1	B	B	F
	EB SR-76 (Right)	172	172	192	13.9	1.2	2009.1	B	A	F
	NB VCR (Thru)	20	20	N/A	13.9	15.3	N/A	B	B	N/A
WB SR-76	SB VCR (Left)	304	304	324	21.6	33.1	5.8	C	C	A
	NB VCR (Right)	22	22	N/A	21.6	8.1	N/A	C	A	N/A
	WB SR-76 (Thru)	194	194	216	21.6	8.1	5.8	C	A	A
EB SR-76	NB VCR (Left)	22	22	N/A	26.5	10.0	N/A	C	B	N/A
	SB VCR (Right)	330	330	330	26.5	1.6	0.0	C	A	A
	EB SR-76 (Thru)	198	198	220	26.5	9.6	0.0	C	A	A
SB VCR	EB SR-76 (Left)	22	22	N/A	10.0	9.7	N/A	A	A	N/A
	WB SR-76 (Right)	22	22	N/A	10.0	9.7	N/A	A	A	N/A
	SB VCR (Thru)	20	20	N/A	10.0	9.7	N/A	A	A	N/A

2.20.3 Construction Emissions

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

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

2.20.4 Greenhouse Gas Reduction Strategies

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from then-Governor Arnold Schwarzenegger's Strategic Growth Plan for California. The Strategic Growth Plan targeted a significant decrease in traffic congestion below 2008 levels and a corresponding reduction in GHG emissions, while accommodating growth in population and the economy. The Strategic Growth Plan relies on a complete systems approach to attain CO_2 reduction goals: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements as shown in Figure 2.19.2.

Figure 2.19.2: Mobility Pyramid

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

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

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce greenhouse gas (GHG) emissions. The CTP defines

performance-based goals, policies, and strategies to achieve our collective vision for California's future, statewide, integrated, multimodal transportation system.

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

Table 2.20.4 summarizes the departmental and statewide efforts that Caltrans is implementing to reduce GHG emissions. More detailed information about each strategy is included in the Climate Action Program at Caltrans (December 2006).

Table 2.20.4 Climate Change/CO_2 Reduction Strategies

Strategy	Program	Partnership		Method/Process	Estimated Co2 Savings Million Metric Tons (MMT)	
		Lead	Agency		2010	2020
Smart Land Use	Intergovernmental Review (IGR)	Caltrans	Local governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local and regional agencies & stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	0.975	7.8
Operational Improvements & Intelligent Transportation Systems (ITS)	Strategic Growth Plan	Caltrans	Regions	State ITS: Congestion Management Plan	0.07	2.17
Mainstream Energy & GHG into Plans and Projects	Office of Policy Analysis and Research; Division of Environmental Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis and Research	Interdepartmental; CalEPA, ARB, CEC		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	0.0045	0.0065 0.045 0.0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	0.117	0.34

Strategy	Program	Partnership		Method/Process	Estimated Co2 Savings Million Metric Tons (MMT)	
		Lead	Agency		2010	2020
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries		2.5% limestone cement mix 25% fly ash cement mix >50% fly ash/slag mix	1.2 0.36	4.2 3.6
Goods Movement	Office of Goods Movement	Cal EPA, ARB, BT&H, MPOs		Goods Movement Action Plan	Not Estimated	Not Estimated
Total					2.72	18.18

2.20.5 Climate Change Reduction Strategies

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

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

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

- The project would incorporate the use of energy-efficient lighting, such as LED traffic signals. LED bulbs cost $60 to $70 each, but last five to six years, compared to the one-year average lifespan of the incandescent bulbs previously used. The LED bulbs themselves consume 10 percent of the electricity of traditional lights, which would also help reduce the project's CO_2 emissions. (Knoxville Business Journal 2008)
- According to Caltrans Standard Specifications, the contractor must comply with all local Air Pollution Control District's (APCD) rules, ordinances, and regulations for air quality restrictions. (See Section 2.11: Air Quality for more information)

2.20.6 Adaptation Strategies

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

At the federal level, the Climate Change Adaptation Task Force, co-chaired by the White House Council on Environmental Quality (CEQ), the Office of Science and Technology Policy (OSTP), and the National Oceanic and Atmospheric Administration (NOAA), released its interagency task force progress report on October 28, 2011 (CEQ n.d.), outlining the federal government's progress in expanding and strengthening the Nation's capacity to better understand, prepare for, and respond to extreme events and other climate change impacts. The report provides an update on actions in key areas of federal adaptation, including: building resilience in local communities, safeguarding critical natural resources such as freshwater, and providing accessible climate information and tools to help decision-makers manage climate risks .

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

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

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

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

The National Academy of Science was directed to prepare a Sea Level Rise Assessment Report[11] to recommend how California should plan for future sea level rise. The report was released in June 2012 and included:

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

[11] *Sea Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future* (2012) is available at http://www.nap.edu/catalog.php?record_id=13389.

- A discussion of future research needs regarding sea level rise.

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

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

All projects that have filed a Notice of Preparation as of the date of EO S-13-08, and/or are programmed for construction funding from 2008 through 2013, or are routine maintenance projects may, but are not required to, consider these planning guidelines. The proposed project was programmed for construction in the region's 2012 Regional Transportation Improvement Program (RTIP), and is located outside the coastal zone and coastal program areas. Direct impacts to transportation facilities due to projected sea level rise are not anticipated.

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

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

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

Chapter 3 – Comments and Coordination

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

Project development team meetings were held quarterly from April 2012 until the present to discuss issues related to the project.

Public Participation

Caltrans held an open house informative meeting on March 20, 2013 from 5:30 to 7:30 p.m. at the Pauma Valley Community Center. Community notices were circulated in the Valley Roadrunner and posted in the Valley Center and Pauma Valley post offices. The purpose of the open house was to provide information to the public about the project. Approximately twenty to thirty community members attended the open house. Due to the limited nature of the potential environmental impacts related to the proposed project, additional scoping was not determined to be needed.

On May 16, 2014, an email was sent to representatives of San Diego County, the San Diego County Bicycle Coalition, and the Oceanside Bicycle/Pedestrian Committee. The representatives were notified about the upcoming project and that a Draft Environmental Document would be mailed to them upon circulation.

Caltrans has prepared an extensive list of interested individuals, groups, and agencies for draft environmental document distribution and review. This list includes members of the public who attended the open house, business and property owners near the project area, nearby school districts, utility operators within the project area, and local elected officials. A complete list of the parties to whom the document will be sent can be found in Chapter 5.

Copies of public notices are shown on the subsequent pages. The Final Environmental Document will include public comments and Caltrans' responses in this chapter.

Consultation and Coordination with Agencies

Project engineers met with the following entities to provide project details and information:

- Rincon Reservation Fire Department in July, 2013
- California Highway Patrol in June, 2013
- Mercy Ambulance in July, 2013
- La Jolla Reservation in July, 2013
- California Department of Forestry and Fire Protection in June, 2013
- Pala Reservation Fire Department in July, 2013
- Pala Tribe in July, 2013

- San Pasqual Tribe in 2013
- La Jolla Tribe in 2013

Public Review Period

The Draft IS/EA was circulated for public review and comment from June 9th until July 10th, 2014. The letter from the State Clearinghouse indicating completion of the public review period is included in this chapter. A public hearing was held during the public comment period on June 26, 2014, at the Pauma Valley Community Center. Caltrans engineering, environmental, right of way, and management staff were present to answer questions from the public in an open-house format. Exhibits of the project design from the document were on display to enhance attendees' understanding of the project. Members of the public were encouraged to sign in, receive a fact sheet about the project, and submit written comments.

Notices of the public meeting were mailed to residents, businesses, and local organizations and agencies in the project vicinity and published in local and regional publications in Spanish and English. A copy of the Notice of Availability is included in this chapter.

Caltrans received 29 comments during the public comment period. The comments are included in this chapter along with written responses from Caltrans. The comments are located on the left half of each page, with each specific comment numbered in the margin and its corresponding response numbered on the left side of the page.

NOTICE OF AVAILABILITY

of Draft Initial Study / Environmental Assessment for the proposed State Route 76 / Valley Center Rd. Intersection Improvement Project and Notice of Public Hearing

WHAT'S BEING PLANNED? The California Department of Transportation (Caltrans) has prepared this Draft Initial Study with proposed Mitigated Negative Declaration / Environmental Assessment (IS/EA), which examines the potential environmental impacts of the proposed State Route 76 / Valley Center Road Intersection Improvement Project in San Diego County.

Caltrans is preparing this Draft IS/EA as the NEPA lead agency assuming responsibility for Federal Highway Administration pursuant to 23 U.S.C. §327.

WHY THIS AD? Caltrans has studied the effects the project may have on the environment. Our studies show that the project will not have a significant effect on the environment with the included mitigation measures. The IS/EA, which discusses potential project impacts, has been prepared. This notice is to inform you of the IS/EA and its availability for review and notice of a public hearing. Caltrans intends to adopt a Mitigated Negative Declaration and to issue a Finding of No Significant Impact (FONSI) for this project pending completion of the public review period that started June 9, 2014 and ends July 10, 2014. This does not mean that Caltrans' decision regarding the project is final. This document is subject to modification based on comments received by interested agencies and the public.

ABOUT THE PUBLIC HEARING: There will be no formal presentation. This will be an "Open Forum" hearing where you will have the opportunity to speak directly with Caltrans representatives about the project and its environmental impacts. All substantive comments will be addressed in the final environmental document.

WHAT'S AVAILABLE: The draft IS/EA is available for review at the Caltrans District Office located at 4050 Taylor Street, San Diego, weekdays from 8:00 a.m. to 5:00 p.m. and online at www.dot.ca.gov/dist11. The IS/EA is currently in public circulation and interested members of the public may review it at the following San Diego locations: Escondido Public Library, 239 S Kalmia Street, Escondido, CA 92025; San Diego Central Library, 330 Park Blvd., San Diego, CA 92101; Valley Center Branch Library, 29200 Cole Grade Road, Valley Center, CA 92082; Valley Center History Museum, 29200 Cole Grade Road, Valley Center, CA 92082; and Pala Library, 2003 Pala Mission Road, Pala, CA 92059.

WHERE YOU COME IN: Have the potential impacts been addressed? Do you have information that should be included? Do you agree with the findings? Your comments will become part of the public record. Please submit your comments during the public review period by July 10, 2014. If you wish to submit written comments please send them to Allie Scrivener, Caltrans District 11, 4050 Taylor Street, MS: 242, San Diego, CA 92110.

PUBLIC HEARING: Thursday, June 26, 2014, from 5:30 p.m. to 7:30 p.m.
Pauma Valley Community Center
16650 Highway 76, Pauma Valley, CA 92061

Individuals who require special accommodation (American Sign or Foreign Language interpreter, accessible seating, documentation in alternative formats, etc.) are requested to contact the **District 11 Public Information Office at (619) 688-6670** at least 10 days prior to the scheduled meeting date. **TTY users** may contact the **California Relay Service TTY line at (800) 735-2929 or 711.**

CONTACT: For more information about this project, please contact Allie Scrivener, Environmental Planner, Branch A, at (619) 688-0192. For general information about transportation issues, please call the Caltrans Public Information Office at (619) 688-6670.

AVISO DE DISPONIBILIDAD

de Estudio Preliminar Inicial / Evaluación Ambiental Preparado para el Proyecto de Mejoras a la Intersección entre la Carretera Estatal 76 y la Calle Valley Center y Aviso de Reunión Pública

¿QUE SE ESTA PLANIFICANDO? El Departamento de Transporte de California (Caltrans) ha preparado un Estudio Preliminar Inicial con Declaración de Mitigación Negativa / Evaluación Ambiental (IS/EA*) el cual analiza los efectos potenciales que el proyecto propuesto de Mejoras a la Intersección entre la Carretera Estatal 76 y la Calle Valley Center en el Condado de San Diego, pudiera tener en el medio ambiente.

Caltrans ha preparado este IS/EA* Preliminar como la agencia federal que encabeza esta tarea y la cual asumió todas las responsabilidades de la Secretaria del Departamento de Transporte de los Estados Unidas bajo la Ley de Política Ambiental Nacional (NEPA*) en cumplimiento con el 23 U.S. C.* § 327.

¿POR QUE ÉSTE ANUNCIO? Caltrans ha estudiado los efectos al medio ambiente que el proyecto pudiera tener. Nuestros estudios muestran que el proyecto no tendrá un efecto importante en el medio ambiente con las medidas de mitigación incluidas. El IS/EA* Preliminar, el cual analiza los efectos potenciales del proyecto, ha sido preparado. Este aviso es para informarle sobre la disponibilidad del IS/EA* Preliminar para su revisión y para notificarle sobre una reunión pública. Caltrans pretende adoptar una Declaración de Mitigación Negativa y publicar un Hallazgo de Efecto no Significativo (FONSI*) para este proyecto mientras finaliza el periodo de revisión pública que inició el 9 de junio del 2014 y concluye el 10 de julio del 2014. Esto no significa que la decisión de Caltrans respecto al proyecto sea final. Éste documento está sujeto a modificación en base a los comentarios recibidos provenientes de las agencias interesadas y el público.

ACERCA DE LA REUNIÓN PÚBLICA: No habrá una presentación formal. Será una reunión de formato denominado "foro abierto" donde usted tendrá la oportunidad de hablar directamente con representantes de Caltrans sobre el proyecto y sus efectos al medio ambiente. Todos los comentarios sustantivos serán atendidos en el documento ambiental final.

QUE HAY DISPONIBLE: El IS/EA* Preliminar está disponible para ser revisado en la Oficina de Distrito de Caltrans, ubicada en 4050 Calle Taylor, San Diego, en días hábiles desde las 8:00 AM hasta las 5:00 PM y por internet en el siguiente enlace: www.dot.ca.gov/dist11. El documento IS/EA* Preliminar está en circulación pública y las personas interesadas pueden revisarlo en San Diego en los siguientes lugares: Biblioteca Pública de Escondido, 239 Calle S. Kalmia, Escondido, CA 92025; Biblioteca Central del Condado de San Diego, 330 Avenida Park, San Diego, CA 92101; Biblioteca del Condado de San Diego – Sucursal de Valley Center, 29200 Calle Cole Grade, Valley Center, CA 92082; Museo de Historia de Valley Center, 29200 Calle Cole Grade, Valley Center, CA 92082; y Biblioteca de Pala, 2003 Calle Pala Mission, Pala CA 92059.

DONDE INTERVIENE USTED: ¿Han sido mencionados los efectos potenciales? ¿Tiene usted información que debería incluirse? ¿Está usted de acuerdo con los resultados? Sus comentarios formarán parte del registro público. Por favor proporcione sus comentarios durante el periodo de revisión pública a más tardar el 10 de julio de 2014. Si usted desea proporcionar sus comentarios por escrito, por favor envíelos a Allie Scrivener, Caltrans District 11, 4050 Calle Taylor, MS: 242, San Diego, CA 92110.

REUNION PÚBLICA: **Jueves, 26 de junio del 2014, 5:30 p.m. a 7:30 p.m.**
Centro Comunitario del Valle de Pauma
16650 Carretera 76, Pauma Valley, CA 92061

Personas que requieran acomodo especial (intérprete de Lenguaje Americano para Sordos o lenguaje extranjero, asientos accesibles, documentación en formatos alternos, etc.) se les pide que contacten a **la Oficina de Información Pública de Caltrans Distrito 11**, llamando al **(619) 688-6670** al menos 10 días antes de la fecha programada de la reunión. **Usuarios TTY** pueden contactar a **la línea TTY del California Relay Service llamando al 1-800-855-3000.**

CONTACTENOS: Para más información sobre éste proyecto, por favor comuníquese con **Allie Scrivener, Planificadora Ambiental A**, al teléfono **(619) 688-0192.** Para información general sobre asuntos de transporte, favor de llamar a **la Oficina de Información Pública del Distrito 11 de Caltrans** al **(619) 688-6670.** ***Abreviaturas por sus siglas en inglés***

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

July 9, 2014

Allie Scrivener
California Department of Transportation, District 11
4050 Taylor Street, MS 242
San Diego, CA 92110

Subject: SR-76 at Valley Center Road Intersection Improvement Project
SCH#: 2014061026

Dear Allie Scrivener:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on July 8, 2014, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2014061026
Project Title SR-76 at Valley Center Road Intersection Improvement Project
Lead Agency Caltrans #11

Type MND Mitigated Negative Declaration

Description Caltrans proposes to improve the safety of the SR-76/Valley Center Road intersection rom postmile 32.6 to 33.2 by increasing sight distance for vehicles entering the intersection, upgrading the intersection, and realigning the curve just east of the intersection to meet current design standards. There are two Build Alternatives for the proposed project, one involving a signalized interchange and another involving a modern-day roundabout. There is one No Build alternative for the project, under which no construction would occur.

Lead Agency Contact

Name Allie Scrivener
Agency California Department of Transportation, District 11
Phone 619 688 0192 **Fax**
email
Address 4050 Taylor Street, MS 242
City San Diego **State** CA **Zip** 92110

Project Location

County San Diego
City Pauma Valley
Region
Lat / Long 33° 17' 18" N / 116° 57' 31.4" W
Cross Streets SR-76 and Valley Center Road
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways SR-76
Airports Pauma Valley Air Park
Railways
Waterways Yulma Creek
Schools Pauma ES; All Tribes Charter School; Palomar College
Land Use Rural Commercial; Semi-Rural Residential; Public Agency Lands

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Geologic/Seismic; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Cal Fire; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, Division of Transportation Planning; Air Resources Board; Air Resources Board, Transportation Projects; State Water Resources Control Board, Division of Water Quality; Regional Water Quality Control Board, Region 9; Department of Toxic Substances Control; Native American Heritage Commission

Date Received 06/09/2014 **Start of Review** 06/09/2014 **End of Review** 07/08/2014

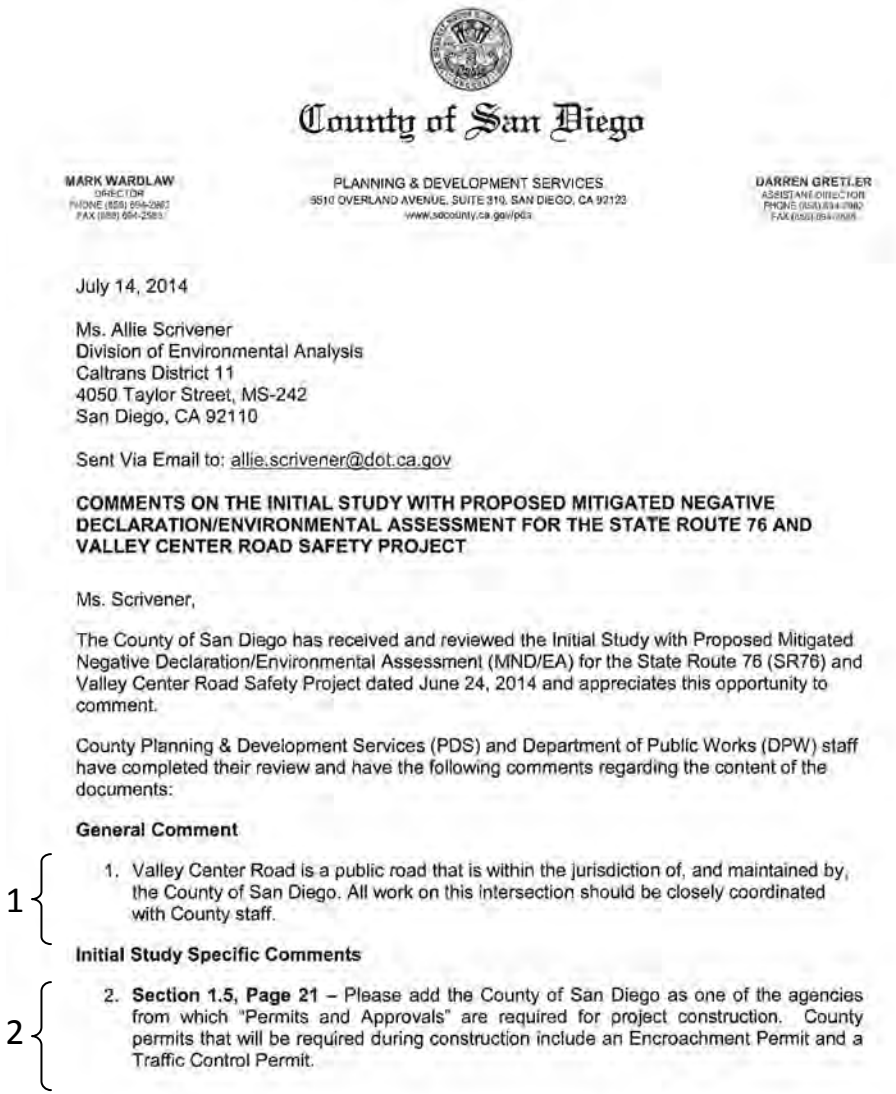
Scrivener, Allie@DOT

From: Dillingham, Tim@Wildlife
Sent: Monday, June 30, 2014 8:44 AM
To: Scrivener, Allie@DOT
Cc: April, Bruce@DOT; Estrada, Olga L@DOT; Estrada, Richard N@DOT; Sevrens, Gail@Wildlife
Subject: proposed State Route 76 and Valley Center Road Intersection Improvement project

The Department has reviewed the IS/EA, but has no comments to make on the project as proposed. Thank you.

Tim Dillingham
Senior Environmental Scientist (Specialist)
California Department of Fish and Wildlife
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4250

Thank you for your comment regarding receipt of the document.



County of San Diego

MARK WARDLAW
DIRECTOR
PHONE (858) 694-2962
FAX (858) 694-2555

PLANNING & DEVELOPMENT SERVICES
5510 OVERLAND AVENUE, SUITE 310, SAN DIEGO, CA 92123
www.sdcounty.ca.gov/pds

DARREN GRETLER
ASSISTANT DIRECTOR
PHONE (858) 694-2962
FAX (858) 694-2555

July 14, 2014

Ms. Allie Scrivener
Division of Environmental Analysis
Caltrans District 11
4050 Taylor Street, MS-242
San Diego, CA 92110

Sent Via Email to: allie.scrivener@dot.ca.gov

COMMENTS ON THE INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION/ENVIRONMENTAL ASSESSMENT FOR THE STATE ROUTE 76 AND VALLEY CENTER ROAD SAFETY PROJECT

Ms. Scrivener,

The County of San Diego has received and reviewed the Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment (MND/EA) for the State Route 76 (SR76) and Valley Center Road Safety Project dated June 24, 2014 and appreciates this opportunity to comment.

County Planning & Development Services (PDS) and Department of Public Works (DPW) staff have completed their review and have the following comments regarding the content of the documents:

General Comment

1. Valley Center Road is a public road that is within the jurisdiction of, and maintained by, the County of San Diego. All work on this intersection should be closely coordinated with County staff.

Initial Study Specific Comments

2. **Section 1.5, Page 21** – Please add the County of San Diego as one of the agencies from which "Permits and Approvals" are required for project construction. County permits that will be required during construction include an Encroachment Permit and a Traffic Control Permit.

1. Caltrans has met and will continue to coordinate with the County of San Diego regarding right of way and other design considerations for the project area.

2. Caltrans is working with the County of San Diego Planning and Public Works departments to obtain necessary approvals for the project. Table 1.5.1 in the Final Environmental Document has been updated to reflect this.

Ms. Allie Scrivener
July 14, 2014

3. **Section 1.3, Page 15** - The proposed project description should include the proposed plans for Valley Center Road (as shown in Figures 2.6.1 and 2.6.2) and maintenance responsibilities of remaining roadways to be outside the new SR-76 alignment/right-of-way in addition to the description that both project alternatives propose to retain the existing SR-76 alignment as a frontage road.

4. **Section 1.4 Page 15** - The description includes the construction of sidewalks around the project in both alternatives. The Initial Study should meet the County's Trails Master Plan and accommodate the SR-76 pathway through the project site. A pathway along the northern road crossing the market driveway could be accommodated along the fill/cut slopes and with transitions to the crosswalks.

5. **Section 1.4 Page 16** – Description of 'high friction' pavement treatments should include details describing if these treatments will be installed in the shoulders. The County has concerns that this rough pavement on the shoulders is not appropriate for areas where cyclists are going to ride. Pavement areas for cycling should be smooth.

6. **Section 1.5, Figure 1.5.1** - Figure should include the SR-76 pathway/trail detail around the north side of the project.

7. **Section 2.1, Page 29** – Discussion of consistency with County General Plan Mobility Element describes this project as 'non-consistent' with Policy M-4.3, Rural Roads Compatible with Rural Character, because of the curb, gutter and sidewalk installation. If the project were to include a pathway component that would feature a soft-surface material travel way then the project could be considered consistent with the policy and the rural road character.

8. **Section 2.1, Page 30** – Discussion of consistency with County General Plan Mobility Element describes the project as 'consistent' with Policy M-11.3, Bicycle Facilities on Roads Designated in the Mobility Element, however, the description given for both alternatives clearly states that bicycle specific passage/lanes would not be included. Both alternatives should be considered as "not consistent". The County recommends the project be modified by adding bicycle facilities to both alternatives. For Alternative 1, bike specific ramps could be added through the roundabout with additional bike ramps built at the roundabout exit, for this reason the sidewalk should be widened to 8-10' circulating the roundabout as described in Design Information Bulletin (DIB) 80-01. For Alternative 2, bicycle specific lanes could be added to the proposed lanes.

Traffic and Transportation/Pedestrian and Bicycle Facilities

9. **Section 2.5, Page 46** - Please note that the Bicycle Transportation Plan (2003) was not superseded by the General Plan Mobility Element (2011) but was incorporated and remains adopted and for reference.

10. **Figure 2.6.9** – Project should have through bicycle lanes adjacent to and between the through travel and right turn lane per the Manual on Uniform Traffic Control Devices (MUTCD) 9.C-4 in Alternative 2 (signalized option).

3. Caltrans has met and will continue to coordinate with the County of San Diego throughout development of the proposed project. A Memorandum of Understanding (MOU) and/or Cooperative Agreement will need to be prepared to outline the details of the future relinquishments and maintenance responsibilities.

4. The project development team will consider alternate designs for pedestrian accommodation through the project area.

5. High Friction Surface Treatment is not planned on the shoulders.

6. Construction of the proposed project would not preclude development of County of San Diego Proposed Community Pathways as discussed in the Pala-Pauma Community Trails and Pathways Plan. However, as this pathway is in the planning stage, Caltrans is unable to delineate it in project feature maps. Further, detailed information is not available for the exact pathway routes to enable mapping at a sufficient level of detail for inclusion in project feature maps.

7. The project team will consider a soft-surface material travel way instead of concrete sidewalks in the design phase. However, a soft-surface travel way will not meet the ADA requirements outlined in DIB 82, which require that surfaces be stable, firm, and slip-resistant. To mitigate the visual impacts, color and texture are being considered so that sidewalks will blend with the surrounding environment.

Ms. Allie Scrivener
July 14, 2014

Visual/Aesthetics

11. The Study should state that the proposed Project's street lighting will be in conformance with the County's Light Pollution Code ("Dark Skies Guidelines").

    Link: http://www.sdcounty.ca.gov/pds/docs/Dark_Skies_Guidelines.pdf)

Water Quality and Storm Water Runoff

12. For areas outside Caltrans's Right-of-Way, County Standard Urban Stormwater Mitigation Plan (SUSMP) requirements apply and include mitigation of any adverse impact on water quality and hydromodification by providing post-construction site design, source control and treatment control BMP's.

    Link: http://www.sdcounty.ca.gov/dpw/watersheds/susmp/susmp.html

13. The project may also consider integrating construction BMPs and associated plans for conformance with the County of San Diego's Grading Ordinance, Watershed Protection Ordinance and State of California's Construction General Permit.

    Link: http://www.sdcounty.ca.gov/dpw/watersheds/susmp/susmp.html

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The County appreciates the opportunity to participate in the environmental review process for this project. We have included as an attachment comments received from the Pauma-Pala Community Sponsor Group for your consideration. If you have any questions regarding these comments, please contact Sheri McPherson, Land Use Environmental Planner, at (858) 694-3064 or email sheri.mcpherson@sdcounty.ca.gov.

Sincerely,

TODD SNYDER, Chief
Advance Planning Division
Planning & Development Services

Attachment:
Pauma-Pala Community Sponsor Group Comments on Environmental Assessment of proposed SR-76 and Valley Center Road Intersection

Cc:
Chris Livoni, Policy Advisor, Board of Supervisor, District 5
Megan Jones, Group Program Manager, LUEG
Nick Ortiz, Project Manager, Planning & Development Services
Richard Chin, Transportation Specialist, Department of Public Works

8. Both build alternatives are considered consistent with Policy M-11.3 because they provide shoulder widths appropriate for Class II bicycle lanes. Therefore, neither build alternative precludes development of bicycle facilities along SR-76 or Valley Center Road.

9. Section 2.5 on page 46 has been updated to reflect that the Bicycle Transportation Plan and the Mobility Element of the 2011 General Plan Update are both current.

10. Bicycle facilities are not currently planned as part of the project. Bicycle lanes may be considered during project design.

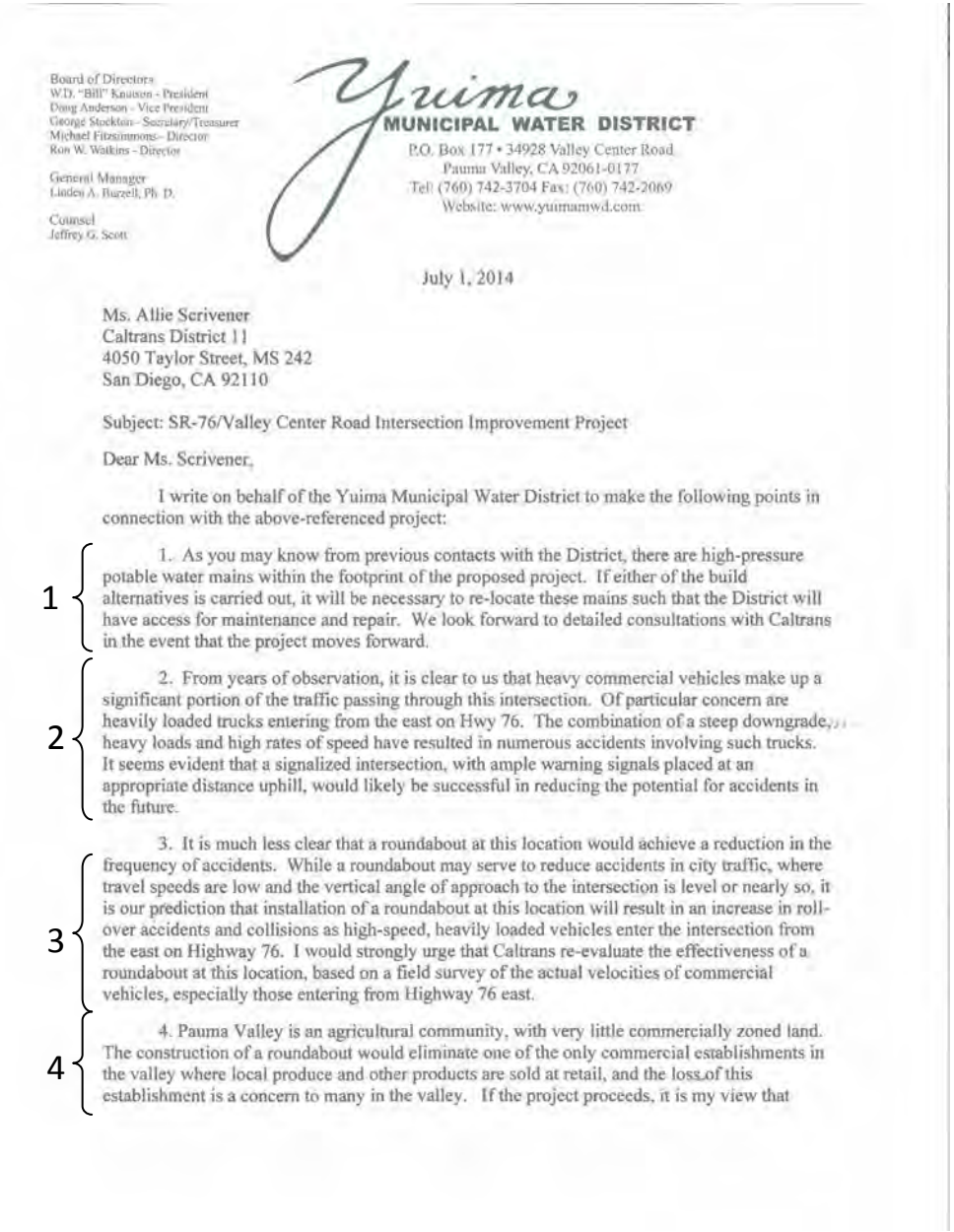
11. Section 2.3 of the Final Environmental Document has been updated to include that additional lighting would conform to county guidelines.

12. This project will conform to the guidelines of the National Pollutant Discharge Elimination System. The final project report will include a Storm Water Data Report, which includes Site Data and Storm Water Quality Design Issues, Regional Water Quality Control Board Agreements, Proposed Design Pollution Prevention BMPs, Proposed Temporary Construction Site BMPs, and Maintenance BMPs.

13. Comments received from the Pauma-Pala Community Sponsor Group have been included in this document and are shown with their responses on page 139.

Ms. Allie Scrivener
July 14, 2014

Rene Vidales, Project Coordinator, Department of Public Works
Pauma-Pala Community Sponsor Group
Sheri McPherson, Land Use and Environmental Planner, Planning & Development Services



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Yuima
MUNICIPAL WATER DISTRICT
P.O. Box 177 • 34928 Valley Center Road
Pauma Valley, CA 92061-0177
Tel: (760) 742-3704 Fax: (760) 742-2069
Website: www.yuimamwd.com

July 1, 2014

Ms. Allie Scrivener
Caltrans District 11
4050 Taylor Street, MS 242
San Diego, CA 92110

Subject: SR-76/Valley Center Road Intersection Improvement Project

Dear Ms. Scrivener,

I write on behalf of the Yuima Municipal Water District to make the following points in connection with the above-referenced project:

1. As you may know from previous contacts with the District, there are high-pressure potable water mains within the footprint of the proposed project. If either of the build alternatives is carried out, it will be necessary to re-locate these mains such that the District will have access for maintenance and repair. We look forward to detailed consultations with Caltrans in the event that the project moves forward.

2. From years of observation, it is clear to us that heavy commercial vehicles make up a significant portion of the traffic passing through this intersection. Of particular concern are heavily loaded trucks entering from the east on Hwy 76. The combination of a steep downgrade, heavy loads and high rates of speed have resulted in numerous accidents involving such trucks. It seems evident that a signalized intersection, with ample warning signals placed at an appropriate distance uphill, would likely be successful in reducing the potential for accidents in the future.

3. It is much less clear that a roundabout at this location would achieve a reduction in the frequency of accidents. While a roundabout may serve to reduce accidents in city traffic, where travel speeds are low and the vertical angle of approach to the intersection is level or nearly so, it is our prediction that installation of a roundabout at this location will result in an increase in roll-over accidents and collisions as high-speed, heavily loaded vehicles enter the intersection from the east on Highway 76. I would strongly urge that Caltrans re-evaluate the effectiveness of a roundabout at this location, based on a field survey of the actual velocities of commercial vehicles, especially those entering from Highway 76 east.

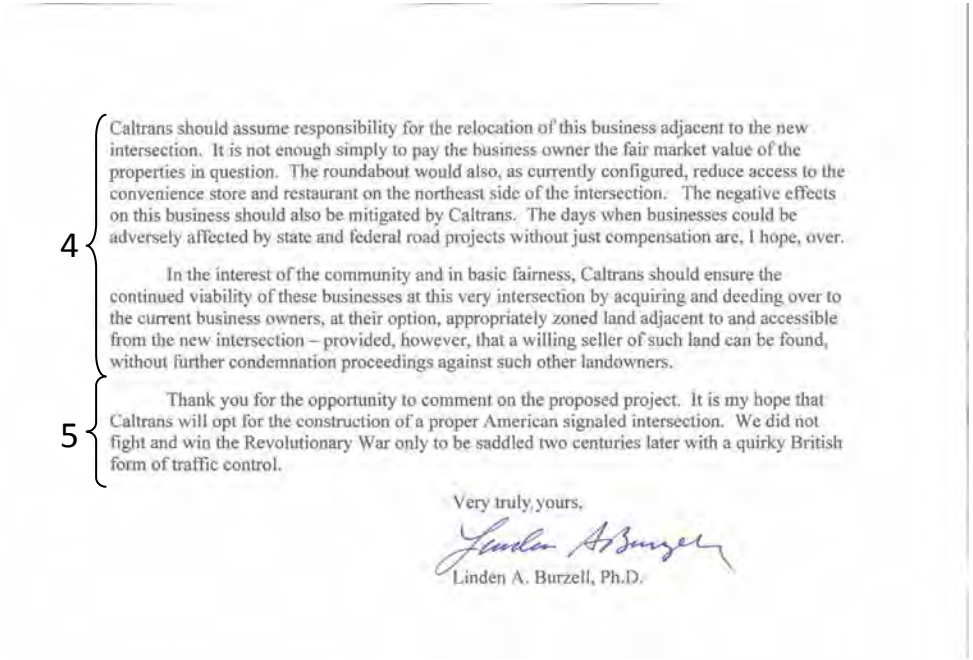
4. Pauma Valley is an agricultural community, with very little commercially zoned land. The construction of a roundabout would eliminate one of the only commercial establishments in the valley where local produce and other products are sold at retail, and the loss of this establishment is a concern to many in the valley. If the project proceeds, it is my view that

1. Thank you for your comment regarding high-pressure water mains within the project area. Caltrans will coordinate with the Yuima Municipal Water District, as well as all other affected utilities, if either build alternative is chosen, per Caltrans policy. For details see www.dot.ca.gov/hq/row/rowman/manual/ch13.pdf.

2. Caltrans proposes to improve the advance warning signs at postmile 33.2 (third curve east of the intersection). Both alternatives will include flashing beacons, vehicle speed feedback signs, curve warning signs and chevron arrows.

3. The roundabout includes geometric features that create appropriate vehicular speed and direction. Signing, striping, landscape and illumination direct driver attention to appropriate issues at the appropriate time and control decision points.

4. All acquisitions of real property require offers of just compensation pursuant to Government Code 7267.2. If the project necessitates the displacement of a business, Caltrans will adhere to federal guidelines outlined in the Code of Federal Regulations (49 CFR Part 24) for relocation assistance and benefits. Caltrans can only acquire properties required for the project. Affected property owners will be paid just compensation for their properties. The decision to invest in similar replacement properties will be their choice and replacement locations will be at their discretion.
Both alternatives would realign portions of Valley Center Road and SR-76, and would modify access for the Stage Stop market.



Caltrans should assume responsibility for the relocation of this business adjacent to the new intersection. It is not enough simply to pay the business owner the fair market value of the properties in question. The roundabout would also, as currently configured, reduce access to the convenience store and restaurant on the northeast side of the intersection. The negative effects on this business should also be mitigated by Caltrans. The days when businesses could be adversely affected by state and federal road projects without just compensation are, I hope, over.

4

In the interest of the community and in basic fairness, Caltrans should ensure the continued viability of these businesses at this very intersection by acquiring and deeding over to the current business owners, at their option, appropriately zoned land adjacent to and accessible from the new intersection – provided, however, that a willing seller of such land can be found, without further condemnation proceedings against such other landowners.

Thank you for the opportunity to comment on the proposed project. It is my hope that Caltrans will opt for the construction of a proper American signaled intersection. We did not fight and win the Revolutionary War only to be saddled two centuries later with a quirky British form of traffic control.

5

Very truly yours,

Linden A. Burzell, Ph.D.

5. Thank you for your comment regarding your preference for the signal alternative.

RINCON BAND OF LUISEÑO INDIANS
Culture Committee
1 W. Tribal Road · Valley Center, California 92082
(760) 297-2621 or (760) 297-2622 & Fax: (760) 749-8901

June 27, 2017

Allie Scrivener
Environmental Analysis, Branch A
California Department of Transportation, District 11
4050 Taylor Street, MS 242
San Diego, CA 92110

Re: SR-76 & Valley Center Road Intersection Improvement Project

Dear Ms. Scrivener:

This letter is written in response to a notification received dated June 9, 2014 in regards to the SR-76 & Valley Center Road Intersection Improvement Project. Rincon is submitting these comments concerning your projects potential impact on Luiseño cultural resources.

1 The Rincon Band has concerns for impacts to historic and cultural resources and the finding of items of significant cultural value that could be disturbed or destroyed and are considered culturally significant to the Luiseño people. This is to inform you, your identified location is within the Luiseño Aboriginal Territory and the tribe is concerned with the overall impact this project could have on the protection and
2 preservation of Luiseño Cultural assets. The Rincon Band of Luiseño Indians would like to remain informed of any and all updates and changes in regards to this project.

If there are any questions or concerns please do not hesitate to contact the Rincon Cultural Resources Department at (760) 297-2635 and they will be happy to assist you.

Thank you for the consideration and the opportunity to protect and preserve our cultural resources.

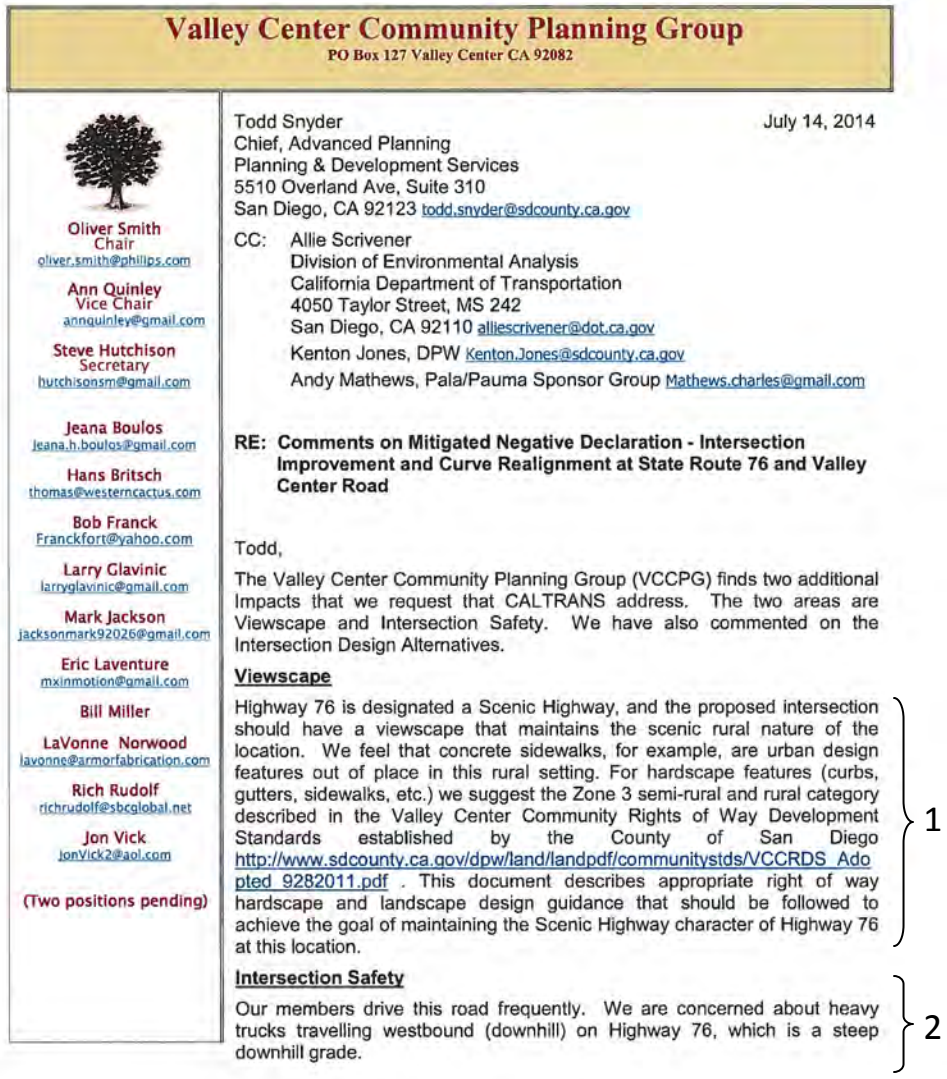
Sincerely,

Rose Duro
Rincon Culture Committee Chairman

Bo Mazzetti, Tribal Chairman · Stephanie Spencer, Vice Chairwoman · Steve Stallings, Council Member · Laurie E. Gonzalez, Council Member · Frank Mazzetti III, Council Member

1. Thank you for your comment. Caltrans has taken measures to avoid and minimize impacts to cultural and historic resources and will continue to do so throughout the project.

2. The Rincon Band of Luiseño Indians will receive a copy of the Final Environmental Document. The project team will continue to keep Caltrans cultural specialists and Native American Liaison informed of any project changes. If there are changes that may affect Native American resources, all local tribes shall be notified.



Valley Center Community Planning Group
PO Box 127 Valley Center CA 92082

Oliver Smith, Chair, oliver.smith@philips.com
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LaVonne Norwood, lavonne@armorfabrication.com
Rich Rudolf, richrudolf@sbcglobal.net
Jon Vick, jonVick2@aol.com
(Two positions pending)

Todd Snyder — July 14, 2014
Chief, Advanced Planning
Planning & Development Services
5510 Overland Ave, Suite 310
San Diego, CA 92123 todd.snyder@sdcounty.ca.gov

CC: Allie Scrivener
Division of Environmental Analysis
California Department of Transportation
4050 Taylor Street, MS 242
San Diego, CA 92110 alliescrivener@dot.ca.gov
Kenton Jones, DPW Kenton.Jones@sdcounty.ca.gov
Andy Mathews, Pala/Pauma Sponsor Group Mathews.charles@gmail.com

RE: Comments on Mitigated Negative Declaration - Intersection Improvement and Curve Realignment at State Route 76 and Valley Center Road

Todd,

The Valley Center Community Planning Group (VCCPG) finds two additional Impacts that we request that CALTRANS address. The two areas are Viewscape and Intersection Safety. We have also commented on the Intersection Design Alternatives.

Viewscape

Highway 76 is designated a Scenic Highway, and the proposed intersection should have a viewscape that maintains the scenic rural nature of the location. We feel that concrete sidewalks, for example, are urban design features out of place in this rural setting. For hardscape features (curbs, gutters, sidewalks, etc.) we suggest the Zone 3 semi-rural and rural category described in the Valley Center Community Rights of Way Development Standards established by the County of San Diego http://www.sdcounty.ca.gov/dpw/land/landpdf/communitystds/VCCRDS_Adopted_9282011.pdf . This document describes appropriate right of way hardscape and landscape design guidance that should be followed to achieve the goal of maintaining the Scenic Highway character of Highway 76 at this location. 1

Intersection Safety

Our members drive this road frequently. We are concerned about heavy trucks travelling westbound (downhill) on Highway 76, which is a steep downhill grade. 2

Page 1 of 2

1. SR-76 is listed as eligible for scenic highway designation, but is not currently listed as scenic highway. However, the character of the existing project area will be considered during project design.

2. The design would include warning signs such as vehicle speed feedback signs, advisory speed limit signs at the curves, chevron arrows to indicate curves ahead, and flashing beacon signs to warn motorists of the intersection ahead. In addition, the high friction surface treatment to be installed would enhance vehicles' slowing ability.

3 The VCCPG Mobility Subcommittee requests that Caltrans consider a runaway truck emergency stopping lane for runaway trucks if design considerations or accident history indicate a need.

4 **Comment on the two Intersection Alternates**

Caltrans has determined that a modification to the intersection will improve safety and sight distance and reduce the number of accidents. VCCPG Mobility Subcommittee believes that Caltrans should select the alternative that traffic safety data has shown will best accomplish these goals as well as improve current level of service and travel times through the intersection.

Sincerely,

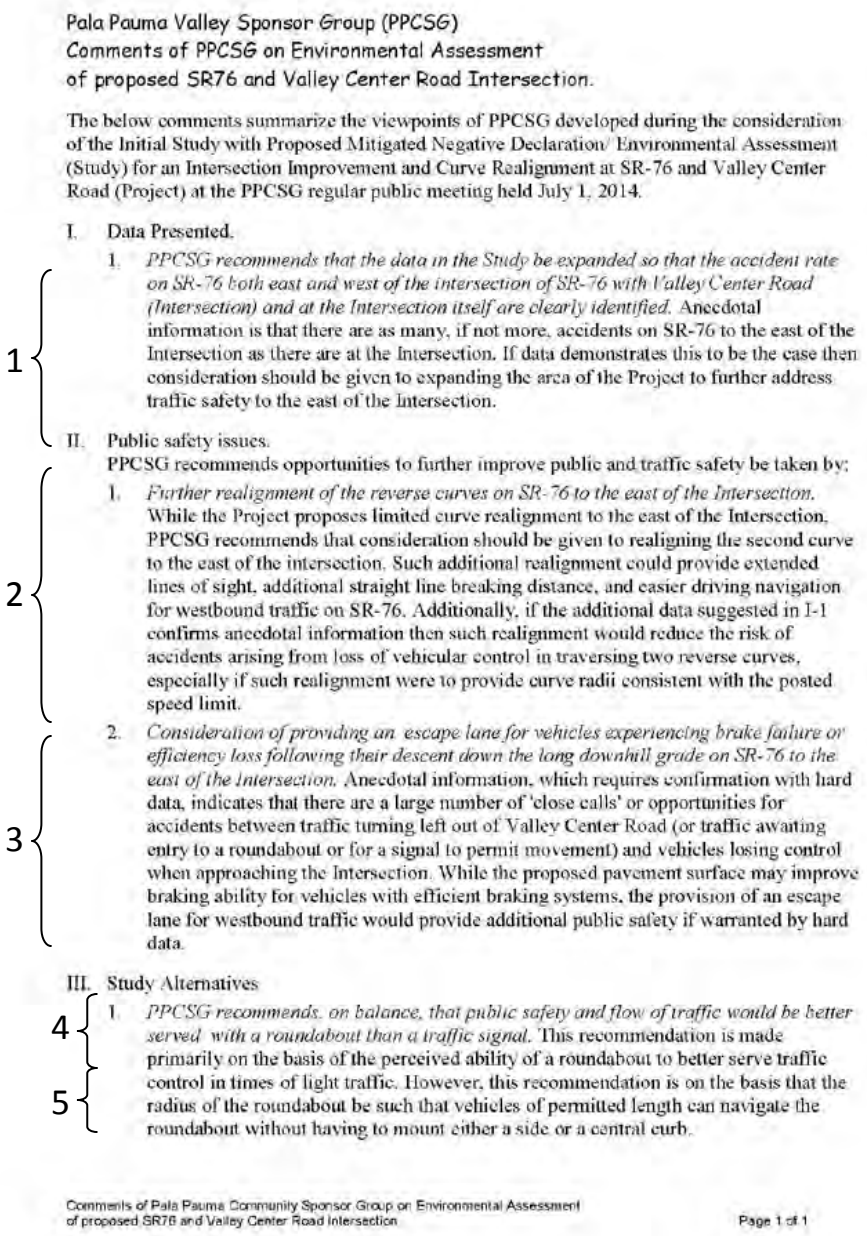
Oliver J. Smith
Chair, Valley Center Community Planning Group
Oliver.smith@philips.com
(760) 703-1455

Page 2 of 2

3. The Traffic Accident Surveillance and Analysis System (TASAS) Selective Accident Retrieval (TSAR) accident detail report shows no history of accidents due to runaway or out of control trucks due to brake failure from January 2005 to June 2012. (Caltrans data to date)

   A runaway truck ramp would not meet the purpose and need of this project. Both build alternatives would incorporate sign improvements, road realignment, and high friction surface treatment.

4. Thank you for your comment. The Project Development Team will select a preferred alternative after it has analyzed and responded appropriately to the public comments. (*How Caltrans Builds Projects*, August 2011)



Pala Pauma Valley Sponsor Group (PPCSG)
Comments of PPCSG on Environmental Assessment
of proposed SR76 and Valley Center Road Intersection.

The below comments summarize the viewpoints of PPCSG developed during the consideration of the Initial Study with Proposed Mitigated Negative Declaration/ Environmental Assessment (Study) for an Intersection Improvement and Curve Realignment at SR-76 and Valley Center Road (Project) at the PPCSG regular public meeting held July 1, 2014.

I. Data Presented.

1. *PPCSG recommends that the data in the Study be expanded so that the accident rate on SR-76 both east and west of the intersection of SR-76 with Valley Center Road (Intersection) and at the Intersection itself are clearly identified.* Anecdotal information is that there are as many, if not more, accidents on SR-76 to the east of the Intersection as there are at the Intersection. If data demonstrates this to be the case then consideration should be given to expanding the area of the Project to further address traffic safety to the east of the Intersection.

1

II. Public safety issues.

PPCSG recommends opportunities to further improve public and traffic safety be taken by:

1. *Further realignment of the reverse curves on SR-76 to the east of the Intersection.* While the Project proposes limited curve realignment to the east of the Intersection, PPCSG recommends that consideration should be given to realigning the second curve to the east of the intersection. Such additional realignment could provide extended lines of sight, additional straight line breaking distance, and easier driving navigation for westbound traffic on SR-76. Additionally, if the additional data suggested in I-1 confirms anecdotal information then such realignment would reduce the risk of accidents arising from loss of vehicular control in traversing two reverse curves, especially if such realignment were to provide curve radii consistent with the posted speed limit.

2

2. *Consideration of providing an escape lane for vehicles experiencing brake failure or efficiency loss following their descent down the long downhill grade on SR-76 to the east of the Intersection.* Anecdotal information, which requires confirmation with hard data, indicates that there are a large number of 'close calls' or opportunities for accidents between traffic turning left out of Valley Center Road (or traffic awaiting entry to a roundabout or for a signal to permit movement) and vehicles losing control when approaching the Intersection. While the proposed pavement surface may improve braking ability for vehicles with efficient braking systems, the provision of an escape lane for westbound traffic would provide additional public safety if warranted by hard data.

3

III. Study Alternatives

1. *PPCSG recommends, on balance, that public safety and flow of traffic would be better served with a roundabout than a traffic signal.* This recommendation is made primarily on the basis of the perceived ability of a roundabout to better serve traffic control in times of light traffic. However, this recommendation is on the basis that the radius of the roundabout be such that vehicles of permitted length can navigate the roundabout without having to mount either a side or a central curb.

4

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Comments of Pala Pauma Community Sponsor Group on Environmental Assessment of proposed SR76 and Valley Center Road Intersection

Page 1 of 1

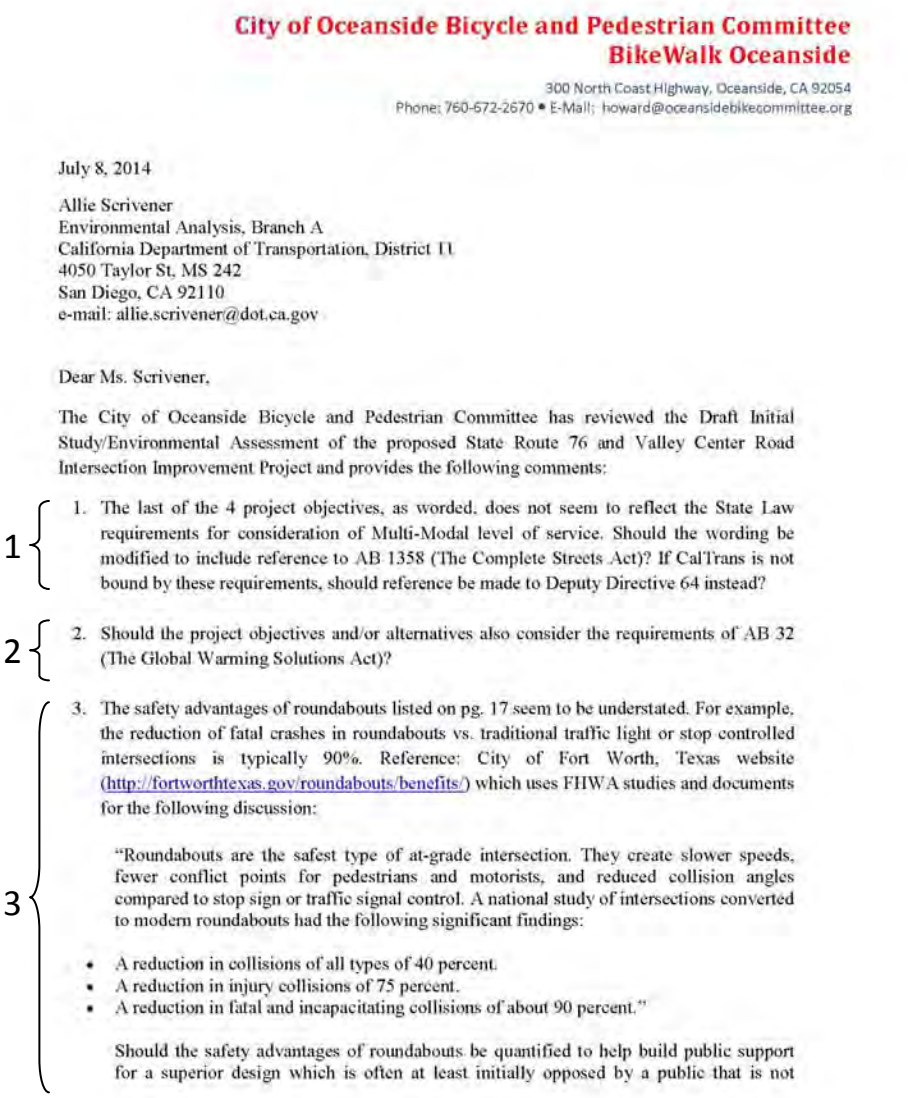
1. Based on accident data, the existing project limits are sufficient to address the purpose and need of the proposed project.

2. Realigning the second curve would not be operationally feasible because it would create a short tangent between the second and third curve, and would require substantial environmental and right of way impacts on the north side of SR-76. The existing curve radius meets the design speed of 35 miles per hour, which is the advisory speed at the second curve.

3. The Traffic Accident Surveillance and Analysis System (TASAS) Selective Accident Retrieval (TSAR) accident detail report shows no history of accidents due to runaway or out of control trucks due to brake failure from January 2005 to June 2012 (Caltrans data to date). A runaway truck ramp would not meet the purpose and need of this project.

4. Thank you for your comment regarding your preference for the Roundabout Alternative.

5. The inscribed diameter is 130 feet, the circulatory roadway is 20 feet wide, and the truck apron is 16 feet wide. The roundabout is big enough to accommodate a truck with a kingpin to rear axle length of 35.5 feet.



City of Oceanside Bicycle and Pedestrian Committee
BikeWalk Oceanside

300 North Coast Highway, Oceanside, CA 92054
Phone: 760-672-2670 • E-Mail: howard@oceansidebikecommittee.org

July 8, 2014

Allie Scrivener
Environmental Analysis, Branch A
California Department of Transportation, District 11
4050 Taylor St, MS 242
San Diego, CA 92110
e-mail: allie.scrivener@dot.ca.gov

Dear Ms. Scrivener,

The City of Oceanside Bicycle and Pedestrian Committee has reviewed the Draft Initial Study/Environmental Assessment of the proposed State Route 76 and Valley Center Road Intersection Improvement Project and provides the following comments:

1 { 1. The last of the 4 project objectives, as worded, does not seem to reflect the State Law requirements for consideration of Multi-Modal level of service. Should the wording be modified to include reference to AB 1358 (The Complete Streets Act)? If CalTrans is not bound by these requirements, should reference be made to Deputy Directive 64 instead?

2 { 2. Should the project objectives and/or alternatives also consider the requirements of AB 32 (The Global Warming Solutions Act)?

3 { 3. The safety advantages of roundabouts listed on pg. 17 seem to be understated. For example, the reduction of fatal crashes in roundabouts vs. traditional traffic light or stop controlled intersections is typically 90%. Reference: City of Fort Worth, Texas website (http://fortworthtexas.gov/roundabouts/benefits/) which uses FHWA studies and documents for the following discussion:

"Roundabouts are the safest type of at-grade intersection. They create slower speeds, fewer conflict points for pedestrians and motorists, and reduced collision angles compared to stop sign or traffic signal control. A national study of intersections converted to modern roundabouts had the following significant findings:

- A reduction in collisions of all types of 40 percent.
- A reduction in injury collisions of 75 percent.
- A reduction in fatal and incapacitating collisions of about 90 percent."

Should the safety advantages of roundabouts be quantified to help build public support for a superior design which is often at least initially opposed by a public that is not

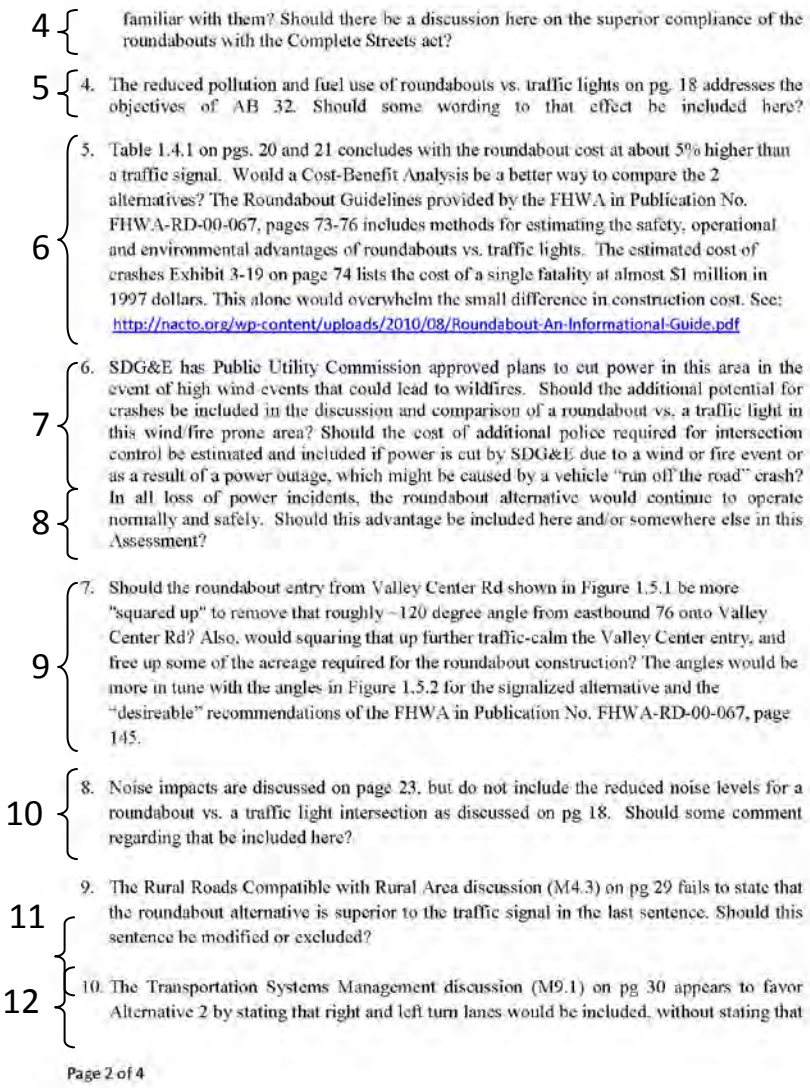
1. Section 1.2.1 on page 13 of the final environmental document has been updated to reflect the objective of maintenance or improvement of travel times for all intersection movement.
   Section 2.5.1 of the Draft and Final Environmental Documents describes Caltrans policy with consideration to bicycles and pedestrians.

2. As discussed in the environmental document under Section 2.20: Climate Change, the project would not increase capacity; therefore, potential for an increase in greenhouse gas emissions is low.

3. Both build alternatives are consistent with the purpose and need of the project. They are both weighted equally in analysis, and safety information is provided on pages 16 and 17 for both types of intersections.

4. A complete analysis of both alternatives is already provided in the draft environmental document. Both build alternatives are weighed equally. Further, both build alternatives would be accessible for vehicle, pedestrian, and bicycle users through the provision of shoulders and sidewalks.

5. The proposed project would not increase capacity at the intersection; therefore, it would not increase greenhouse gas emissions and has not been considered under the provisions of AB-32.



familiar with them? Should there be a discussion here on the superior compliance of the roundabouts with the Complete Streets act?

4. The reduced pollution and fuel use of roundabouts vs. traffic lights on pg. 18 addresses the objectives of AB 32. Should some wording to that effect be included here?

5. Table 1.4.1 on pgs. 20 and 21 concludes with the roundabout cost at about 5% higher than a traffic signal. Would a Cost-Benefit Analysis be a better way to compare the 2 alternatives? The Roundabout Guidelines provided by the FHWA in Publication No. FHWA-RD-00-067, pages 73-76 includes methods for estimating the safety, operational and environmental advantages of roundabouts vs. traffic lights. The estimated cost of crashes Exhibit 3-19 on page 74 lists the cost of a single fatality at almost $1 million in 1997 dollars. This alone would overwhelm the small difference in construction cost. See: http://nacto.org/wp-content/uploads/2010/08/Roundabout-An-Informational-Guide.pdf

6. SDG&E has Public Utility Commission approved plans to cut power in this area in the event of high wind events that could lead to wildfires. Should the additional potential for crashes be included in the discussion and comparison of a roundabout vs. a traffic light in this wind/fire prone area? Should the cost of additional police required for intersection control be estimated and included if power is cut by SDG&E due to a wind or fire event or as a result of a power outage, which might be caused by a vehicle "run off the road" crash? In all loss of power incidents, the roundabout alternative would continue to operate normally and safely. Should this advantage be included here and/or somewhere else in this Assessment?

7. Should the roundabout entry from Valley Center Rd shown in Figure 1.5.1 be more "squared up" to remove that roughly ~120 degree angle from eastbound 76 onto Valley Center Rd? Also, would squaring that up further traffic-calm the Valley Center entry, and free up some of the acreage required for the roundabout construction? The angles would be more in tune with the angles in Figure 1.5.2 for the signalized alternative and the "desireable" recommendations of the FHWA in Publication No. FHWA-RD-00-067, page 145.

8. Noise impacts are discussed on page 23, but do not include the reduced noise levels for a roundabout vs. a traffic light intersection as discussed on pg 18. Should some comment regarding that be included here?

9. The Rural Roads Compatible with Rural Area discussion (M4.3) on pg 29 fails to state that the roundabout alternative is superior to the traffic signal in the last sentence. Should this sentence be modified or excluded?

10. The Transportation Systems Management discussion (M9.1) on pg 30 appears to favor Alternative 2 by stating that right and left turn lanes would be included, without stating that

Page 2 of 4

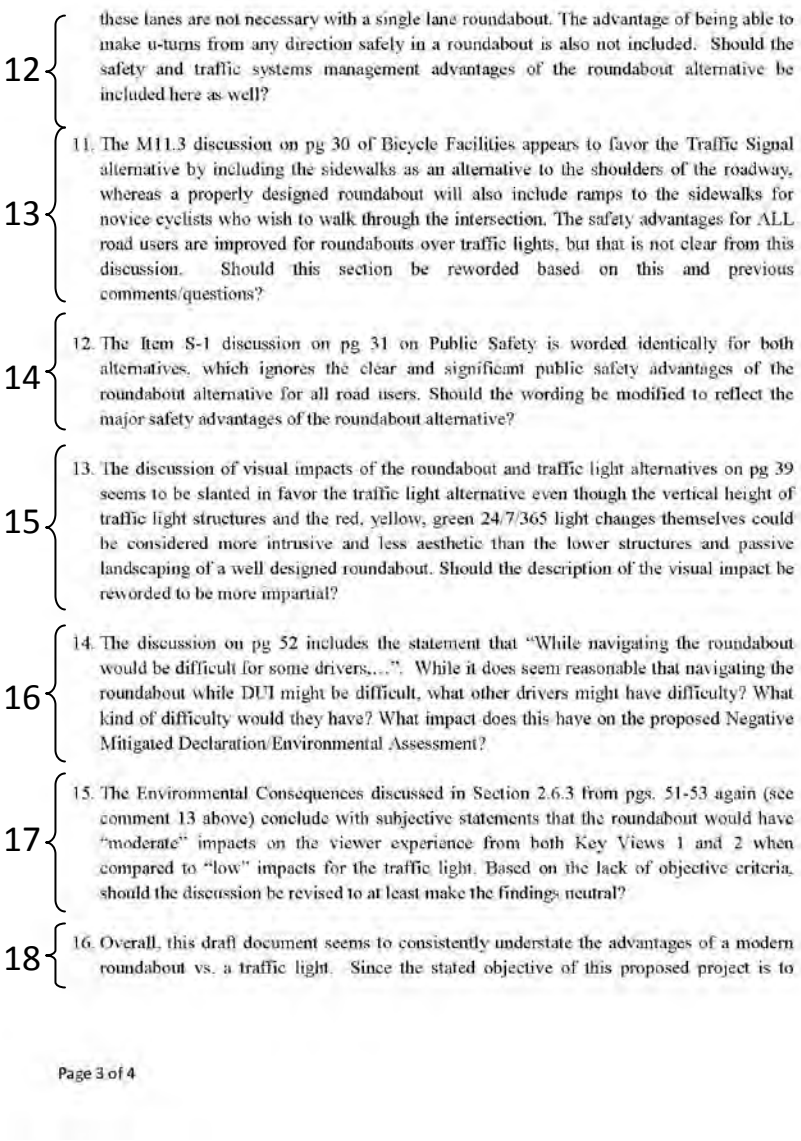
6. Selection of a preferred alternative by the Project Development Team does not depend solely on cost. Consideration also includes safety, design feasibility, environmental and community impacts, and community input. The primary consideration is based on best meeting the project purpose and need.

7. Caltrans has considered this point in selection of the preferred alternative.

8. Signalized intersections become all-way stop intersections during power outages.

9. If the intersection were squared and SR-76 and Valley Center Road were connected at 90 degrees, the curve point of inflection would be too close to the roundabout and only a short non-standard curve would fit. This would create a problem with the super-elevation transition runoff draining into the roundabout because the curve radius would be too close to the roundabout. Additionally, this design would impact the culturally sensitive area at the southwest corner of the intersection. A retaining wall would have to be constructed to avoid impacts to the area, which would significantly increase the capital cost. The design solution is to slightly skew the approach angle of Valley Center Road.

10. The project is not capacity-increasing (Type 1); therefore, noise impacts are not expected to occur. Since the proposed project is not a Type 1 project in accordance with 23 CFR 772, no noise analysis was required.



these lanes are not necessary with a single lane roundabout. The advantage of being able to make u-turns from any direction safely in a roundabout is also not included. Should the safety and traffic systems management advantages of the roundabout alternative be included here as well? 12

11. The M11.3 discussion on pg 30 of Bicycle Facilities appears to favor the Traffic Signal alternative by including the sidewalks as an alternative to the shoulders of the roadway, whereas a properly designed roundabout will also include ramps to the sidewalks for novice cyclists who wish to walk through the intersection. The safety advantages for ALL road users are improved for roundabouts over traffic lights, but that is not clear from this discussion. Should this section be reworded based on this and previous comments/questions? 13

12. The Item S-1 discussion on pg 31 on Public Safety is worded identically for both alternatives, which ignores the clear and significant public safety advantages of the roundabout alternative for all road users. Should the wording be modified to reflect the major safety advantages of the roundabout alternative? 14

13. The discussion of visual impacts of the roundabout and traffic light alternatives on pg 39 seems to be slanted in favor the traffic light alternative even though the vertical height of traffic light structures and the red, yellow, green 24/7/365 light changes themselves could be considered more intrusive and less aesthetic than the lower structures and passive landscaping of a well designed roundabout. Should the description of the visual impact be reworded to be more impartial? 15

14. The discussion on pg 52 includes the statement that "While navigating the roundabout would be difficult for some drivers,…". While it does seem reasonable that navigating the roundabout while DUI might be difficult, what other drivers might have difficulty? What kind of difficulty would they have? What impact does this have on the proposed Negative Mitigated Declaration/Environmental Assessment? 16

15. The Environmental Consequences discussed in Section 2.6.3 from pgs. 51-53 again (see comment 13 above) conclude with subjective statements that the roundabout would have "moderate" impacts on the viewer experience from both Key Views 1 and 2 when compared to "low" impacts for the traffic light. Based on the lack of objective criteria, should the discussion be revised to at least make the findings neutral? 17

16. Overall, this draft document seems to consistently understate the advantages of a modern roundabout vs. a traffic light. Since the stated objective of this proposed project is to 18

Page 3 of 4

11. The rural roads discussion is an evaluation based on county policies. Both build alternatives are evaluated equally and are determined to be inconsistent with policy M-4.3 to avoid sidewalk, curb, and gutter due to their inclusion of these features. However, the inclusion is based on ADA requirements and is required for Caltrans projects.

12. Discussion regarding M-9.1 on page 30 has been modified. It now includes Alternative 1 as a single-lane roundabout, which would allow left, right, and through movements through the intersection without requiring turn lanes.

13. Page 30, point M-11.3 has been updated to include curb ramps that will be included in the Roundabout Alternative.

14. Both build alternatives are consistent with County safety policy and meet the project's purpose and need.

15. Both alternatives were given equal analysis under the provisions of CEQA and NEPA. Although the Signal Alternative would include larger visual features, it also contains features more familiar to the project area and therefore constitutes a reduced visual impact to its surroundings.

16. The discussion on page 52 was included to reflect the visual impacts of Alternative 1 on the community. There should be no difficulty navigating the intersection under this alternative. This point is discussed in the draft environmental document due to anticipated visual change.

18 improve safety and thereby reduce the very high accident rate, should CalTrans adopt the much safer roundabout as the default design?

19 We concur that the single lane roundabout alternative is far superior to the traffic light in meeting the stated safety and environmental objectives of this project.

20 Since this would likely be the first modern roundabout in the east San Diego county area, we recommend a robust public education campaign to familiarize all road users on how to negotiate them safely. There are excellent videos available on the web from the FHWA and others that could be used as a template to develop a site specific video for this purpose. We would be pleased to review and comment on any educational tools you develop for this purpose.

Respectfully submitted,

Pete Penseyres Howard LaGrange

Co-Chairs of the City of Oceanside Bike and Pedestrian Committee

Page 4 of 4

17. The objective criteria used in the analysis are viewer distance, viewer exposure, number of individuals exposed to project elements, and sensitivity of viewers to visual changes. Caltrans use of these criteria is explained in the Visual section of both the draft and final environmental documents. The Roundabout Alternative, while not the first of its kind on a California rural highway, would be new to Pauma Valley and could therefore constitute a greater change to the project area. The level of impact does not imply a positive or negative change; simply the degree of change each alternative would constitute.

18. For projects that undergo a public comment period, the Project Development Team selects the preferred alternative after it has analyzed and responded appropriately to the public comments. (*How Caltrans Builds Projects*, August 2011)

19. Thank you for your comment regarding your preference for the Roundabout Alternative. Both build alternatives would meet the purpose and need of this project and have been evaluated for environmental impacts.

20. Thank you for your comment regarding community outreach and information. For every project built, Caltrans develops a Transportation Management Plan and conducts a public information campaign prior to construction. Under the Roundabout Alternative, Caltrans would provide roundabout information to members of the public to increase familiarity with the project features.

San Diego County Bicycle Coalition

July 9, 2014

1111 Sixth Avenue #402
San Diego, CA 92101
T 858-487-6063
http://www.sdcbc.org

Allie Scrivener
Environmental Analysis, Branch A
California Department of Transportation, District 11
4050 Taylor St, MS 242
San Diego, CA 92110
e-mail: allie.scrivener@dot.ca.gov

Dear Ms. Scrivener,

The San Diego County Bicycle Coalition (SDCBC) has reviewed the Draft Initial Study/Environmental Assessment of the proposed State Route 76 and Valley Center Road Intersection Improvement Project and provides the following comments:

1 1. SDCBC sees the realignment of this intersection as a significant improvement to the documented unsafe conditions of this intersection. SDCBC strongly recommends Alternative 1: the modern roundabout. Overall, this draft document could be improved to further promote the advantages of a roundabout intersection vs. a signalized intersection. Since the stated objective of this proposed project is to improve safety and thereby reduce the very high accident rate of that intersection, should CalTrans promote the much safer roundabout as the default design as opposed to trying to make the two alternatives seem roughly equal to the general public?

2 2. In order to avoid duplication and in order to strengthen the argument for the Alternative 1 roundabout, SDCBC echoes all the comments and questions of the City of Oceanside Bicycle and Pedestrian Committee by Pete Penseyres and Howard LaGrange, attached here for reference. Can you please copy your Oceanside responses to Kevin Wood, SDCBC Chair at suburbanpride@gmail.com and Karl Rudnick, SDCBC Board at rudnick.cooper@gmail.com?

3 3. Can Figure 1.5.1 also include sharrows leading into roundabout entrances, indicating to bicyclists the proper lane position for successfully using the roundabout? This intersection is the gateway to one of the more scenic areas of San Diego County for recreational and training cycling, and the sharrows would add an educational tool for both cyclists and motorists for safe road usage.

We look forward to your responses to our and the Oceanside Bicycle and Pedestrian Committee's comments and questions. Please let us know if we can assist you in any way, both in promoting the roundabout alternative to the general public and in follow-up educational activities. Since that will be the first roundabout in this area of San Diego County, an educational push to promote the benefits of the new realignment and how to use it would help for both acceptance and safe usage from the beginning.

Sincerely,

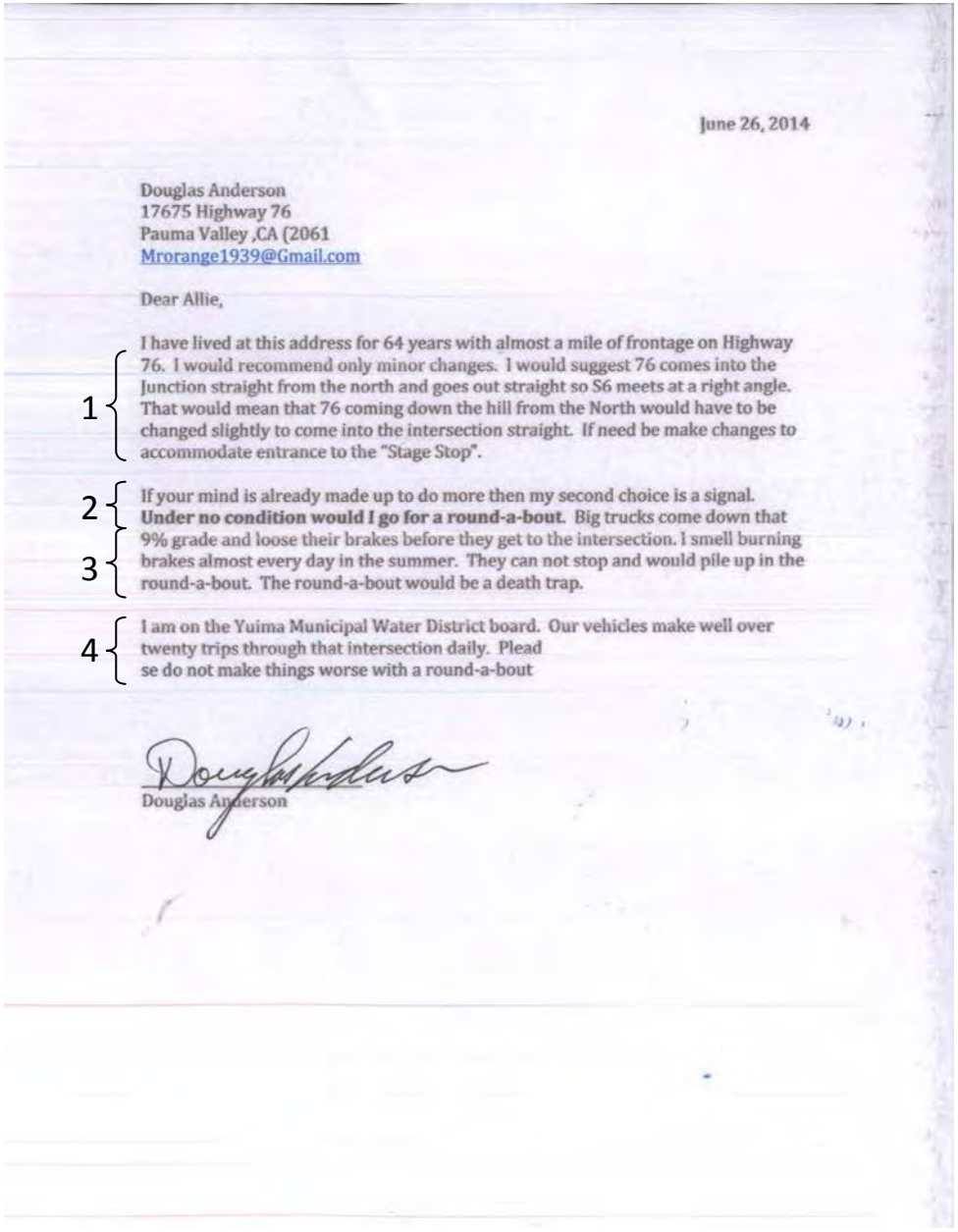
Kevin C. Wood
Chair

1. Thank you for your comment regarding your preference for the Roundabout Alternative.

2. Thank you for your comment. Both build alternatives would meet the purpose and need of this project and have been evaluated for environmental impacts.

3. Thank you for your comment regarding your concurrence with the comments provided by the City of Oceanside Bicycle and Pedestrian Committee. Howard LaGrange, Kevin Wood, and Karl Rudnick have been added to the distribution list for the final environmental document and will receive copies of the responses to comments. Responses to the comment letter from the City of Oceanside Bicycle and Pedestrian Committee can be found on pages 163 to 166 of this document.

4. Bicyclists will have an option to cross the intersection using either the roundabout or the sidewalk. The roundabout design will include on and off bicycle ramps to go in and out of the wide sidewalks. Sharrows would be considered in project design if their inclusion is in compliance with the California Manual on Uniform Traffic Control Devices.



June 26, 2014

Douglas Anderson
17675 Highway 76
Pauma Valley ,CA (2061
Mrorange1939@Gmail.com

Dear Allie,

1 I have lived at this address for 64 years with almost a mile of frontage on Highway 76. I would recommend only minor changes. I would suggest 76 comes into the Junction straight from the north and goes out straight so S6 meets at a right angle. That would mean that 76 coming down the hill from the North would have to be changed slightly to come into the intersection straight. If need be make changes to accommodate entrance to the "Stage Stop".

2 If your mind is already made up to do more then my second choice is a signal. **Under no condition would I go for a round-a-bout.** Big trucks come down that
3 9% grade and loose their brakes before they get to the intersection. I smell burning brakes almost every day in the summer. They can not stop and would pile up in the round-a-bout. The round-a-bout would be a death trap.

4 I am on the Yuima Municipal Water District board. Our vehicles make well over twenty trips through that intersection daily. Plead
se do not make things worse with a round-a-bout

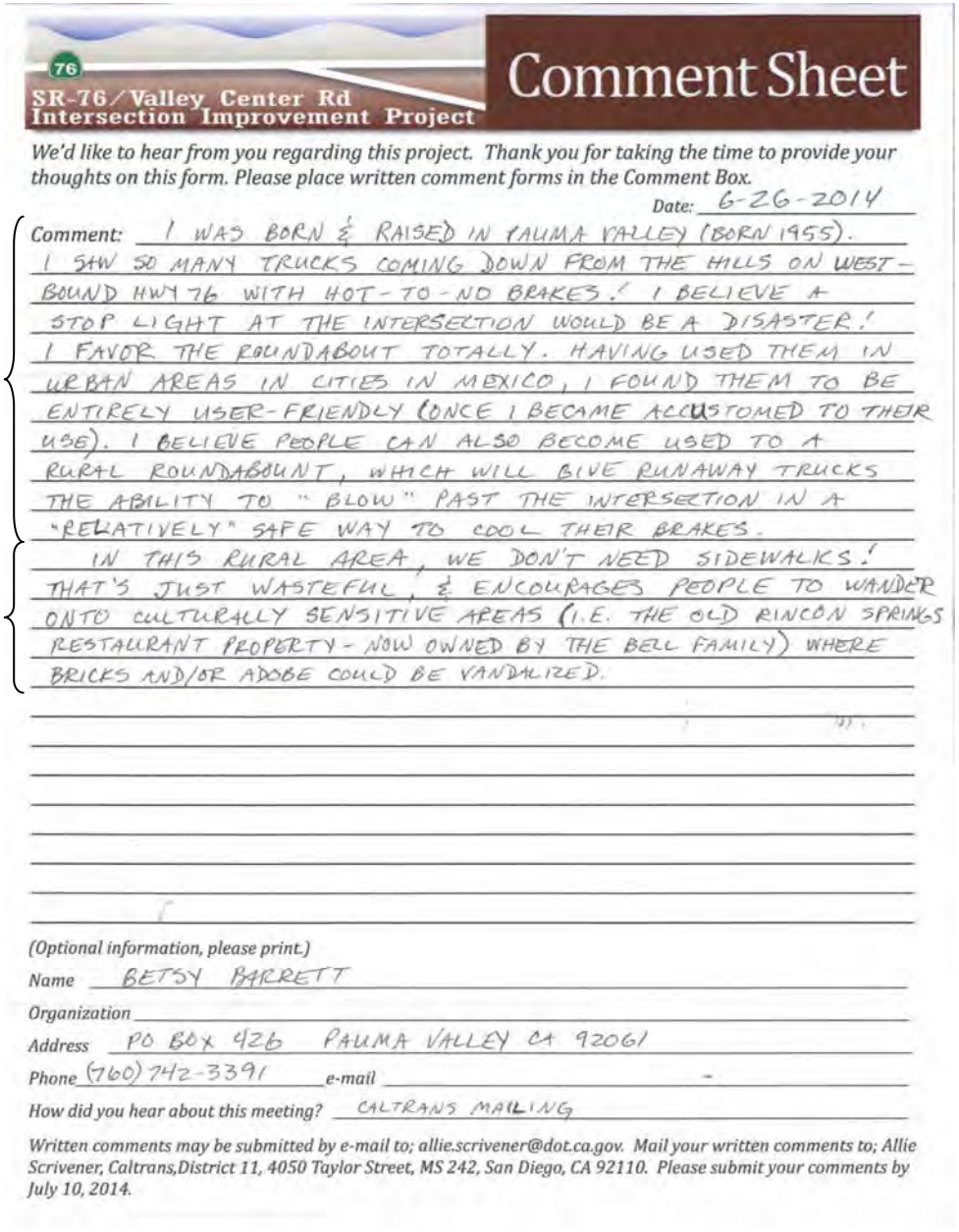
Douglas Anderson

1. Both alternatives will realign VCR and SR-76 and the access for Stage Stop store will be modified.

2. Thank you for your comment regarding your preference for the Signal Alternative.

3. The roundabout includes geometric features that create appropriate vehicular speed and direction. Signing, striping, landscape and illumination direct driver attention to appropriate issues at the appropriate time and control decision points. The Traffic Accident Surveillance and Analysis System (TASAS) Selective Accident Retrieval (TSAR) accident detail report shows no history of accidents due to runaway or out of control trucks involving brake failure from January 2005 to June 2012. (Caltrans data to date)
   The grade of westbound SR-76 east of the project varies from 6% to 8%.

4. Thank you for your comment regarding your preference. The inscribed diameter of the roundabout is 130 feet, the circulatory roadway is 20 feet wide, and the mountable truck apron is 16 feet wide. The roundabout is therefore large enough to accommodate a size WB-50 truck, which has a kingpin to rear axle length of 30 feet.



76

SR-76/Valley Center Rd Intersection Improvement Project

Comment Sheet

We'd like to hear from you regarding this project. Thank you for taking the time to provide your thoughts on this form. Please place written comment forms in the Comment Box.

Date: 6-26-2014

Comment: I WAS BORN & RAISED IN PAUMA VALLEY (BORN 1955). I SAW SO MANY TRUCKS COMING DOWN FROM THE HILLS ON WEST-BOUND HWY 76 WITH HOT-TO-NO BRAKES! I BELIEVE A STOP LIGHT AT THE INTERSECTION WOULD BE A DISASTER! I FAVOR THE ROUNDABOUT TOTALLY. HAVING USED THEM IN URBAN AREAS IN CITIES IN MEXICO, I FOUND THEM TO BE ENTIRELY USER-FRIENDLY (ONCE I BECAME ACCUSTOMED TO THEIR USE). I BELIEVE PEOPLE CAN ALSO BECOME USED TO A RURAL ROUNDABOUNT, WHICH WILL GIVE RUNAWAY TRUCKS THE ABILITY TO "BLOW" PAST THE INTERSECTION IN A "RELATIVELY" SAFE WAY TO COOL THEIR BRAKES. 1

IN THIS RURAL AREA, WE DON'T NEED SIDEWALKS! THAT'S JUST WASTEFUL & ENCOURAGES PEOPLE TO WANDER ONTO CULTURALLY SENSITIVE AREAS (I.E. THE OLD RINCON SPRINGS RESTAURANT PROPERTY - NOW OWNED BY THE BELL FAMILY) WHERE BRICKS AND/OR ADOBE COULD BE VANDALIZED. 2

(Optional information, please print.)

Name BETSY BARRETT

Organization

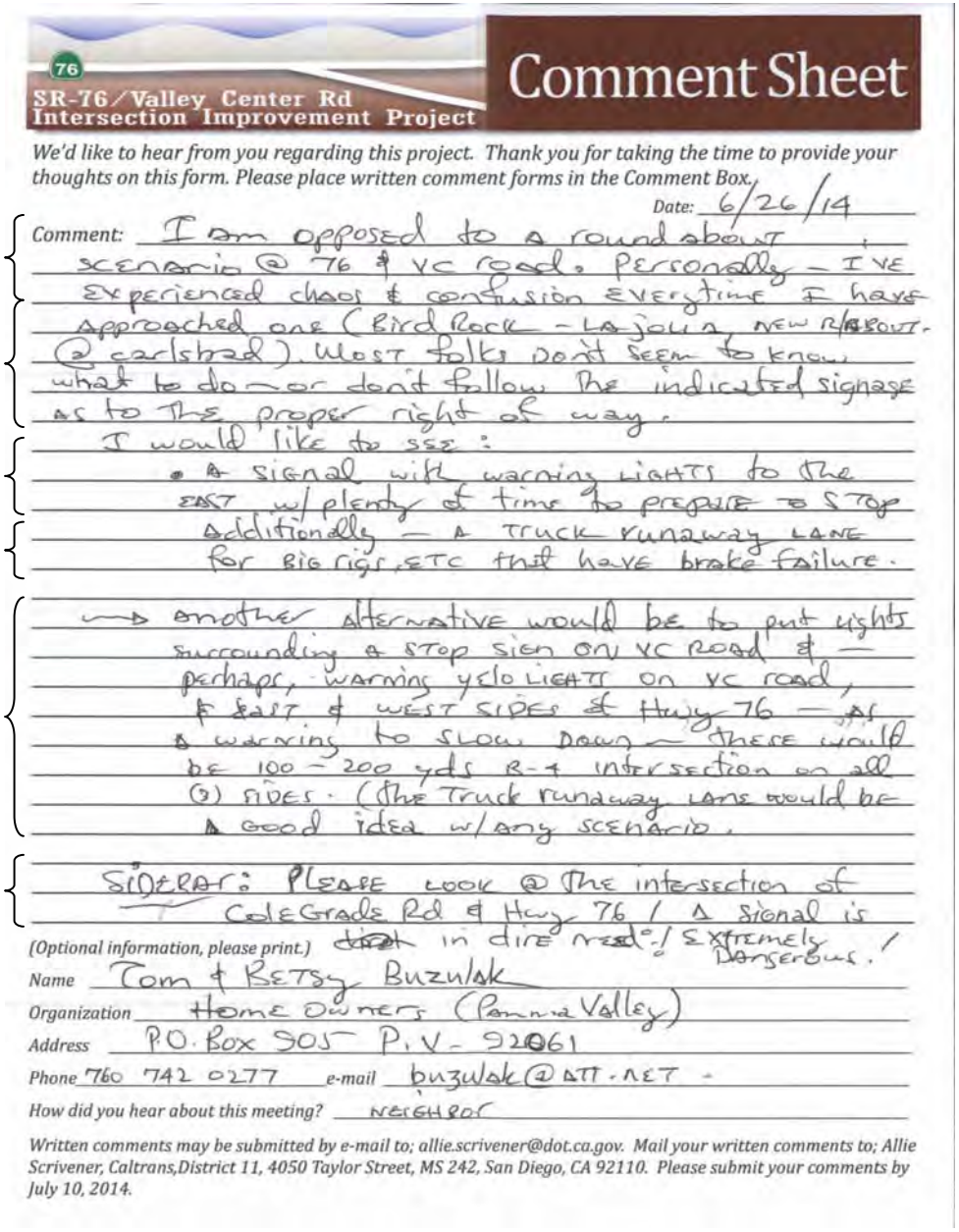
Address PO BOX 426 PAUMA VALLEY CA 92061

Phone (760) 742-3391 e-mail

How did you hear about this meeting? CALTRANS MAILING

Written comments may be submitted by e-mail to; allie.scrivener@dot.ca.gov. Mail your written comments to; Allie Scrivener, Caltrans,District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by July 10, 2014.

1. Thank you for your comment regarding your preference for the Roundabout Alternative.
2. Per Caltrans guidelines and Americans with Disabilities (ADA) requirements, Caltrans facilities are required to provide roadway access for all users.



76

SR-76/Valley Center Rd Intersection Improvement Project

Comment Sheet

We'd like to hear from you regarding this project. Thank you for taking the time to provide your thoughts on this form. Please place written comment forms in the Comment Box.

Date: 6/26/14

Comment: I am opposed to a round about scenario @ 76 & VC road. Personally – I've experienced chaos & confusion everytime I have approached one (Bird Rock – La Jolla, new R'about @ Carlsbad). Most folks don't seem to know what to do – or don't follow the indicated signage as to the proper right of way.

1

2

I would like to see:

- A signal with warning lights to the east w/ plenty of time to prepare to stop

3

Additionally – a truck runaway lane for big rigs, etc that have brake failure.

4

→ another alternative would be to put lights surrounding a stop sign on VC Road & – perhaps, warning yello lights on VC road, E & West sides of Hwy 76 – as a warning to slow down – these would be 100 – 200 yds B-4 intersection on all (3) sides. (The truck runaway lane would be a good idea w/ any scenario.

5

SIDEBAR: Please look @ the intersection of Cole Grade Rd & Hwy 76 / A signal is in dire need! / Extremely Dangerous. /

6

(Optional information, please print.)

Name Tom & Betsy Buzulak

Organization Home Owners (Pomona Valley)

Address P.O. Box 905 P.V. 92061

Phone 760 742 0277 e-mail buzulak@att.net

How did you hear about this meeting? Neighbor

Written comments may be submitted by e-mail to; allie.scrivener@dot.ca.gov. Mail your written comments to; Allie Scrivener, Caltrans,District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by July 10, 2014.

1. Thank you for your comment regarding your preference.

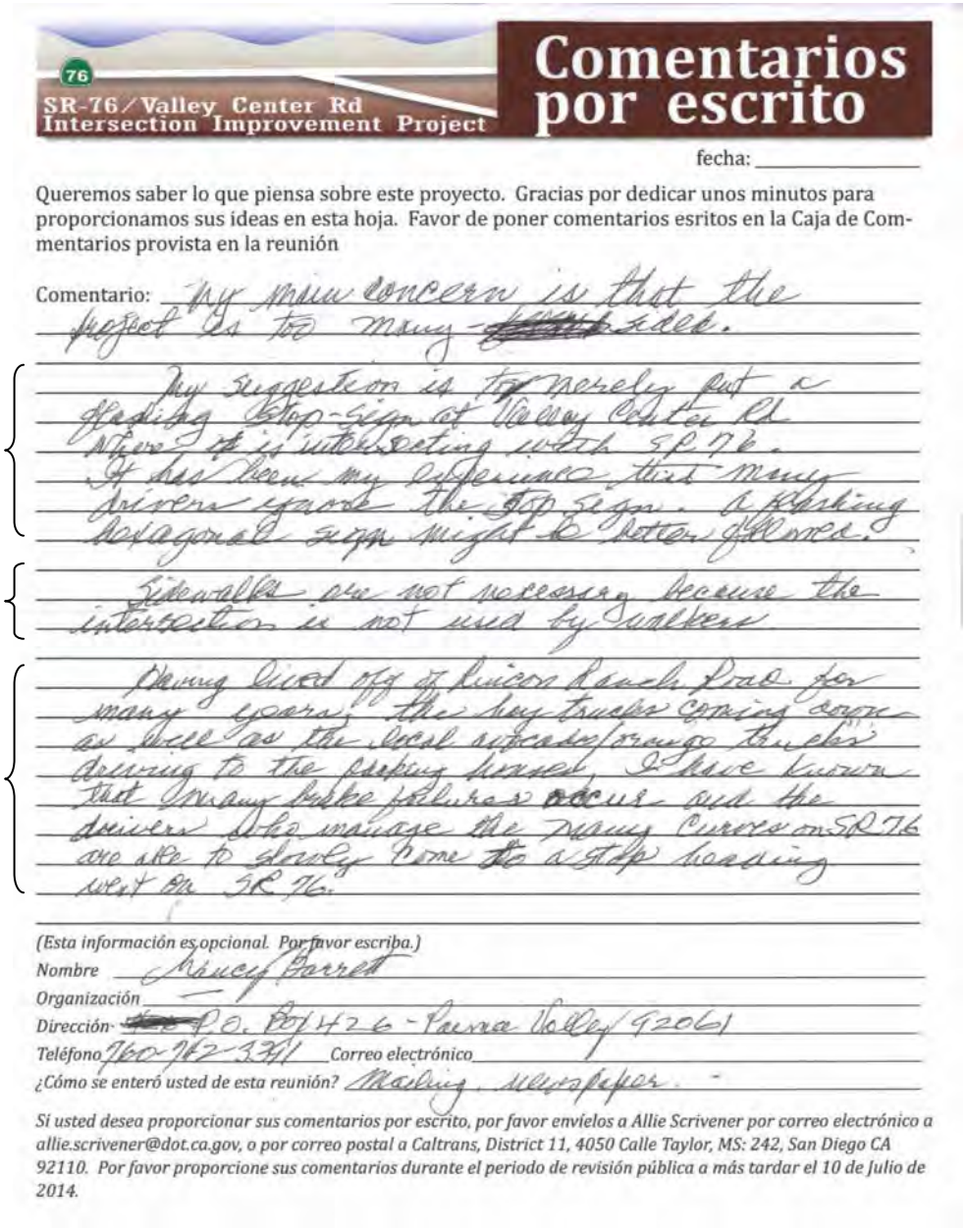
2. Thank you for your comment. Both build alternatives would include increased lighting and warning signage at and in advance of the intersection to avoid confusion.

3. Thank you for your comment regarding your preference for the Signal Alternative. As mentioned above, both build alternatives would include warning lights and signage.

4. The Traffic Accident Surveillance and Analysis System (TASAS) Selective Accident Retrieval (TSAR) accident detail report shows no history of accidents due to runaway or out of control trucks involving brake failure from January 2005 to June 2012 (Caltrans data to date).

5. Flashing lights alone would not meet the purpose and need of the project. However, both build alternatives would include increased lighting and warning signage at and in advance of the intersection.

6. The proposed project does not look at the SR-76 corridor as a whole. However, the corridor is evaluated in the 2007 SR-76 East Corridor Study, which includes the SR-76/Cole Grade Road intersection. The SR-76 East Corridor Study can be accessed here: http://www.dot.ca.gov/dist11/departments/planning/pdfs/systplan/16-SR76EastCorridorStudyMarch2007.pdf



76
SR-76/Valley Center Rd
Intersection Improvement Project

Comentarios por escrito

fecha: _____

Queremos saber lo que piensa sobre este proyecto. Gracias por dedicar unos minutos para proporcionamos sus ideas en esta hoja. Favor de poner comentarios esritos en la Caja de Comentarios provista en la reunión

Comentario: My main concern is that the project is too many ~~[illegible]~~ sided.

1 My suggestion is to merely put a leading Stop-Sign at Valley Center Rd where it is intersecting with SR 76. It has been my observance that many drivers ignore the Stop Sign. A flashing Octagonal sign might be better followed.

2 Sidewalks are not necessary because the intersection is not used by walkers.

3 Driving East off of Lilac Road for many years, the big trucks coming down as well as the local vineyard/orange trucks driving to the packing house. I have known that many brake failures occur and the drivers who manage the many curves on SR 76 are able to slowly come to a stop heading west on SR 76.

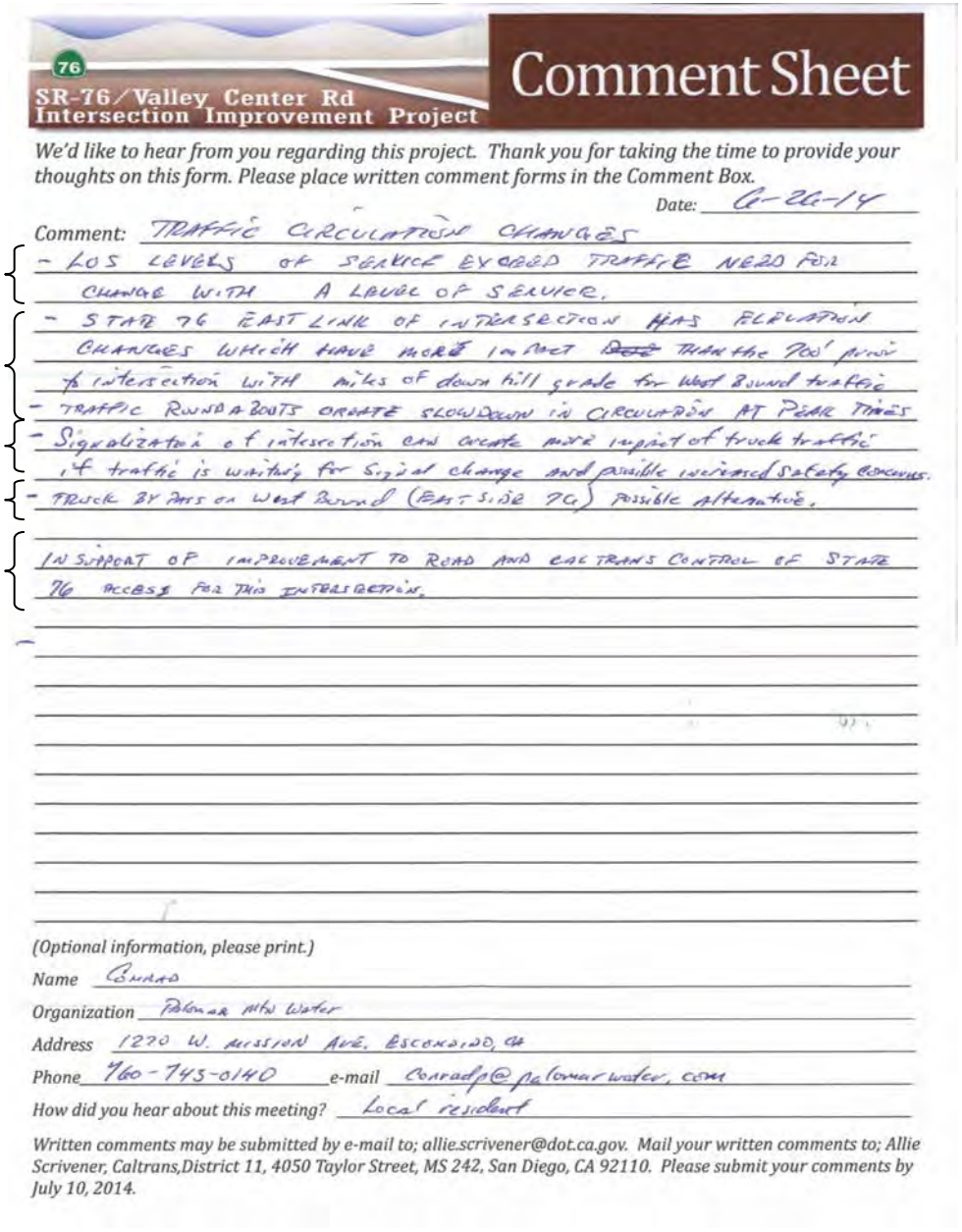
(Esta información es opcional. Por favor escriba.)
Nombre Nancy Barrett
Organización —
Dirección ~~[illegible]~~ P.O. Box 426 - Pauma Valley 92061
Teléfono 760-742-3311 Correo electrónico
¿Cómo se enteró usted de esta reunión? Mailing, newspaper

Si usted desea proporcionar sus comentarios por escrito, por favor envíelos a Allie Scrivener por correo electrónico a allie.scrivener@dot.ca.gov, o por correo postal a Caltrans, District 11, 4050 Calle Taylor, MS: 242, San Diego CA 92110. Por favor proporcione sus comentarios durante el periodo de revisión pública a más tardar el 10 de Julio de 2014.

1. Thank you for your suggestion for the intersection improvement at SR-76 and Valley Center Road. However, a stop sign alone would not meet the purpose and need of this project. The Roundabout Alternative has been selected because it would direct traffic through the intersection in a way that would reduce vehicle to vehicle conflict points.

2. Per Caltrans guidelines and Americans with Disabilities Act (ADA) requirements, Caltrans facilities are required to provide access for all roadway users.

3. There were no reported accidents involving brake failure for trucks. Both build alternatives are designed to help vehicles, including large trucks, to slow down. The measures include high friction surface treatment, curve correction, increased sight distance, and increased signage.



76

SR-76/Valley Center Rd
Intersection Improvement Project

Comment Sheet

We'd like to hear from you regarding this project. Thank you for taking the time to provide your thoughts on this form. Please place written comment forms in the Comment Box.

Date: 6-26-14

Comment: TRAFFIC CIRCULATION CHANGES

1 - LOS LEVELS OF SERVICE EXCEED TRAFFIC NEED FOR CHANGE WITH A LAUGE OF SERVICE.

2 - STATE 76 EAST LINK OF INTERSECTION HAS ELEVATION CHANGES WHICH HAVE MORE IMPACT ~~DATE~~ THAN the 700' prior to intersection WITH miles of down hill grade for West Bound traffic
- TRAFFIC ROUNDABOUTS CREATE SLOWDOWN IN CIRCULATION AT PEAK TIMES

3 - Signalization of intersection can create more impact of truck traffic if traffic is waiting for signal change and possible increased safety concerns.

4 - TRUCK BY PASS on West Bound (EAST SIDE 76) possible alternative.

5 IN SUPPORT OF IMPROVEMENT TO ROAD AND CALTRANS CONTROL OF STATE 76 ACCESS FOR THIS INTERSECTION.

(Optional information, please print.)

Name Conrad

Organization Palomar Mtn Water

Address 1270 W. MISSION AVE. ESCONDIDO, CA

Phone 760-745-0140 e-mail conradp@palomarwater.com

How did you hear about this meeting? Local resident

Written comments may be submitted by e-mail to; allie.scrivener@dot.ca.gov. Mail your written comments to; Allie Scrivener, Caltrans,District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by July 10, 2014.

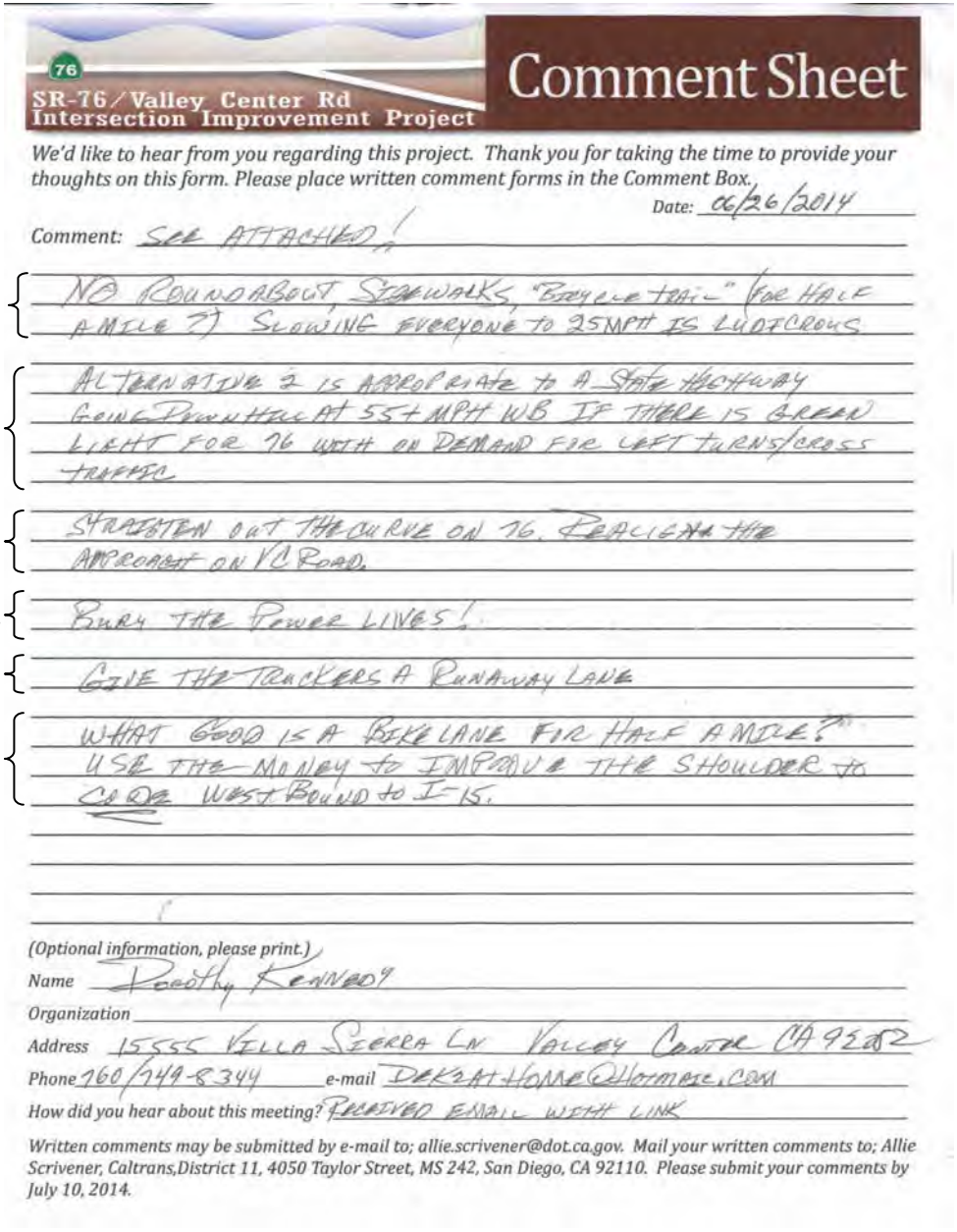
1. The primary purpose of this project is to improve the safety of the intersection.

2. The project would improve safety east of the intersection by increasing the line of sight, modifying the curve, and installing high friction surface treatment on the road surface to help vehicles slow down. In addition, Caltrans proposes to improve the advance warning signs at postmile 33.2 (third curve east of the intersection). Both alternatives will include flashing beacons, vehicle speed feedback signs, curve warning signs and chevron arrows. The signage will be displayed at a great enough distance for vehicles to slow for the intersection.

3. Signalized intersections are designed to be as safe as possible with warning signs to help motorists.

4. The Traffic Accident Surveillance and Analysis System (TASAS) Selective Accident Retrieval (TSAR) accident detail report shows no history of accidents due to runaway or out of control trucks involving brake failure from January 2005 to June 2012 (Caltrans data to date). A truck bypass lane would not fit the purpose and need of this project.

5. Thank you for your comment regarding your support for roadway improvements at this intersection.



76

SR-76/Valley Center Rd Intersection Improvement Project

Comment Sheet

We'd like to hear from you regarding this project. Thank you for taking the time to provide your thoughts on this form. Please place written comment forms in the Comment Box.

Date: 06/26/2014

Comment: SEE ATTACHED!

1 NO ROUNDABOUT, SIDEWALKS, "BICYCLE TRAIL" FOR HALF A MILE ?? SLOWING EVERYONE TO 25MPH IS LUDICROUS

2 ALTERNATIVE 2 IS APPROPRIATE TO A STATE HIGHWAY GOING THROUGH AT 55+MPH WB IF THERE IS GREEN LIGHT FOR 76 WITH ON DEMAND FOR LEFT TURNS/CROSS TRAFFIC

3 STRAIGHTEN OUT THE CURVE ON 76. REALIGN THE APPROACH ON VC ROAD.

4 BURY THE POWER LINES!

5 GIVE THE TRUCKERS A RUNAWAY LANE

6 WHAT GOOD IS A BIKE LANE FOR HALF A MILE?? USE THE MONEY TO IMPROVE THE SHOULDER TO GO OVER WEST BOUND TO I-15.

(Optional information, please print.)

Name Dorothy Kennedy

Organization

Address 15555 VILLA SIERRA LN VALLEY CENTER CA 92082

Phone 760/749-8344 e-mail DAKZAT HOME@HOTMAIL.COM

How did you hear about this meeting? RECEIVED EMAIL WITH LINK

Written comments may be submitted by e-mail to; allie.scrivener@dot.ca.gov. Mail your written comments to; Allie Scrivener, Caltrans,District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by July 10, 2014.

1. Thank you for your comment regarding speed limits and the Roundabout Alternative. Bicycle facilities are not currently planned, but will be considered during the design phase of the project. Per Caltrans guidelines and Americans with Disabilities Act (ADA) requirements, Caltrans facilities are required to provide access for all roadway users.

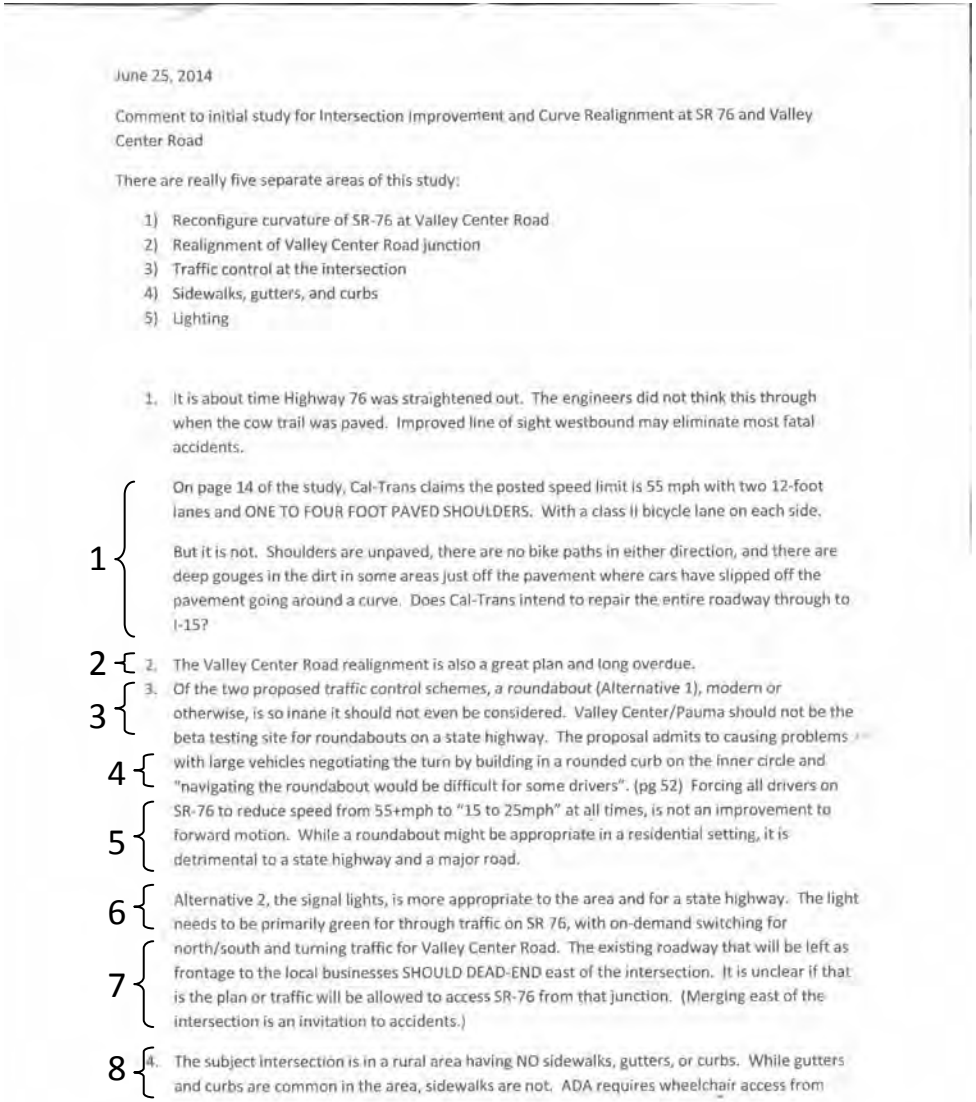
2. Thank you for your comment regarding your preference for the Signal Alternative.

3. SR-76 curve corrections and Valley Center Road realignment are components of both build alternatives.

4. Any required utility relocations or protection measures would be coordinated with the utility owners during the design process.

5. The Traffic Accident Surveillance and Analysis System (TASAS) Selective Accident Retrieval (TSAR) accident detail report shows no history runaway or out of control trucks involving brake failure from January 2005 to June 2012 (Caltrans data to date). A runaway truck lane would not meet the purpose and need of this project.

6. Bicycle facilities are not currently planned, but will be considered during the design phase of the project. Shoulder improvements are proposed within the project limits.



June 25, 2014

Comment to initial study for Intersection Improvement and Curve Realignment at SR 76 and Valley Center Road

There are really five separate areas of this study:

1) Reconfigure curvature of SR-76 at Valley Center Road
2) Realignment of Valley Center Road junction
3) Traffic control at the intersection
4) Sidewalks, gutters, and curbs
5) Lighting

1. It is about time Highway 76 was straightened out. The engineers did not think this through when the cow trail was paved. Improved line of sight westbound may eliminate most fatal accidents.

1 On page 14 of the study, Cal-Trans claims the posted speed limit is 55 mph with two 12-foot lanes and ONE TO FOUR FOOT PAVED SHOULDERS. With a class II bicycle lane on each side.

But it is not. Shoulders are unpaved, there are no bike paths in either direction, and there are deep gouges in the dirt in some areas just off the pavement where cars have slipped off the pavement going around a curve. Does Cal-Trans intend to repair the entire roadway through to I-15?

2 2. The Valley Center Road realignment is also a great plan and long overdue.

3 3. Of the two proposed traffic control schemes, a roundabout (Alternative 1), modern or otherwise, is so inane it should not even be considered. Valley Center/Pauma should not be the beta testing site for roundabouts on a state highway. The proposal admits to causing problems

4 with large vehicles negotiating the turn by building in a rounded curb on the inner circle and "navigating the roundabout would be difficult for some drivers". (pg 52) Forcing all drivers on

5 SR-76 to reduce speed from 55+mph to "15 to 25mph" at all times, is not an improvement to forward motion. While a roundabout might be appropriate in a residential setting, it is detrimental to a state highway and a major road.

6 Alternative 2, the signal lights, is more appropriate to the area and for a state highway. The light needs to be primarily green for through traffic on SR 76, with on-demand switching for

7 north/south and turning traffic for Valley Center Road. The existing roadway that will be left as frontage to the local businesses SHOULD DEAD-END east of the intersection. It is unclear if that is the plan or traffic will be allowed to access SR-76 from that junction. (Merging east of the intersection is an invitation to accidents.)

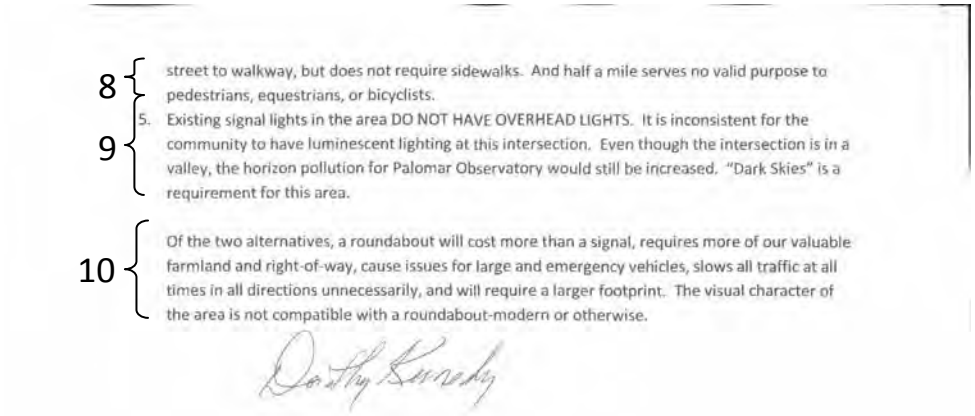
8 4. The subject intersection is in a rural area having NO sidewalks, gutters, or curbs. While gutters and curbs are common in the area, sidewalks are not. ADA requires wheelchair access from

1. The DED and FED do not claim that bicycle lanes already exist along SR-76. The Document references the Mobility Element of the County of San Diego 2011 General Plan update, which states that bicycle facilities are planned along SR-76. Page 14 has been updated to reflect that shoulders along SR-76 vary from 0- to 4-ft. There is no project currently planned to upgrade the entire SR-76 segment from I-15 to Valley Center Road. The purpose of this project is to reduce the frequency and severity of accidents at the SR-76/Valley Center Road intersection.

2. Thank you for your comment regarding the realignment of Valley Center Road.

3. While a roundabout would be the first of its kind on a state highway in San Diego County, the California State Highway System Roundabout Inventory developed in July of 2014 cites 20 existing examples of roundabouts on California highways including rural areas, with 60 more in planning or development stages. The California State Highway System Roundabout Inventory can be accessed here: http://www.dot.ca.gov/hq/tpp/offices/oasp/roundabouts/Final_2014_CA_SHS_Roundabout_Inventory_Report_07082014.pdf

4. The Roundabout Alternative would include a mountable curb for ease of navigation for trucks, buses, and other large vehicles. This is a typical feature of roundabout design. The description on page 52 of the DED describes unfamiliarity with the roundabout as the cause of discomfort for some drivers, but the roadway would be easily navigable for all roadway users.



street to walkway, but does not require sidewalks. And half a mile serves no valid purpose to pedestrians, equestrians, or bicyclists.

8

5. Existing signal lights in the area DO NOT HAVE OVERHEAD LIGHTS. It is inconsistent for the community to have luminescent lighting at this intersection. Even though the intersection is in a valley, the horizon pollution for Palomar Observatory would still be increased. "Dark Skies" is a requirement for this area.

9

Of the two alternatives, a roundabout will cost more than a signal, requires more of our valuable farmland and right-of-way, cause issues for large and emergency vehicles, slows all traffic at all times in all directions unnecessarily, and will require a larger footprint. The visual character of the area is not compatible with a roundabout-modern or otherwise.

10

Dorothy Kennedy

5. The speed reduction with the Roundabout Alternative would allow vehicles to pass through the intersection without coming to a complete stop. Under the signal alternative, westbound vehicles passing through the intersection would have to stop at the signal when vehicles crossing the intersection from other directions have the right of way.

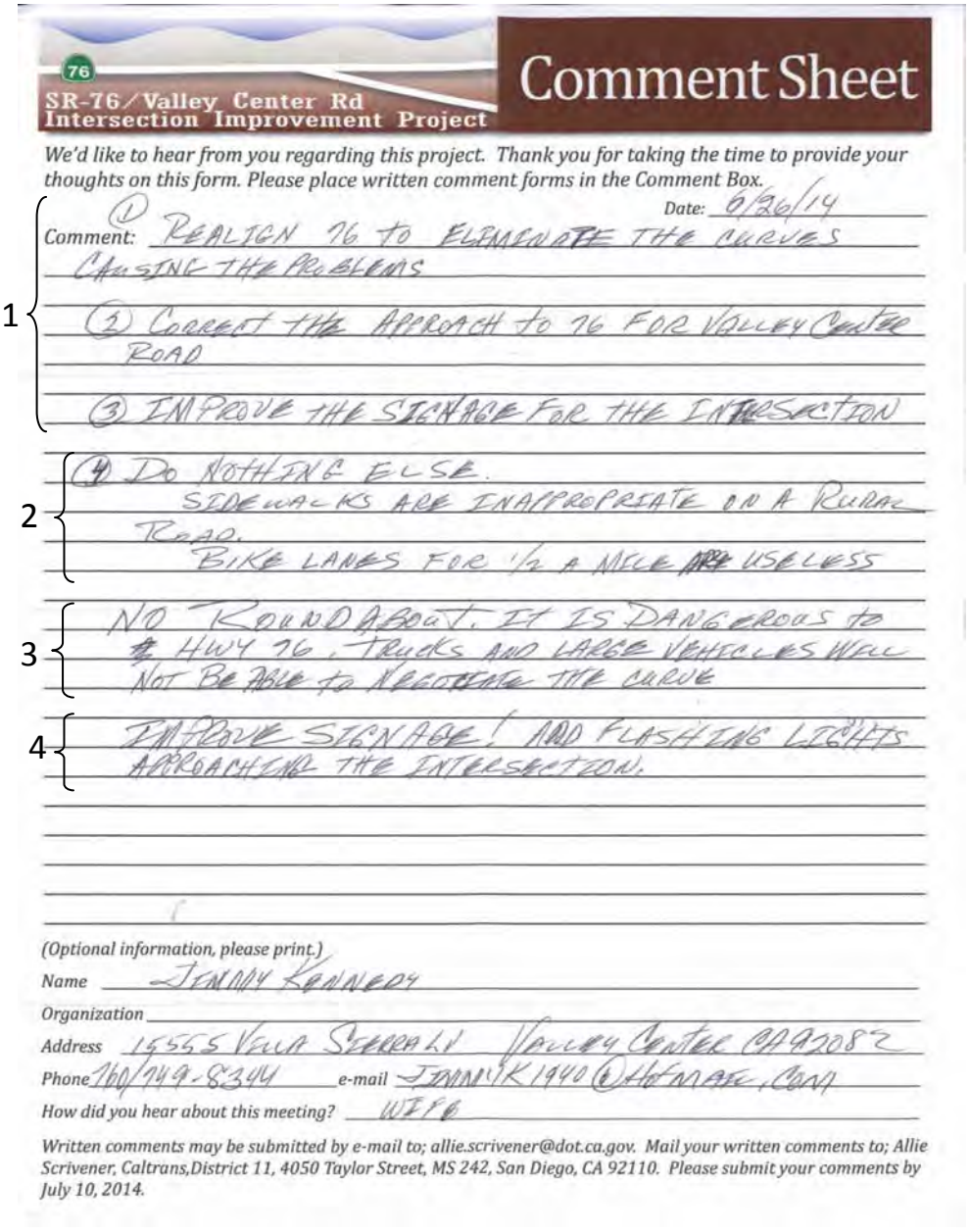
6. Thank you for your comment regarding your preference for the Signal Alternative.

7. For both build alternatives, the existing SR-76 alignment would terminate at its eastern end as it abuts the new SR-76 alignment. Page 15 of the DED has been updated to reflect this.

8. Per Caltrans guidelines and Americans with Disabilities (ADA) requirements, Caltrans is required to accommodate all roadway users on its facilities. Sidewalks would be colored and textured to blend with the surrounding environment.

9. Special lights that point downward will be installed. The proposed street lighting would be designed in accordance with the County's Light Pollution Code.

10. Thank you for your comment describing your concerns about the Roundabout Alternative. Based on current design, the Roundabout Alternative would affect four parcels and the Signal Alternative would affect seven parcels. Care is being taken to incorporate landscaping and visual mitigation to maintain the rural look and feel of the area.



76

SR-76/Valley Center Rd Intersection Improvement Project

Comment Sheet

We'd like to hear from you regarding this project. Thank you for taking the time to provide your thoughts on this form. Please place written comment forms in the Comment Box.

Date: 6/26/14

Comment:

1 ① REALIGN 76 TO ELIMINATE THE CURVES CAUSING THE PROBLEMS

② CORRECT THE APPROACH TO 76 FOR VALLEY CENTER ROAD

③ IMPROVE THE SIGNAGE FOR THE INTERSECTION

2 ④ DO NOTHING ELSE. SIDEWALKS ARE INAPPROPRIATE ON A RURAL ROAD. BIKE LANES FOR ½ A MILE ARE USELESS

3 NO ROUNDABOUT. IT IS DANGEROUS to # HWY 76. TRUCKS AND LARGE VEHICLES WILL NOT BE ABLE to NEGOTIATE THE CURVE

4 IMPROVE SIGNAGE! ADD FLASHING LIGHTS APPROACHING THE INTERSECTION.

(Optional information, please print.)

Name JENNY KENNEDY

Organization

Address 15555 VELA SERENA LN Valley Center CA 92082

Phone 760/749-8344 e-mail JENNYK1940@HOTMAIL.COM

How did you hear about this meeting? WIFE

Written comments may be submitted by e-mail to; allie.scrivener@dot.ca.gov. Mail your written comments to; Allie Scrivener, Caltrans,District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by July 10, 2014.

1. Both build alternatives include realignment of curve sections of SR-76, realignment of Valley Center Road approaching SR-76, and signage improvements for the intersection.

2. Bicycle facilities are not yet planned as part of the project. Bicycle facilities will be considered in the design phase of the project. The document discusses bicycle infrastructure because the project area is listed in the Mobility Element of the 2011 San Diego County General Plan Update as a planned Class II bicycle lane.
   Per Caltrans guidelines and Americans with Disabilities Act (ADA) requirements, Caltrans infrastructure is designed to be accessible to all users.

3. The Roundabout Alternative would include a mountable curb for ease of navigation for trucks, buses, and other large vehicles.

4. Both build alternatives propose to improve signage and lighting of the project area.

76

SR-76 / Valley Center Rd
Intersection Improvement Project

Comentarios por escrito

fecha: _____

Queremos saber lo que piensa sobre este proyecto. Gracias por dedicar unos minutos para proporcionamos sus ideas en esta hoja. Favor de poner comentarios esritos en la Caja de Commentarios provista en la reunión

1 2

Comentario: Please consider the signal intersection alternative as the preferred alternative. It improves the sight distance uphill. It eliminates the reversing curve element. It avoids what I believe will be intersection movement uncertainty that will occur in a modern roundabout. I believe that the high visitor traffic (rather than locals) will make for more uncertainty in the minds of the motorists. And uncertainty in motorists minds causes a higher accident frequency.

Thank you

Bradley McGrist

(Esta información es opcional. Por favor escriba.)

Nombre _____

Organización _____

Dirección _____

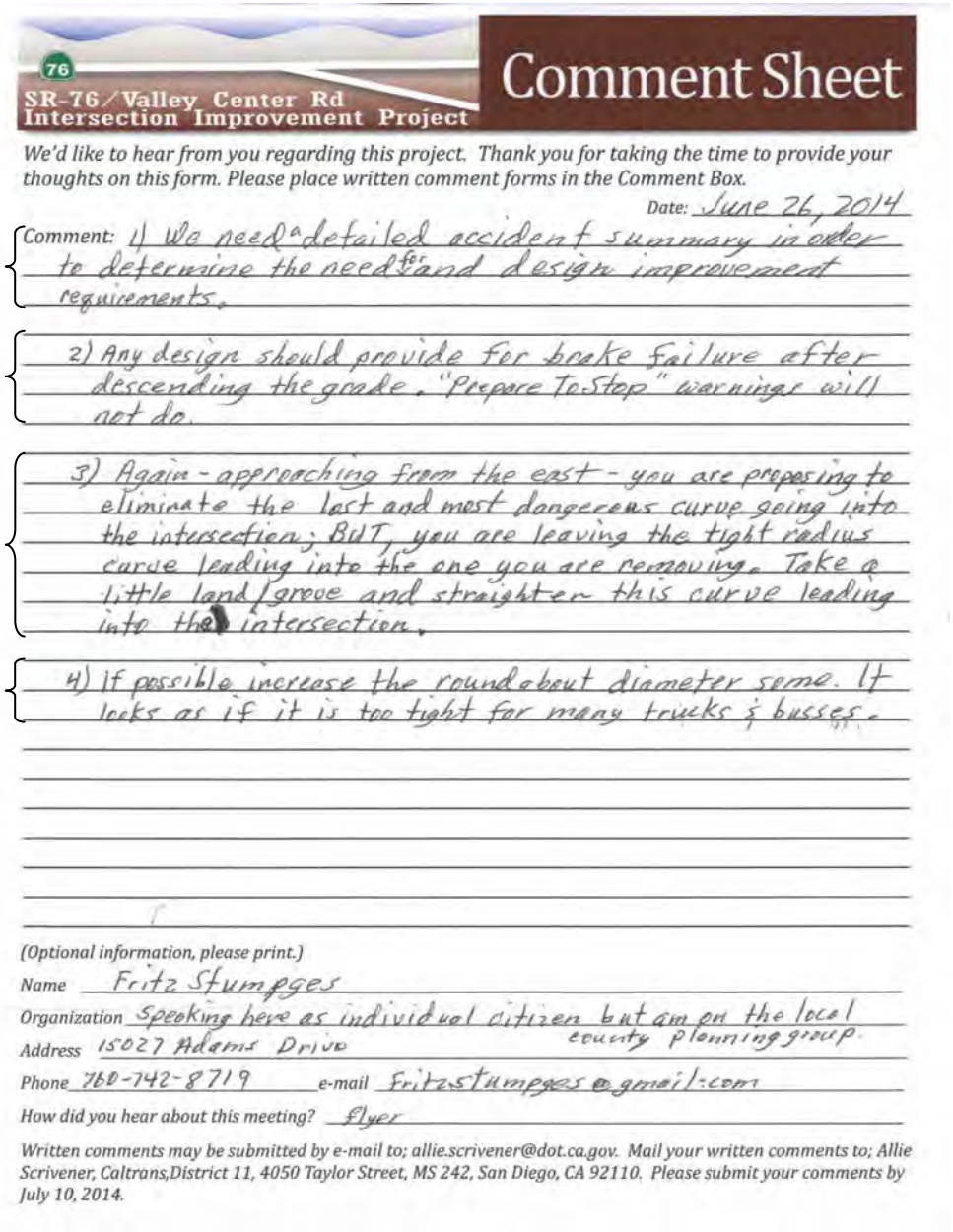
Teléfono _____ *Correo electrónico* _____

¿Cómo se enteró usted de esta reunión? _____

Si usted desea proporcionar sus comentarios por escrito, por favor envíelos a Allie Scrivener por correo electrónico a allie.scrivener@dot.ca.gov, o por correo postal a Caltrans, District 11, 4050 Calle Taylor, MS: 242, San Diego CA 92110. Por favor proporcione sus comentarios durante el periodo de revisión pública a más tardar el 10 de Julio de 2014.

1. Thank you for your comment regarding your preference for the Signal Alternative.

2. Both build alternatives would improve uphill sight distance and realign the roadway to remove the reversing curve. The roundabout includes geometric features that create appropriate vehicular speed and direction. Signing, striping, landscape and illumination direct driver attention to appropriate issues at the appropriate time and control decision points.



76

SR-76/Valley Center Rd Intersection Improvement Project

Comment Sheet

We'd like to hear from you regarding this project. Thank you for taking the time to provide your thoughts on this form. Please place written comment forms in the Comment Box.

Date: June 26, 2014

Comment:

1 1) We need a detailed accident summary in order to determine the need for and design improvement requirements.

2 2) Any design should provide for brake failure after descending the grade. "Prepare To Stop" warnings will not do.

3 3) Again - approaching from the east - you are proposing to eliminate the last and most dangerous curve going into the intersection; BUT, you are leaving the tight radius curve leading into the one you are removing. Take a little land/grove and straighten this curve leading into the intersection.

4 4) If possible increase the roundabout diameter some. It looks as if it is too tight for many trucks & busses.

(Optional information, please print.)

Name Fritz Stumpges

Organization Speaking here as individual citizen but am on the local county planning group.

Address 15027 Adams Drive

Phone 760-742-8719 e-mail fritzstumpges@gmail.com

How did you hear about this meeting? Flyer

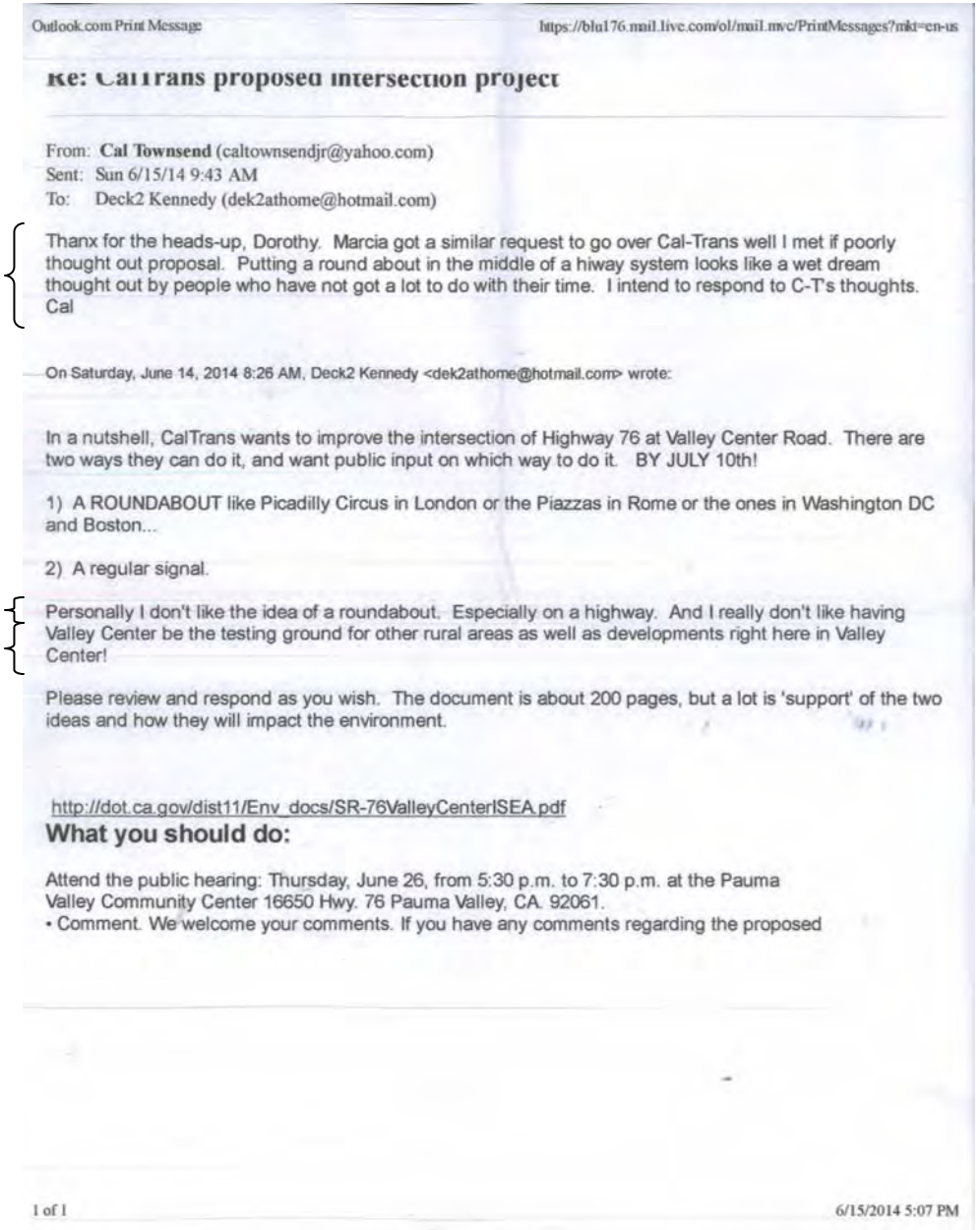
Written comments may be submitted by e-mail to; allie.scrivener@dot.ca.gov. Mail your written comments to; Allie Scrivener, Caltrans,District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by July 10, 2014.

1. Caltrans does not list specific details of accidents in environmental documents. This information can be requested from the California Highway Patrol (CHP) at http://chp.ca.gov/ or http://cad.chp.ca.gov/.

2. Both build alternatives include geometric features that create appropriate vehicular speed and direction. Signing, striping, landscape and illumination direct driver attention to appropriate issues at the appropriate time and control decision points. Further, the high friction surface treatment to be installed would enhance vehicles' slowing ability.

3. Realigning the second curve requires 0.33 acre of orchard on the north side of SR-76. It creates a short tangent between the second and third curve, which is not operationally feasible. The design exception for the second curve would still allow a sufficient spacing and curve radius for the roadway to be safely navigated at the existing design speed of 35 miles per hour. Further, the warning signage, high friction surface treatment, and correction of the adjacent curves will increase the safety of this section. The existing curve radius meets the design speed of 35 mph, which is the advisory speed at the second curve.

4. The inscribed diameter of the roundabout is 130 feet, the circulatory roadway is 20 feet wide, and the mountable truck apron is 16 feet wide. The roundabout is therefore large enough to accommodate a size WB-50 truck, which has a kingpin to rear axle length of 35.5 feet.



Outlook.com Print Message https://blu176.mail.live.com/ol/mail.mvc/PrintMessages?mkt=en-us

Re: CalTrans proposed intersection project

From: **Cal Townsend** (caltownsendjr@yahoo.com)
Sent: Sun 6/15/14 9:43 AM
To: Deck2 Kennedy (dek2athome@hotmail.com)

1 Thanx for the heads-up, Dorothy. Marcia got a similar request to go over Cal-Trans well I met if poorly thought out proposal. Putting a round about in the middle of a hiway system looks like a wet dream thought out by people who have not got a lot to do with their time. I intend to respond to C-T's thoughts. Cal

On Saturday, June 14, 2014 8:26 AM, Deck2 Kennedy <dek2athome@hotmail.com> wrote:

In a nutshell, CalTrans wants to improve the intersection of Highway 76 at Valley Center Road. There are two ways they can do it, and want public input on which way to do it. BY JULY 10th!

1) A ROUNDABOUT like Picadilly Circus in London or the Piazzas in Rome or the ones in Washington DC and Boston...

2) A regular signal.

2 Personally I don't like the idea of a roundabout. Especially on a highway. And I really don't like having
3 Valley Center be the testing ground for other rural areas as well as developments right here in Valley Center!

Please review and respond as you wish. The document is about 200 pages, but a lot is 'support' of the two ideas and how they will impact the environment.

http://dot.ca.gov/dist11/Env_docs/SR-76ValleyCenterISEA.pdf

What you should do:

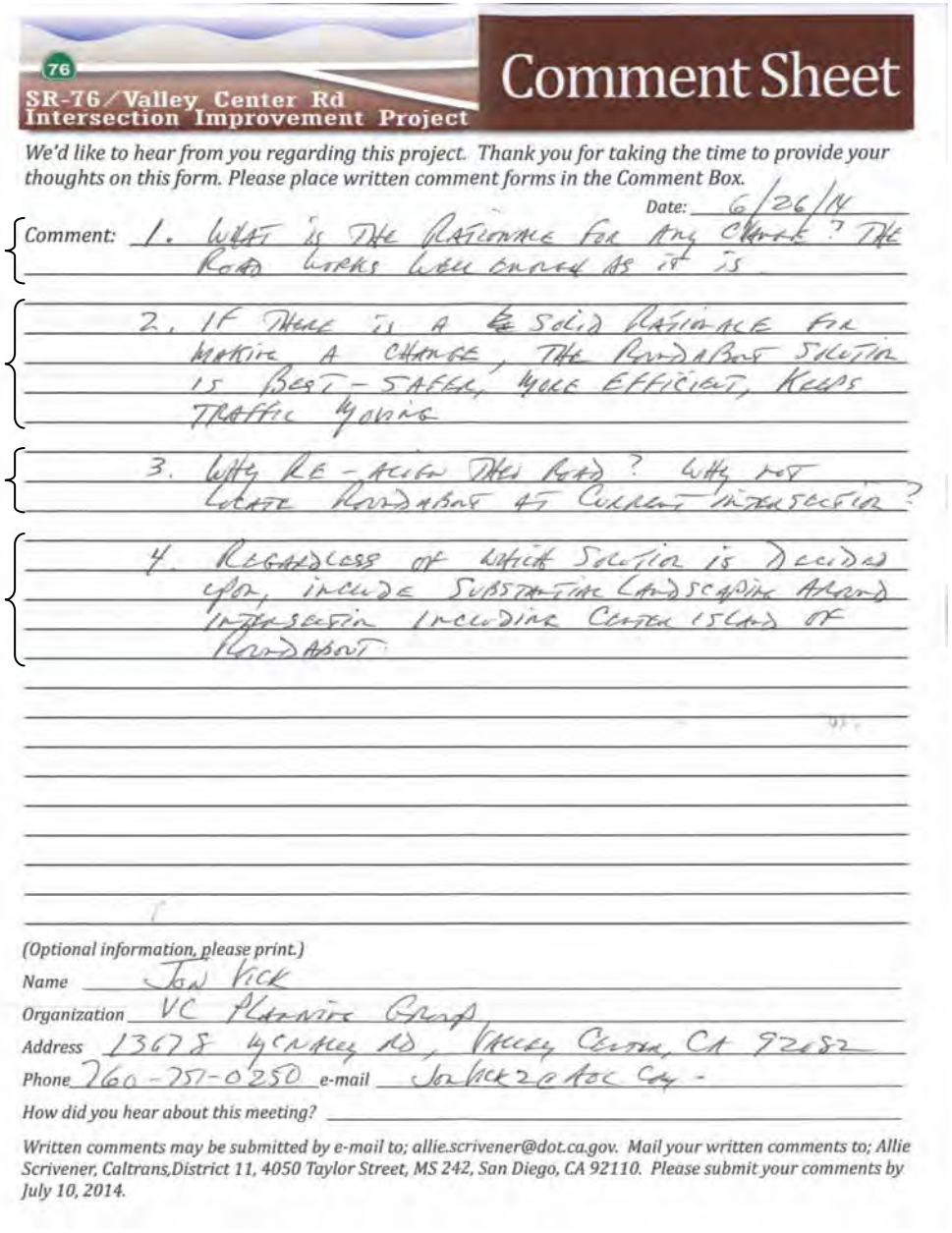
Attend the public hearing: Thursday, June 26, from 5:30 p.m. to 7:30 p.m. at the Pauma Valley Community Center 16650 Hwy. 76 Pauma Valley, CA. 92061.
• Comment. We welcome your comments. If you have any comments regarding the proposed

1 of 1 6/15/2014 5:07 PM

1. Thank you for your comment.

2. Thank you for your comment regarding your preference.

3. While the Roundabout Alternative would be the first of its kind on a state highway within San Diego County, the California State Highway System Roundabout Inventory developed in June of 2012 cites 20 existing examples of roundabouts on California highways including rural areas, with 60 more in planning or development stages. The California State Highway System Roundabout Inventory can be accessed here: http://www.dot.ca.gov/hq/tpp/offices/oasp/roundabouts/Final_2014_CA_SHS_Roundabout_Inventory_Report_07082014.pdf#zoom=85



76

SR-76/Valley Center Rd Intersection Improvement Project

Comment Sheet

We'd like to hear from you regarding this project. Thank you for taking the time to provide your thoughts on this form. Please place written comment forms in the Comment Box.

Date: 6/26/14

1 Comment: 1. WHAT IS THE RATIONALE FOR ANY CHANGE? THE ROAD LOOKS WELL ENGINEERED AS IT IS

2 2. IF THERE IS A SOLID RATIONALE FOR MAKING A CHANGE, THE ROUNDABOUT SOLUTION IS BEST - SAFER, MORE EFFICIENT, KEEPS TRAFFIC MOVING

3 3. WHY RE-ALIGN THE ROAD? WHY NOT LOCATE ROUNDABOUT AT CURRENT INTERSECTION?

4 4. REGARDLESS OF WHICH SOLUTION IS DECIDED UPON, INCLUDE SUBSTANTIAL LANDSCAPING AROUND INTERSECTION INCLUDING CENTER ISLAND OF ROUNDABOUT

(Optional information, please print.)

Name JON VICK

Organization VC PLANNING GROUP

Address 13678 MCNALLY RD, VALLEY CENTER, CA 92082

Phone 760-751-0250 e-mail JONVICK2@AOL.COM

How did you hear about this meeting?

Written comments may be submitted by e-mail to; allie.scrivener@dot.ca.gov. Mail your written comments to; Allie Scrivener, Caltrans,District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by July 10, 2014.

1. The project rationale is discussed on Page 13 of the DED and FED in the section entitled "Purpose and Need." This section discusses the higher-than-average accident history within the project limits. The project is also proposed to upgrade the curves and sight distances to current standards.

2. Thank you for your comment regarding your preference for the Roundabout Alternative.

3. Constructing the roundabout at the existing intersection would result in fewer safety improvements due to the orientation of the roads approaching the intersection. The roadway angles would not allow vehicles to enter the intersection at approach angles that would substantially improve safety. Further, a detour would be required in order for the intersection to remain open for vehicles during construction. Under the current design, no road closure would be required.

4. Caltrans policy is to provide replacement planting on conventional highways to mitigate project impacts. The replacement planting/landscape is intended to be sustainable and to survive with little or no maintenance once established.

Jul 01 14 11:15a Lynne Villalobos 760-742-1471 p.1

SR-76/Valley Center Rd Intersection Improvement Project

Comment Sheet

We'd like to hear from you regarding this project. Thank you for taking the time to provide your thoughts on this form. Please place written comment forms in the Comment Box.

To: Mr. Hulu fax: 619-688-2572 Date: 6-26-14

1 Comment: A round about is NOT a solution – 25 mph in a major thruway (arterial). This will NOT do what you want it to do. Highway too fast. Cars backing up due to 25 mph @ Round-about will be another danger

Laney Villalobos

2 Your "public mtg" was an insult to Pauma Valleyites. We deserved a mtg, not a "walk about". "Divide & conquer" is as old as Philip II, King of Macedonia, and you used it very effectively. Only 1 person I talked to was in favor of a roundabout. The rest recognize it was not meant for this Valley.

3 Of course, it's about the money. The Indians got a lite @ Reservation / Hwy 76 intersection. But the Valley, not owning a casino, gets the cheap option. We want a "simple lite", maybe

4 even just 2 flashing lites, the 2ND being a stop sign on Valley Ctr. Rd, the 1st being a warning "Stop Ahead" And warning lite on 76, slowing traffic speed on 76.

5 To ask people to "write a comment!" in a noisy mtg. was impossible.

(Optional information, please print.)

Name Laney Villalobos

Organization

Address 17166 Hwy 76

Phone 760-742-1471 *e-mail* laney3207@gmail.com

How did you hear about this meeting?

Written comments may be submitted by e-mail to: allie.scrivener@dot.ca.gov. Mail your written comments to: Allie Scrivener, Caltrans, District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by July 10, 2014.

(over)

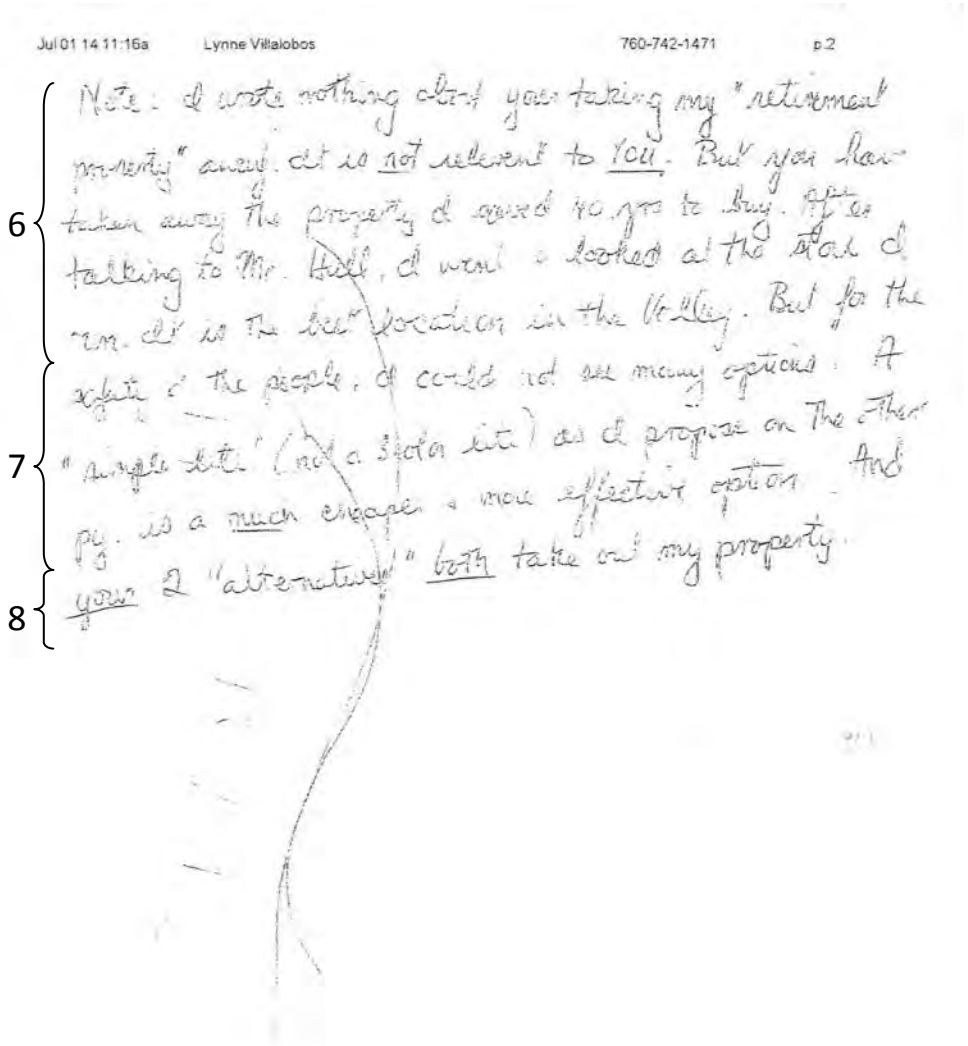
1. The roundabout includes geometric features that create appropriate vehicular speed and direction. Signing, striping, landscape and illumination direct driver attention to appropriate issues at the appropriate time and control decision points. The signage will be displayed at a great enough distance for vehicles to slow for the intersection.

2. The open house public meeting format has been the standard practice by Caltrans for many years. It allows members of the public to attend within a two hour window to discuss project details directly and freely with Caltrans staff. The public can submit their comments at the meeting or any time within the 30-day public review period. It also enables Caltrans to hear from everyone who wishes to speak, as the formal answer/lecture format may result in one or more people monopolizing this time and causing some individuals to be intimidated or otherwise feel unable to express their opinions freely.

3. Selection of a preferred alternative does not depend solely on cost. It is based primarily on best meeting the purpose and need of the project. Consideration will also include safety, design feasibility, environmental and community impacts, community input, and cost.

4. Flashing lights alone would not meet the purpose and need of this project.

5. Thank you for your comment regarding submitting comments during the public meeting. In an effort to make project-related comments as convenient as possible for interested parties, several methods have been provided for submitting project comments. The



Jul 01 14 11:16a Lynne Villalobos 760-742-1471 p.2

Note: I wrote nothing about you taking my "retirement property" away. It is not relevant to you. But you have taken away the property I wanted to you to buy. After talking to Mr. Hall, I went + looked at the rest of my property. It is the best location in the Valley. But for the safety of the people, I could not see many options. A "single lite" (not a 3 lane lite) as I propose on the other pg. is a much cheaper + more effective option. And you + "alternative" both take out my property.

6

7

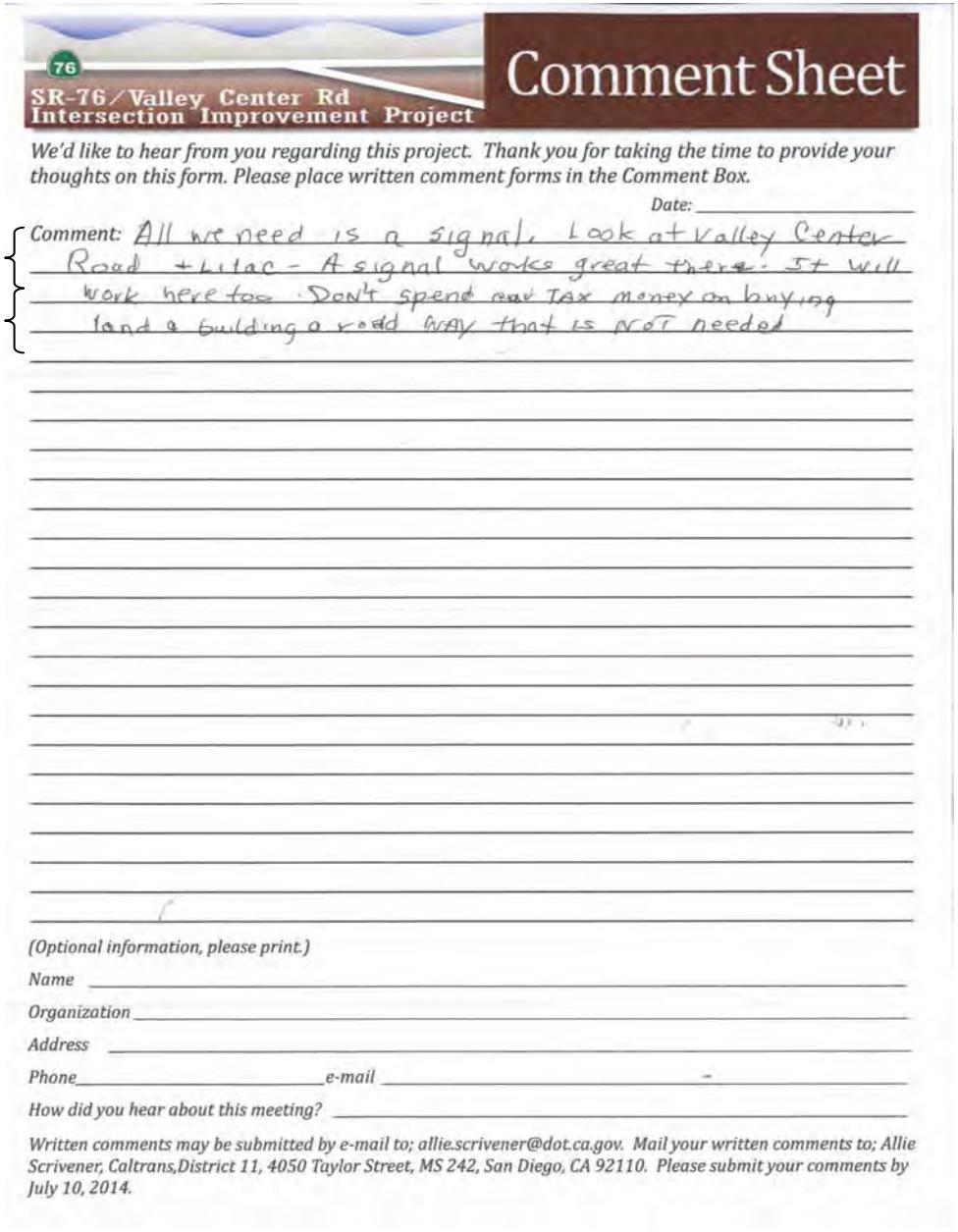
8

public hearing is one venue for comment submittal. Interested parties may also mail, email, fax, or hand-deliver their comments on Caltrans projects. The comment period is thirty days for the convenience of parties interested in the project.

6. All acquisitions of real property require offers of just compensation pursuant to Government Code 7267.2. If the project necessitates the displacement of a business, Caltrans will adhere to federal guidelines outlined in the Code of Federal Regulations (49 CFR Part 24) for relocation assistance and benefits. Caltrans can only acquire properties required for the project. Affected property owners will be paid just compensation for their properties. The decision to invest in similar replacement properties will be their choice and replacement locations will be at their discretion.

7. Flashing lights alone would not meet the purpose and need of this project.

8. Constructing the roundabout at the existing intersection would result in less substantial safety improvements due to the orientation of the roads approaching the intersection. Further, a detour would be required in order for the intersection to remain open for vehicles during construction.



76

SR-76/Valley Center Rd Intersection Improvement Project

Comment Sheet

We'd like to hear from you regarding this project. Thank you for taking the time to provide your thoughts on this form. Please place written comment forms in the Comment Box.

Date: _____

Comment: All we need is a signal. Look at Valley Center Road + Lilac - A signal works great there. It will work here too. Don't spend our tax money on buying land & building a road way that is NOT needed

1

2

(Optional information, please print.)

Name _____

Organization _____

Address _____

Phone _____ e-mail _____

How did you hear about this meeting? _____

Written comments may be submitted by e-mail to; allie.scrivener@dot.ca.gov. Mail your written comments to; Allie Scrivener, Caltrans,District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by July 10, 2014.

1. Thank you for your comment regarding your preference for the Signal Alternative.

2. Both build alternatives would require the acquisition of new right of way and construction of additional roadway in order for the intersection to meet current design standards.

Scrivener, Allie@DOT

From: Steven C. Much [smuchs@smuchs.cnc.net]
Sent: Friday, June 27, 2014 7:57 PM
To: Scrivener, Allie@DOT
Cc: 'Dorothy Kennedy'
Subject: Highway 76 intersection

Follow Up Flag: Follow up
Flag Status: Completed

Hello Allie,
Please do not change the intersection at Hwy 76
and valley center road.
Thank you.

Steven C. Much
PO Box 133
15348 Villa Sierra Road
Valley Center, Ca. 92082
(760)809-9588
(760)749-7116

Thank you for your comment.

Scrivener, Allie@DOT

From: jerilyn lagus [jdlagus@att.net]
Sent: Monday, June 30, 2014 4:10 PM
To: Scrivener, Allie@DOT

I would like to see the roundabout built at HWY 76/ Valley Center Road. That would be my choice and I live in Valley Center.

Thanks,

Jerilyn D. Lagus

Thank you for your comment regarding your preference for the Roundabout Alternative.

Scrivener, Allie@DOT

From: Estrada, Richard N@DOT
Sent: Monday, June 30, 2014 9:15 AM
To: Scrivener, Allie@DOT
Cc: Labrador, Albert@DOT; Dispenzieri, Mike V@DOT
Subject: Fw: CA State Hwy 76 Valley Center Road

Fyi.

From: Steven Hutchison [mailto:hutchisonsm@gmail.com]
Sent: Friday, June 27, 2014 03:43 PM
To: Estrada, Richard N@DOT
Subject: CA State Hwy 76 Valley Center Road

Dear Mr. Estrada,

I apparently missed the open house that you presented on the intersection update for State Highway 76 and Valley Center Road. I have been fascinated by California's willingness to consider a roundabout for that intersection.

1

I suspect you heard from a number of people that roundabouts are too strange, or too unsafe, or too confusing for Californians to adjust to. But, I believe the data tell a different story. In my experience with roundabouts, I have found them to be imminently manageable, faster to pass through on average, and more focused on safety. I have engaged roundabouts in Europe, the eastern U.S., Arizona, Temecula in Riverside County, and even in La Jolla here in San Diego County. In all cases, whether roundabouts or traffic circles, they were efficient and safe.

I further suspect that most of the resistance to roundabouts comes from fearing what hasn't been experienced. Sure, there are always some who claim to have extensive experience with roundabouts and most of that experience was somehow bad. But, I am thinking that much of that bad experience was manufactured as a defense against accepting something 'new' that has been proven to be more efficient and safer.

Please add me to your tally of residents who are in favor of a roundabout at State Highway 76 and Valley Center Road.

Respectfully,

Steve Hutchison
Valley Center Planning Group
31290 Munster Platz Way, Valley Center, CA 92082

2

p.s.: It would also be helpful for those of us in Valley Center if you could manage to arrange an upgrade State Highway 76 from I-15 east to Valley Center Road. Presently, the restriction on vehicles over 40-feet is funneling an inordinate amount of bus and truck traffic through Valley Center along Old Castle Road and Lilac Road to Valley Center Road and then on to the casinos at San Pasqual and Rincon reservations. Just a thought.

1

1. Thank you for your comments regarding your preference for the Roundabout Alternative.

2. The San Diego Association of Governments (SANDAG) 2050 Regional Transportation Plan lists proposed operational improvements along SR-76 from I-15 to Couser Canyon, which would include curve corrections that would allow vehicles with a kingpin to rear axle length of 40 feet to use the roadway. Information about the 2050 Regional Transportation Plan is located here: http://www.sandag.org/index.asp?projectid=349&fuseaction=projects.detail

Scrivener, Allie@DOT

From: Dorothy Kennedy [dek2athome@hotmail.com]
Sent: Tuesday, July 01, 2014 6:43 AM
To: Scrivener, Allie@DOT
Cc: execsecretariat lhwa@lhwa.dot.gov
Subject: CalTrans Draft - Highway 76/Valley Center Road
Attachments: My summary n analysis.docx

1 CalTrans DOES know that there is a 10% grade to the east of this intersection? A roundabout is inappropriate. This is RURAL, not suburban or urban. With large trucks coming down the grade at speed there had better be lots of signage and warning and hope everyone can brake in time, if the brakes hold.

2 Has FHWA taken a look at this intersection and your plans?

3 Instead of just Alternate 3) - do nothing, perhaps start out with signs and lines on the existing intersection to improve traffic control where it is. (Alternative 3a OR Alternative 3b). And I would like to see a listing of the 35 accidents from 2005 to 2009 cited in the study. Has the incidence rate increased or decreased in the past five years?

Give Alternative 3b a try before forcing out a thriving business and causing extreme traffic problems in an area that really doesn't need it.

4 Find some other highway location to beta test roundabouts!

Thank you

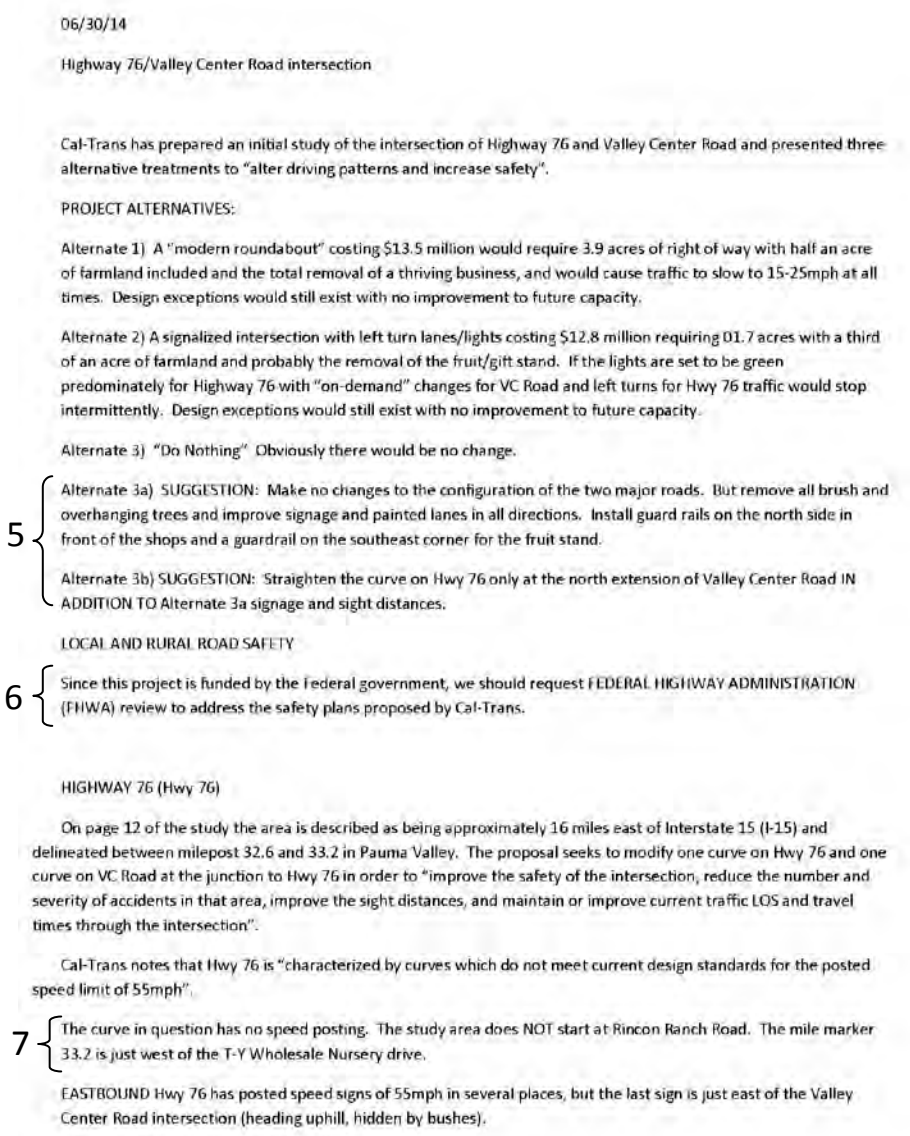
Dorothy Kennedy
15555 Villa Sierra Lane
Valley Center, CA 92082
760/749-8344

Dorothy.Kennedy=dek2athome@hotmail.com

1. The grade varies between 6% and 8%. Roundabouts have been demonstrated to substantially reduce fatal and injury crash experience at rural locations, including those with greater than 55mph approaches. The roundabout would include geometric features that create appropriate vehicular speed and direction. Signing, striping, landscape, and illumination appropriately direct driver and control decision points. Both build alternatives would increase warning signage, ensuring sufficient time for vehicles to slow down. Further, the high friction surface treatment to be installed would enhance vehicles' slowing ability.

2. The Federal Highway Administration was mailed a copy of the Draft Environmental Document on June 9, 2014, and is included in the Distribution List on page 127 of the Document. No comments were received.

3. Signage and striping improvements alone would not meet the purpose and need of this project.
   The study cited in the project report from January 2005 to December 2009 reported 35 accidents within 5 years.
   Caltrans does not list specific accident details. This information can be requested from the California Highway Patrol (CHP) at http://chp.ca.gov/ or http://cad.chp.ca.gov/.
   The Traffic Accident Surveillance and Analysis System (TASAS) Selective Accident Retrieval (TSAR) accident detail report from January 2010 to the most current listing in the database (June 2012) lists 13 accidents within 2.5 years. The annual average has decreased from 7 to 5.2 per year. However, the intersection still meets the signal warrant of a minimum of 5 accidents per year.



06/30/14

Highway 76/Valley Center Road intersection

Cal-Trans has prepared an initial study of the intersection of Highway 76 and Valley Center Road and presented three alternative treatments to "alter driving patterns and increase safety".

PROJECT ALTERNATIVES:

Alternate 1) A "modern roundabout" costing $13.5 million would require 3.9 acres of right of way with half an acre of farmland included and the total removal of a thriving business, and would cause traffic to slow to 15-25mph at all times. Design exceptions would still exist with no improvement to future capacity.

Alternate 2) A signalized intersection with left turn lanes/lights costing $12.8 million requiring 01.7 acres with a third of an acre of farmland and probably the removal of the fruit/gift stand. If the lights are set to be green predominately for Highway 76 with "on-demand" changes for VC Road and left turns for Hwy 76 traffic would stop intermittently. Design exceptions would still exist with no improvement to future capacity.

Alternate 3) "Do Nothing" Obviously there would be no change.

5 Alternate 3a) SUGGESTION: Make no changes to the configuration of the two major roads. But remove all brush and overhanging trees and improve signage and painted lanes in all directions. Install guard rails on the north side in front of the shops and a guardrail on the southeast corner for the fruit stand.

Alternate 3b) SUGGESTION: Straighten the curve on Hwy 76 only at the north extension of Valley Center Road IN ADDITION TO Alternate 3a signage and sight distances.

LOCAL AND RURAL ROAD SAFETY

6 Since this project is funded by the Federal government, we should request FEDERAL HIGHWAY ADMINISTRATION (FHWA) review to address the safety plans proposed by Cal-Trans.

HIGHWAY 76 (Hwy 76)

On page 12 of the study the area is described as being approximately 16 miles east of Interstate 15 (I-15) and delineated between milepost 32.6 and 33.2 in Pauma Valley. The proposal seeks to modify one curve on Hwy 76 and one curve on VC Road at the junction to Hwy 76 in order to "improve the safety of the intersection, reduce the number and severity of accidents in that area, improve the sight distances, and maintain or improve current traffic LOS and travel times through the intersection".

Cal-Trans notes that Hwy 76 is "characterized by curves which do not meet current design standards for the posted speed limit of 55mph".

7 The curve in question has no speed posting. The study area does NOT start at Rincon Ranch Road. The mile marker 33.2 is just west of the T-Y Wholesale Nursery drive.

EASTBOUND Hwy 76 has posted speed signs of 55mph in several places, but the last sign is just east of the Valley Center Road intersection (heading uphill, hidden by bushes).

4. While a roundabout would be the first of its kind on a San Diego state highway, the California State Highway System Roundabout Inventory developed in June of 2012 cites 20 existing examples of roundabouts on California highways, with 60 more in planning or development stages. The California State Highway System Roundabout Inventory can be accessed here: http://www.dot.ca.gov/hq/tpp/offices/oasp/roundabouts/Final_2014_CA_SHS_Roundabout_Inventory_Report_07082014.pdf#zoom=85

5. Signage, striping, and curve improvements alone would not meet the purpose and need of this project. Both build alternatives will include warning signs, lane striping, and sight distance improvement. This location does not meet the criteria for metal beam guardrail. The existing corner sight distance is not obstructed by the orange trees. However, both build alternatives will require some orange tree removal in order to realign Valley Center Road.

6. The Federal Highway Administration was mailed a copy of the Draft Environmental Document on June 9, 2014 and is included in the Distribution List on page 127 of the Document.

7. The speed limit of the entire roadway is indicated by a white 55 mph sign and applies to the curve in question. This is referred to as the "posted speed limit". A yellow advisory sign is posted for 35 mph. Thank you for your comment regarding Rincon Ranch Road. Project maps have been corrected to remove the Rincon Ranch Road label from its placement near Postmile 33.2.

8 WESTBOUND Hwy 76 has no such signs. At Harold's Road (mile marker 37.0) just inside the La Jolla Indian Reservation there is a posted warning sign that TRUCKS USE LOW GEAR. Highway 76 then drops approximately 1800 feet in elevation within four miles with a series of eleven curves POSTED at speeds ranging from 20mph (2) through 35mph (2) with the last three from Rincon Ranch Road being 25mph right , 30mph left, and 30mph right, with many other downhill curves 'at speed' with no speed advisory.

9 Cal-Trans needs to be more generous with signage on the westbound side and perhaps reduce the posted speed limit through those four downhill miles to something that would meet current design standards. Perhaps flashing caution lights east of Red Gate to caution drivers to reduce downhill speed. (a % of slope is meaningless).

Approaching Valley Center Road from the east at about mile marker 33.5, Cal-Trans has a sign indicating San Pasqual and Rincon Tribal Reservations are to the left. Followed within a short distance, around a bush and the crest of a curve, is a standard green sign indicating Valley Center 10 miles and Escondido 18 miles.

10 Neither sign has sufficient sight distance for a driver to read and comprehend before the intersection.

There are no signs posted warning drivers of roadside businesses on north and south sides of the road.

11 There are no road markings to guide drivers to the correct positioning of the vehicles for safe exit or entry to the highway from those businesses.

VALLEY CENTER ROAD

12 Approaches Hwy 76 from the north with a slight bend. The POSTED speed limit is 50mph from the casino northward. (Not 55mph as stated in the study.) There is a sign warning of a stop ahead, a stop sign, and faded stop limit lines on the street. The junction is not significantly skewed northwest as the study indicates, but is extremely wide with a right and left turn lanes. The stop warning sign should be highlighted in some way.

13 Cal-Trans/San Diego County needs to improve the street markings to clearly indicate right and left turn lanes. A directional sign on the north side of Hwy 76 facing VC Road indicating Pauma Valley/I-15 (left) and Julian/Palomar Mountain (right) would reduce wait times at the stop sign while indecisive/lost drivers found their way.

CRASH EXPERIENCE

14 The most severe accidents have most likely been caused by failing brakes and insecure/indecisive drivers. No alteration of the roadway will solve these problems.

15 A listing of accidents in the area as cited in the study would be appreciated including dates, times, number of vehicles, number of persons involved, number of injuries and deaths, and cause.

16 It should be noted that Hwy 76 is the primary route for trucks between Pauma/Valley Center and communities to the east (Julian, Palomar Mountain, Anza-Borrego). The route is frequented by locals, but also drivers unfamiliar with rural winding downhill roads. With a predominance of automatic transmissions with such drivers, it is not just big rigs that burn out brakes going downhill.

8. These are speed advisory signs and are non-regulatory. The speed limit is 55 mph on SR-76 (http://www.dot.ca.gov/hq/roadinfo/faq.htm), and 50 mph on Valley Center Road (based on posted signage).

9. Warning signs, including a vehicle speed feedback sign, advisory speed limits at the curves, chevron arrows to indicate curves ahead, flashing beacon signs, and lighting are included as part of the project..

10. Relocation and installation of guide signs is proposed as part of the project. Directional signs at the intersection are under consideration as part of the project.

11. There are roadway markers already in place for the left turn pocket on westbound SR-76 to southbound Valley Center Road. Both build alternatives will provide designated accommodation for left and right turns through the intersection.

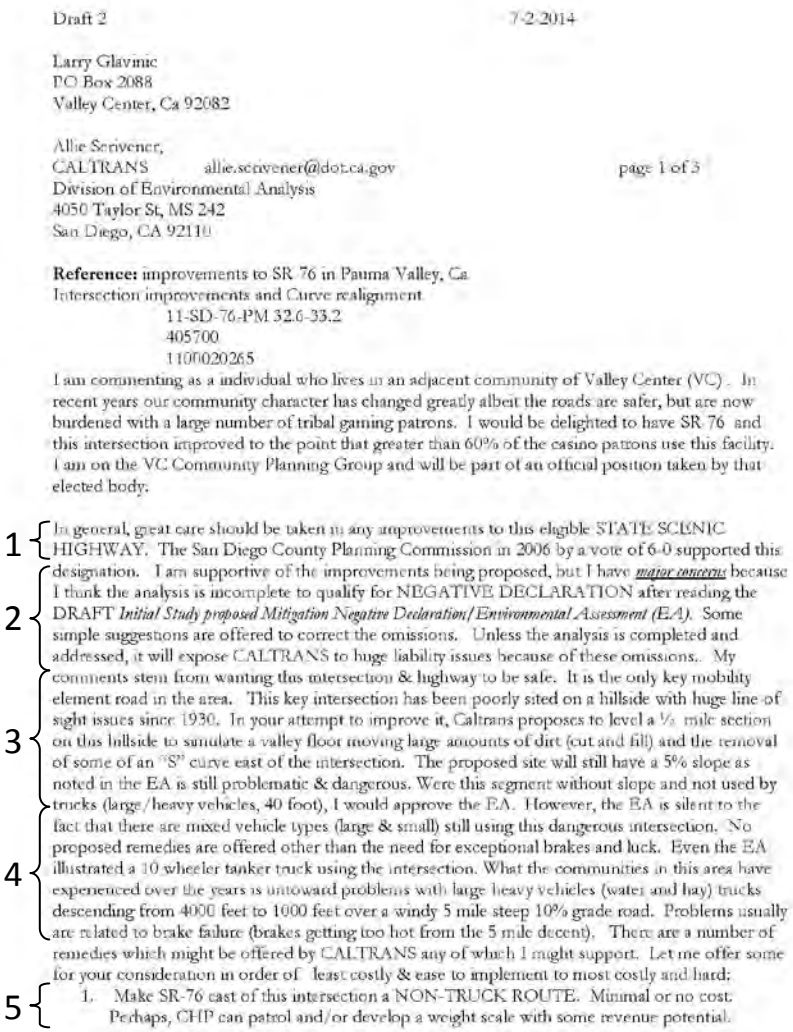
12. Thank you for your comment regarding the speed limit of Valley Center Road. Page 13 of the DED has been corrected to reflect that the speed limit of Valley Center Road is 50 mph. Page 14 correctly states that the posted speed limit is 50 mph on Valley Center Road, and 55 mph on SR-76.

13. There are roadway markers already in place for the left turn pocket on westbound SR-76 to southbound Valley Center Road. Both build alternatives will provide designated accommodation for left and right turns through the intersection. Directional signs at the intersection are proposed as part of the project.

14. There were no reported accidents involving brake failure for trucks. Both build alternatives would increase warning signage, ensuring sufficient time for vehicles to slow down. Further, the high friction surface treatment to be installed would enhance vehicles' slowing ability.

15. Caltrans does not list specific details of accidents in environmental documents. This information can be requested from the California Highway Patrol (CHP) at http://chp.ca.gov/ or http://cad.chp.ca.gov/.

16. There were no reported accidents involving brake failure for trucks. Both build alternatives would increase warning signage, ensuring sufficient time for vehicles to slow down. Further, the high friction surface treatment to be installed would enhance vehicles' slowing ability.



Draft 2 7-2-2014

Larry Glavinic
PO Box 2088
Valley Center, Ca 92082

Allie Scrivener,
CALTRANS allie.scrivener@dot.ca.gov page 1 of 3
Division of Environmental Analysis
4050 Taylor St, MS 242
San Diego, CA 92110

Reference: improvements to SR 76 in Pauma Valley, Ca
Intersection improvements and Curve realignment
11-SD-76-PM 32.6-33.2
405700
1100020265

I am commenting as a individual who lives in an adjacent community of Valley Center (VC) . In recent years our community character has changed greatly albeit the roads are safer, but are now burdened with a large number of tribal gaming patrons. I would be delighted to have SR 76 and this intersection improved to the point that greater than 60% of the casino patrons use this facility. I am on the VC Community Planning Group and will be part of an official position taken by that elected body.

1 In general, great care should be taken in any improvements to this eligible STATE SCENIC HIGHWAY. The San Diego County Planning Commission in 2006 by a vote of 6-0 supported this designation. I am supportive of the improvements being proposed, but I have *major concerns* because

2 I think the analysis is incomplete to qualify for NEGATIVE DECLARATION after reading the DRAFT *Initial Study proposed Mitigation Negative Declaration/Environmental Assessment (EA)*. Some simple suggestions are offered to correct the omissions. Unless the analysis is completed and addressed, it will expose CALTRANS to huge liability issues because of these omissions. My

3 comments stem from wanting this intersection & highway to be safe. It is the only key mobility element road in the area. This key intersection has been poorly sited on a hillside with huge line of sight issues since 1930. In your attempt to improve it, Caltrans proposes to level a ½ mile section on this hillside to simulate a valley floor moving large amounts of dirt (cut and fill) and the removal of some of an "S" curve east of the intersection. The proposed site will still have a 5% slope as noted in the EA is still problematic & dangerous. Were this segment without slope and not used by

4 trucks (large/heavy vehicles, 40 foot), I would approve the EA. However, the EA is silent to the fact that there are mixed vehicle types (large & small) still using this dangerous intersection. No proposed remedies are offered other than the need for exceptional brakes and luck. Even the EA illustrated a 10 wheeler tanker truck using the intersection. What the communities in this area have experienced over the years is untoward problems with large heavy vehicles (water and hay) trucks descending from 4000 feet to 1000 feet over a windy 5 mile steep 10% grade road. Problems usually are related to brake failure (brakes getting too hot from the 5 mile decent). There are a number of remedies which might be offered by CALTRANS any of which I might support. Let me offer some for your consideration in order of least costly & ease to implement to most costly and hard:

5 1. Make SR-76 east of this intersection a NON-TRUCK ROUTE. Minimal or no cost. Perhaps, CHP can patrol and/or develop a weight scale with some revenue potential.

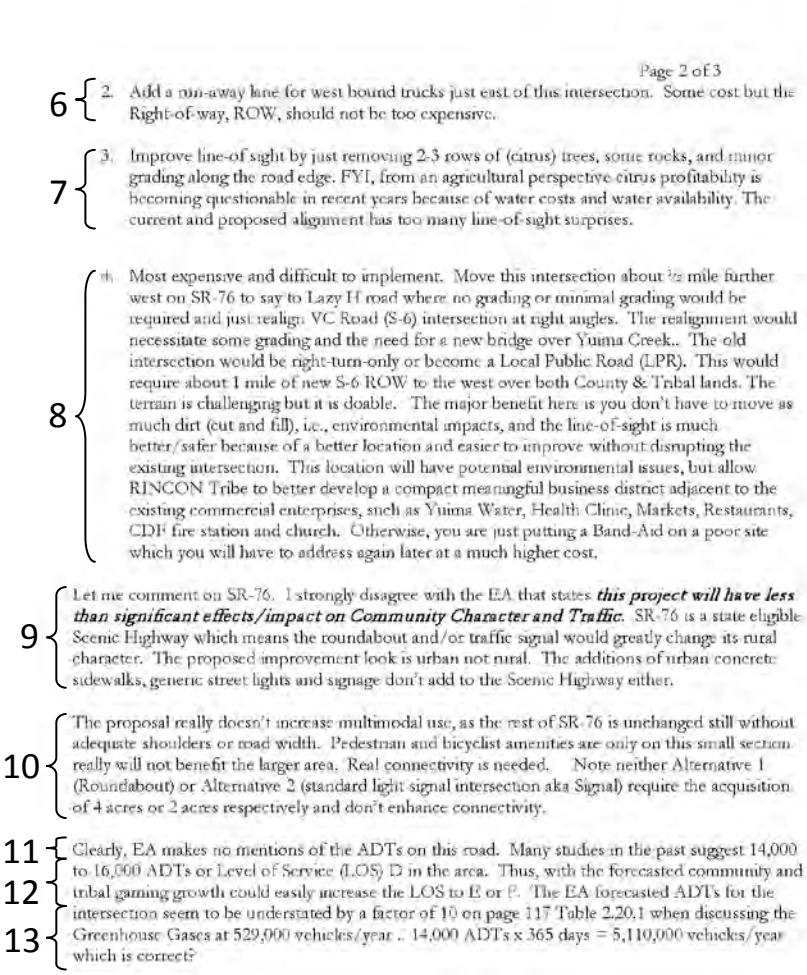
1. The proposed project designs are preliminary. Intersection improvements would be compatible with the existing views and roadway.

2. Caltrans has fulfilled NEPA and CEQA requirements during its analysis for the Draft Initial Study/ Mitigated Negative Declaration.

3. Both build alternatives would include sight distance and curve improvements, as well as a high friction surface treatment to help vehicles slow down. Further, both alternatives would include flashing beacons, a curve warning sign with an advisory speed limit sign, chevron arrows indicating a curve, and a vehicle speed feedback sign on west bound SR-76.

4. The slope improvements, High Friction Surface Treatment, and curve corrections are anticipated to substantially increase ease of slowing for trucks and other large vehicles, thereby improving safety. Further, the Final Environmental Document has been updated to state that on SR-76 from Valley Center Road to SR-76, trucks with a kingpin to rear axle length of over 30 feet are not advised.

5. The highway cannot be made a Non-Truck route, however, signage on SR-76 alerts motorists that from Valley Center Road to SR-79, trucks with Kingpin to Rear Axle lengths over 30 feet are not advised.



Page 2 of 3

6 2. Add a run-away lane for west bound trucks just east of this intersection. Some cost but the Right-of-way, ROW, should not be too expensive.

7 3. Improve line-of sight by just removing 2-3 rows of (citrus) trees, some rocks, and minor grading along the road edge. FYI, from an agricultural perspective citrus profitability is becoming questionable in recent years because of water costs and water availability. The current and proposed alignment has too many line-of-sight surprises.

8 th. Most expensive and difficult to implement. Move this intersection about ½ mile further west on SR-76 to say to Lazy H road where no grading or minimal grading would be required and just realign VC Road (S-6) intersection at right angles. The realignment would necessitate some grading and the need for a new bridge over Yuima Creek.. The old intersection would be right-turn-only or become a Local Public Road (LPR). This would require about 1 mile of new S-6 ROW to the west over both County & Tribal lands. The terrain is challenging but it is doable. The major benefit here is you don't have to move as much dirt (cut and fill), i.e., environmental impacts, and the line-of-sight is much better/safer because of a better location and easier to improve without disrupting the existing intersection. This location will have potential environmental issues, but allow RINCON Tribe to better develop a compact meaningful business district adjacent to the existing commercial enterprises, such as Yuima Water, Health Clinic, Markets, Restaurants, CDF fire station and church. Otherwise, you are just putting a Band-Aid on a poor site which you will have to address again later at a much higher cost.

9 Let me comment on SR-76. I strongly disagree with the EA that states ***this project will have less than significant effects/impact on Community Character and Traffic***. SR-76 is a state eligible Scenic Highway which means the roundabout and/or traffic signal would greatly change its rural character. The proposed improvement look is urban not rural. The additions of urban concrete sidewalks, generic street lights and signage don't add to the Scenic Highway either.

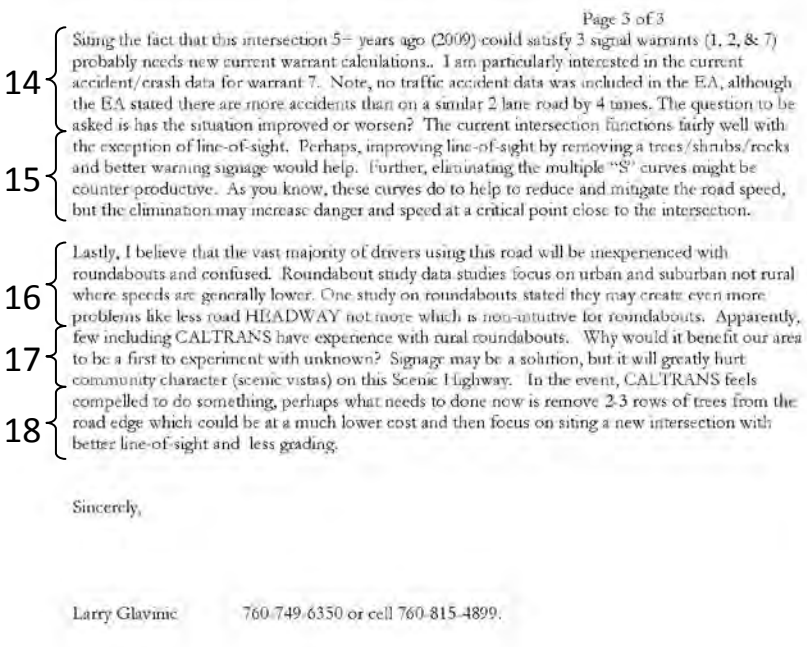
10 The proposal really doesn't increase multimodal use, as the rest of SR-76 is unchanged still without adequate shoulders or road width. Pedestrian and bicyclist amenities are only on this small section really will not benefit the larger area. Real connectivity is needed. Note neither Alternative 1 (Roundabout) or Alternative 2 (standard light signal intersection aka Signal) require the acquisition of 4 acres or 2 acres respectively and don't enhance connectivity.

11 Clearly, EA makes no mentions of the ADTs on this road. Many studies in the past suggest 14,000
12 to 16,000 ADTs or Level of Service (LOS) D in the area. Thus, with the forecasted community and
13 tribal gaming growth could easily increase the LOS to E or F. The EA forecasted ADTs for the intersection seem to be understated by a factor of 10 on page 117 Table 2.20.1 when discussing the Greenhouse Gases at 529,000 vehicles/year .. 14,000 ADTs x 365 days = 5,110,000 vehicles/year which is correct?

6. The Traffic Accident Surveillance and Analysis System (TASAS) Selective Accident Retrieval (TSAR) accident detail report shows no history of accidents due to runaway or out of control trucks or brake failure from January 2005 to June 2012 (Caltrans data to date). A runaway truck lane would not meet the purpose and need of this project.

7. The existing corner sight distance is not obstructed by the orange trees. However, the Signal and Roundabout designs include realigning VCR, requiring partial acquisition of the orange farm on the southeast quadrant of the intersection.

8. Relocation of Valley Center Road would not improve safety for the businesses and residences adjacent to the intersection.



Page 3 of 3

Siting the fact that this intersection 5+ years ago (2009) could satisfy 3 signal warrants (1, 2, & 7) probably needs new current warrant calculations.. I am particularly interested in the current accident/crash data for warrant 7. Note, no traffic accident data was included in the EA, although the EA stated there are more accidents than on a similar 2 lane road by 4 times. The question to be asked is has the situation improved or worsen? The current intersection functions fairly well with the exception of line-of-sight. Perhaps, improving line-of-sight by removing a trees/shrubs/rocks and better warning signage would help. Further, eliminating the multiple "S" curves might be counter-productive. As you know, these curves do to help to reduce and mitigate the road speed, but the elimination may increase danger and speed at a critical point close to the intersection.

Lastly, I believe that the vast majority of drivers using this road will be inexperienced with roundabouts and confused. Roundabout study data studies focus on urban and suburban not rural where speeds are generally lower. One study on roundabouts stated they may create even more problems like less road HEADWAY not more which is non-intuitive for roundabouts. Apparently, few including CALTRANS have experience with rural roundabouts. Why would it benefit our area to be a first to experiment with unknown? Signage may be a solution, but it will greatly hurt community character (scenic vistas) on this Scenic Highway. In the event, CALTRANS feels compelled to do something, perhaps what needs to done now is remove 2-3 rows of trees from the road edge which could be at a much lower cost and then focus on siting a new intersection with better line-of-sight and less grading.

Sincerely,

Larry Glavinic 760-749-6350 or cell 760-815-4899.

14 15 16 17 18

9. Both build alternatives are being designed with sensitivity to the existing environment. Rural roundabouts exist on many highways throughout the state and are considered to be visually appealing, compatible with the existing roadway, and highly effective. SR-76 is eligible for scenic highway designation, but it is not officially designated at present. Although Caltrans considers eligibility during design of any project, scenic highway eligibility does not prohibit or regulate highway improvements.

10. The purpose of this project is to improve safety for all roadway users. It is not the intention of this project to increase multimodal mobility.

11. Page 117 of the Final IS/EA has been updated to include average daily traffic (ADT).

12. The existing and forecasted levels of service (LOS) are based on afternoon Peak Hour Volumes. This is discussed on page 117 of the Final Environmental Document.

13. The 14,000 – 16,000 ADT has been taken from the forecasted year 2030 ADT from the Project Study Report. The most current ADT estimates are on page 117 of the Final Environmental Document. The number of hours per year is used to convert the hourly values of performance statistics to Annual Values. The Sidra traffic analysis program takes the total Peak Hour Volume (PHV) and multiplies it by 480 hours per year (for a.m. and p.m. PHV). This results in the total Peak Volume per year, not the total number of vehicles per year.

14. The study cited in the project report from January 2005 to December 2009 reported 35 accidents within 5 years. The Traffic Accident Surveillance and Analysis System (TASAS) Selective Accident Retrieval (TSAR) accident detail report from January 2010 to the most current listing in the database (June 2012) lists 13 accidents within 2.5 years. The annual average has decreased from 7 to 5.2 per year, but the intersection still meets the signal warrant of a minimum of 5 accidents per year.
    Caltrans does not list specific details of accidents in environmental documents. This information can be requested from the California Highway Patrol (CHP) at http://chp.ca.gov/ or http://cad.chp.ca.gov/.

15. Eliminating the S-curve increases the corner sight distance and stopping sight distance at the intersection.

16. The roundabout includes geometric features that create appropriate vehicular speed and direction. Signing, striping, landscape and illumination direct driver attention to appropriate issues at the appropriate time and control decision points. The roundabout lowers the speed of the vehicles approaching the roundabout, enabling safe queuing and passage through the intersection.

17. While the Roundabout Alternative would be the first of its kind on a state highway in San Diego County, it would not constitute a trial run of rural roundabouts on state highways. The California State Highway System Roundabout Inventory developed in June of 2012 cites 20 existing examples of roundabouts on California highways including rural areas, with 60 more in planning or development stages. Several of the existing roundabouts are on rural routes with high speed approaches, and are considered successful by local agencies and users. The roundabout inventory can be found here:
    http://www.dot.ca.gov/hq/tpp/offices/oasp/roundabouts/Final_2014_CA_SHS_Roundabout_Inventory_Report_07082014.pdf.

18. The existing corner sight distance is not obstructed by the orange trees. However, the Signal and Roundabout designs include realigning Valley Center Road, which goes through part of the orange farm on the southeast quadrant of the intersection.

Scrivener, Allie@DOT

From: Scott Loetke [pineglenacademy@yahoo.com]
Sent: Monday, July 07, 2014 5:40 AM
To: Scrivener, Allie@DOT
Subject: Hwy. 76 & valley center Rd

Hi, I would just like to put my input in in regards to the proposed intersection improvements at Hwy. 76 and Valley Center Rd. I live in valley Center and work in Warner Springs, so I go past this intersection twice a day. I would prefer the round-about option, too many people run the stop sign as it is, the light would not be much of an improvement as far as safety goes.
Thanks,
Scott Loetke

Thank you for your comment regarding your preference for the Roundabout Alternative.

Scrivener, Allie@DOT

From: Terry White [trwhite60@yahoo.com]
Sent: Wednesday, July 16, 2014 9:51 AM
To: Scrivener, Allie@DOT
Cc: Dorothy Kennedy
Subject: Highway 76 and Valley Center Road intersection proposal

Dear Allie Scrivener,

1 The plan to put a "roundabout" at the intersection of Highway 76 and Valley Center Road is a terrible idea! That will make it worse, not better. I have been using that intersection at highway 76 and Valley Center Road for over 25 years at least two days a week going up to and beyond Palomar Mountain and that intersection is not a huge dangerous one. There are far more serious or fatal traffic accidents on Highway 76 to the west at Cole Grade Road near Pauma Casino and further west by the Pala Casino. Many people use Hwy 76 and the Palomar grade to go the desert every weekend! Most of them are towing 40' "toy haulers". A "roundabout" will be far more dangerous when they are coming down the grade to Hwy 76 and Valley Center Road intersection and have to try to slow all that weight down to 25mph and go in a circle.

2

3 Please tell the state to not waste money on a "round a bout". This is not Europe or Mayberry, NC. Use the money to fill the pot holes in the state and county highways. These are more dangerous and throw your vehicle all over the road if you hit one or if you try to avoid one.

Thank you,

Terry White
Valley Center, CA

1. Thank you for your comment. The intersection has experienced accident ratings greater than the state average and has been flagged for safety improvement. Therefore, Caltrans needs to examine the area for intersection safety improvements.

2. The design will include warning signs such as, vehicle speed feedback sign, advisory speed limit at the curves, chevron arrows to indicate curve ahead, and flashing beacon signs to warn the motorist of the intersection ahead.

3. Per FHWA guidelines, Caltrans projects for intersection improvement must consider roundabouts in their design. This intersection was flagged for 4 or more collisions within 3, 6, or 12 months. It meets criteria for intersection improvement and access control. The proposed intersection improvements are intended to reduce the frequency and severity of accidents at this intersection.

Chapter 4 – List of Preparers

The following Caltrans staff and consultants contributed to the preparation of this IS/EA.

Rush Abrams, Associate Environmental Planner/Biologist; M.A., Urban and Regional Planning, University of Oregon; 7 years of Caltrans experience

Antonio Araullo, Transportation Engineer; B.S., Civil Engineering, University of Santo Tomas, Philippines; 15 years of Caltrans experience

Claudia Barron, Graphic Designer; Bachelor of Fine Arts, Illustration, Syracuse University; 25 years of Caltrans experience

Michelle Blake, Environmental Planner, Archaeology; M.A., Cultural Resource Management, Sonoma State University (2010); B.A., Anthropology (Archaeology), University of California, San Diego (2008); 2 years of Caltrans experience.

Henry Castillo, Landscape Architect; B.L.A., Landscape Architecture, Cal Poly Pomona; 34 years of Caltrans experience

Mike Dispenzieri, Transportation Engineer; B.S., Civil Engineering, San Diego State University; 6 years of Caltrans experience

Olga Estrada, Environmental Analysis Branch Chief, Senior Environmental Planner; B.A., Psychology; 23 years of Caltrans experience

Richard Estrada, Senior Transportation Engineer, Project Manager/Design Manager/Program Manager; B.S., Construction; 23 years Caltrans experience

Ellen Jenne, Associate Environmental Planner; B.A., Environmental Policy, Lawrence University; 5 years of Caltrans experience

Joel Kloth, Engineering Geologist; B.S., Geology, California Lutheran University, Thousand Oaks; 14 years of Caltrans Experience

Albert Labrador, Transportation Engineer (Civil), Project Engineer; B.S., Civil Engineering, San Diego State University; 15 years of Caltrans experience

Michelle Madigan, Associate Environmental Planner; B.A., Environmental Studies, University of California, Santa Barbara; M.A., City Planning, San Diego State University; 16 years of Caltrans experience

Allie Scrivener, Environmental Planner; B.S., Environmental Policy Analysis and Planning, University of California, Davis; 2 years of Caltrans experience

Brenda Reeder, Associate Right of Way Agent; B.A., English Literature, University of California, San Diego; M.S., Education, Indiana University; 5 years of Caltrans experience

Paul Swearingen, Transportation Engineer (Civil), PE. B.S. Civil Engineering, Civil Engineering, San Diego State University; 8 years of Caltrans Experience

Evan Torres, Landscape Architect. BLA, Landscape Architecture, Cal Poly San Luis Obispo; 1 year of Caltrans experience

Chapter 5 – Distribution List

Federal, State, and Local Elected Officials

U.S. Senate
Barbara Boxer
600 B Street, Suite 2240
San Diego, CA 92101

U.S. Senate
Dianne Feinstein
880 Front Street, Suite 3296
San Diego, CA 92101

State Senate: 36th District
Joel Anderson
El Cajon District Office
500 Fesler Street #201
El Cajon, CA 92020

State Assembly: 75th District
Marie Waldron
District Office
350 W. 5th Avenue, Suite #110
Escondido, CA 92025

United States Representative: 50th District
Duncan Hunter
333 S. Juniper St., Suite 110
Escondido, CA 92025

San Diego County Board of Supervisors
District 5: Bill Horn; North County Office
325 S. Melrose Ave., Suite 5200
Vista, CA 92081

County Assessor, Recorder, Clerk
Ernest J. Dronenburg, Jr.
San Diego Assessor Main Office
1600 Pacific Highway, Suite 103
San Diego, CA 92101

San Diego County Sheriff
William D. Gore
John F. Duffy Administrative Center
9621 Ridgehaven Ct.
San Diego, CA 92123

Federal Agencies

Federal Highway Administration
California Division
650 Capitol Mall, Suite 4-100
Sacramento, CA 95814
Attn: Scott McHenry

U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Blvd, Suite 930
Los Angeles, CA 90017
Attn: Stephanie Hall

U.S. Fish & Wildlife Service
2177 Salk Ave, Suite 250
Carlsbad, CA 92008
Attn: Sally Brown

U.S. Department of Agriculture
Natural Resources Conservation Service
332 S. Juniper Street, Suite 110
Escondido, CA 92025
Attn: Jason N. Jackson, District Conservationist

State Agencies

California Transportation Commission
Attn: Laura Pennebaker
1120 N Street, MS-52
Room 2221 (MS-52)
Sacramento, CA 95814

State Clearinghouse
Governor's Office of Planning and Research
P.O. Box 3044
Sacramento, CA 95812-3044

CA Regional Water Quality Control Board
Region 9: San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108-2700
Attn: Michael Porter

California Department of Fish and Wildlife
Region 5
3883 Ruffin Road
San Diego, CA 92123
Attn: Tim Dillingham

State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

California Highway Patrol
Border Division (601)
9330 Farnham Street
San Diego, CA 92123-1216

California Department of Conservation
801 K Street, MS 24-01
Sacramento, CA 95814

California Public Utilities Commission
Los Angeles Office
320 W 4th Street, Suite 500
Los Angeles, CA 90013

California Department of Toxic Substances Control
San Diego Field Office
2375 Northside Drive, Ste. 100
San Diego, CA 92108

CA Department of Forestry and Fire Protection (CalFIRE); Southern Region, San Diego Unit
2249 Jamacha Road
El Cajon, CA 92019
Attn: Thom Porter, Unit Chief

California Health and Human Services
1600 Ninth Street, Room 460
Sacramento, CA 95814

California Department of Parks and Recreation
P.O. Box 942896
Sacramento, CA 94296

Office of the State Fire Marshal
Pipeline Safety Division (Lakewood Office)
3950 Paramount Blvd. #210
Lakewood, CA 90712

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

Local Agencies

Yuima Municipal Water District
34928 Valley Center Road
P.O. Box 177
Pauma Valley, CA 92061

Valley Center Parks & Recreation District
28246 Lilac Road
Valley Center, CA 92082

San Diego Association of Governments
401 B Street, Suite 800
San Diego, CA 92101

Department of Public Works
County Operations Center
5510 Overland Avenue, Suite 410
San Diego, CA 92123

Chamber of Commerce, Valley Center
29115 Valley Center Rd, Ste I-3
Valley Center CA 92082

Metropolitan Transit System
1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490

San Diego County Air Pollution Control District
10124 Old Grove Road
San Diego, CA 92131

County of San Diego Administration Center
1600 Pacific Highway, Room 209
San Diego, CA 92101

County of San Diego, Department of Agriculture, Weights, and Measures
North County Office
151 E. Carmel Street
San Marcos, CA 92078

Everett Hauser, AICP, PTP
County of San Diego
Planning and Development Services
5510 Overland Avenue
San Diego, CA 92123

County Department of Public Works
Transportation Division
5510 Overland Ave, Suite 410, Room 470
San Diego, CA 92123

Valley Center Fire Protection District
Attn: Administration
28234 Lilac Road
Valley Center, CA 92082

San Diego County Fire Marshal
5510 Overland Avenue, Suite 250
San Diego, CA 92123

San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Pauma Valley Community Services District
33129 Cole Grade Road
Pauma Valley, CA 92061

City of Escondido
201 North Broadway
Escondido CA 92025

San Diego County Office of Emergency Services
5580 Overland Avenue, Suite 100
San Diego, CA 92123-1294

San Diego County Environmental Health Department
5500 Overland Ave #170
San Diego, CA 92123

Valley Center Municipal Water District
29300 Valley Center Road
Valley Center, CA 92082

Planning Groups

Pala Pauma Community Sponsor Group
P.O. Box 1273
Pauma Valley, CA 92061

Valley Center Community Planning Group
Attn: Oliver Smith, Chair
P.O. Box 127
Valley Center, CA 92082-0127

Native American Organizations

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691

Pala Band of Mission Indians
Historic Preservation Office
Attn: Shasta Gaughen
35008 Pala Temecula Road; Pala, CA 92059

Pauma & Yuima Reservation
Randall Majel, Chairperson
P.O. Box 369
Pauma Valley CA 92061

Pechanga Band of Mission Indians
Paul Macarro, Cultural Resources Manager
P.O. Box 1477
Temecula, CA 92593

Rincon Band of Mission Indians
Vincent Whipple, Tribal Historic Preservation Officer
P.O. Box 68
Valley Center, CA 92082

Pauma Valley Band of Luiseño Indians
Bennae Calac, Tribal Council Member
P.O. Box 369
Pauma Valley, CA 92061

Rincon Band of Mission Indians
Bo Mazzetti, Chairperson
P.O. Box 68
Valley Center, CA 92082

San Pasqual Band of Indians
Kristie Orosco, Environmental Coordinator
P.O. Box 365
Valley Center, CA 92082

San Luis Rey Band of Mission Indians
Cultural Department
1889 Sunset Drive
Vista, CA 92081

La Jolla Band of Mission Indians
Lavonne Peck, Chairwoman
22000 Highway 76
Pauma Valley, CA 92061

Libraries

San Diego Public Library (Central Library)
330 Park Blvd.
San Diego, CA 92101-7416
(619) 236-5800

Pala Library
2003 Pala Mission Road
Pala, CA 92059
(760) 742-1997

Pala Library and Learning Center
Pala Band of Mission Indians
12196 Pala Mission Road
Pala, CA 92059
(760) 742-1997

Valley Center Branch Library
29200 Cole Grade Road
Valley Center, CA 92082
760-749-1305

East Valley Center Branch Library
2245 E. Valley Parkway
Escondido, CA 92027
760-839-4395

Escondido Public Library
239 S Kalmia Street
Escondido, CA 92025
760-839-4683

Interested Groups and Individuals

San Diego Gas and Electric
Attn: Brian Swanson
P.O. Box 129831
San Diego, CA 92112-9831

AT&T Inc.
Attn: Sandi Marks
7337 Trade St
San Diego 92121

MediaCom
27192-A Sun City Blvd,
Sun City, CA 92586

Hikmat Jabro
11341 Treyburn Way
San Diego, CA 92131

Laney Villalobos
P.O. Box 333
Valley Center, CA 92082

Cristina Wallace
14946 Vesper Road
Valley Center, CA 92082

Belsy & Nancy Barrett
P.O. Box 426
Pauma Valley, CA 92061

Tom Bumgardner
P.O. Box 21213
Valley Center, CA 92082

Tamara Crispi
P.O. Box 540
Pauma Valley, CA 92061

Bradley Smith, P.E.
32510 Luiseno Circle
Pauma Valley, CA

S & J Merhar
P.O. Box 660
Pauma Valley, CA 92061

Palomar Observatory
35899 Canfield Rd
Palomar Mountain, CA 92060

Valley Center Historical Society
29200 Cole Grade Road
Valley Center, CA 92082

North County Transit District
Attn: Kurt Luhrsen, Principal Planner
810 Mission Avenue
Oceanside, CA 92054

Steve Flynn
P.O. Box 642
Rancho Santa Fe, CA 92067

Pat Smith
1750 Abajo Drive
Monterey Park, CA 91754

Sun Pacific
Attn: Berne H. Evans III
3374 Lerdo Hwy
Bakersfield, CA 93308

Bob Hillested
35161 Rincon Springs Road,
P.O. Box 1010
Pauma Valley, CA 92061

Helen Hasher
P.O. Box 2304
Valley Center, CA 92082

George Stockton
P.O. Box 1580
Pauma Valley, CA 92061

Bill Winn
16222 Pauma Valley Drive
Pauma Valley, CA

James Trujilo
22000 Hwy. 76 Pauma Valley, CA
(760)-742-1297

Donald Armstrong
P.O. Box 116
Pauma Valley, CA 92061

Stage Stop & Liquor
17128 Highway 76
Pauma Valley, CA 92061

Western Union Financial Services
P.O. Box 6036
Engelwood, CO 80112

Brian Swanson
8315 Century Park Court
San Diego, CA 92123

Pete Penseyres
Co-Chair, Oceanside Bike-Pedestrian
Advisory Committee
6535 Indian Trail Way
Fallbrook, CA 92028

Paul Nevins
Vice President, North County Cycle Club
PO Box 1700 Carlsbad, CA 92018

Karl Rudnick
Board, San Diego County Bicycle Coalition
P.O. Box 34544
San Diego, CA 92163

Douglas Anderson
17675 Highway 76
Pauma Valley, CA 92061

Conrad Pawelski
Palomar Mountain Water
1270 W. Mission Ave
Escondido, CA 92029

Fritz Stumpges
15027 Adams Drive
Pauma Valley, CA 92061

Steven C. Much
P.O. Box 133
Valley Center, CA 92082

Lori Johnson
P.O. Box 847
Pauma Valley, CA 92061

Larry Glavinic
P.O. Box 2088
Valley Center, CA 92082

Jilberto's Taco Shop
17128 Highway 76
Pauma Valley, CA 92061

Pauma Valley Country Club
15835 Pauma Valley Drive
Pauma Valley, CA 92061

Jim Baross
San Diego County Bicycle Coalition
Spokesperson; Chair, Advocacy Committee
3335 N. Mtn. View Dr.
San Diego, CA 92116-1738

Kevin C. Wood
Chair, San Diego County Bicycle Coalition
P.O. Box 34544
San Diego, CA 92163

Howard LaGrange
Co-Chair, City of Oceanside Bike and
Pedestrian Committee
300 North Coast Highway
Oceanside, CA 92054

Tom and Betsy Buzulak
P.O. Box 505
Pauma Valley, CA 92061

Dorothy and Jimmy Kennedy
15555 Villa Sierra Lane
Valley Center, CA 92082

Jon Vick
13678 McNally Road
Valley Center, CA 92082

Steve Hutchison
Valley Center Planning Group
31290 Munster Platz Way
Valley Center, CA 92082

Schools

Valley Center-Pauma Unified School District
28751 Cole Grade Road
Valley Center, California 92082

Pauma Christian Academy
17584 S Mesa Dr
Pauma Valley, CA 92061

High Sierra Academy
29235 Valley Center Road
Valley Center, CA 92082

Palomar College
1140 West Mission Road
San Marcos, California 92069-1487

Pine Glen Academy
15519 Villa Sierra Rd
Valley Center, CA 92082

APPENDICES

Appendix A: CEQA Checklist

Appendix B: Resources Evaluated Relative to the Requirements of Section 4(f)

Appendix C: Title VI Policy Statement

Appendix D: Environmental Commitments Record

Appendix E: References

Appendix F: Forms and Correspondence

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Appendix A: CEQA Checklist

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Appendix A: CEQA Checklist

11-SD-76	32.6/33.2	405700
Dist.-Co.-Rte.	P.M/P.M.	E.A.

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Supporting documentation of all California Environmental Quality Act (CEQA) checklist determinations is provided in Chapter 2 of this Initial Study/Environmental Assessment (IS/EA). 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 with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista	☐	☒	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
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)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
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?	☐	☒	☐	☐
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?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
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?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

VII. GREENHOUSE GAS EMISSIONS: Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	An assessment of the greenhouse gas emissions and climate change is included in the body of environmental document. While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined in the body of the environmental document.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
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?	☐	☐	☐	☒
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
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?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
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?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow	☐	☐	☐	☒

X. LAND USE AND PLANNING: Would the project:

a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

XI. MINERAL RESOURCES: Would the project:

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

XII. NOISE: Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
) 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?	☐	☐	☐	☒
XIII. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIV. 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?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒
XV. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
XVI. TRANSPORTATION/TRAFFIC: Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒
XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
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)?	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

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Appendix B: Resources Evaluated Relative to the Requirements of Section 4(f)

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Appendix B: Resources Evaluated Relative to the Requirements of Section 4(f)

This section of the document discusses parks, recreational facilities, wildlife refuges and historic properties found within or next to the project area that do not trigger Section 4(f) protection because either:

- They are not publicly owned
- They are not open to the public
- They are not eligible historic properties
- The project does not permanently use the property and does not hinder the preservation of the property, or
- The proximity impacts do not result in constructive use

The following historic archaeological site is considered eligible for the National Register of Historic Places (NRHP) and for the California Register of Historical Resources (CRHR):

- CA-SDI-17259H is a historic period house foundation and associated landscape. Luiseño ethnographer Phillip Sparkman lived in an adobe at this site. The adobe was later incorporated into the Rincon Springs Cafe, a local restaurant popular from 1930 to 1962. The cafe was abandoned in 1964 and destroyed by a fire in 1976. Today only the foundations, garden ruins, fence posts, and olive orchard are visible on the parcel.

Caltrans is avoiding the site through project redesign and implementation of an Environmentally Sensitive Area (ESA); therefore, it would not be impacted by the undertaking. The State Historic Preservation Office (SHPO) concurred with the Finding of No Adverse Effect on April 2, 2014 (see Appendix E: Forms and Correspondence).

Proximity Impacts Analysis

With implementation of an ESA, the project and its construction would not impact any of the site's activities, features, or attributes. Therefore, the provisions of Section 4(f) are not triggered.

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Appendix C: Title VI Policy Statement

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

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March 2013

NON-DISCRIMINATION POLICY STATEMENT

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

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

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

MALCOLM DOUGHERTY
Director

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Appendix D: Environmental Commitments Record

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Task and Brief Description	CEQA Mitigation Measure	Timing / Phase	Action Taken to Comply/Remarks	Construction Task Completed	
				Initial	Date
Environmental PS&E Review		PS&E			
Preconstruction Meeting		Pre-Const			
Transfer Resident Engineer Book		Pre-Const			
Prejob Meeting		Construction			
Environmental Compliance Review		Construction			
Permits		Construction			
Section 402 Permit for point source discharge of pollutant		Construction			
1602 Agreement for streambed alteration		Construction			
Section 2080.1 Agreement for Threatened and Endangered Species		Construction			
Water Discharge Permit		Construction			
Section 401 Water Quality Certification		Construction			
Section 402 for Point Source Discharge of Pollutant		Construction			
Farmland					
No staging would take place within agricultural land unless it is within Caltrans right-of-way.					
Community Character and Cohesion					
See Visual Section					
Utilities and Emergency Services					
Access to emergency services during construction would be maintained at all times, and a transportation management plan would be implemented to provide passage for emergency vehicles on roadways that are temporarily affected.					
Emergency response service providers would be notified in advance of the proposed locations, nature, timing, and duration of any construction activities. They would be advised in advance of any access restrictions.					
Any required utility relocations or protection measures would be coordinated with the utility owners during the design process.					
A waste management plan would be implemented during project construction to minimize generation of construction debris and solid waste throughout the construction phase of the project.					
Traffic and Transportation/Pedestrian and Bicycle Facilities					
The transportation management plan would include a public awareness campaign prior to and during construction; motorist information strategies including signage and public notices.					
The TMP would include details regarding emergency service coordination and procedures during the construction phase, and copies would be provided to all relevant service providers.					
A public awareness program would be developed to inform the public of the upcoming detours and construction schedule.					
Any traffic impacts to schools in the proposed project area would be noted. All access to schools would be maintained during the construction phase of the proposed project.					
Where partial closures are implemented, flagging would occur to ensure safe passage through the project area during construction.					

Task and Brief Description	CEQA Mitigation Measure	Timing / Phase	Action Taken to Comply/Remarks	Construction Task Completed	
				Initial	Date
Visual					
Where existing asphalt is removed, disturbed soils shall receive treatment complying with the storm water best management practices for stabilization of all disturbed areas.					
During clearing and grubbing it is recommended that the existing plant materials be consolidated into a duff material to be stored on-site and applied prior to application of erosion control measures.					
To ensure healthy and vigorous plant growth, a three (3)-year plant establishment period may be needed for maintenance of highway planting constructed within the State highway right-of-way. The project contract will include one (1) year of plant establishment. Caltrans may also pursue an additional two (2)-year supplemental service contract to aid in the plant establishment effort. Additional agreements may be required for establishment of vegetated areas located outside the highway right-of-way.					
For Alternative 1, the inner shoulder area of the roundabout shall receive integrally colored concrete with a textured surface treatment or interlocking brick pavers.	Yes				
To discourage and minimize graffiti, exposed wall surfaces (retaining walls) shall be textured with decorative patterns.					
The highway intersection would be illuminated in compliance with state highway safety standards and regulations. The Mount Palomar Observatory is located approximately 16 miles from the project site and requires consideration when selecting and locating the lighting standards and fixtures. To reduce direct and ambient light pollution, all street light fixtures shall shielded and cast downward. Proper placement and installation of lighting will avoid or minimize any conflict with the operation of the Observatory.					
Cultural					
Environmentally Sensitive Areas (ESAs) shall be delineated on plans and layout sheets. Within the boundaries of the ESA, as indicated on the project plans, or where designated by the Resident Engineer, no construction or related activities that involve ground disturbance are permitted.					
A Contractor Environmental Training Program meeting will be held and shall include district archaeological staff. All responsible parties will ensure that ESAs are discussed during the pre-construction meeting. The importance of ESAs will be discussed with construction personnel.					
The ESA for CA-SDI-17259H shall be delineated in the field prior to initiating any work in those areas. Any ESA temporary fencing would be installed by hand. The Caltrans Archaeologist will coordinate this activity with the Environmental Construction Liaison and Resident Engineer, and be present to supervise and monitor fence installation. A photographic record of the newly installed ESA fence would be documented by the Caltrans Archaeologist.					
No construction activity (including storage or staging of equipment or materials) shall occur within the ESAs. Workers must remain outside of the ESAs at all times. The Contractor will notify the Caltrans Resident Engineer and Archaeologist days prior to any work adjacent to the ESA.					
In the event that subsurface deposits are found outside the ESA boundaries, the Contractor and the Engineer shall halt work in the vicinity of the deposit and contact the Caltrans Archaeologist, who will follow the Programmatic Agreement for Post Review Discoveries.					
The Environmental Construction Liaison will inform the Caltrans Archaeologist when construction is complete. The Contractor, under supervision of the Environmental Construction Liaison and/or Caltrans Archaeologist, will remove temporary fencing at the conclusion of construction.					

Task and Brief Description	CEQA Mitigation Measure	Timing / Phase	Action Taken to Comply/Remarks	Construction Task Completed	
				Initial	Date
If human remains are discovered, State Health and Safety Code Section 7050.5 states that all activities shall stop in all areas suspected to overlie remains, and the County Coroner shall be contacted. Pursuant to California Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), which would notify the Most Likely Descendent (MLD).					
The person who discovered the remains will contact Caltrans District 11: Environmental Division so that they may work with the MLD on respectful treatment of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.					
An additional cultural resource study may be required if the project scope changes to include work not currently identified or areas not covered by this cultural resource study. If previously unidentified cultural materials are unearthed, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the nature and significance of the find.					
Water Quality and Storm Water Runoff					
The roadway runoff would be collected to combine the two areas into one using a drainage system comprising of inlets, curb & gutter, dikes and 24" culverts. The runoff would outlet into Yuima Creek on the north side of the box culvert bridge. The outfall would be protected with 6" rip rap to prevent soil erosion in the creek.					
The new cut and fill slopes would be at 2.5:1 (H:V) and would require compost socks, compost blankets and hydroseeding for permanent erosion control.					
A Storm Water Data Report (SWDR) would be required for this project. The SWDR would outline the process of determining requirement for permanent Treatment Best Management Practices (BMP) and would also evaluate required temporary construction BMPs.					
A Storm Water Pollution Prevention Plan (SWPPP) must also be submitted for approval prior to start of construction. The SWPPP would outline the contractor's strategy in implementing BMPs to protect water quality during construction.					
This project would be designed and constructed in compliance with State Water Resources Control Board adopted Order No. 2012-0011-DWQ NPDES No. CAS000003 National Pollutant Discharge Elimination System (NPDES) permit, and if applicable, the State Water Resources Control Board adopted Order No.2012-0006-DWQ NPDES No.CAS000002 NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.					
For temporary erosion control, Fiber rolls and hydraulic mulch would be used along the 4:1 slopes. In addition, the existing drainage inlet would be protected with fiber rolls.					
Geology/Soils/Seismic/ Topography					
If potentially liquefiable materials such as loose saturated sand and silts are encountered, a liquefaction analysis would be performed to evaluate the potential for liquefaction at the site.					
Potential impacts related to scour at the Yuima Creek Bridge would be addressed/avoided through conformance with associated geotechnical recommendations, including the use of riprap revetments.					

Task and Brief Description	CEQA Mitigation Measure	Timing / Phase	Action Taken to Comply/Remarks	Construction Task Completed	
				Initial	Date
Hazardous Waste					
Asbestos containing materials and lead based paint may be present in the structures onsite. Current Federal and State regulations indicate that the ACMs are not a hazardous waste if they are not disturbed. However, if the ACMs are disturbed such that powder or dust is emitted by hand pressure when dry, it would be considered hazardous waste and would be handled, removed, and disposed as such.					
If disturbed, the ACMs would be disposed as a hazardous waste at the proper disposal facility.					
Testing for the presence of ACMs and lead paint is recommended prior to any structure demolition.					
Paint striping or thermoplastic paint would be removed in accordance with Caltrans standard special provision (SSP) 15-2.02C(2). A Lead Compliance Plan would be prepared for conducting the paint removal activities, and it would describe proper handling methods of the paint material and provide information regarding limiting exposure to lead chromate containing paint materials. The material may be disposed as a non-hazardous waste.					
Since there may be non hazardous ADL in shallow subsurface soils at the subject location, there may be a health concern to workers onsite when exposed soil adjacent to the edge of paving is disturbed. The project activities at the subject location would follow standard special provision (SSP) 7-1.02K(6)U)(iii), paragraph 4. According to this SSP, no excavated soil would be relinquished to the contractor for offsite disposal, and a LCP would be required.					
Treated wood waste is wood that has been treated with a chemical preservative. If guardrails posts and sign posts are to be removed, according to the treated wood SSP 14-010, the treated wood must be properly stored, and disposed at a solid waste landfill facility permitted to accept such wastes.					
There are two localized areas with hazardous concentrations of pesticides (chlordane) in the upper 1.5 feet of soil. This material would be excavated and hauled offsite to a Class I landfill facility prior to roadway excavation activities.					
A detailed description regarding handling and removal of pesticide impacted soil is described in a report entitled "Soil Management Plan State Route 76 Intersection Improvement State Route 76 at Valley Center Road Pauma Valley, California, Caltrans District 11, EA 405700 Contract No. 11a1996, Task Order No. 15.					
Based on the potential for encountering impacted soil, or for soil vapor migration, it is recommended that the Caltrans Unknown Hazard Procedures be implemented during construction activities in the vicinity of the facilities that represent a potential impact to the Site. The resident engineer overseeing construction should have available field monitoring equipment (e.g., PID) to facilitate timely detection of potentially hazardous conditions in the field.					
Although excavation activities associated with the proposed project are not likely to encounter groundwater, should groundwater be encountered during construction/excavation activities and dewatering become necessary, regulatory compliance and permitting consistent with SDRWQCB and NPDES requirements should be adhered to, and groundwater sampling should be conducted.					
It is recommended that removal of hazardous waste (pesticides in soil) be conducted as early as possible so that potential special handling, treatment, or disposal provisions associated with hazardous wastes do not interrupt construction.					

Task and Brief Description	CEQA Mitigation Measure	Timing / Phase	Action Taken to Comply/Remarks	Construction Task Completed	
				Initial	Date
If signs of transite piping are observed during construction activities, sampling and analysis should be conducted.					
Air Quality					
The construction contractor would comply with Caltrans' Standard Specifications in Section 14(2010).					
Section 14-9.01 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.					
Section 14-9.02 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18 of the Air Quality Report.					
Water or dust palliative would be applied to the site and equipment as frequently as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a "no visible dust" criterion either at the point of emission or at the right of way line, depending on local regulations.					
Soil binder would be spread on any unpaved roads used for construction purposes, and all project construction parking areas.					
Trucks leaving the right-of-way would be washed off as necessary to control fugitive dust emissions.					
Construction equipment and vehicles would be properly maintained. Low-sulfur fuel would be used in all construction equipment as provided in California Code of Regulations Title 17, Section 93114.					
The contractor would develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.					
The contractor would use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic.					
The contractor would cover all transported loads of soils and wet materials prior to transport, or provide adequate freeboard (space from the top of the material to the top of the truck) to minimize emission of dust (particulate matter) during transportation.					
To decrease particulate matter, the contractor would promptly and regularly remove dust and mud that is deposited on paved, public roads due to construction activity and traffic.					
Construction traffic would be routed and scheduled to avoid peak travel times as much as possible, reduce congestion, and minimize related air quality impacts caused by idling vehicles along local roads.					
Mulch or plant vegetation would be installed as soon as practical after grading to reduce windblown particulate in the area. (Certain methods of mulch placement, such as straw blowing, may themselves cause dust and visible emission issues, and may require controls such as dampened straw.)					
The contractor would locate construction equipment and truck staging and maintenance areas as far as feasible and nominally downwind of schools, active recreation areas, residences, and other areas of high population density.					
Biological Environment					

Task and Brief Description	CEQA Mitigation Measure	Timing / Phase	Action Taken to Comply/Remarks	Construction Task Completed	
				Initial	Date
Permanent impacts to riparian vegetation would be offset through enhancement of 0.1 acre of riparian areas within US and state jurisdictional waters. The non-vegetated channel within Caltrans right-of-way up and downstream of permanent impacts would be planted with willows and other riparian species. A plant list and planting plan will be developed for the project. Invasive plants would be removed.					
Depending on the chosen alternative, Caltrans would debit Rancho San Diego Mitigation Bank credits of 0.9 acre or 0.7 acre of coastal sage scrub, and 15 oak trees to mitigate for the loss of these resources.					
Spoils, trash, or any debris would be removed offsite to an approved disposal facility.					
Soils from construction grading would be stockpiled away from the San Luis Rey River to minimize potential erosion and sedimentation into the riverbed. Staging/storage areas for construction equipment and materials would be located away from the San Luis Rey River and no equipment maintenance should be performed near the riverbed to minimize the potential for pollution runoff.					
Both build alternatives are being designed in conformance with National Pollutant Discharge Elimination System (NPDES) requirements. The Caltrans Storm Water Quality Handbook: Project Planning and Design Guide (2007) would be used to determine the appropriate best management practices to be implemented throughout the construction process.					
To avoid incidental loss of sensitive habitat types during construction activities, Environmentally Sensitive Areas (ESAs) would be designated along the limits of grading prior to the start of construction, and grading would not occur beyond this limit. Construction crews should be made fully aware of this boundary.	Yes				
Temporary impact areas would have temporary irrigation and be planted with native container plants and seeds of similar composition of the adjacent habitats. A plan for planting and maintaining these areas would be submitted for review by resource agencies.					
All clearing of vegetation within the construction limits would occur between September 30 and February 15, which is outside the breeding seasons for California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, and arroyo toad, to avoid impacts to these species. If activities must occur during this timeframe, a mandatory preconstruction survey by a qualified biologist would be conducted to ensure that no toads or nesting birds are present within the proposed work area.					
Should toads or a nest site be located, appropriate measures may include designation of the location as an Environmentally Sensitive Area (ESA) and delaying or restricting project activities until nesting and fledging is completed.	Yes				
A qualified biologist would monitor the site immediately prior to and during construction, to identify the presence of noxious weeds and recommend measures to control the spread.					
Precautions may be taken if invasive species are found in or adjacent to the construction areas to avoid the inadvertent introduction of invasives. Such precautions may include the inspection and cleaning of construction equipment and eradication strategies.					
Noxious weeds found growing within the project right-of-way during construction would be removed. Heavy equipment such as loaders and motor graders, in areas where noxious plant density is high, may be used. Manual removal would be used in areas with limited populations or large individual plants.					

Task and Brief Description	CEQA Mitigation Measure	Timing / Phase	Action Taken to Comply/Remarks	Construction Task Completed	
				Initial	Date
All plants used in the landscaping and mitigation areas would comply with federal, state, and county laws requiring inspections for infestations. The vendor would supply certification of inspection from the County of San Diego Agriculture.					
Species identified on the California Invasive Plant council's List of Exotic Pest Plants of Greatest Ecological Concern in California would not be incorporated into the planning scheme.					
Graded habitat adjacent to the corridor would be revegetated with an appropriate native plant mix. Revegetation with native plant species would occur as early as possible following grading and be accompanied by at least 3 years of periodic monitoring and maintenance to ensure adequate coverage and prevent erosion.					

PROJECT PERSONNEL

Initial	Full Name	Title	Phone Number	Date Assigned to Project	Date Transferred from Project	Remarks
	Richard Estrada	Project Manager	688-6887			
	Wendy Dandeneau	Project Engineer	688-6638			
	Mike Dispenzieri	Project Engineer	688-3253			
	Allie Scrivener	Env. Coordinator	688-0192			
	Michelle Blake	Dist. Archaeologist	688-0187			
	Rush Abrams	Dist. Biologist	688-0186			
	Joel Kloth	Hazardous Waste	688-3146			
	Tim Mann	Landscape Arch.	688-4255			
	Michelle Madigan	Permit Specialist	688-0119			
	Antonio Araullo	NPDES Specialist	688-6436			

Appendix E: References

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Appendix F: Forms and Correspondence

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

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

April 2, 2014

Reply In Reference To: CATRA_2014_0228_001

Kevin Hovey
Chief, Environmental Analysis, Branch D
Caltrans, District 11
4050 Taylor St., M.S. 242
San Diego, CA 92110

RE: PRC 5024 (b) and (f) Notice and Summary, HPSR for proposed State Route 76 and Valley Center Road Intersection Improvement Project, San Diego County, 11-SD-76, PM 32.6/33.2 (EA: 405700)

Dear Mr. Hovey:

Thank you for requesting my comments pursuant to Public Resources Code Section 5024(f). In addition to your February 25, 2014 letter, the California Department of Transportation (Caltrans) has provided a Historical Resources Compliance Report (HRCR). In addition to your letter, you have submitted the Historic Property Survey Report for the Intersection Improvement Project at State Route 76 and Valley Center Road in Pauma Valley, San Diego County, California (February 24, 2014) as evidence of your efforts to identify and evaluate historic properties in the project APE. This reports included an Environmentally Sensitive Area (ESA) Action Plan (Blake, 2014) and Archaeological Survey Reports (Blake, 2014) & (Laylander & Pallette, 2006). You are seeking my comments on a Finding of No Adverse Effect.

My staff has reviewed the documentation you provided, and I would like to offer the following comments.

The project is an intersection improvement in the community of Pauma Valley involving the following actions: new right-of-way takes, realignment, easement construction, and installation of either a traffic signal or a rotary/roundabout.

Caltrans determined that the Area of Potential Effects (APE) encompasses of approximately 13 acres and includes the entire boundaries of the archaeological site CA-SDI-17259H.

A records search including the South Coastal Information Center and Caltrans Cultural Resources Database was conducted on September 4, 2013. A small portion of one previously recorded historic era site CA-SDI-17259H, consisting of house foundation and associated landscape, was determined to lie within the project APE. This site was also field verified during pedestrian surface survey on September 18, 2013. A second field survey in response to project design changes was conducted on January 17, 2014. No additional archaeological resources were discovered. Native American consultation included contact with the Native American Heritage Commission (October 1, 2012) and Native American tribes and individuals likely to have knowledge of sites of religious or cultural significance to them in the project area (October 2012, September 2013). No such properties were identified through consultation efforts.

Caltrans is considering that the entire CA-SDI-17259H site is meeting National Register criteria without evaluating the site and assumes that the state-owned portion within the right-of-way is a contributing portion. Caltrans further is proposing to establish an ESA/ESA Action Plan to avoid the site. By doing so Caltrans has determined that the project as described will not have an adverse effect on the assumed eligible state-owned historic resource.

Based on the documentation provided I concur with your finding of no adverse effect. Identification efforts are sufficient and I also have no objections to the delineation of the APE nor the ESA Action Plan, as depicted in the supporting documentation.

If you have any questions or concerns, please contact Michelle C. Messinger, Historian II of my staff at (916) 445-7005 or at Michelle.Messinger@parks.ca.gov.

Sincerely,

Carol Roland-Nawi, Ph.D.

Carol Roland-Nawi, Ph.D.
State Historic Preservation Officer

CC: Gloria Scott, Chief, Built Environment Preservation Services Branch

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 **1/24/14**	4. Sheet 1 of _____
1. Name of Project **SR-76 Intersection Improvement**	5. Federal Agency Involved **FHWA**	
2. Type of Project **Safety: Intersection Improvement**	6. County and State **San Diego, CA**	

PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS **1/24/14**	2. Person Completing Form **C. Calvert**
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☐ NO ☑		4. Acres Irrigated **69,537** / Average Farm Size **80**
5. Major Crop(s) **Nursery, Flower, Fruit/Nut**	6. Farmable Land in Government Jurisdiction Acres: **112,974** % **4**	7. Amount of Farmland As Defined in FPPA Acres: **91,812** % **4**
8. Name Of Land Evaluation System Used **CA - Storie System**	9. Name of Local Site Assessment System **None**	10. Date Land Evaluation Returned by NRCS **3/3/14**

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment _____			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	0.58	0.37		
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres In Corridor	78.25	78.25		
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	0	0		
B. Total Acres Statewide And Local Important Farmland	0	0		
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*				
PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))* — Maximum Points				
1. Area in Nonurban Use — 15				
2. Perimeter in Nonurban Use — 10				
3. Percent Of Corridor Being Farmed — 20				
4. Protection Provided By State And Local Government — 20				
5. Size of Present Farm Unit Compared To Average — 10				
6. Creation Of Nonfarmable Farmland — 25				
7. Availablility Of Farm Support Services — 5				
8. On-Farm Investments — 20				
9. Effects Of Conversion On Farm Support Services — 25				
10. Compatibility With Existing Agricultural Use — 10				
TOTAL CORRIDOR ASSESSMENT POINTS — 160	0	0	0	0
PART VII *(To be completed by Federal Agency)*				
Relative Value Of Farmland (From Part V) — 100	0	0	0	0
Total Corridor Assessment (From Part VI above or a local site assessment) — 160	0	0	0	0
TOTAL POINTS *(Total of above 2 lines)* — 260	0	0	0	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?
Corridor A	**0.58**	**9/4/14**	YES ☐ NO ☑

5. Reason For Selection:

Increased safety improvements associated with Corridor A

Signature of Person Completing this Part: _____ DATE 9/17/2014

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

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?
More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?
More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?
Site is protected - 20 points
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with $1,000 or more in sales.)
As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?
Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?
High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?
Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?
Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish and Wildlife Office
2177 SALK AVENUE - SUITE 250
CARLSBAD, CA 92008
PHONE: (760)431-9440 FAX: (760)431-5901
URL: www.fws.gov/carlsbad/

Consultation Tracking Number: 08ECAR00-2014-SLI-0372 June 03, 2014
Project Name: SR-76/Valley Ctr Rd Intersect

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project.

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: SR-76/Valley Ctr Rd Intersect

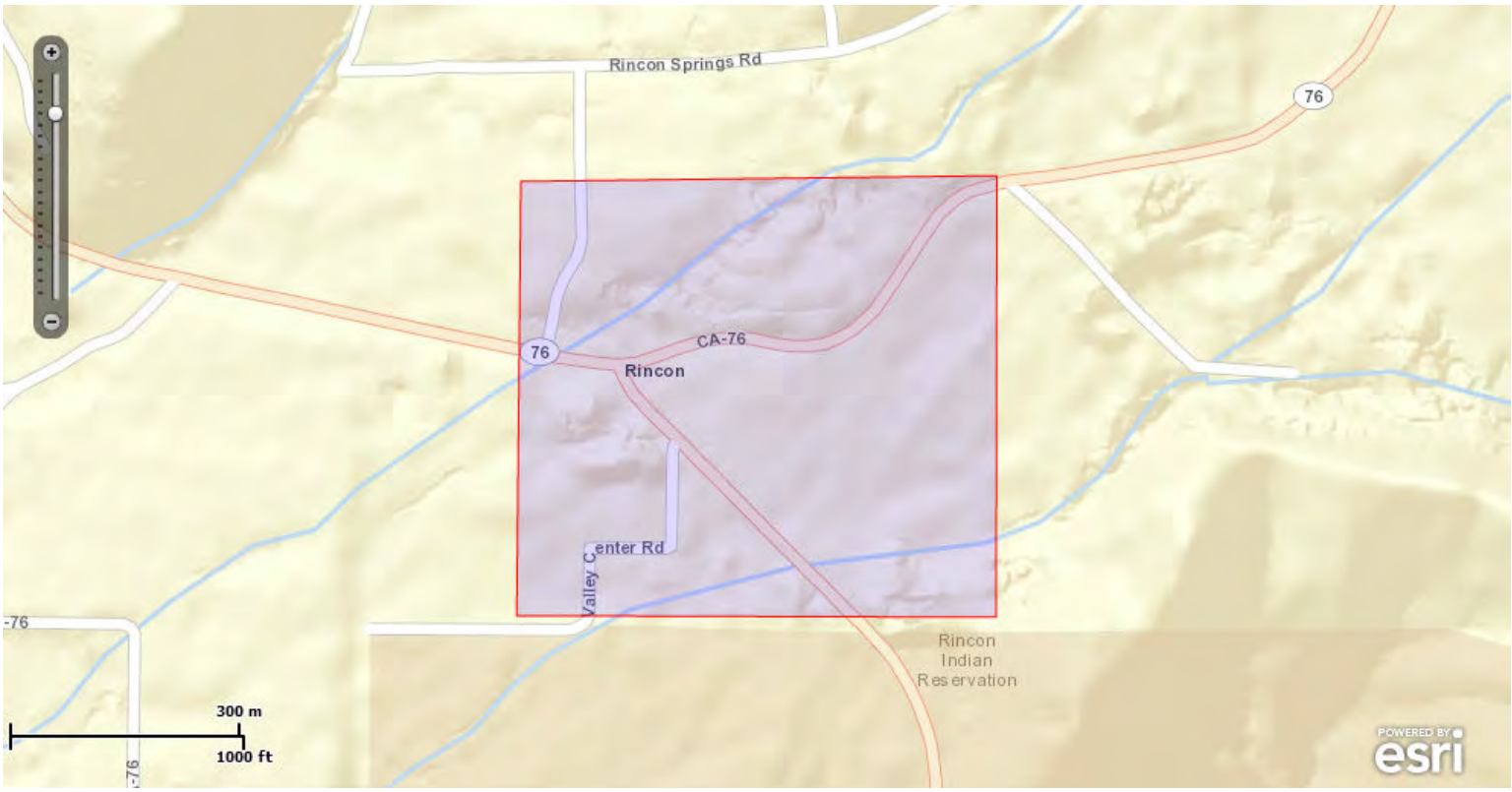
Official Species List

Provided by:

Carlsbad Fish and Wildlife Office
2177 SALK AVENUE - SUITE 250
CARLSBAD, CA 92008
(760) 431-9440
http://www.fws.gov/carlsbad/

Consultation Tracking Number: 08ECAR00-2014-SLI-0372
Project Type: Transportation
Project Description: Intersection improvement project.

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-116.9601232 33.2905658, -116.9534199 33.2906322, -116.9534308 33.2854358, -116.9601833 33.285452, -116.9601232 33.2905658)))

Project Counties: San Diego, CA

Endangered Species Act Species List

There are a total of 7 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed on the **Has Critical Habitat** lines may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

arroyo toad *(Anaxyrus californicus)*

Population: Entire

Listing Status: Endangered

Has Critical Habitat: Final designated

Coastal California gnatcatcher *(Polioptila californica californica)*

Population: Entire

Listing Status: Threatened

Has Critical Habitat: Final designated, Proposed

Laguna Mountains skipper *(Pyrgus ruralis lagunae)*

Population: Entire

Listing Status: Endangered

Has Critical Habitat: Final designated

Nevin's barberry *(Berberis nevinii)*

Listing Status: Endangered

Has Critical Habitat: Final designated

Quino Checkerspot butterfly *(Euphydryas editha quino (=e. e. wrighti))*

Population: Entire

Listing Status: Endangered

Has Critical Habitat: Final designated

Southwestern Willow flycatcher *(Empidonax traillii extimus)*

Population: Entire

Listing Status: Endangered

Has Critical Habitat: Final designated

Stephens' kangaroo rat *(Dipodomys stephensi)*

Population: Entire

Listing Status: Endangered

Critical habitats that lie within your project area

There are no critical habitats within your project area.