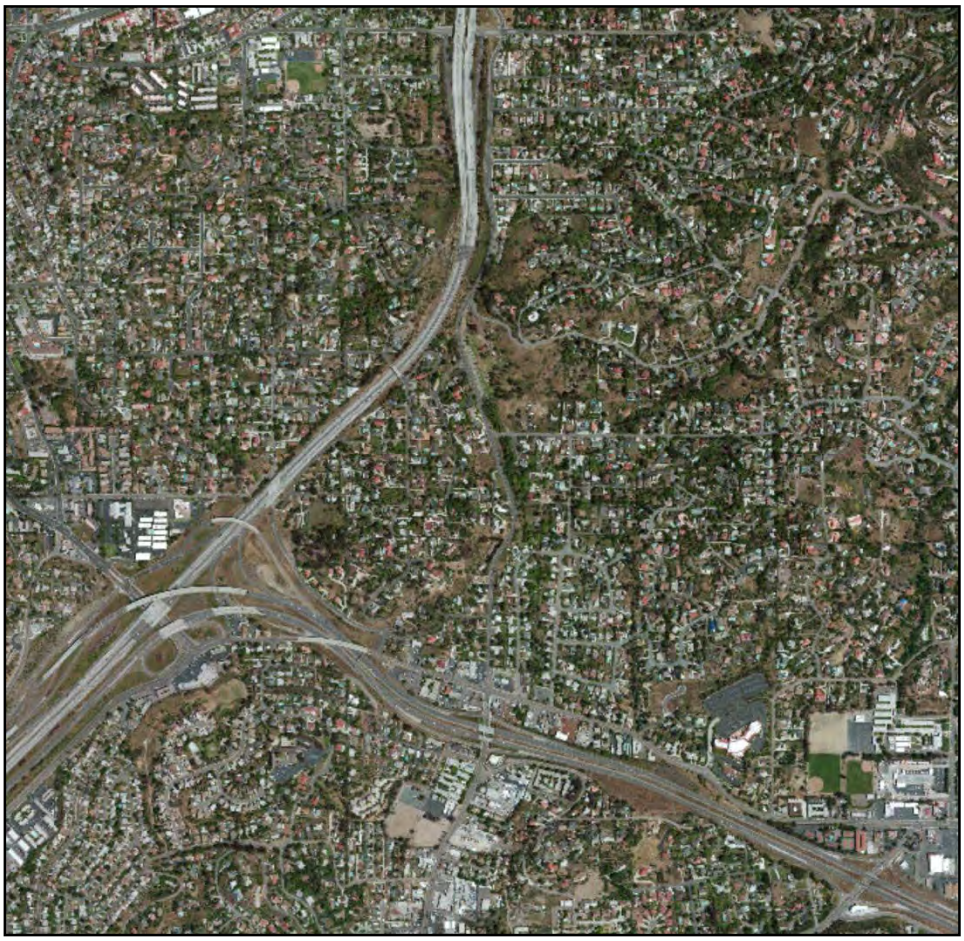
SR-94/ SR-125 Interchange Project

SAN DIEGO COUNTY, CALIFORNIA
DISTRICT 11 – SD – 94/125 (PM 13.6-14.6) (R10.5-T11.5)
EA: 14665 PI: 1100000078

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.

December 2015

General Information about This Document

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SCH#
11-SD-94-PM 13.6/14.6 11-SD-125-PM R10.5/T11.5
EA: 14665
PI: 1100000078

SR-94/ SR-125 Interchange Project

INITIAL STUDY with (Proposed) Mitigated Negative Declaration / Environmental Assessment

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

THE STATE OF CALIFORNIA
Department of Transportation

Responsible Agencies: California Transportation Commission

6/11/2015
Date of Approval

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11-SD-94-PM 13.6/14.6 11-SD-125-PM R10.5/T11.5
EA: 14665
PI: 1100000078

MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to construct a direct freeway-to-freeway connection from southbound State Route 125 (SR-125) to eastbound State Route 94 (SR-94) in the City of La Mesa. The proposed project extends from Lemon Avenue On-ramp to the eastbound Kenwood Drive Off-ramp. The proposed project would result in the construction of freeway-to-freeway connector to allow direct SR-125 south to SR-94 east movements.

Determination

Caltrans has prepared an Initial Study for this project, and following public review, 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
- Farmlands
- Timberlands
- Environmental Justice
- Paleontology
- Section 4(f)

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

- Land Use
- Community Impacts
- Community Character and Cohesion
- Growth
- Relocations and Real Property Acquisition
- Utilities/Emergency Services
- Traffic and Transportation/Pedestrian and Bicycle Facilities
- Visual/Aesthetics
- Cultural Resources
- Hydrology and Floodplain
- Geology/Soils/Seismic/Topography
- Water Quality and Storm Water Runoff
- Hazardous Waste/Materials
- Air Quality
- Noise

- Natural Communities
- Plant Species
- Animal Species
- Threatened and Endangered Species
- Invasive Species
- Climate Change

With the following mitigation measures incorporated, the proposed project would have less than significant effects to:

Biological Environment

- Although disturbed coastal sage scrub was not found to support any sensitive species, it represents a natural community and permanent impacts to this habitat would be mitigated at a 1:1 ratio at Rancho San Diego, an offsite Caltrans mitigation bank. Temporary impacts would be mitigated onsite with restoration to pre-existing conditions and seeding with an appropriate native mix.

- Permanent impacts to disturbed coastal sage scrub would be mitigated with coastal sage scrub credits at a 1:1 ratio at Rancho San Diego, an offsite Caltrans mitigation bank. Mitigation credits have already been debited for the project. An additional 0.6 acre of coastal sage scrub may be impacted by staging/storing. Temporary impacts would be mitigated onsite by restoring the areas to pre-existing conditions and seeding affected areas with a native coastal sage scrub mix.

- For temporary construction impacts refer to the measures listed in the Transportation Management Plan.

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

12/16/15
Date

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

FOR

SR-94 / SR-125 Interchange Project, San Diego County

The California Department of Transportation (Caltrans) has determined that the Build Alternative (*Alternative D*) 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 (and other documents as appropriate).

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.

12/16/15 _____ for
Date

Laurie Berman
Caltrans District Director

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Chapter 1 Proposed Project

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).

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.

Caltrans proposes to construct a direct freeway-to-freeway connection from southbound State Route 125 (SR-125), to eastbound State Route 94 (SR-94) in the City of La Mesa. The connector would pass under existing SR-125, and join eastbound SR-94 between Bancroft Drive and Kenwood Drive. A single auxiliary lane would be constructed along southbound SR-125 extending from the Lemon Avenue on-ramp to the exit for the proposed connector. In addition, a single auxiliary lane would be constructed extending from the end of the proposed connector to the eastbound Kenwood Drive Off-ramp. The total length of the proposed project is 2.0 miles. Figures 1 and 2 show proposed project location and vicinity maps.

The proposed project is included in the SANDAG 2050 Regional Transportation Plan (RTP) and in the 2014 Regional Transportation Improvement Program (RTIP), and the 2015 Federal Statewide Transportation Improvement Program (FSTIP). The 2050 RTP was adopted on October 28, 2011. The 2014 RTIP/2015 FSTIP received federal approval on December 15, 2014. The design concept and scope of the proposed project is consistent with the project description in the 2014 RTIP/2015 FSTIP. The estimated total project cost in the RTIP is $63.9 Million.

The project is proposed to be funded through the Transportation Congestion Relief Program (TCRP) which has allocated $6 Million. The project is proposed to also be funded by SANDAG which has contributed $1.7 Million in Trans Net funds for the environmental studies of the proposed project. Funding from the TCRP and Trans Net is proposed for construction.

Figure 1 – Project Location

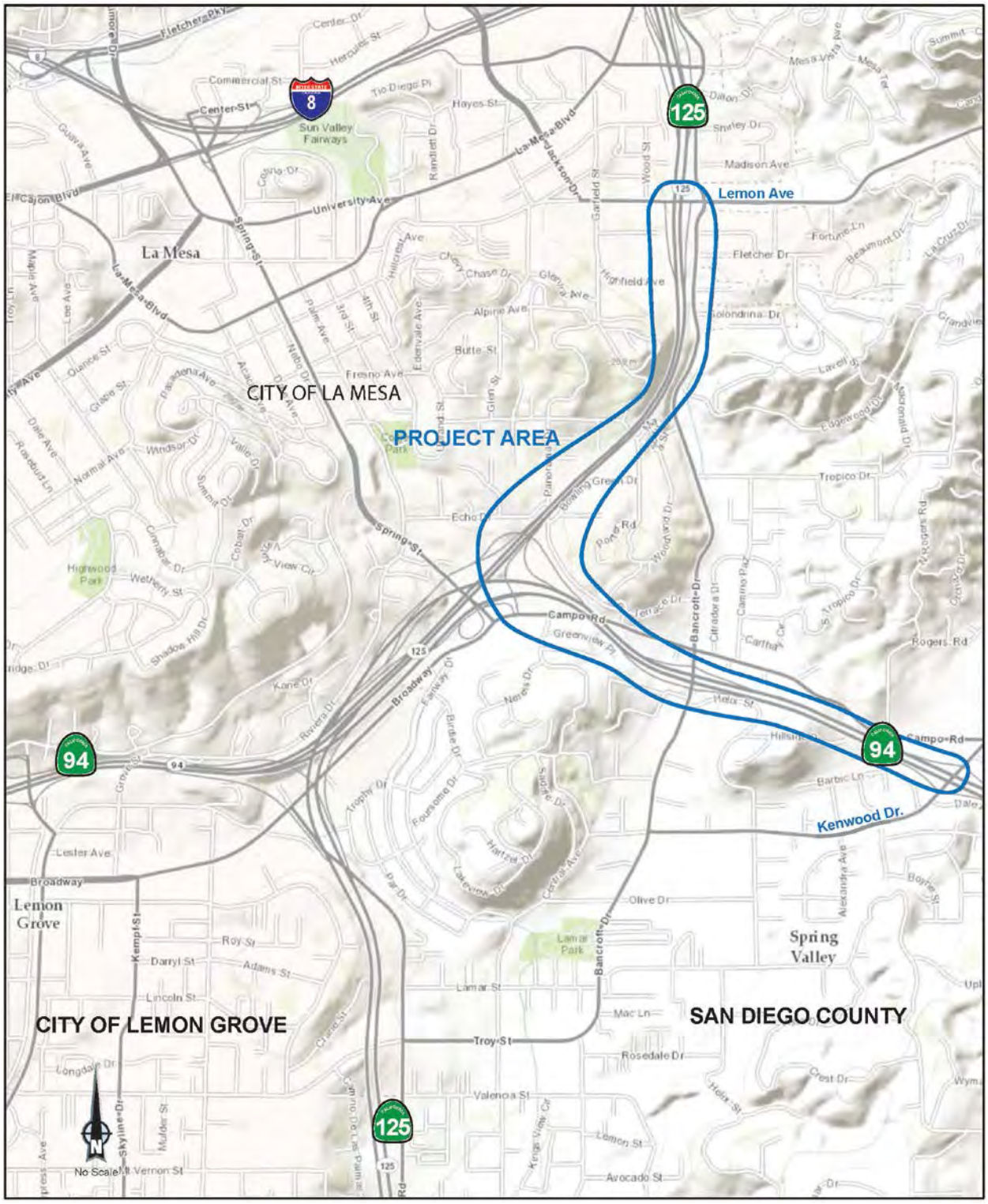

Figure 2 – Project Vicinity

Purpose and Need

Purpose of the Project

The purpose of the proposed project is to provide a direct freeway to freeway connection from southbound SR-125 to eastbound SR-94.

The objectives of the proposed project are to:

- Accommodate traffic generated by current and future local and regional growth.
- Improve operational characteristics of the SR-125/SR-94 interchange.
- Improve the operations of local streets and arterials.
- Provide transportation improvements consistent with the adopted 2050 Regional Transportation Plan (RTP).

Need for the Project

The proposed connector alignment was shown on the original interchange plans from 1974. However, the connector was never fully designed or constructed. Similar to the SB to EB connector, the westbound (WB) to northbound (NB) connector was also not constructed with the original interchange.

The project is needed to address existing operational deficiencies for traffic going from SB SR-125 to EB SR-94, and deficiencies are anticipated in the future. The existing interchange is missing a direct connection from SB SR-125 to EB SR-94. In the current configuration, vehicles must exit SR-125 south at Spring Street, make a left turn onto Spring Street at a signalized intersection, and then proceed onto the loop on-ramp to EB SR-94. As a result, regional traffic is forced to utilize a local street (Spring Street) to complete this move. The use of local streets results in deficient levels of service during the peak hours at the intersection of the SB SR-125 off-ramp and Spring Street and at the intersection of Spring Street and Campo Road; travel time delays for the freeway and local street network; and queuing on Spring Street and Campo Road that impedes the efficient flow of traffic during peak hours. Existing congestion and queuing at the SR-94/SR-125 interchange is primarily caused by vehicles exiting and entering the freeway system via the local street system. The proposed project is needed due to existing and future operational deficiencies in the southbound SR-125 to eastbound SR-94 connection. See Table 1.

Traffic forecasts show that planned development in the region will overload this link as it currently exists. Traffic demand in the project area is anticipated to increase dramatically by the year 2020. The City of La Mesa, County of San Diego, SANDAG, and local planning groups have expressed support for the construction of a direct connector to allow vehicles to make the SB SR-125 to EB SR-94 freeway-to-freeway connection without leaving the freeway system.

According to the Draft State Route 125 Transportation Concept Summary, dated September 2010, “SR-125 is a four to eight lane facility from SR-905 to SR-52 that carries international, interregional, commuter, and recreational travel,” and “SR-125 provides a vital north/south connection that provides an alternative in the southern and central San Diego region to other north/south routes such as I-5, I-15 and I-805.”According to the Draft Urban SR-94 Transportation Concept Report Summary, dated March 2011, “SR-94 is a principal east-west

route which carries interregional, intraregional, and to a lesser extent international travel. The western portion of the route (P.M. SD 1.40 - P.M. 14.9) serves as a major commuter route. The remainder of the route serves outlying rural communities located in the southeastern portion of San Diego County." "SR-94 provides a vital east/west connection between I-5 and SR-125" and "carries significant commute traffic to and from downtown San Diego as well as truck traffic to the bay front area."

The proposed project (which consists of a south to east freeway connector) is also identified in the approved 2050 RTP under the Constrained Revenue scenario as a freeway connector improvement with an estimated cost of $139 million. The RTIP, also developed by SANDAG, is a multi-billion dollar, multi-year program of proposed projects for major highway, arterial, transit, and bikeway projects, including the TransNet Program of projects. The RTIP covers 5 fiscal years and incrementally implements the RTP. SANDAG approved the 2014 RTIP, which covers Fiscal Years 2014-2019. The SANDAG Board of Directors adopted the 2014 RTIP on September 26, 2014. The proposed project is included in the 2014 RTIP as MPO ID: Cal 68. Other projects located within the study area are the following:

- Lemon Grove Avenue at SR-94 - a key project in the redevelopment of the city's Downtown Village Specific Plan, would realign Lemon Grove Avenue at SR-94 adding traffic lanes and improving access to and from SR-94, reducing motorist delays and emissions.
- Euclid Avenue from Euclid Avenue to SR-94 - improvements to the interchange to enhance safety features through this corridor and the optimization of the level of service for both Euclid Avenue and SR-94.

Table 1: Summary of Intersection LOS Analysis for Existing (2011) Year

			AM Peak Hour		PM Peak Hour	
#	**Study Intersection**	**Control**	**Delay**	**LOS**	**Delay**	**LOS**
1	WB SR-94 Ramps / Bancroft Dr.	Signal	12	B	18	B
2	EB SR-94 Ramps / Bancroft Dr.	Signal	15	B	12	B
3	WB SR-94 Ramps / Kenwood Dr.	AWSC	13*	B*	11*	B*
4	EB SR-94 Ramps / Kenwood Dr.	AWSC	9*	A*	11*	B*
5	WB SR-94 Ramps / Spring St.	Signal	20	C	35	D
6	NB SR-125 Ramp / Lemon Ave.	OWSC	13**	B**	16**	C**
7	NB SR-125 Ramp/EB SR-94 Ramp/Campo Rd.	Signal	36	C	20	C
8	Campo Rd / Bancroft Dr.	Signal	25	C	28	C
9	Spring St / Broadway	Signal	24	C	24	C

AWSC - All-Way Stop Control; OWSC - One-Way Stop Control; Delay is measured in seconds per vehicle
* SimTaffic was used to simulate the intersection operation and estimate the LOS
** At OWSC intersection, delay is presented for the controlled approach

Independent Utility and Logical Termini

"Independent Utility" means that the proposed 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 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 proposed project would result in improved traffic conditions and does not depend on the development of other projects. There is independent utility because there are no additional improvement projects needed to maintain or improve the traffic conditions. The proposed project has logical termini beginning with a freeway exit on southbound SR-125 and leading to a freeway entrance on eastbound SR-94 providing the missing connection between the two freeways. The boundaries connect the essential elements of the proposed project and contain the area potentially affected by project construction and operation.

Project Description

The proposed project is located in San Diego County on southbound SR-125 at Lemon Avenue (PM 14.7), heading south and connecting to eastbound SR-94 to Kenwood Drive (PM R11.8). The proposed project covers a distance of 2.0 miles. Within the limits of the proposed project, State Route 94 operates as a conventional four-lane, undivided highway with 12-foot lanes, and one to 10-foot shoulders. State Route 125 is a six to eight-lane freeway with 8 to 10-foot shoulders. The purpose of the proposed project is to provide a direct freeway to freeway connection from southbound SR-125 to eastbound SR-94; accommodate traffic generated by current and future local and regional growth; and improve the operations of local streets and arterials.

- Caltrans proposes to construct a freeway-to-freeway connector to allow direct SR-125 south to SR-94 east movements. In summary, the proposed project may result in the following actions:
- A freeway connector that exits southbound (SB) SR-125, passes under SR-125 and connects with eastbound (EB) SR-94 near Bancroft Drive.
- An auxiliary lane on SB SR-125 from the existing Lemon Avenue SB on-ramp to the new freeway connector.
- An auxiliary lane on eastbound SR-94 from the new connector to the existing EB off-ramp to Kenwood Drive.
- Either replacement of the existing Mariposa Street overcrossing with an in-kind overcrossing or a permanent removal of this overcrossing.
- Widening of the existing SR-94 Bridge over Bancroft Drive.
- A bridge structure over Panorama Drive.
- Construction of noise barriers (where appropriate) along SR-94 and SR-125.

- Construction of retaining walls along SR-125, the connector, and SR-94.
- Reconstruction and realignment of 700 ft. of Echo Drive.
- Proposed staging and storage areas would be located in already disturbed areas between Panorama Drive and WB SR-94/NB SR-125 connector, as well as the area under the WB SR-94, just north of the NB SR-125 on-ramp. See Figure 3-C for more details.

Alternatives

This section describes the proposed action and the design alternatives that were developed to meet the identified need through accomplishing the defined purpose(s), while avoiding or minimizing environmental impacts. The alternatives are “Proposed Build Alternative,” and the “No-Build Alternative.”

Alternative D (Build Alternative) – Preferred Alternative

The project under consideration proposes the following features:

- A two-lane freeway connector that exits southbound (SB) SR-125 at PM 14.0, passes under SR-125 at PM 13.65 and connects with eastbound (EB) SR-94 near Bancroft Drive at PM R11.15.
- A 1,820-foot auxiliary lane on SB SR-125 from the existing Lemon Avenue SB on-ramp to the new freeway connector exit.
- A 1,950-foot auxiliary lane on EB SR-94 from the new connector to the existing EB off-ramp to Kenwood Drive.
- Replacement of the existing Mariposa Street overcrossing with a longer structure to span the new auxiliary lane.
- Widening of the existing SR-94 bridge structure over Bancroft Drive to accommodate the proposed connector.
- A 58 foot long by 44 foot wide bridge structure on Panorama Drive over the connector.
- An 88 foot long by 44 foot wide bridge structure on Echo Drive over the connector.
- A 40 foot by 473 foot bridge carrying the EB SR-94 off-ramp to Bancroft Drive over the proposed connector.
- Construction of noise barriers (where appropriate) along SR-94 and SR-125.
- Construction of 12,070 linear feet of retaining walls along SR-125, the connector, and SR-94 that would vary in height from 5 to 30 feet.

<u>Roadway Improvements:</u>

The Build Alternative would construct a new two-lane connector from southbound SR-125 to eastbound SR-94 that passes under SR-125 (See Figures 3A – 3E). A single 1,950 foot long auxiliary lane would be constructed along southbound SR-125 extending from the Lemon Avenue on-ramp to the exit for the proposed connector. The connector would pass under

Panorama Drive, Echo Drive, existing SR-125, then pass under the westbound to southbound connector, the Campo Road off-ramp overcrossing, the Campo Road overcrossing, be braided with the eastbound Bancroft Drive off-ramp, and finally join eastbound SR-94 between Bancroft Drive and Kenwood Drive. The existing bridge over Bancroft Drive would be widened to accommodate the new connector. A new 1,950 foot long auxiliary lane would be constructed from the end of the proposed connector to the eastbound Kenwood Drive off-ramp.

The horizontal and vertical alignments of the proposed connector were set so that the connector could pass under four existing bridges, two proposed local street overcrossings, and the SR-125 overcrossing while avoiding the existing bridge columns. The horizontal alignment of the connector includes three sets of reversing curves with a minimum radius of 750 feet. In order to provide adequate sight distance on the 750 foot radius curve, the design includes a 25 foot wide buffer from the inside edge of travelled way on the curve to the retaining walls or slopes.

The proposed project connector would include two 12-foot travel lanes, a 5-foot inside shoulder, and a 10-foot outside shoulder from the exit to the existing Campo Road overcrossing. After this the connector tapers to a single 12-foot travel lane, a 5-foot inside shoulder, and a 10-foot outside shoulder.

The entrance of the southbound Lemon Avenue on-ramp would be realigned to merge into the proposed auxiliary lane. The connector alignment passes under Panorama Drive as it exits SR-125. The proposed design would construct a new bridge overcrossing at Panorama Drive.

Approximately 400 feet farther south the connector passes under Echo Drive where a new bridge overcrossing would be constructed.

The exit of the southbound Spring Street off-ramp would be re-constructed to provide a smoother profile along the SR-125 south to SR-94 east connector undercrossing bridge deck.

The eastbound Bancroft Drive off-ramp would remain in its existing location but would be re-constructed on a slab bridge passing over the proposed connector. The profile would be raised a maximum of seven feet to accommodate the connector. The ramp cross-section includes a single 12-foot lane, a 4-foot inside shoulder, and an 8-foot outside shoulder.

There are two design options for the proposed project at Mariposa Street overcrossing:

Design Option A would maintain the existing slopes on along northbound SR-125 approaching the Mariposa Street overcrossing.

Design Option B would cut into the existing slope along northbound SR-125 approaching the Mariposa Street overcrossing to allow room for a lane addition to be completed as a future project following this project.

<u>Widening of the Bancroft Drive Undercrossing:</u>

The existing three span bridge would be widened to construct the new connector. The proposed structure would be a three span, cast-in-place, pre-stressed concrete box girder bridge. It would be 126 feet long and would average about 30 feet in width. Abutments supported on piles, similar to the existing structure, are recommended for the proposed widening. The existing structure would consist of pier wall type bents supported on piles. The proposed widening would also utilize pier walls supported on piles but with a wider footing.

Bancroft Drive Eastbound Off-ramp Overcrossing:

The proposed structure would be a reinforced concrete slab crossing over the new connector below. The existing off-ramp to Bancroft Drive is planned to be shut down during construction and traffic would be detoured onto the Spring Street exit from eastbound SR-94, then east on Campo Road to Bancroft Drive. The structure would be built top-down with sub-horizontal ground anchor walls framing the sides. The completed structure would be 40 feet long and 474 feet wide along radial curves between 1,600 feet and 2,200 feet.

SR-125 South to SR-94 East Connector Undercrossing:

A pre-stressed concrete slab is the recommended structure type. The slab would span radial to the curve to minimize the span length and reduce the superstructure depth to 2'-0". A drop-cap end diaphragm would be utilized to accommodate the varying elevations of the SR-125 freeway and allow for easier construction of the abutment footing. Spread footing abutments behind sub-horizontal ground anchor walls are the recommended substructure type for this simple-span structure. This would help with the proposed construction staging to minimize the traffic impact the SR-125. Rock appears to be present at the site so no piles would be needed for the abutments. To construct the bridge without lengthy traffic disruptions the use of an accelerated bridge construction technique known as a move-in bridge is proposed. This would allow the closure of SR-125 to be limited to overnight closures and one single weekend closure. The bridge slab would be constructed onsite adjacent to the final alignment and then moved in during a weekend closure.

Panorama Drive Undercrossing:

The proposed Panorama Drive overcrossing is a simple span structure, 58 feet long and 46 feet wide. The bridge carries 20-foot and 12-foot traffic lanes with integral shoulders and two, 6-foot sidewalks. The proposed layout of the structure is set to provide a minimum span length that would result in a structure that provides the required vertical clearance. A Cast-in-Place Reinforced Concrete Box Girder is recommended as the preferred superstructure type. Tall cantilever seat type abutments supported on spread footings are recommended for this structure. Both abutments are set on a 35-degree skew to reduce the span length, minimize superstructure depth, and ultimately provide adequate vertical clearance. The abutments are framed by standard retaining walls on the north side and southwest corner, and a wing wall on the southeast side.

In order to minimize traffic disruption, construction of the Panorama Drive overcrossing would not be staged during the same time period as the construction of the replacement Mariposa Street overcrossing.

Echo Drive Overcrossing:

The proposed Echo Drive overcrossing is a simple span structure, 89 feet long and 46 feet wide. The bridge carries two 16-foot traffic lanes with integral shoulders and two, 6-foot sidewalks. A Cast-in-Place Reinforced Concrete Box Girder is recommended as the preferred superstructure type. Tall cantilever seat type abutments supported on spread footings are recommended for this structure. Both abutments are set at an approximately 40 degree skew to minimize the bridge span length and ultimately construction cost. While abutment 1 is located against the southbound SR-125 to eastbound SR-94 connector, abutment 2 is set back

approximately 20 feet to provide the required site distance that vehicles would need as they drive under the proposed connector undercrossing just beyond this bridge.

Mariposa Street Overcrossing:

The construction of the auxiliary lane on SR-125 would require the westerly span of the existing Mariposa Street overcrossing to be lengthened. The impacts due to the removal of this access to these vehicles, loss of access for emergency vehicles, and the possible community and jurisdictional (City of La Mesa) opposition to the removal contributed to the decision to replace the bridge.

In the proposed build alternative, the existing overcrossing would be demolished and a new overcrossing would be constructed in its place. The proposed Mariposa Street overcrossing replacement structure is a 2-span structure, 191 feet long and 43 feet wide (typical and minimum). The bridge carries two 16-foot traffic lanes, a 7-foot sidewalk, and a 2-foot shoulder. A modified Concrete Barrier would be used to accommodate the 7-foot sidewalk on the south side of the bridge and a concrete barrier would be used on the north side. A Concrete Box Girder is recommended as the preferred structure type. Seat type abutments supported on spread footings are recommended for this structure.

The bridge abutments would be constructed to accommodate the ultimate planned condition of SR-125, which includes the addition of a through lane and an HOV lane in each direction.

Design Option A would construct a slope below the easterly abutment to match the existing condition.

Design Option B would construct a ground anchor wall in front of the abutment to allow for construction of the ultimate number of lanes.

In order to minimize traffic disruption, construction of the replacement Mariposa Street overcrossing would not be staged during the same time period as the construction of the Panorama Drive overcrossing.

Retaining Walls:

Due to the constrained right-of-way, retaining walls would be constructed along most of the proposed connector. Soil nail walls are recommended for the southerly side of the connector located between the eastbound Bancroft Drive off-ramp and the Campo Road overcrossing. Walls located on either side of the connector beneath the SR-125/SR-94 connector undercrossing are recommended to be constructed with sub-horizontal ground anchors.

Drainage Features:

An existing lined drainage channel would be relocated along the west side of SR-125 from Mariposa Street to Panorama Drive. There is an existing 60 inch RCP storm drain that receives drainage from west of SR-125 and crosses the proposed connector alignment at Echo Drive. This storm drain would be re-aligned to flow down the connector towards Campo Road. Drainage from the proposed connector would flow into the proposed 60 inch RCP storm drain system. New catch basins are proposed along the connector to limit spread widths and capture surface flow. Farther south, the storm drain enters a box culvert that drains into the Lower Sweetwater River, downstream of Sweetwater Reservoir. East of Campo Road, the connector

storm drain would outfall into an existing 20-foot wide concrete lined channel which drains into the Lower Sweetwater River.

Increased peak flows due to the addition of paved area would be mitigated by the construction of three detention basins: one located just east of the proposed Echo Drive overcrossing, one located between the connector and the existing northbound Campo Road on-ramp, and one just south of the eastbound Bancroft Drive on-ramp.

Non Standard Design Features:

Some design exceptions will be required. The following are the major design exception categories:

- Standards for Curvature
- Standards for Superelevation
- Standards for Stopping Sight Distance
- Corner Sight Distance at Public Intersections
- Ramp Deceleration Lane
- Minimum Weave Length
- Vertical Curves
- Superelevation Transition
- Profile Grades on Freeway-to-Freeway Connectors
- Merging Branch Connector Auxiliary Lanes
- Merging Branch Connector Design
- Diverging Branch Connector Design
- Superelevation Runoff
- Reversing Curves Transition Length

Utilities and Other Owner Involvement

Owners of utilities in the proposed project area are AT&T, Cox Communications, the City of La Mesa, the County of San Diego, Helix Water District, and San Diego Gas & Electric (SDG&E). Each of these utilities would be affected by the proposed project. A conservative approach was taken to identify all possible utility impacts and associated costs. Most utility companies affected by the proposed project should design and construct their own utility relocations. The total utility cost is estimated at $2.6 million. A determination of prior rights should be conducted in the next phase of the proposed project to determine cost liability for each utility.

Highway Planting

A Landscape Concept Plan was prepared for the proposed project and is included in Chapter 2.7: Visual/Aesthetics Section.

Noise Barriers

A noise study was prepared for the proposed project. It will determine the need and feasibility of noise barriers for the proposed project. The Noise Abatement Decision Report (NADR) will determine the reasonableness of the noise abatement for the proposed project. See Chapter 2.15: Noise for proposed noise barrier locations.

Non-motorized and Pedestrian Features

The City of La Mesa Bicycle Facilities and Alternative Transportation Plan recommends that sidewalks be installed on Echo Drive and Panorama Drive. Sidewalks are proposed on both sides of Echo Drive and Panorama Drive within the proposed project limits.

The replacement of the Mariposa Street overcrossing would include replacement of the existing sidewalk on the south side of the bridge only.

All work for compliance with the Americans with Disabilities Act (ADA) will be provided. This includes but is not limited to typical pedestrian facilities such as sidewalks, driveways, curb ramps, curb cuts, crosswalks, and associated signage along local streets and connections with local streets affected by the proposed project.

Needed Structure Rehabilitation and Upgrading

There is a potential that the existing Bancroft Drive undercrossing, where widening is proposed, would need to be retrofitted. However, preliminary analysis shows that it will not be needed. The existing barrier on the north side of the undercrossing, opposite the widening, will be replaced.

Cost Estimates

Cost estimations were escalated to the construction year. The total estimated project cost, in 2019 dollars, for Design Option A is $64,200,000 (which includes $52,131,000 in capital costs and $12,054,000 in support costs). The total estimated project cost, in 2019 dollars, for Design Option B is $62,500,000 (which includes $50,733,000 in capital costs and $11,765,000 in support costs).

The Right-of-Way cost estimated for the proposed project is $5,691,000 for 2017. The proposed project would require partial takes on seven parcels and two full takes. Both Design Options are expected to require the same Right-of-Way acquisitions. See Chapter 2: Community Impact Section for description of ROW takes.

Transportation System Management (TSM) and Transportation Demand Management (TDM) Alternatives

TSM strategies increase the efficiency of existing facilities; they are actions that increase the number of vehicle trips a facility can carry without increasing the number of through lanes. Examples of TSM strategies include: ramp metering, auxiliary lanes, turning lanes, reversible lanes and traffic signal coordination. TSM also encourages automobile, public and private transit, ridesharing programs, and bicycle and pedestrian improvements as elements of a unified urban transportation system. Modal alternatives integrate multiple forms of transportation modes, such as pedestrian, bicycle, automobile, rail, and mass transit.

TDM focuses on regional means of reducing the number of vehicle trips and vehicle miles traveled as well as increasing vehicle occupancy. It facilitates higher vehicle occupancy or reduces traffic congestion by expanding the traveler's transportation options in terms of travel method, travel time, travel route, travel costs, and the quality and convenience of the travel experience.

Typical activities within this alternative reduce the amount of single occupancy vehicle trips by providing contract funds to regional agencies that are actively promoting ridesharing, maintaining rideshare databases, and providing limited rideshare services to employers and individuals. Promoting mass transit, or by facilitating non-motorized alternative means of transportation are two examples. TDM strategies may also include reducing the need for travel altogether through initiatives such as telecommuting. In some cases, TDM may also involve offering alternate work schedules, with the resultant greater travel flexibility producing a more even pattern of transportation network use, muting the effect of morning and evening rush hours.

Although TSM/TDM measures alone would not satisfy the purpose and need of the proposed project, the following TSM measures have been incorporated into the build alternatives for the proposed project:

- A single auxiliary lane would be constructed along southbound SR-125 extending from the Lemon Avenue on-ramp to the exit for the proposed connector.
- A single auxiliary lane would be constructed extending from the end of the proposed connector to the eastbound Kenwood Drive Off-ramp.

No-Build (No-Action) Alternative

The No Build Alternative assumes that no branch connectors would be constructed in the proposed project corridor and that no changes to the existing interchange configuration would occur. Traffic would continue to use local streets and cause queuing issues. The No Build Alternative would not be consistent with the 2050 RTP, which assumes the construction of the branch connector within the La Mesa community.

Comparison of Alternatives

After the public circulation period, all comments were considered, and Caltrans selected a preferred alternative and made the final determination of the project’s effect on the environment. Under the California Environmental Quality Act (CEQA), no unmitigable significant adverse impacts were identified. Caltrans has prepared a Mitigated Negative Declaration. Similarly, Caltrans determined the action would not significantly impact the environment. Caltrans, as assigned by the Federal Highway Administration (FHWA), has issued a Finding of No Significant Impact (FONSI) in accordance with the National Environmental Policy Act (NEPA).

IDENTIFICATION OF A PREFERRED ALTERNATIVE

After comparing and weighing the benefits and impacts of all of the feasible alternatives, including full consideration of functionality; community acceptance; environmental effects; traffic operations; mandatory design exceptions; and constructability; the project development team has identified Build Alternative D as the preferred alternative. Alternative B was also considered but would have required an EIR/EIS, while Alternative D would require an IS/EA leading to a Mitigated Negative Declaration (MND) / Finding of No Significant Impact (FONSI). The

additional right of way requirements and environmental impacts for Alternative B lead to a decision to move forward with Alternative D and eliminate Alternative B.

ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER DISCUSSION

In total, five build alternatives were considered for the proposed project. They were identified as Alternatives A through E. Only Alternative D was selected as a viable alternative.

Alternative A:

Alternative A proposed a fly-over structure with a left-hand entrance to SR-94. The fly-over structure would be 2,900 feet long and elevated over 50 feet. This alternative was eliminated due to the non-standard left-hand entrance, high cost, potential visual impacts, and potential noise impacts.

Alternative B:

Alternative B also proposed a fly-over structure, but with a right-hand entrance to SR-94. The fly-over structure would be 2,200 feet long and elevated over 50 feet. Alternative B was eliminated because of the high cost, potential visual impacts, and potential noise impacts.

Alternative C:

Alternative C was similar to Alternative B with a fly-over structure and a right- hand entrance; however, the fly-over structure would touch down west of the Campo Road Overcrossing. The flyover structure would be 1,900 feet long. Alternative C was eliminated because of high costs, potential visual impacts, and potential noise impacts.

Alternative E:

Alternative E proposed a concept known as a Texas U-turn. This alternative would construct one additional lane on the SB Spring Street Off-ramp which would loop left at Spring Street and travel opposite traffic. It would then join into EB SR-94 with a left-hand entrance. Alternative E was eliminated due to the non-conventional traffic movements, the limited single lane configuration, the slow design speed (25 mph), and the non-standard left-hand entrance.

PERMITS AND APPROVALS NEEDED

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

Agency	Permit/Approval	Status
United States Army Corps of Engineers	Section 404 Permit for filling or dredging waters of the United States.	Application for Section 404 is expected to take place during Design Phase, Jan. 1st, 2019
Regional Water Quality Control Board	Section 401 Permit for surface waters of the United States	Application for Section 401 is expected to take place during Design Phase, Jan. 1st, 2019
California Department of Fish and Wildlife	Section 1602 Permit for Streambed Alteration Agreement	Application for Section 1602 is expected to take place during Design Phase, Jan. 1st, 2019

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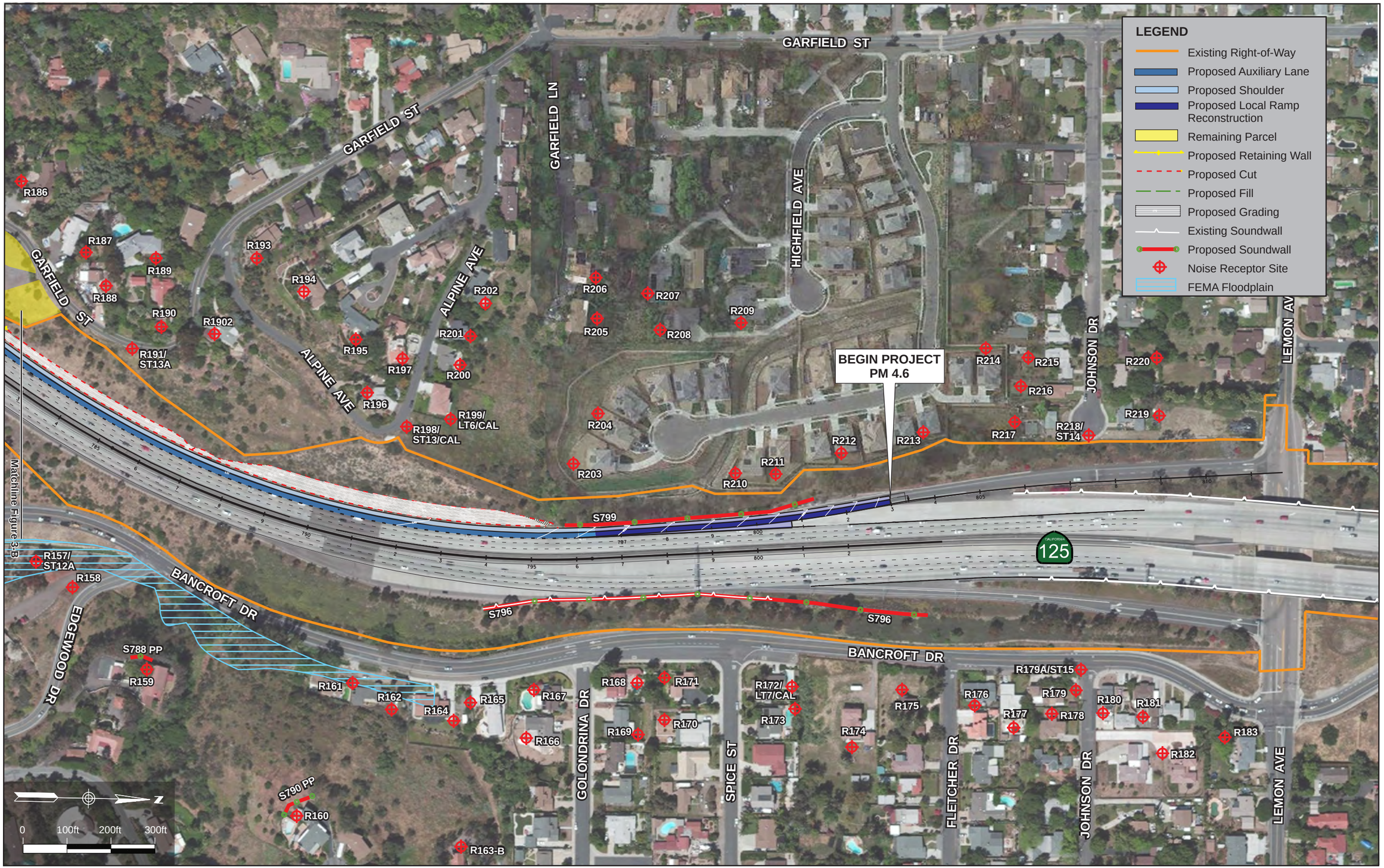


Figure 3-A
Project Features Map

Figure 3-B
Project Features Map

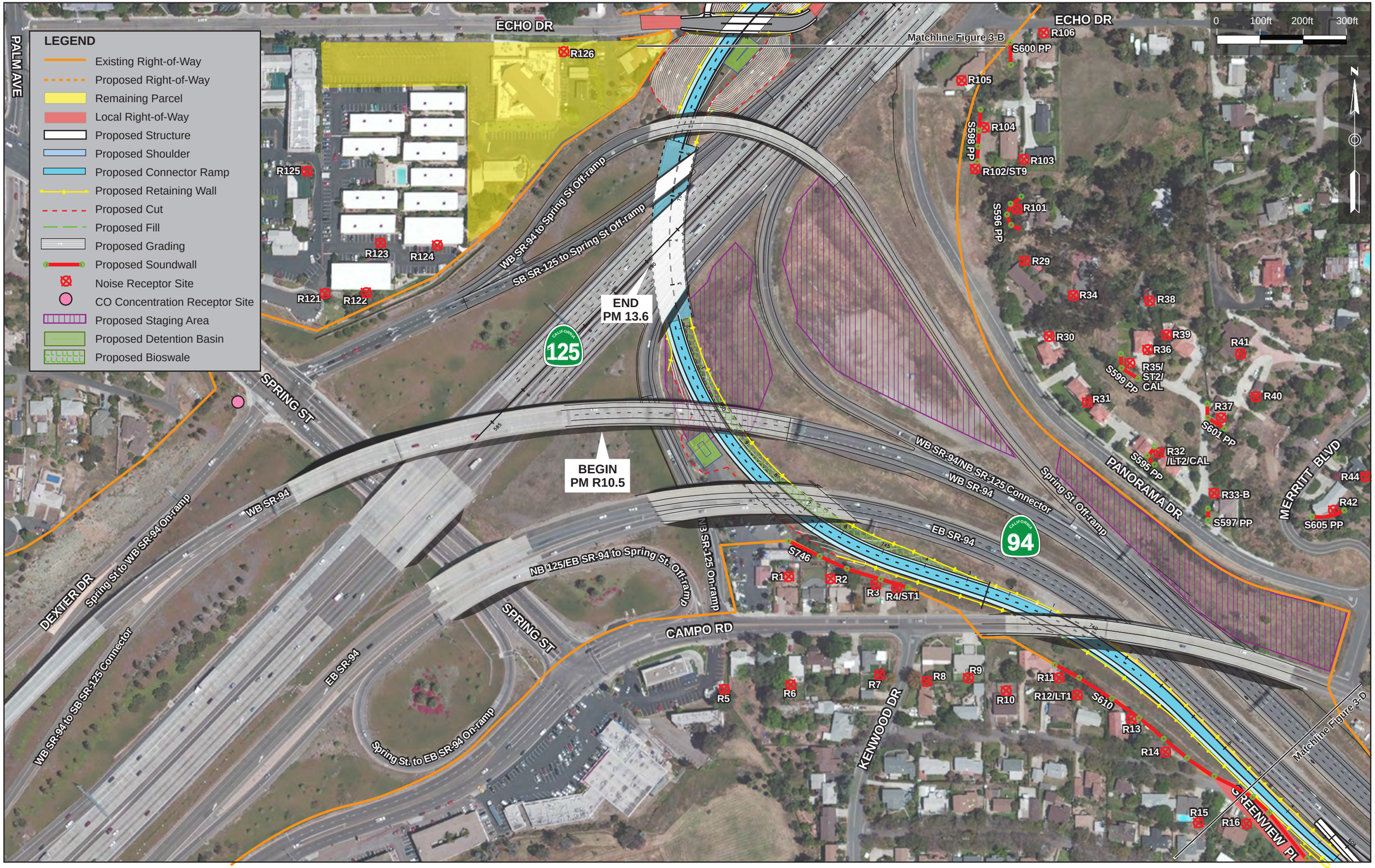


Figure 3-C
Project Features Map

Figure 3-D
Project Features Map

Figure 3-E
Project Features Map

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

This chapter explains the impacts that the proposed project would have on the human, physical and biological environments in the proposed project area. It describes the existing environment that could be affected by the proposed project and potential impacts.

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

Resources without Impacts:

Coastal Zone

The project site is not located within the coastal zone.

Wild and Scenic Rivers

There are no wild and scenic designated rivers within the project footprint.

Parks and Recreational Facilities

The project would not impact any parks or recreational facilities.

Farmlands/Timberlands

There are no farmlands and/or timberlands within the project footprint.

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, signed by the Director, which can be found in Appendix C of this document.

No minority or low-income populations that would be adversely affected by the proposed project have been identified. Therefore, this project is not subject to the provisions of EO 12898.

Paleontology

The project would not impact paleontological resources within the project vicinity.

Section 4(f)

The project would not impact Section 4(f) resources within the project vicinity. There are no 4(f) resources within a half mile of the proposed project.

Human Environment

2.1 Land Use

This section identifies adopted land use plans applicable to the proposed project and discusses potential land use related impacts. Information in this section is drawn from the Community Impact Assessment prepared for the proposed project, dated March 2015.

An examination of land use patterns can effectively convey the general form of a community's organizational structure, including where its residents live, work, and recreate. The Land Use Element is a required section of a municipality's General Plan that governs zoning and planning for the given region. The Land Use Element also defines where growth may occur within the region and identifies Specific Plans for areas of special interest, such as commercial centers, neighborhoods, and redevelopment areas within the city. By describing the existing and projected major land uses in the affected area and the surrounding region, the information can be used to "analyze any potential land use changes or land use conflicts associated with the proposed project" (Caltrans 1997). Specific topics within land uses include historic and existing land use patterns, farmlands, and development trends, as well as adopted planning goals and policies. Land use patterns also affect a community's "job/housing balance," which focuses on the need for a balance between employment generation and residential land uses.

In this chapter, the affected environment information for the study area and, where necessary, the area of primary impacts, are presented.

2.1.1 Existing and Future Land Use

The study area consists of both an area of primary impacts that extends 0.25 mile in each direction from the proposed changes to the freeway and interchange, and a wider region of secondary impacts. As shown in Figure 4, land uses within the larger study area are primarily a mixture of residential, commercial, industrial spaces, and open space uses.

Existing Land Use

SR-125 is a State Highway that currently runs from Otay Mesa Road (formerly State Route 905) in Otay Mesa near the United States–Mexico border to State Route 52 (SR-52) in the City of Santee. SR-94 is also a State Highway that currently runs from Interstate 5 (I-5) in downtown San Diego and continues east to the end of the freeway portion of the route just past SR-125 in the Spring Valley area. The non-freeway segment of SR-94 is Campo Road that continues east to Interstate 8 (I-8) near the unincorporated community of Boulevard. In the proposed project vicinity, SR-125 passes through the unincorporated community of Spring Valley before it junctions with SR-94. Near the western junction of SR-125 and SR-94, SR-125 briefly passes through the City of Lemon Grove and then enters the City of La Mesa.

Commercial uses are generally near the existing interchange of SR-125 and SR-94 and occur primarily within the unincorporated community of Spring Valley and within the City of Lemon Grove. Industrial areas are sparse but do occur within the unincorporated community of Spring Valley along Bancroft Drive in the vicinity of SR-94. Areas of undeveloped land (e.g., open space and/or habitat preserve) occur within the unincorporated community of Spring Valley at the south side of the intersection of Fairway Drive and Broadway, as well as within the City of La Mesa on the north side of High Street.

Residential uses are the most prevalent land use in the study area and are located within all affected jurisdictions. The majority of single-family residential uses are located within the City of La Mesa, north of the existing interchange of SR-125 and SR-94; however, areas immediately to the south of the existing interchange within the unincorporated community of Spring Valley also include areas of single-family residential uses. There are some multi-family residential areas north of the interchange within the City of La Mesa as well as to the south of the interchange within both the City of Lemon Grove and the unincorporated community of Spring Valley.

The primary impact area consists of generally the same types of land uses seen within the larger study area, with single-family residential areas present north, south, east, and west of the existing interchange. Multi-family residential uses are located at the intersection of Fairway Drive and Broadway and along Spring Place and Helix Street within the unincorporated community of Spring Valley, as well as in the vicinity of Spring Street north of the existing interchange within the City of La Mesa.

Commercial land uses within the primary impact area occur to the north along Campo Road within the unincorporated community of Valle de Oro but pockets of commercial uses are also located south of SR-94 within the unincorporated community of Spring Valley.

Future Land Uses/Development Trends

The study area is primarily built out in a relatively urbanized part of San Diego County, with few vacant developable parcels of land remaining. Some infill projects and redevelopment projects are proposed in the study area, as summarized in Table 2.

Table 2: Future Proposed Projects in the Study Area

	Project Name	Project Location	Project Description	Project Status
1	La Mesa Meadows Residential Development	City of La Mesa, just north of the intersection of Garfield Street and McKinley Court	31-unit single-family residential development on a former nursery site.	Under Construction
2	La Mesa Downtown Village Streetscape Improvement Project	Downtown La Mesa	Revitalization and beautification of the downtown area to enhance its sense of place, to improve its status as a destination, and to solidify its identity as La Mesa's City Center. This objective will be accomplished through the replacement and refurbishment of existing pedestrian infrastructure, installation of new amenities, and enhancement of pedestrian linkages.	Under Construction
3	Lemon Grove Avenue Realignment Project	City of Lemon Grove, Lemon Grove Avenue at SR-94	This project is key to the redevelopment of the City's Downtown Village Specific Plan. This project will realign Lemon Grove Avenue at SR-94, adding traffic lanes and improving access to and from SR-94, and reducing motorist delays and emissions.	Opening September 2015
4	SR-94/Euclid Avenue Interchange Improvements	City of San Diego, Euclid Avenue from Euclid Avenue to SR-94	Improvements to the interchange to enhance safety features through this corridor and the optimization of the level of service for both Euclid Avenue and SR-94 (S14009).	Unknown

The proposed project would not result in a large amount of land use conversion. The proposed project would consist of the construction of a freeway-to-freeway connector to allow direct SR-125 south to SR-94 east movements, and would be consistent with existing transportation uses. As a result of the ROW acquisitions for the proposed project, one single-family residence would be displaced through implementation of the proposed project. No businesses would be displaced as result of project implementation. For additional detail, see the Summary of Relocation Benefits in Appendix C. In total, approximately 0.90 acre of residential land, and 0.25 acre of vacant land would be converted to a transportation land use if the Build Alternative is selected.

Land uses within or directly adjacent to the primary impact area may experience short-term impacts from construction noise, dust, and storm water runoff, as well as long-term impacts from operational noise. Construction of the proposed project would unavoidably result in noise and dust generation. Residential neighborhoods and community facilities within the primary impact area, particularly those immediately adjacent to the project area, could experience temporary impacts related to construction noise and dust generation. This includes residents of the unincorporated communities of Spring Valley and Valle de Oro as well as the City of La Mesa. These temporary construction-related impacts are considered proximity impacts and would not be long-term in nature. Dust generation would be minimized by employing best management practices during construction such as regular watering, covering exposed dirt piles, and

maintaining the construction site. Depending on the locations of the staging areas, construction equipment also has the potential to affect views along SR-94 and SR-125 as well as local streets within the study area. If construction occurs after daylight hours, construction equipment that requires lighting could result in temporary visual impacts related to temporary light pollution.

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

The proposed SR-94/SR-125 connector project study area is composed of a variety of planned land uses in each of the adopted community plans. The County of San Diego General Plan (County of San Diego 2011) provides overall guidance for land use decisions within the County and contains the following elements: Land Use, Mobility, Conservation and Open Space, Housing, Safety, and Noise. The City of La Mesa 2012 General Plan (City of La Mesa General Plan 2012) is the City of La Mesa's vision for the future for the next 20 years, and documents the goals, objectives, and policies necessary to achieve this vision. The following elements are contained within the plan: Land Use and Urban Design, Circulation, Conservation and Sustainability, Recreation and Open Space, Historic Preservation, Noise, Safety, Public Services and Facilities, Health and Wellness, and Housing. The Spring Valley Community Plan (County of San Diego 2011) was created to address issues, characteristics and visions of the Spring Valley Community within the greater San Diego County planning area. The Spring Valley Community Plan contains the following elements: Land Use, Mobility, Conservation and Open Space, Safety, and Noise. In addition to the Land Use and Urban Design Element the La Mesa Municipal Code is the principal tool used by La Mesa to implement land use policy.

As San Diego County is composed of multiple communities, there are accompanying community plans that identify specific goals for each region. As discussed previously, the planning community of Spring Valley is located within the primary impact area.

County of San Diego General Plan

The existing Land Use Element of the County of San Diego General Plan "provides a framework to accommodate future development in an efficient and sustainable manner that is compatible with the character of unincorporated communities and the protection of valuable and sensitive natural resources" (County of San Diego 2011). The County of San Diego General Plan Regional Categories Map Figure LU-1 designates the area surrounding the proposed project as the Village regional category, which allows the most intensive land uses in Unincorporated San Diego County Additionally, the Mobility Element of the General Plan "provides a framework for a balanced, multi-modal transportation system for the movement of people and goods within the unincorporated areas of the County of San Diego (County of San Diego 2011). Specific policies in the General Plan of particular relevance to the project are summarized in Table 3 on Page 23.

In addition, the unincorporated community of Spring Valley and the unincorporated community of Valle de Oro have Community Plans that are related to the County of San Diego General Plan.

Spring Valley Community Plan

The Spring Valley Community Plan Circulation and Mobility Element does not recognize any specific issues associated with integrated mobility and access or the local road network that could be affected by the proposed project. Issue CM 11.2 of the Spring Valley Community Plan states that "The SR-125 ramp to SR-94 eastbound currently requires drivers to get off on Spring

Street and negotiate a hairpin turn onto a ramp that has traffic exiting for Spring Street. Both drivers traveling onto SR-94 and Spring Street have to exchange lanes to get onto the freeway or exit Spring Street. Provision of this ramp is included in the 2030 Regional Transportation Plan and currently programmed for 2020 implementation" (County of San Diego 2011). Specific policies in the Spring Valley Community Plan of particular relevance to the project are summarized in Table 3.

Valle de Oro Community Plan

Spring Valley was divided into two separate planning areas, with Valle de Oro North of SR-94 and Spring Valley to the south in 1989 (County of San Diego 2011). The Valle de Oro Community Plan states the general goal of its mobility element to "Provide a balanced, coordinated transportation system which would provide safe, efficient circulation within and through the community that would effectively connect Valle de Oro to neighboring communities, and which would complement existing and future land use patterns," which the Community Plan aims to promote through a number of policies. Those relevant to the proposed project including the following Mobility Elements (ME):

- Require design of all road improvements that maximizes environmental and aesthetic consideration consistent with safety needs.
- Support timely and adequate public notification of all proposed changes in the community transportation system.
- The County shall request Caltrans to schedule the construction of the westbound SR-94 to northbound SR-125 and southbound SR-125 to eastbound SR-94 connector ramps.

City of La Mesa General Plan

The City of La Mesa General Plan Land Use and Urban Design Element is meant to address the major issues that affect the physical form and development of the community" (City of La Mesa 2011). The General Plan Circulation Element recognizes that although La Mesa's central location enables access to many destinations through three freeways and two trolley lines, this also creates physical barriers to inner-city travel. The Circulation element focuses on a complete and equitable transportation system, including "Complete Streets" That balance individual mobility and universal access (City of La Mesa 2012):

City of La Mesa Bicycle Facilities and Alternative Transportation Plan

The purpose of the City of La Mesa Bicycle Facilities and Alternative Transportation Plan is to "promote a safe, convenient and efficient environment for bicycle and pedestrian travel that encourages the use of public streets, off-street facilities and public transit" (City of La Mesa 2012) . Based on community input, the following goals and objectives were identified:

a) The community desires a comprehensive bikeway system that provides a network of facilities serving destinations throughout the City.

b) The community desires that sidewalk continuity and pedestrian safety are given priority during transportation facility improvements.

c) As the City continues to encourage active lifestyles, more programs are needed to educate residents about the health benefits of cycling and walking.

d) Overall enforcement and education of both motorists and cyclists is needed to improve safety and awareness throughout the City.

e) Develop a Complete Streets framework that encourages all modes of transportation and reduces traffic congestion, increases alternative transportation options, connectivity and improves public health and safety.

City of La Mesa Sidewalk Master Plan

The City of La Mesa Sidewalk Master Plan seeks to improve funding resources to improve sidewalk facilities throughout the City to improve connectivity, provide infrastructure, and improve safety. Currently, the City of La Mesa has created a Sidewalk Master Plan Map that shows where sidewalks are located, and where planned sidewalks would be constructed (City of La Mesa 2008).

Regional Transportation Plan/Sustainable Communities Strategy

The 2050 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS), “Our Region. Our Future,” was developed by SANDAG and adopted by its Board of Directors in 2011. “Our Region. Our Future,” is a long-range transportation plan with a 2050 horizon year, and includes plans to invest an estimated $214 billion in local, state, and federal transportation funds in the next 40 years, with 34 percent of these funds going to highway improvements such as the proposed project (SANDAG 2011). “Our Region. Our Future.” incorporates guidelines from the SANDAG Regional Comprehensive Plan, a “blueprint” for regional development (SANDAG 2011). As required by Senate Bill (SB) 375, the SCS demonstrates how the region would reduce greenhouse gas emissions to state-mandated levels over time. The SCS includes four topic areas: (1) land use, housing, and habitat conservation; (2) transportation networks including highways, transit, and local streets and roads; (3) transportation demand management strategies; and (4) transportation system management programs and policies (SANDAG 2011).

Regional Transportation Improvement Program (RTIP)

The RTIP, also developed by SANDAG, is a multi-billion dollar, multi-year program of proposed projects for major highway, arterial, transit, and bikeway projects, including the TransNet Program of projects. The RTIP covers 5 fiscal years and incrementally implements the RTP. SANDAG approved the 2014 RTIP, which covers Fiscal Years 2014-2019. The SANDAG Board of Directors adopted the 2014 RTIP on September 26, 2014. The proposed project is included in the 2014 RTIP as MPO ID: Cal 68. Other projects located within the study area are the following:

- Lemon Grove Avenue at SR-94 - a key project in the redevelopment of the city's Downtown Village Specific Plan, would realign Lemon Grove Avenue at SR-94 adding traffic lanes and improving access to and from SR-94, reducing motorist delays and emissions
- Euclid Avenue from Euclid Avenue to SR-94 - improvements to the interchange to enhance safety features through this corridor and the optimization of the level of service for both Euclid Avenue and SR-94.

Multiple Species Conservation Program

The County of San Diego, City of La Mesa, and the Unincorporated Community of Spring Valley participate in the Multiple Species Conservation Program (MSCP), a comprehensive habitat conservation planning program for San Diego County. The City of La Mesa has entered into an agreement with the United States Fish and Wildlife Service and the California Department of Fish and Wildlife to establish the La Mesa Sub-area Plan for Habitat Conservation. The La Mesa Sub-area Plan lists threatened and endangered species which are subject to conservation within the MSCP.

Environmental Consequences

The County of San Diego General Plan, City of La Mesa General Plan, and Spring Valley Community Plan identify specific goals and policies for the various communities within the study area. A detailed listing of relevant goals and policies and the proposed project's consistency with those policies is provided in Table 4. The proposed project would not result in any substantial land use changes within the study area, and would minimize effects to adjacent existing land uses to the greatest extent possible. Additionally, applicable community plans within San Diego County reflect this larger goal of the provision of a transportation system that provides convenient linkages to the rest of the metropolitan region. Therefore, the project would be generally consistent with the County and community plans and policies established for the County of San Diego within the project study area.

No-Build Alternative

The No-Build Alternative proposes no improvements and will not provide the new transportation options discussed in the Community Plans.

Table 3: Consistency with State, Regional, and Local Plans and Programs

Policy	Build Alternative	No-Build Alternative
County of San Diego General Plan		
Prioritize infrastructure improvements and the provision of public facilities for Villages and community cores as sized for the intensity of development allowed by the Land Use Map.	**Consistent.** The proposed project would be located within a Village area as designated by the County of San Diego General Plan Land Use Element. Infrastructure improvements would be sized to be consistent with the intensity of development allowed for in the area.	**Not Consistent.** The transportation system would remain as it does in the existing condition.
Adequate and sustainable infrastructure, public facilities, and essential services that meet community needs and are provided concurrent with growth and development.	**Consistent.** The proposed project would accommodate traffic generated by current and future local and regional growth.	**Not Consistent.** The transportation system would remain as it does in the existing condition.

Policy	Build Alternative	No-Build Alternative
Plan and site infrastructure for public utilities and public facilities in a manner compatible with community character, minimize visual and environmental impacts, and whenever feasible, locate any facilities and supporting infrastructure outside preserve areas. Require context sensitive Mobility Element road design that is compatible with community character and minimizes visual and environmental impacts; for Mobility Element roads identified in Table M-4, an LOS D or better may not be achieved.	**Consistent.** The proposed project would be compatible with the community character of the surrounding area, and would minimize visual and environmental impacts to the greatest extent possible.	**N/A**
A safe and efficient road network that balances regional travel needs with the travel requirements and preferences of local communities.	**Consistent.** The proposed project would improve the safety along Campo Road and Spring Street, as well as SR-94 and SR-125. Drivers currently negotiate a hairpin turn onto a ramp that has traffic exiting at Spring Street. By constructing the southbound SR-125 to eastbound SR-94 direct connector, circulation would improve local streets including Campo Road and Spring Street, and the efficiency of the SR-94 and SR-125 connection would also be improved.	**Not Consistent.** The transportation system would remain as it does in the existing condition.
Provide a public road network that accommodates travel between and within community planning areas rather than accommodating overflow traffic from State highways and freeways that are unable to meet regional travel demands.	**Consistent.** The proposed project would accommodate traffic generated by current and future local and regional growth. After construction of the proposed project is completed, overflow traffic from these State highways attempting to move from southbound SR-125 to eastbound SR-94 would no longer spill onto local streets within the Community Planning areas of Spring Valley or Valle de Oro.	**Not Consistent.** The transportation system would remain as it does in the existing condition.
Provide an interconnected public road network with multiple connections that improve efficiency by incorporating shorter routes between trip origin and destination, disperse traffic, reduce traffic congestion in specific areas, and provide both primary and secondary access/egress routes that support emergency services during fire and other emergencies.	**Consistent.** The proposed project would specifically disperse traffic congestion along Spring Street and Campo Road by constructing a direct freeway-to-freeway connector between southbound SR-125 and eastbound SR-94. This direct connection provided an interconnected public road network that would improve efficiency as it would eliminate vehicles exiting the freeway and entering the local roadway network to make this movement. As a result, traffic congestion is expected to be reduced.	**Not Consistent.** The transportation system would remain as it does in the existing condition.

Policy	Build Alternative	No-Build Alternative
Consider narrower rights-of-way, flexibility in design standards, and lower design speeds in areas planned for substantial development in order to avoid bisecting communities or town centers. Reduce noise, air, and visual impacts of new freeways, regional arterials, and Mobility Element roads, through landscaping, design, and/or careful location of facilities.	**Consistent.** The proposed project would incorporate elements to avoid dividing or distribution of vehicles to the surrounding community. In addition, impacts to air quality, noise, and aesthetics would be reduced through landscaping, design, and location to the greatest extent possible.	**Not Consistent.** The transportation system would remain as it does in the existing condition.
A road network that provides adequate capacity to reasonably accommodate both planned land uses and regional traffic patterns, while supporting other General Plan goals such as providing environmental protections and enhancing community character.	**Consistent.** One of the objectives for the proposed project would be to accommodate traffic generated by current and future local and regional growth, which would thereby reduce congestion on local streets, SR-94, and SR-125. This improvement in operation of these transportation facilities would potentially improve economic conditions, quality of life, and environmental conditions in the study area.	**Not Consistent.** The transportation system would remain as it does in the existing condition.
New or expanded transportation facilities that are phased with and equitably funded by the development that necessitates their construction.	**Consistent.** The proposed project is expected to accommodate existing and future local and regional growth, and would be funded under the Constrained Revenue scenario outlined in the 2050 RTP.	**Not Consistent.** The transportation system would remain as it does in the existing condition.
Provide an interconnected and appropriately scaled local public road network in Village and Rural Villages that reinforces the compact development patterns promoted by the Land Use Element and individual community plans.	**Consistent.** The study area is within a Village area as identified in the County of San Diego General Plan Land use Element. As such, implementation of the proposed project would ensure that Campo Road and Spring Street are properly scaled to the local public road network, and are not forced to accommodate overflow traffic from the lack of a direct freeway-to-freeway connector between southbound SR-125 and eastbound SR-94.	**Not Consistent.** The transportation system would remain as it does in the existing condition.
A multi-modal transportation system that provides for the safe, accessible, convenient, and efficient movement of people and goods within the unincorporated County.	**Consistent.** The proposed project would improve safety and efficiency on local streets and arterials as well as on eastbound SR-94 and southbound SR-125 within unincorporated San Diego County.	**Not Consistent.** The transportation system would remain as it does in the existing condition.

Policy	Build Alternative	No-Build Alternative
Coordinate with regional planning agencies, transit agencies, and adjacent jurisdictions to provide a transportation system with the following: • Sufficient capacity consistent with the County General Plan Land Use Map; • Travel choices, including multiple routes and modes of travel to provide the opportunity for reducing vehicle miles traveled; • Facilities sited and designed to be compatible with the differing scales, intensities, and characteristics of the unincorporated communities while still accommodating regional, community, and neighborhood travel demands; and • Maximized efficiency to enhance connectivity between different modes of travel.	**Consistent.** The proposed project is identified and approved in the adopted 2050 RTP provided by SANDAG under the Constrained Revenue scenario as a freeway connector improvement. The proposed project would be designed to accommodate project growth in the study area, and would reduce vehicle miles travelled as it would eliminate the need to exit the freeway to make the southbound SR-125 to eastbound SR-94 movement. Implementation of the proposed project would ensure that Campo Road and Spring Street are properly scaled to the local public road network, and are not forced to accommodate overflow traffic from the lack of a direct freeway-to-freeway connector between southbound SR-125 and eastbound SR-94.	**Not Consistent.** The transportation system would remain as it does in the existing condition.
City of La Mesa General Plan		
A comprehensive, flexible transportation system that is functional, safe, accessible, and attractive.	**Consistent.** The proposed project would accommodate traffic generated by current and future local and regional growth and improve the operations of local streets and arterials as well as eastbound SR-94 and southbound SR-125.	**Not Consistent.** The transportation system would remain as it does in the existing condition.
Apply a “Complete Streets” approach to future transportation infrastructure projects.	**Consistent.** The proposed project would adhere to the “Complete Streets” approach by improving the efficiency and safety of Campo Road, Spring Street, and other local roads in the vicinity of the proposed project.	**Not Consistent.** The transportation system would remain as it does in the existing condition.
Freeway right-of-way that is well-designed and attractively landscaped. Ensure that freeways in La Mesa, and all of the access and exits points, contribute to the urban design and community identity of the City of La Mesa.	**Consistent.** The proposed project would be designed to incorporate freeway right-of-way with attractive landscaping cohesive with the surrounding community. The proposed project would include the construction of a direct freeway-to-freeway connector, and would be designed to contribute to the urban design and community identity of the City of La Mesa.	**N/A**

Policy	Build Alternative	No-Build Alternative
Work with Caltrans to ensure that the environmental impact of future freeway construction projects is mitigated at the time of construction.	**Consistent.** The proposed project is required to undergo the environmental review process pursuant to NEPA and CEQA, and will comply with any mitigation proposed for the project.	**N/A**
Work with Caltrans to eliminate safety hazards and improve connectivity across freeways and adjacent on-and off-ramps for bicyclists and pedestrians in La Mesa consistent with the La Mesa Freeway Crossing Study.	**Consistent.** The proposed project would construct a direct freeway-to-freeway connector between SR-125 and SR-94 that would improve safety on local roads including Spring Street and Campo Road that are currently used to connect southbound SR-125 to eastbound SR-94. The proposed project would be expected to eliminate safety hazards consistent with the La Mesa Freeway Crossing Study.	**Not Consistent.** The transportation system would remain as it does in the existing condition.
Work with Caltrans to enhance the appearance of the freeway infrastructure within the City limits.	**Consistent.** Alternative D of the proposed project would be constructed as an underpass that would reduce the appearance of freeway infrastructure within the City limits.	**N/A**
The City of La Mesa will actively participate in regional planning efforts, and strive to implement Regional Growth Management Strategies, including SANDAG's Sustainable Communities Strategy and Regional Comprehensive Plan, which directly relate to City interests.	**Consistent.** The proposed project is identified and approved in the approved 2050 RTP provided by SANDAG under the Constrained Revenue scenario as a freeway connector improvement.	**Not Consistent.** The transportation system would remain as it does in the existing condition.
Collaborate with Caltrans and MTS to improve the appearance and maintenance of landscaping within the transportation right-of-way.	**Consistent.** The proposed project would comply with all Caltrans requirements to improve the aesthetics of the transportation right-of-way, including landscaping maintenance.	**Not Consistent.** The transportation system would remain as it does in the existing condition.
City of La Mesa Sidewalk Master Plan		
Construct sidewalks on Panorama Drive and Echo Drive.	**Consistent.** The proposed project would include construction of the Panorama Drive and Echo Drive overcrossings, and would include construction of associated sidewalks. Sidewalks are proposed on each side of Echo Drive and Panorama Drive within the project limits.	**Not Consistent.** The transportation system would remain as it does in the existing condition.

Policy	Build Alternative	No-Build Alternative
City of La Mesa Bicycle Facilities and Alternative Transportation Plan		
Construct Class 3 Bike Routes along Panorama Drive and Mariposa Street.	**Consistent.** Although the proposed project does not include construction of Class 3 bike routes, project implementation would relieve congestion on local streets and promote safety for bicyclists and would not preclude the future construction of bike routes along the designated roadways.	**Not Consistent.** The No Build Alternative would not be consistent, although it would not preclude the future construction of bike routes along the designated roadways.
Spring Valley Community Plan		
Provide the best possible traffic flow within and through Spring Valley.	**Consistent.** The proposed project would improve the operational deficiencies in the southbound SR-125 to eastbound SR-94 connection, thereby improving traffic flow on local streets (Spring Street and Campo Road), by constructing a direct freeway-to-freeway connection to relieve congestion on local streets.	**Not Consistent.** The transportation system would remain as it does in the existing condition.
An appropriate interchange for SR-125 southbound to SR-94 eastbound.	**Consistent.** Implementation of the proposed project would result in the construction of a freeway-to-freeway connector to allow direct SR-125 southbound to SR-94 eastbound movements.	**Not Consistent.** The No Build Alternative would not be consistent as no interchange would be constructed.
Coordinate with SANDAG and Caltrans to implement the 2020 RTP and the planned interchange at SR-94 and SR-125 by 2020.	**Consistent.** The proposed project is identified and approved in the approved 2050 RTP under the Constrained Revenue scenario as a freeway connector improvement. The proposed project is coordinated through SANDAG and Caltrans.	**Not Consistent.** The No Build Alternative would not be consistent as the RTP would not be implemented.
Valle de Oro Community Plan		
Provide a balanced, coordinated transportation system which will provide safe, efficient circulation within and through the community that will effectively connect Valle de Oro to neighboring communities, and which will complement existing and future land use patterns.	**Consistent.** The proposed project would accommodate traffic generated by current and future local and regional growth and improve the operations of local streets and arterials by constructing a direct freeway-to-freeway connector between southbound SR-125 and SR-94. The proposed project is intended to provide safe and efficient circulation along the highway system.	**Not Consistent.** The transportation system would remain as it does in the existing condition.

Policy	Build Alternative	No-Build Alternative
Require design of all road improvements that maximizes environmental and aesthetic consideration consistent with safety needs.	**Consistent.** The proposed project would consider improved safety and environmental/aesthetic considerations to the greatest extent possible. Alternative D of the proposed project would be constructed as an underpass that would reduce the appearance of freeway infrastructure within the City limits. The proposed project would comply with all Caltrans requirements to improve the aesthetics of the transportation right-of-way, including landscaping maintenance.	**N/A**
Support timely and adequate public notification of all proposed changes in the community transportation system.	**Consistent.** During construction of the proposed project, as part of the TMP, the surrounding community would be notified of any construction-related changes in the transportation network as soon as possible.	**N/A**
The County shall request Caltrans to schedule the construction of the westbound SR-94 to northbound SR-125 and southbound SR-125 to eastbound SR-94 connection ramps as soon as possible.	**Consistent.** The proposed project includes construction of a direct freeway-to-freeway connector between southbound SR-125 and eastbound SR-94. However, the project does not include construction of a connector between westbound SR-94 and northbound SR-125.	**Consistent.** The proposed project would be consistent and would not preclude the future construction of a westbound SR-94 to northbound SR-125 connection ramp.

City = City of La Mesa
County = San Diego County
LOS = level of service
SR-94 = State Route 94
SR-125 = State Route 125
RTP = Regional Transportation Plan
SANDAG = San Diego Association of Governments
CEQA = California Environmental Quality Act
NEPA = National Environmental Policy Act
MTS = Metropolitan Transit System
Caltrans = California Department of Transportation
TMP = Traffic Management Plan

Avoidance, Minimization, and Mitigation Measures

The proposed project would be consistent with the planned land uses in the study area, as well as the goals, policies, and measures described in the study area's planning documents. Therefore, no mitigation measures would be necessary.

2.2 GROWTH

Regulatory Setting

The Council on Environmental Quality (CEQ) regulations, which established the steps necessary to comply with the National Environmental Policy Act (NEPA) of 1969, requires evaluation of the potential environmental effects of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations (40 Code of Federal Regulations [CFR] 1508.8) refer to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (CEQA) also requires the analysis of a project's potential to induce growth. The CEQA guidelines (Section 15126.2[d]) require that environmental documents "…discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment…"

Affected Environment

Information in this section is drawn from the Community Impact Assessment prepared for this project, dated March 2015.

The proposed project would traverse a highly urbanized part of eastern San Diego County. The majority of the study area is considered to be developed with urban uses, and there are few vacant developable parcels of land remaining within the study area. As of 2008, an estimated 65 percent of the East Suburban MSA (Major Statistical Area), which includes the study area, was considered developed, with 4.8 percent available for development and the remaining 30.2 percent undevelopable. Areas east of Interstate 5 and along SR-94 and SR-125 are developed with lower-density residential and commercial uses. Redevelopment is likely to occur in this area; however, a limited amount of new construction may also occur in this area.

Population forecasts published by SANDAG through 2050 suggest that population growth and its associated development will continue in the study area and region. The population within the County of San Diego is expected to increase, with the change in growth estimated at 40 percent over the 42-year period from 2008 to 2050. In comparison to the general population growth trend for San Diego County, the City of La Mesa is forecast to experience a slightly lesser degree of growth by 2050 while unincorporated San Diego County is expected to experience a slightly greater degree of growth through 2050. However, this growth is expected at a slower pace than in previous years.

Environmental Consequences

The proposed project would improve the operations of local streets and arterials and would accommodate traffic generated by current and future local and regional growth, and is not anticipated to affect development trends in the area.

Growth would occur regardless of the proposed freeway improvements, and the project would not substantially affect the location, rate, type, or amount of growth in the project vicinity due to other limits on growth, including land use controls within local and regional plans and policies, and the highly urbanized nature of the surrounding land uses.

Future growth associated with the project is not considered reasonably foreseeable, as the majority of the study area is already developed, and areas currently undeveloped are planned for growth consistent with local land use plans.

<u>No-Build Alternative</u>

The No-Build alternative will not influence growth or cause growth related impacts. No further infrastructure will be provided that could result in growth or growth related impacts.

Avoidance, Minimization, and/or Mitigation Measures

The proposed project would not result in a substantial growth-related impact. Therefore, no avoidance, minimization, or mitigation measures would be necessary.

2.3 COMMUNITY IMPACTS

2.3.1 Community Character and Cohesion

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.

Affected Environment

Information in this section is drawn from the Community Impact Assessment prepared for this project, dated March 2015.

Community cohesion is the degree to which residents have a "sense of belonging" to their neighborhood; a level of commitment of residents to the community; or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time. Cohesive communities have been regularly linked to certain social characteristics such as high ratios of owner-occupied single-family residences, frequent interpersonal contact, ethnic homogeneity, and shared goals. Neighborhoods with residential stability are also indicative of areas with high community cohesion.

Demographics

Selected demographic data for the Study Area, including characteristics of age, ethnicity, household size, and length of residency for those residing in the area are described below. Census tracts referenced within text below are shown on Figure 4.

Age

Areas with high proportions of older adults are indicative of places with elevated community cohesion, as older adults generally show higher levels of community and civic involvement than younger residents. According to the 2008–2012 ACS, the census tracts within the study area on

average had a similar proportion of persons younger than 19 than the County of San Diego as a whole. The City of La Mesa had a smaller population of individuals under 19 while the unincorporated community of Spring Valley had a larger population of individuals under 19 than the County of San Diego as a whole. The median age for Census Tracts 137.01 and 152.00 are substantially higher than any other census tracts as well as the County of San Diego. Similarly, both of these populations had a much higher percentage of individuals over the age of 64 than the County overall. The City of La Mesa and the unincorporated community of Spring Valley demonstrated similar age distribution profiles in comparison to San Diego County overall. Generally, these statistics suggest a higher proportion of older and/or retired persons in the eastern portion of the study area.

Race and Ethnicity

All census tracts within the study area had a majority White population within the exception of Census Tract 144.00 (39.2 percent). This census tract also demonstrates the highest Black and Hispanic population percentage (28.0 and 41.9 percent, respectively), and highest minority population. The unincorporated community of Spring Valley has a lower White population and a substantially higher black population than San Diego County as a whole. The City of La Mesa has a lower minority population percentage than San Diego County as a whole, and has a substantially lower Hispanic population than the County overall. Generally, the proportion of minority populations was greater in the southwestern part of the study area, within Census Tract 144.00.

Household Size

Of the census tracts in the study area, Census Tract 137.02 exhibits the highest number of persons per household, 3.23, which is substantially higher than the San Diego County average of 2.75. The unincorporated community of Spring Valley also exhibits a high average household occupancy of 3.01 in comparison to the County average of 2.75. In contrast, the City of La Mesa and Census Tract 149.02 have a substantially lower average household occupancy than the County overall, with an average occupancy of 2.30 and 2.16, respectively. Persons per household were highest for Census Tract 137.02 and the unincorporated community of Spring Valley.

Housing Tenure

It is assumed that those areas exhibiting higher concentrations of owner-occupied residential units would exhibit relatively higher levels of community cohesion due to the collected vested interest of area homeowners to create a welcoming, safe, and inviting environment for the safety of their families and the benefit of property values. Areas exhibiting longer homeowner tenures are expected to have higher levels of community cohesion due to homeowners being actively engaged in their community for a longer period of time. In San Diego County, homeowners and renters have most commonly lived in their home since 1969 or earlier. This same pattern holds true across the entire study area. Only Census Tract 149.01 and the City of La Mesa have some homeowners that moved in 2010 or later, while only the unincorporated community of Spring Valley has a very small portion of its renter population that moved in 2010 or later. Census Tract 146.02 demonstrates a greater proportion of individuals that moved in between 2000 and 2009 than some of the other census tracts throughout the study area. Zero homeowners within Census Tract 144.00 report having moved in between 1970 and 1979. Census Tract 144.00 is the only census tract within the study area that does not report the highest proportion of homeowners as having lived in their place of residence since 1969 or

earlier. Conversely, Census Tract 152.00 demonstrates a substantially higher proportion of residents that moved in during 1969 or earlier than any other census tract.

Environmental Consequences

Community cohesion throughout the vast majority of the project area is not likely to be diminished, as the proposed project would not divide existing neighborhoods, nor would it separate residences from community facilities. One residential displacement would occur as a result of the proposed project. However, no negative effects to existing public facilities are anticipated.

The project area is considered to be largely urbanized. The proposed project would not create new geographic or social barriers that may hinder interaction, as it is an improvement of an already existing transportation corridor. The proposed project would help to enhance connections by providing better access to a number of community facilities, residential neighborhoods, and commercial centers. This could potentially improve cohesion in the respective communities by increasing the use of public facilities and pedestrian activity.

From a community cohesion standpoint, the potential for higher traffic volumes passing through the proposed interchange as a result of increased operational efficiency may slightly affect the suburban character of these communities. However, the increased traffic volumes would not be considered a substantial change to the existing connection between southbound SR-125 and eastbound SR-94. Implementation of the proposed project would direct traffic through the interchange without diverting a portion of the traffic onto surface streets. The decrease in automobile queuing, reduction in noise from braking and accelerating, and improvements to air quality would prove beneficial to the community.

The aesthetic character of the community would be altered as a result of the proposed project. Impacts to aesthetics would be reduced through landscaping and design. The Build Alternative would be constructed as an underpass that would reduce the appearance of freeway infrastructure within the area. In addition, the proposed project would comply with all Caltrans requirements to improve the aesthetics of the transportation right-of-way, including landscaping maintenance.

<u>No-Build Alternative</u>

The No-Build Alternative proposes no improvements and will not result in changes to community character and cohesion.

Avoidance, Minimization, and/or Mitigation Measures

The proposed project would not result in any substantial effects related to community character and cohesion, and therefore, no avoidance, minimization, or mitigation measures would be necessary.

2.4 RELOCATIONS AND REAL PROPERTY ACQUISITION

Regulatory Setting

Caltrans' Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 Code

of Federal Regulations (CFR) Part 24. The purpose of 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. Please see Appendix C for a summary of the RAP.

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 for a copy of the Caltrans' Title VI Policy Statement.

Affected Environment

Information in this section is drawn from the Community Impact Assessment prepared for this project, dated March 2015.

The proposed project would require eight partial parcel acquisitions and two full parcel acquisitions to construct a proposed sound barrier. Construction of the proposed project would require the acquisition of private property, including one single-family residence, for ROW (Right of Way) requirements.

Proposed project activities are mostly within Caltrans Right of Way (ROW). The existing ROW in the proposed project area is adequate within the interchange, but is tightly constrained along SR-125 and SR-94 beyond the interchange. Partial and full ROW acquisitions are required from both public and private property within the proposed project limits. The acquisitions mentioned above are necessary to construct the freeway connector for SB SR-125 to EB SR-94 and its associated improvements, including the proposed sound walls that would require partial acquisition of five properties. Portions of City ROW and open space would be relinquished to the State. Full acquisitions are associated with one existing residential parcel and one existing vacant parcel. Table 4, below, summarizes the proposed project's ROW acquisitions.

Table 4: Proposed Right-of-Way Acquisitions

Parcel	Owner	Land Use	Acquisition Area (sf)
Partial Acquisitions			
APN 494-760-1500	Private Owner	Residential	1,134
APN 494-760-1600	Private Owner	Residential	71
APN 494-760-1700	Private Owner	Residential	1,277
APN 494-890-1000	Private Owner	Residential	573
APN 494-890-1400	Private Owner	Residential	9
APN-499-491-2200	Private Owner	Residential	3,001
APN 499-491-0900	Private Owner	Residential	3,576
Green View Place	County of San Diego	Public Property/Local Right-of-Way	12,396
Mariposa Street Right-of-Way	City of La Mesa	Public Property/Local Right-of-Way	638
Full Acquisitions			
APN 499-491-3800	Private Owner	Residential	14,871
APN 504-311-3200	Private Owner	Vacant	10,989

Source: T.Y. Lin International (2014).
APN = Assessor's Parcel Number
N/A = not applicable
sf = square feet

Environmental Consequences

According to the Draft Relocation Impact Memorandum (DRIM) (November 2012), the full acquisition of one single-family residence would result in one relocation.

No-Build Alternative

The No-Build Alternative proposes no improvements and will not require property acquisitions.

Avoidance, Minimization, and/or Mitigation Measures

Relocation assistance shall be provided by Caltrans. Replacement properties for the potential acquisitions have not been identified at this time. However, relocation assistance payments and counseling shall be provided to affected persons and businesses in accordance with the Relocation Assistance Act, as amended.

Relocation assistance payments and counseling shall be provided to persons, businesses, agricultural parcels, or nonprofit organizations in accordance with the Relocation Assistance Act. Additionally, Caltrans shall coordinate with all displaced persons and shall initiate special financial and/or advisory services through ROW programs, including buy- and lease-back programs for businesses subject to displacement, last resort housing, and SANDAG's Board Policy No. 021 (Acquisition of Real Property Interests and Relocation Assistance) for relocating firms to economically viable locations.

2.5 UTILITIES/EMERGENCY SERVICES

Affected Environment

Owners of utilities in the project area are AT&T, Cox Communications, the City of La Mesa, the County of San Diego, Helix Water District, and San Diego Gas & Electric (SDG&E). Each of these utilities would be affected by the proposed project. A conservative approach was taken to identify all possible utility impacts and associated costs. Most utility companies affected by the project would design and construct their own utility relocations. The total utility cost is estimated at $2.6 million. A determination of prior rights should be conducted in the next phase of the project to determine cost liability for each utility.

Environmental Consequences

During construction temporary impacts to emergency services would include temporary road closures requiring the use of detours. This could increase response times to certain locations.

Post-construction, the project would improve access from southbound SR-125 to eastbound SR-94. This may improve response times for emergency vehicles that would be travelling from southbound SR-125 to eastbound SR-94. It would also improve the safety of emergency vehicles that currently need to pass through an intersection on Spring Street to access eastbound SR-94 from southbound SR-125.

No-Build Alternative

The No-Build Alternative proposes no improvements and will not require utility relocations or impacts to emergency services.

Avoidance, Minimization, and/or Mitigation Measures

Utility impacts should be avoided to the maximum extent feasible during the design of project.

Potholing and mark-out prior to construction should help to minimize the risk of damage to utility facilities.

The Transportation Management Plan for the project includes notifications to emergency services as part of the public information program. This would help them plan their routes to avoid delays due to construction. See Section 2.6: Avoidance, Minimization, and/or Mitigation Measures.

2.6 TRAFFIC AND TRANSPORTATION/PEDESTRIAN AND BICYCLE FACILITIES

Regulatory Setting

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

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

Affected Environment

A Traffic Analysis Report (July 2014) was prepared to analyze the existing and future traffic conditions in the project area. The study area is approximately 8 miles east of downtown San Diego within the City of La Mesa in San Diego County. It includes SR-94 from east of the Lemon Grove Avenue interchange to east of Kenwood Drive and SR-125 from just north of Jamacha Road to just north of Lemon Avenue.

Opening (2020) and design (2040) year traffic volumes, in the form of Average Daily Traffic (ADT) and AM/PM peak hour volumes, were based on the SANDAG series 12 revenue constrained model runs. The model scenarios used for the project are as follows:

- Year 2011 Existing
- Year 2020 No Build
- Year 2020 Build Alternative 1
- Year 2040 No Build

- Year 2040 Build Alternative 1

The traffic analysis focused on mainline freeway sections and local intersections. The freeway sections include:

- SR-125 north of Lemon Avenue interchange to north of Jamacha Road interchange.
- SR-94 east of Lemon Grove interchange to east of the Kenwood Drive interchange.

Five existing and one future freeway-to-freeway connector ramps are included in the analysis. These include:

- The ramp from Eastbound (EB) SR-94 to Southbound (SB) SR-125
- The ramp from Northbound (NB) SR-125 to Westbound (WB) SR-94
- The ramp from NB SR-125 to EB SR-94
- The ramp from WB SR-94 to NB SR-125
- The ramp from WB SR-94 to SB SR-125
- The ramp from SB SR-125 to EB SR-94 (future build alternative)

The 10 intersections analyzed as part of the traffic study are:

- WB SR-94 on- and off-ramps / Bancroft Drive
- EB SR-94 on- and off-ramps / Bancroft Drive
- WB SR-94 on- and off-ramps / Kenwood Drive
- EB SR-94 on- and off-ramps / Kenwood Drive
- WB SR-94 ramp / Spring Street
- SB SR-125 ramp / Lemon Avenue
- NB SR-125 ramp / Lemon Avenue
- NB SR-125 ramp / EB SR-94 ramp / Campo Road
- Campo Road / Bancroft Drive
- Spring Street / Broadway

Average Daily Traffic is the average 24-hour volume of traffic, being the total volume during a stated period divided by the number of days in that period. The period is a year, unless stated otherwise. Level of Service (LOS) is a measure of the "density" of vehicles traveling on a given section of freeway. Higher speeds with large distances between vehicles and little, if any, difficulty in maneuvering characterize better LOS. Lower speeds with little space between vehicles and limited opportunity to maneuver characterizes lower LOS.

Existing (2011) traffic volumes are shown in Tables 5 through 9. The existing high traffic volumes in both directions of SR-94 within the project limits contribute to unacceptable (LOS E or worse) conditions during the AM peak period for WB traffic and for the PM peak period for EB traffic. Six mainline sections in the EB direction and four sections in the WB direction are

estimated to operate at LOS F during the AM and PM peak periods. Five mainline sections were analyzed in the NB direction and six sections in the SB direction of SR-125. The existing high traffic volumes on the freeway section between Lemon Avenue and Spring Street, in both directions of SR-125, contribute to unacceptable (LOS E or worse) conditions during both AM and PM peak periods. One mainline section in the NB direction and one section in the SB direction are estimated to operate at LOS F during the PM peak period. The LOS F in both directions in the PM peak is expected due to the balanced traffic volumes on this section of SR-125. Existing conditions for the study area are summarized in the follow tables:

- Table 5: SR-94 Freeway Segments - Existing Condition (2011) ADT, Peak Hour Volumes and LOS
- Table 6:SR-125 Freeway Segments – Existing Conditions (2011) ADT, Peak Hour Volumes and LOS
- Table 7: Intersection Analysis – Existing Condition (2011) Peak Hour Volumes and LOS
- Table 8: SR-94 Ramps – Existing (2011) ADT and Peak Hour Volumes
- Table 9: SR-125 Ramps – Existing (2011) ADT and Peak Hour Volumes

Table 5: SR-94 Freeway Segments - Existing Condition (2011) ADT, Peak Hour Volumes and LOS

Segment			No. of	ADT	AM		PM	
#	From	To	Lanes		Volume	LOS	Volume	LOS
Eastbound								
1	Lemon Grove Ave On-ramp	SB SR-125 Off-ramp	4	87,200	4120	B	8830	**F**
2	SB SR-125 Off-ramp	NB SR-125 Off-ramp	4	72,900	3560	B	7180	D
3	NB SR-125 Off-ramp	NB SR-125 On-ramp	2	40,800	1850	B	4080	**E**
4	NB SR-125 On-ramp	Campo Rd Off-ramp	4	50,400	2660	B	4780	C
5	Campo Rd Off-ramp	Spring St On-ramp	2	43,450	2160	B	4160	**E**
6	Spring St On-ramp	Bancroft Dr Off-ramp	3	61,200	2950	B	5690	**F**
7	Bancroft Dr Off-ramp	Bancroft Dr On-ramp	2	55,300	2660	C	5190	**F**
8	Bancroft Dr On-ramp	Kenwood Dr Off-ramp	2	58,670	2850	C	5460	**F**
9	Kenwood Dr Off-ramp	Kenwood Dr On-ramp	2	49,970	2420	C	4760	**F**
10	Kenwood Dr On-ramp	Sweetwater Springs Blvd Off-ramp	2	52,120	2620	C	4950	**F**
Westbound								
1	Sweetwater Springs Blvd On-ramp	Kenwood Dr Off-ramp	2	51,530	4840	**F**	2800	C
2	Kenwood Dr Off-ramp	Kenwood Dr On-ramp	2	49,380	4690	**F**	2610	C
3	Kenwood Dr On-ramp	Bancroft Dr Off-ramp	2	57,660	5410	**F**	3200	D
4	Bancroft Dr Off-ramp	Bancroft Dr On-ramp	2+HOV	55,380	5180	**F**	3030	C
5	Bancroft Dr On-ramp	Spring St Off-ramp	3+HOV	63,380	5850	**E**	3510	C
6	Spring St Off-ramp	NB SR-125 Off-ramp	3+HOV	59,500	5440	D	3260	B
7	NB SR-125 Off-ramp	SB SR-125 Off-ramp	3	43,300	4190	C	2470	B
8	SB SR-125 Off-ramp	Spring St On-ramp	2	39,200	3990	**E**	2140	B
9	Spring St On-ramp	SB SR-125 On-ramp	2	42,200	4250	**E**	2340	C
10	SB SR-125 On-ramp	NB SR-125 On-ramp	4	73,700	6800	D	4370	B
11	NB SR-125 On-ramp	Lemon Grove Ave Off-ramp	4	89,900	8420	**E**	5250	C

Bold Text = LOS of E or F

Table 6: SR-125 Freeway Segments – Existing Conditions (2011) ADT, Peak Hour Volumes and LOS

Segment			No. of Lanes	ADT	AM		PM	
#	From	To			Volume	LOS	Volume	LOS
Northbound								
1	Jamacha Rd On-ramp	EB/WB SR-94 Off-ramp	3	55,900	5080	D	3560	C
2	EB/WB SR-94 Off-ramp	EB SR-94 On-ramp	2	30,100	2650	C	1980	B
3	EB SR-94 On-ramp	SR-94/Campo On-ramp	3	62,200	4360	C	5080	D
4	SR-94/Campo On-ramp	Lemon Ave Off-ramp	3	84,900	6300	**F**	6430	**F**
5	Lemon Ave Off-ramp	Grossmont Off-ramp	5	82,650	6140	C	6240	C
Southbound								
1	Grossmont On-ramp	Lemon Ave On-ramp	3	81,350	5040	D	6270	**E**
2	Lemon Ave On-ramp	Spring St Off-ramp	3	83,400	5240	**E**	6450	**F**
3	Spring St Off-ramp	WB SR-94 Off-ramp	3	62,850	4160	C	4880	D
4	WB SR-94 Off-ramp	SR-94/Spring On-ramp	2	31,350	1610	B	2850	C
5	SR-94/Spring On-ramp	EB SR-94 On-ramp	3	38,950	2040	B	3600	C
6	EB SR-94 On-ramp	Jamacha Rd Off-ramp	3	53,250	2600	B	5250	D

Table 7: Intersection Analysis- Existing Condition (2011) Peak Hour Volumes and LOS

#	Study Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	WB SR-94 Ramps / Bancroft Dr	Signal	12	B	18	B
2	EB SR-94 Ramps / Bancroft Dr	Signal	15	B	12	B
3	WB SR-94 Ramps / Kenwood Dr	AWSC	13*	B*	11*	B*
4	EB SR-94 Ramps / Kenwood Dr	AWSC	9*	A*	11*	B*
5	WB SR-94 Ramps / Spring St	Signal	20	C	35	D
6	SB SR-125 Ramp / Lemon Ave					
7	NB SR-125 Ramp / Lemon Ave	OWSC	13**	B**	16**	C**
8	NB SR-125 Ramp/EB SR-94 Ramp/Campo Rd	Signal	36	C	20	C
9	Campo Rd / Bancroft Dr	Signal	25	C	28	C
10	Spring St / Broadway	Signal	24	C	24	C

AWSC - All-Way Stop Control; OWSC - One-Way Stop Control; Delay is measured in seconds per vehicle

* SimTaffic w as used to simulate the intersection operation and estimate the LOS

** At OWSC intersection, delay is presented for the controlled approach

Table 8: SR-94 Ramps – Existing (2011) ADT and Peak Hour Volumes

#	Description	ADT	AM	PM
Eastbound				
1	SB SR-125 Off-ramp	14,300	560	1650
2	NB SR-125 Off-ramp	32,100	1710	3100
3	NB SR-125 On-ramp	9600	810	700
4	Campo Rd Off-ramp	6950	500	620
5	Spring St On-ramp	17,750	790	1530
6	Bancroft Dr Off-ramp	5900	290	500
7	Bancroft Dr On-ramp	3370	190	270
8	Kenwood Dr Off-ramp	8700	430	700
9	Kenwood Dr On-ramp	2150	200	190
Westbound				
1	Kenwood Dr Off-ramp	2150	150	190
2	Kenwood Dr On-ramp	8280	720	590
3	Bancroft Dr Off-ramp	2280	230	170
4	Bancroft Dr On-ramp	8000	670	480
5	Spring St Off-ramp	3880	410	250
6	NB SR-125 Off-ramp	16,200	1400	930
7	SB SR-125 Off-ramp	4100	200	330
8	Spring St On-ramp	3000	260	200
9	SB SR-125 On-ramp	31,500	2550	2030
10	NB SR-125 On-ramp	16,200	1620	880

Table 9: SR-125 Ramps – Existing (2011) ADT and Peak Hour Volumes

#	Description	ADT	AM	PM
Northbound				
1	EB/WB SR-94 Off-ramp	25,800	2430	1580
2	EB SR-94 On-ramp	32,100	1710	3100
3	WB SR-94 On-ramp	16,200	1400	930
4	Campo On-ramp	6500	540	420
5	Lemon Ave Off-ramp	2250	160	190
Southbound				
1	Lemon Ave On-ramp	2050	200	180
2	Spring St Off-ramp	20,550	1080	1570
3	WB SR-94 Off-ramp	31,500	2550	2030
4	WB SR-94 On-ramp	4100	200	330
5	Spring St On-ramp	3500	230	420
6	EB SR-94 On-ramp	14,300	560	1650

Environmental Consequences

Figures 6A – 6D show the Opening Year (2020) forecast traffic volumes, and Figures 7A – 7D show the Design Year (2040) forecast traffic volumes.

Travel Time Comparisons: Table 10: Summary of Intersection Delay/LOS Analysis AM/PM Peak Periods, summarizes delay times at intersections in the project area for the existing, opening, and design years.

Intersections within the project area experience minor delays for the 2011 existing travel times during the AM and PM peak periods. Most intersections within the proposed project area operate at LOS C or better. One intersection in the AM Peak Hours operates at LOS D with a 36 second delay and one intersection in the PM Peak period operates at LOS D with a 35 second delay. In 2020 with the addition of the proposed project the intersections along Spring Street and Campo Road improve compared to the No-build alternative. For the 2040 Design Year the delay times for intersections along Spring St. and Campo Road improve with the addition of the proposed connector as well.

Compared to the no-build alternative, the LOS results for the WB SR-94 Ramps / Spring Street, EB SR-94 Ramp / Campo Road, and Spring Street / Broadway intersections have improved significantly during both peak periods with the addition of the proposed connector. The proposed direct connector is braided with the EB off-ramp to Bancroft Drive. Some Spring Street traffic is expected to use the EB off-ramp to Kenwood Drive instead of the Bancroft Drive off-ramp. As a result, the intersection of EB SR-94 Ramps / Kenwood Drive is expected to operate slightly worse than the no-build alternative and only during the PM peak period.

Table 10: Summary of Intersection Delay/LOS Analysis AM/PM Peak Periods

#	Study Intersection	Control	2011		2011		2020 No-Build		2020 Build		2040 No-Build		2040 Build		2040 No-Build		2040 Build	
			AM Peak Hour		PM Peak Hour		PM Peak Hour		PM Peak Hour		AM Peak Hour		AM Peak Hour		PM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	WB SR-94 Ramps / Bancroft Dr	Signal	12	B	18	B	17	B	17	B	17	B	17	B	24	C	24	C
2	EB SR-94 Ramps / Bancroft Dr	Signal	15	B	12	B	20	C	20	C	21	C	21	C	22	C	22	C
3	WB SR-94 Ramps / Kenwood Dr	AWSC	13*	B*	11*	B*	12*	B*	12*	B*	120*	F*	78*	F*	13*	B*	13*	B*
4	EB SR-94 Ramps / Kenwood Dr	AWSC	9*	A*	11*	B*	12*	B*	12*	B*	11*	B*	11*	B*	14*	B*	14*	B*
5	WB SR-94 Ramps / Spring St	Signal	20	C	35	D	43	D	16	B	24	C	29	C	87	F	18	B
6	SB SR-125 Ramp / Lemon Ave																	
7	NB SR-125 Ramp / Lemon Ave	OWSC	13**	B**	16**	C**	18**	C**	18**	C**	16**	C**	16**	C**	23**	C**	23**	C**
8	NB SR-125 Ramp/EB SR-94 Ramp/Campo Rd	Signal	36	D	20	C	21	C	17	B	40	D	28	C	21	C	17	C
9	Campo Rd / Bancroft Dr	Signal	25	C	28	C	31	C	30	C	37	D	38	D	40	D	36	D
10	Spring St / Broadway	Signal	24	C	24	C	22	C	22	C	38	D	27	C	34	C	20	C

AWSC - All-Way Stop Control; OWSC - One-Way Stop Control; Delay is measured in seconds per vehicle

* SimTaffic was used to simulate the intersection operation and estimate the LOS

** At OWSC intersection, delay is presented for the controlled approach

Peak Period Performance:

The AM/PM Peak hour demands for the 2011/2020/2040 Build and No-Build scenarios and LOS are summarized in tables:

- Table 11: SR-94 Freeway Segments – No-Build Alternative 2011/2020/2040 Peak Hour Demands and LOS
- Table 12: SR-94 Freeway Segments – Build Alternative 2020/2040 Peak Hour Demands and LOS
- Table 13: SR-125 Freeway Segments – No-Build Alternative 2011/2020/2040 Peak Hour Demands and LOS
- Table 14: SR-125 Freeway Segments – Build Alternative 2020/2040 Peak Hour Demands and LOS

SR-94 No-Build: For the 2011 No-Build scenario, the high volumes and weaving sections in both directions of SR-94 within the project limits contribute to unacceptable (LOS E or worse) conditions during the AM peak period for WB traffic and the PM peak period for EB traffic. Seven mainline sections in the EB direction and eight sections in the WB direction are estimated to operate at LOS E or worse during the AM and PM peak periods. By 2020 conditions worsen for the No-Build condition with all but two freeway segments on the SR-94 operating at LOS E or worse, with seven segments at LOS F during the EB PM Peak hour, and as demand increases in 2040 all but one segment on SR-94 would be operating at LOS F. In 2020, during the AM peak hour the WB direction on SR-94 would experience a minor increase in demand from 2011, and the LOS shows slight improvement with six freeway segments operating at unacceptable levels. In 2040 during the PM peak hour demands in the EB direction have increased to show a LOS of F in all but one freeway segment, with the remaining segment operating at LOS D, and during the AM Peak hour, travel in the WB direction would operate at LOS E or worse in 8 freeway segments with the remaining three segments operating at LOS D.

SR-125 No-Build: For the 2011 No-Build, five mainline sections were analyzed in the NB direction and six sections in the SB direction of SR-125. The high volumes and the merge/diverge maneuvers on the freeway section between Lemon Avenue and Spring Street, in both directions of SR-125, contribute to unacceptable (LOS E or worse) conditions during both peak periods. During the AM peak travel time, one mainline section in the NB direction and one mainline section in the SB direction operate at LOS E or worse. During the PM peak travel time one mainline section in the NB direction and two mainline sections in the SB direction operate at LOS E or worse. The unacceptable LOS in both directions in the PM peak hour is expected due to the balanced traffic volumes on this section of SR-125. In 2020, one mainline section in the NB direction and one section in the SB direction are estimated to operate at LOS E or worse during the PM peak period. During the AM peak hour in the SB direction, three mainline sections are expected to operate at LOS E or worse in the AM and one freeway segment would operate at LOS E. By 2040 demand would increase causing LOS to worsen in the project area. In the NB direction both the AM and PM peak hour two segments would operate at LOS E or worse, with the remaining three segments operating at LOS D in the AM peak hour. In the southbound direction during the AM peak hour two segments would operate at LOS E or worse with increased demands, while the PM peak hour would have four segments at unacceptable LOS and the remaining two segments at LOS D.

SR-94 Build: The 2020 build scenario the SR-94 EB AM peak hour would have all freeway segments operating at acceptable LOS with most of the segments at LOS B. The PM EB peak hour would have seven freeway segments operating at LOS E or worse. In the WB AM peak hour six segments would operate at unacceptable LOS and the PM peak hour would have two segments at LOS D, with the rest of the segment operating at LOS C or better. For the 2040 peak hour, the high demands and weaving sections in both directions of SR-94 within the project limits contribute to unacceptable (LOS E or worse) conditions during the AM peak period for WB traffic and the PM peak period for EB traffic.

SR-125 Build: In 2020 and 2040 high demands and the merge/diverge maneuvers on the freeway section between Lemon Avenue and the SR-94 connector, in both directions of SR-125, contribute to unacceptable (LOS E or worse) conditions during both peak periods. In 2020 two mainline freeway segments in the NB direction, and three segments in the SB direction are estimated to operate at LOS E or worse during the PM peak period. The LOS F operations in both directions in the PM peak are expected due to the balanced traffic demands on this section of SR-125. During the AM peak hour, one mainline section is expected to operate at LOS F due to high demands. As demands increase by 2040 in the NB direction two segments in the AM peak hour and 2 segments in the PM peak hour expected to operate at unacceptable LOS, and in the SB direction two segments in the AM peak and four segments in the PM peak hour would operate at unacceptable LOS.

The biggest benefit of the proposed project would be that the direct connector would provide the missing connection from SB SR-125 to EB SR-94, which would reduce the use of arterial streets/intersections and provide transportation improvements consistent with the adopted 2050 RTP.

Table 11: SR-94 Freeway Segments – No-Build Alternative 2011/2020/2040 Peak Hour Demands and LOS

Segment			No. of	2011 AM		2011 PM		2020 AM		2020 PM		2040 AM		2040 PM	
#	From	To	Lanes	Demand	LOS	Demand	LOS	Demand	LOS	Demand	LOS	Demand	LOS	Demand	LOS
Eastbound															
1	Lemon Grove Ave On-ramp	SB SR-125 Off-ramp	4	4120	B	8830	F	4300	B	9200	F	5030	C	10750	F
2	SB SR-125 Off-ramp	NB SR-125 Off-ramp	4	3560	B	7180	D	3720	B	7500	D	4350	B	8760	F
3	NB SR-125 Off-ramp	NB SR-125 On-ramp	2	1850	B	4080	E	1920	B	4300	E	2250	B	5020	F
4	NB SR-125 On-ramp	Campo Rd Off-ramp	4	2660	B	4780	C	2770	B	5030	C	3240	B	5870	E
5	Campo Rd Off-ramp	Spring St On-ramp	2	2160	B	4160	E	2250	B	4390	F	2630	C	5120	F
6	Spring St On-ramp	Bancroft Dr Off-ramp	3	2950	B	5690	F	3080	B	5970	F	3600	C	6970	F
7	Bancroft Dr Off-ramp	Bancroft Dr On-ramp	2	2660	C	5190	F	2770	C	5440	F	3240	D	6350	F
8	Bancroft Dr On-ramp	Kenwood Dr Off-ramp	2	2850	C	5460	F	2970	D	5730	F	3470	D	6690	F
9	Kenwood Dr Off-ramp	Kenwood Dr On-ramp	2	2420	C	4760	F	2520	C	5010	F	2940	C	5850	F
10	Kenwood Dr On-ramp	Sweetwater Springs Off-ramp	2	2620	C	4950	F	2730	C	5210	F	3190	D	6080	F
Westbound															
1	Sweetwater Springs Blvd On-ramp	Kenwood Dr Off-ramp	2	4840	F	2800	C	5120	F	3030	D	5980	F	3540	D
2	Kenwood Dr Off-ramp	Kenwood Dr On-ramp	2	4690	F	2610	C	4960	F	2830	C	5790	F	3310	D
3	Kenwood Dr On-ramp	Bancroft Dr Off-ramp	2	5410	F	3200	D	5760	F	3440	D	6720	F	4020	E
4	Bancroft Dr Off-ramp	Bancroft Dr On-ramp	2+HOV*	5180	F	3030	C	5520	D	3260	B	6440	E	3810	C
5	Bancroft Dr On-ramp	Spring St Off-ramp	3+HOV*	5850	E	3510	C	6210	D	3760	B	7250	D	4390	C
6	Spring St Off-ramp	NB SR-125 Off-ramp	3+HOV*	5440	D	3260	B	5780	C	3500	B	6750	D	4090	B
7	NB SR-125 Off-ramp	SB SR-125 Off-ramp	3	4190	C	2470	B	4340	C	2540	B	5070	D	2970	B
8	SB SR-125 Off-ramp	Spring St On-ramp	2	3990	E	2140	B	4130	E	2200	B	4820	F	2570	C
9	Spring St On-ramp	SB SR-125 On-ramp	2	4250	E	2340	C	4400	F	2420	C	5140	F	2830	C
10	SB SR-125 On-ramp	NB SR-125 On-ramp	4	6800	D	4370	B	7100	D	4520	B	8300	E	5280	C
11	NB SR-125 On-ramp	Lemon Grove Ave On-ramp	4	8420	E	5250	C	8770	F	5430	C	10250	F	6340	D

* The HOV lane was not included in the LOS analysis

Table 12: SR-125 Freeway Segments – No-Build Alternative 2011/2020/2040 Peak Hour Demands and LOS

Segment			No. of	2011 AM		2011 PM		2020 AM		2020 PM		2040 AM		2040 PM	
#	From	To	Lanes	Demand	LOS	Demand	LOS	Demand	LOS	Demand	LOS	Demand	LOS	Demand	LOS
Northbound															
1	Jamacha Rd On-ramp	EB/WB SR-94 Off-ramp	3	5080	D	3560	C	5380	D	3690	C	6290	E	4310	C
2	EB/WB SR-94 Off-ramp	EB SR-94 On-ramp	2	2650	C	1980	B	2860	C	2050	B	3350	D	2400	C
3	EB SR-94 On-ramp	SR-94/Campo On-ramp	3	4360	C	5080	D	4660	D	5250	E	5450	D	6140	E
4	SR-94/Campo On-ramp	Lemon Ave Off-ramp	3	6300	F	6430	F	6700	F	6650	F	7830	F	7770	F
5	Lemon Ave Off-ramp	Grossmont Off-ramp	5	6140	C	6240	C	6530	C	6450	C	7630	D	7540	D
Southbound															
1	Grossmont On-ramp	Lemon Ave On-ramp	3	5040	D	6270	E	5290	D	6590	F	6180	E	7700	F
2	Lemon Ave On-ramp	Spring St Off-ramp	3	5240	E	6450	F	5500	E	6800	F	6430	F	7950	F
3	Spring St Off-ramp	WB SR-94 Off-ramp	3	4160	C	4880	D	4340	C	5200	D	5070	D	6080	E
4	WB SR-94 Off-ramp	SR-94/Spring On-ramp	2	1610	B	2850	C	1640	B	3100	D	1910	B	3630	D
5	SR-94/Spring On-ramp	EB SR-94 On-ramp	3	2040	B	3600	C	2090	B	3880	C	2440	B	4540	D
6	EB SR-94 On-ramp	Jamacha Rd Off-ramp	3	2600	B	5250	D	2670	B	5580	E	3120	B	6530	F

Table 13: SR-94 Freeway Segments – Build Alternative 2020/2040 Peak Hour Demands and LOS

Segment			No. of	2020 AM		2020 PM		2040 AM		2040 PM	
#	From	To	Lanes	Demand	LOS	Demand	LOS	Demand	LOS	Demand	LOS
Eastbound											
1	Lemon Grove On-ramp	SB SR-125 Off-ramp	4	4300	B	9200	**F**	5030	C	10750	**F**
2	SB SR-125 Off-ramp	NB SR-125 Off-ramp	4	3720	B	7500	D	4350	B	8760	**F**
3	NB SR-125 Off-ramp	NB SR-125 On-ramp	2	1920	B	4300	**E**	2250	B	5020	**F**
4	NB SR-125 On-ramp	Campo Rd Off-ramp	4	2770	B	5030	C	3240	B	5870	D
5	Campo Rd Off-ramp	Spring St On-ramp	2	2250	B	4390	**F**	2630	C	5120	**F**
6	Spring St On-ramp	Bancroft Dr Off-ramp	3	2510	B	4790	D	2930	B	5590	**E**
7	Bancroft Dr Off-ramp	SB SR-125 On-ramp	2	2200	B	4260	**E**	2570	C	4970	**F**
8	SB SR-125 On-ramp	Bancroft Dr On-ramp	3	3000	B	4260	D	3520	C	6570	**F**
9	Bancroft Dr On-ramp	Kenwood Dr Off-ramp	3	3200	C	5900	**E**	3750	C	6910	**F**
10	Kenwood Dr Off-ramp	Kenwood Dr On-ramp	2	2720	C	5150	**F**	3180	C	6030	**F**
11	Kenwood Dr On-ramp	Sweetwater Springs Off-ramp	2	2930	C	5350	**F**	3430	D	6260	**F**
Westbound											
1	Sweetwater Springs Blvd On-ramp	Kenwood Dr Off-ramp	2	5120	**F**	3030	D	5980	**F**	3540	D
2	Kenwood Dr Off-ramp	Kenwood Dr On-ramp	2	4960	**F**	2830	C	5790	**F**	3310	D
3	Kenwood Dr On-ramp	Bancroft Dr Off-ramp	2	5760	**F**	3440	D	6720	**F**	4020	**E**
4	Bancroft Dr Off-ramp	Bancroft Dr On-ramp	2+HOV*	5520	D	3260	B	6440	**F**	3810	C
5	Bancroft Dr On-ramp	Spring St Off-ramp	3+HOV*	6210	D	3760	B	7250	**F**	4390	C
6	Spring St Off-ramp	NB SR-125 Off-ramp	3+HOV*	5780	C	3500	B	6750	D	4090	B
7	NB SR-125 Off-ramp	SB SR-125 Off-ramp	3	4340	C	2540	B	5070	D	2970	B
8	SB SR-125 Off-ramp	Spring St On-ramp	2	4130	**E**	2200	B	4820	**F**	2570	C
9	Spring St On-ramp	SB SR-125 On-ramp	2	4400	**F**	2420	C	5140	**F**	2830	C
10	SB SR-125 On-ramp	NB SR-125 On-ramp	4	7100	D	4520	B	8300	**E**	5280	C
11	NB SR-125 On-ramp	Lemon Grove Ave Off-ramp	4	8770	**F**	5430	C	10250	**F**	6340	D

Table 14: SR-125 Freeway Segments – Build Alternative 2020/2040 Peak Hour Demands and LOS

Segment			No. of	2020 AM		2020 PM		2040 AM		2040 PM	
#	From	To	Lanes	Demand	LOS	Demand	LOS	Demand	LOS	Demand	LOS
Northbound											
1	Jamacha Rd On-ramp	EB/WB SR-94 Off-ramp	3	5380	D	3690	C	6290	E	4310	**F**
2	EB/WB SR-94 Off-ramp	EB SR-94 On-ramp	2	2860	C	2050	B	3350	D	2400	C
3	EB SR-94 On-ramp	SR-94/Campo On-ramp	3	4660	D	5250	**E**	5450	E	6140	**E**
4	SR-94/Campo On-ramp	Lemon Ave Off-ramp	3	6700	**F**	6650	**F**	7830	**F**	7770	**F**
5	Lemon Ave Off-ramp	Grossmont Off-ramp	5	6530	C	6450	C	7630	D	7540	D
Southbound											
1	Grossmont On-ramp	Lemon Ave On-ramp	3	5320	D	6680	**F**	6230	E	7830	**F**
2	Lemon Ave On-ramp	EB SR-94 Off-ramp	4	5540	C	6900	D	6490	D	8090	E
3	EB SR-94 Off-ramp	Spring St Off-ramp	3	4740	D	5550	**E**	5540	E	6490	**F**
4	Spring St Off-ramp	WB SR-94 Off-ramp	3	4340	C	5200	D	5070	D	6080	E
5	WB SR-94 Off-ramp	SR-94/Spring On-ramp	2	1640	B	3100	D	1910	B	3630	D
6	SR-94/Spring On-ramp	EB SR-94 On-ramp	3	2090	B	3880	C	2440	B	4540	D
7	EB SR-94 On-ramp	Jamacha Rd Off-ramp	3	2670	B	5580	**E**	3120	B	6530	**F**

Americans with Disabilities Act:

Pedestrian access is provided within the project area along Bancroft Drive, Echo Drive, Panorama Drive, and Mariposa Street. To comply with the Americans with Disabilities Act (ADA) existing curb ramps within the project footprint would be evaluated during the design phase and any non-compliant ramps would be replaced with compliant ramps. Sidewalks installed on Mariposa Street, Echo Drive, and Panorama Drive would provide a minimum five foot clear width. When possible during construction, pedestrian access in conformance with ADA, would be maintained through the use of temporary curb ramps and pedestrian detours.

Construction Impacts:

The build alternative would require widening of the freeway, which in turn would have an impact on the existing Mariposa Street Bridge over SR-125. To assess the potential for transportation impacts, an assessment of the multimodal traffic (vehicular, bicycle, pedestrian) was conducted.

Vehicular traffic counts were conducted for 24 hours, with a daily total of 675 vehicles. Northbound traffic volumes were slightly higher (359 vs. 316 vehicles). The AM peak hour was 74 vehicles/hour northbound between 8 and 9 AM. The PM peak hour was 40 vehicles/hour southbound between 4 and 5 PM.

Non-motorized transportation was observed between 11 AM and 5 PM on the same day. During that six-hour period, a total of eight (8) pedestrians and ten (10) bicycles were observed crossing on the bridge. The average volume of pedestrians and bikes was less than two per hour. Seven of the bicycles were observed between noon and 1 PM.

If the Mariposa Street Bridge were closed during construction, the alternate route would be via Panorama Drive and Merritt Boulevard. In the absolute worst case, the alternate route would add 1.3 miles of travel. The estimated vehicular travel time (increased delay) is about 4 minutes. Many vehicles would have a lesser increase in delay. For example, a trip from the intersection of Panorama Drive/Mariposa Street to Eucalyptus Park would take approximately 2 minutes via the Mariposa Street Bridge and 4 minutes via Panorama Drive and Bancroft Boulevard. Delays to bicycles and pedestrians would be greater – approximately 10 minutes for bicycles and 25 minutes for pedestrians. Assuming the three minutes of delay per vehicle, and 675 vehicles/day, the total additional delay in one year would be 12,300 vehicle-hours.

A Transportation Management Plan (TMP) would be prepared for the proposed project. The objective of a TMP is to maintain a safe movement of vehicles through the construction zone, as well as provide the highest level of traffic flow and access during construction periods.

Avoidance, Minimization, and/or Mitigation Measures

The preliminary TMP elements that were recommended are:

- A Public Awareness Campaign would notify the public about the project and its impacts through brochures, press releases, paid advertising, public meetings/speakers bureau, construction bulletins and the District's Website (http://www.dot.ca.gov/dist11/).
- Motorist Information Strategies would include portable Changeable Message Signs (CMS), ground mounted signs and the use of Web cameras. These strategies provide the current road conditions and would enable the motorist to make informed

decisions about their own travel plans and the options they have for alternative routes.

- Incident Management elements include the Construction Zone Enhanced Enforcement Program (COZEEP), the Freeway Service Patrol (FSP) and the Traffic Management Team (TMT). Implementation of these elements would identify incidents that occur within the construction area and provide corrective action in a timely manner.
- COZEEP provides California Highway Patrol (CHP) assistance and surveillance within construction areas. This can allow enforcement of speed limits and provide emergency response support within the work zones.
- The TMT would be involved in the planning and coordinating of major lane or freeway closures. They can also help evaluate signs for detours and provide advance warning to motorists in case of an accident or non-recurring congestion.
- Demand management techniques include promoting variable work hours to vary peak travel times; installing temporary ramp meters and/or modifying existing ramp meters to control the volumes entering the freeway within the construction zones. The purpose of demand management is to reduce traffic volumes within the construction zones.

2.7 VISUAL/AESTHETICS

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]).

Affected Environment

Information and analysis in this section is drawn from the Visual Impact Assessment dated March 2015.

The project location and setting provides the context for determining the type and severity of changes to the existing visual environment. The terms *visual character* and *visual quality* are defined below and are used to further describe the visual environment. The project setting is also referred to as the *corridor* or *project corridor* which is defined as the area of land that is visible from, adjacent to, and outside the highway right-of-way, and is determined by topography, vegetation, and viewing distance.

The proposed project is located at the juncture of SR-94 and SR-125 in the eastern region in San Diego County, California. The landscape is characterized by suburban communities, hills, valleys, riparian communities, boulders/rock outcroppings, naturalized waterways, Oak and Sycamore trees, and other native highway planting lining the roadways. The land use within the corridor is primarily suburban – coupled with commercial and open space.

The visual impact assessment generally follows the guidance outlines in the publication Visual Impact Assessment for Highway Projects published by the Federal Highway Administration (FHWA) in March1981.

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.

Scenic Resources

The SR-125 corridor from SR-94 to I-8, near La Mesa, is designated as a Scenic Highway in the City of La Mesa General Plan and the County General Plan Conservation and Open Space Element. The corridor gives a commanding view of the scenic, rolling terrain of the corridor. This is primarily due to the existing elevation of the highway located above the surrounding topography with the land sloping upwards on both sides of the highway.

The view of the highway allows the traveler to view attractive residential areas. Mount Helix is the dominant visual feature within the corridor. Other scenic resources include the distant views of Cowles Mountain to the northwest, and Dictionary Hill and San Miguel Mountain towards the south and southeast.

Visual Impact

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. These impacts can be considered beneficial or detrimental. In addition, the project should consider cumulative impacts and temporary impacts due to the construction.

Existing Visual Character

The project area is located within and around the SR-94/125 corridors, situated at the intersection of the Cities of La Mesa, Spring Valley and Lemon Grove. This area is characterized by the scenic rolling terrain and feature boulder outcroppings, oak trees, and distant views of Cowles Mountain, Dictionary Hill and San Miguel Mountain. The existing highway facility, with connectors, intersects at this location allowing SR-94 and SR-125 to traverse through the area. When viewed from the highway, the highway connectors are the visually dominant urban element in the immediate (foreground) view. The hues of the highway

facility contrast with the tan colors of valley floor and surrounding hills in the summer and fall, and provide less contrast with the vegetative cover in the winter and spring seasons. In general, the scale of the existing roadway is smaller when compared to the size of the corridor and rolling hills of the immediate viewshed. The continuity of the vegetative roadside surrounding hills is interrupted in form, line, and textural by the highway facility.

The visual character of the existing viewshed is considered to be moderately high.

Existing Visual Quality

The table (Table 15) below provides a reference for determining levels of visual impact by combining resource change and viewer response.

Table 15: Visual Impact Ratings Using Viewer Response and Resource Change

	Viewer Response (VR)					
Resource Change (RC)		Low (L)	Moderately-Low (ML)	Moderate (M)	Moderately-High (MH)	High (H)
	Low (L)	L	ML	ML	M	M
	Moderately-Low (ML)	ML	ML	M	M	MH
	Moderate (M)	ML	M	M	MH	MH
	Moderately-High (MH)	M	M	MH	MH	H
	High (H)	M	MH	MH	H	H

The existing SR-94/SR-125 interchange is a memorable scene with views of distant mountain ranges and peaks providing definition to the skyline. The surrounding hills, boulder outcroppings, and Oak trees complete a memorable setting and establish a moderately-high degree of vividness. The existing facility presents foreground views of highway features (structures, highway paving, and retaining walls) and slightly detracts from the vividness of the setting. The existing rural/suburban character is distinctive and diverse in contrast with the setting of the transportation facility. The natural landscape elements are unique and of high visual interest. As a result, the existing vividness rating is considered moderately high.

Due to the intrusion of the highway facility, the existing corridor displays a moderate level of visual intactness. The overhead utility transmission wires and poles, graded slopes, overcrossing bridge structure, and interchange ramps are the primary visual distractions within the visual setting. The expansive roadway surface, retaining walls, and distant residential land-use are secondary distractions. The surrounding built and natural features in the viewshed are intact with only moderate intrusion. As a result, the existing intactness rating is considered moderate.

The individual elements in the setting create a moderate level of visual unity. While the topography of the roadway facility appears harmonious within the visual setting of the corridor, the presence of graded slopes disrupt the transition between roadway and roadside elements. As a result, the existing unity rating is considered moderate.

Combining the existing vividness, intactness, and unity ratings would result in an existing visual quality rating of moderate to moderately high.

Existing Viewer Groups, and Viewer Response

The population affected by the project is composed of *viewers*. Viewers are people whose views of the landscape may be altered by the proposed project – either because the landscape itself has changed or their perception of the landscape has changed.

Viewers, or more specifically, the response viewers have to changes in their visual environment, are one of two variables that determine the extent of visual impacts that would be caused by the construction and operation of the proposed project.

There are two major types of viewer groups for highway projects: highway neighbors and highway users. Each viewer group has their own particular level of *viewer exposure* and *viewer sensitivity*, resulting in distinct and predictable visual concerns for each group which help to predict their responses to visual changes.

HIGHWAY NEIGHBORS *(Views to the Road)*

Highway neighbors are people who have views to the road. They can be subdivided into different viewer groups by land use. For example, residential, commercial, industrial, retail, institutional, civic, educational, recreational, and agricultural land uses may generate highway neighbors or viewer groups with distinct reasons for being in the corridor and therefore having distinct responses to changes in visual resources. For this project the following highway neighbors were considered:

- Residents of the Casa de Oro - Mount Helix area (neighborhood located east of the project)
- Residents of Spring Valley (city located south of the project)
- Residents of La Mesa (city located northwest of the project)

HIGHWAY USERS *(Views from the Road)*

Highway users are people who have views *from* the road. They can be subdivided into different viewer groups in two different ways – by mode of travel or by reason for travel. For example, subdividing highway users by mode of travel may yield pedestrians, bicyclists, transit riders, car drivers and passengers, and truck drivers. Dividing highway users or viewer groups by reason for travel creates categories like tourists, commuters, and haulers. It is also possible to use both mode and reason for travel simultaneously, creating a category like *bicycling tourists,* for example. For this project the following highway users were considered:

- Commuter and local motorists
- Regional travelers/tourists
- Commercial drivers

Viewer Response

Viewer response is a measure or prediction of the viewer's reaction to changes in the visual environment and has two dimensions as previously mentioned, viewer exposure and viewer sensitivity.

Viewer Exposure

Viewer exposure is a measure of the viewer's ability to see a particular object. Viewer exposure has three attributes: location, quantity, and duration. *Location* relates to the position of the viewer in relationship to the object being viewed. The closer the viewer is to the object, the more exposure. *Quantity* refers to how many people see the object. The more people who can see an object or the greater frequency an object is seen, the more exposure the object has to viewers. *Duration* refers to how long a viewer is able to keep an object in view. The longer an object can be kept in view, the more exposure. High viewer exposure helps predict that viewers would have a response to a visual change.

HIGHWAY NEIGHBORS *(Views to the Road)*

Residents and Businesses:

Due to viewing location and surrounding topography, highway neighbors have obscured views of the roadway. Most viewers do not view the facility from a residence or business. These viewers would have no or lower quality view of the project area. Conversely, a limited quantity of highway neighbors, located at the outer edge of the nearby neighborhoods and cities, (approximately twenty to thirty homes or businesses) have a moderately-high quality view location of the project area. Those limited viewers experience the project from backyards, patios, windows, and/or driveways. The anticipated duration of time that these residents would view the project would range from less than a minute to several hours indicating a moderately-high view duration. Therefore, a limited number of potential viewers (low exposure) observe the project from a nearby vantage point (moderately-high exposure) for extended periods (moderately-high exposure). Collectively, the average exposure rating for residents and business owners/patrons is considered moderate.

HIGHWAY USERS *(Views from the Road)*

Commuters and Local Motorists:

Commuters and local motorists, residing and working in the region, travel regularly through the project area. They observe the project from the highway facility with an unobscured view of the project features in the foreground. The quality of the view location is considered high. The quantity of the viewers would be approximately fifteen to twenty thousand viewers per day indicating a moderately high quantity of viewers. Conversely, the anticipated duration of exposure would be limited due to the length of the proposed project (approximately 2.5 miles) and the rate of speed (highway speeds). The exposure to the project is anticipated to be 30 seconds to 3 minutes. This anticipated duration is considered moderate. Therefore, considering the unobscured view location of the project (moderately-high), the quantity of anticipated viewers (moderate), and the duration of the view (moderate), commuters and local motorists would have an average exposure rating considered moderately high.

Regional Travelers and Tourists:

These inter-regional travelers view the project on a limited basis due to the infrequent travel within the project area. Similarly, the quantity of tourists are considered low due to the limited destination areas. Recent traffic forecasts anticipate that the quantity of regional travelers/tourists would increase in the near term; however, when compared with the aggregate total of highway users, regional travelers and tourists are present in lower percentages. Therefore, considering the unobscured view location of the project (moderately-high), the quantity of anticipated, viewers (low), and the duration of the view (moderate), regional travelers and tourists would have an average exposure rating considered moderately-low.

Commercial Drivers:

The SR-94/SR-125 is a primary route for commercial transport to southeast San Diego County and the international border crossing at Tecate, Mexico. Recent traffic forecasts anticipate that the quantity of commercial traffic would increase in the near term. However, when compared with the aggregate total of highway users, commercial drivers are present in lower percentages. In addition, commercial drivers would view the project from the roadway on a regular basis (daily, weekly, and monthly). Therefore, considering the unobscured view of the project (moderately high), the quantity of anticipated viewers (moderately low), and the duration of the view (moderate), commercial drivers would have an average exposure rating considered moderate.

Overall Viewer Exposure

An aggregate calculation of viewer exposure for the viewer groups is determined using an average rating for all viewer categories. The analysis was performed for the two (2) user groups, (highway neighbors and users) and the analysis provides an average of the narratives for viewer exposure. The resulting average indicates a moderate viewer exposure to the proposed change in the visual environment.

Collectively, the average exposure rating for highway neighbors and users is considered moderate.

Viewer Sensitivity

Viewer sensitivity is a measure of the viewer's recognition of a particular object. It has three attributes: activity, awareness, and local values. *Activity* relates to the attention level of viewers – are they preoccupied, thinking of something else, or are they truly engaged in observing their surroundings? The more they are actually observing their surroundings, the more sensitivity viewers would have to changes in visual resources. *Awareness* relates to the focus of view—the focus is wide and the view general or the focus is narrow and the view specific. The more specific the awareness, the more sensitive a viewer is to change*. Local values* and attitudes also affect viewer sensitivity. If the viewer group values aesthetics in general or if a specific visual resource has been protected by local, state, or national designation, it is likely that viewers would be more sensitive to visible changes. High viewer sensitivity helps predict that viewers would have a high concern for any visual change.

HIGHWAY NEIGHBORS *(Views to the Road)*

Residents and Businesses:

Of those highway neighbors observing the proposed project, the view sensitivity would vary depending upon the activity of the individual. Considering the broad possibilities of preoccupation, it is anticipated that residents and business owners/patrons would be engaged in viewing their surroundings to a moderate degree. Due to the topographic limitations of the view area, when viewed by highway neighbors, the project would dominate the setting. In addition, view awareness of would be narrow and view specific indicating a moderately high degree of sensitivity. The local residents, and to a lesser extent business owner/patrons, have a moderately high regard for aesthetics in their public spaces. These values and goals would indicate a moderately high sensitivity to change in the visual setting. Therefore, those viewers, with the potential to observe the project, would be engaged in viewing their surroundings (moderately-high sensitivity). Due to the limited physical area, the viewers would possess a narrow focus (moderately high sensitivity) and value aesthetics in their community (moderately high sensitivity). Collectively, the sensitivity rating for highway neighbors is considered moderately high.

HIGHWAY USERS *(Views from the Road)*

Commuters and Local Motorists:

Commuters and local motorists (drivers), due to their immediate activity, would be primarily focused on the traffic and roadway conditions. Additionally, while preoccupied with driving, the viewer would be passively engaged in observing the surroundings. This preoccupation with the view would be narrow and view specific indicating a moderately high degree of awareness to visual changes. Commuters and local motorists (passengers), due to their activity, would have a wider, more generalized, awareness of their visual environment. This level of preoccupation with the immediate view would be broad indicating a moderate degree of awareness. In addition, commuters and local motorists may be residents or others with a familiarity and appreciation of the visual setting. These viewers would have a higher regard for aesthetics in their public spaces. These values and goals would indicate a moderately high sensitivity to change. Therefore, this category of viewer would be engaged in observing their surroundings (moderate sensitivity). Due to the viewer’s proximity to the proposed project, would possess a narrow focus (moderately high sensitivity), and value aesthetic in public spaces (moderately high sensitivity). As a result, commuters and local motorist would have an average sensitivity rating considered moderately high.

Regional Travelers and Tourists:

Similar to drivers/passengers in other categories, regional travelers and tourists would be focused on the traffic and roadway conditions. The driver would be preoccupied with the immediate task while passively engaged in observing the surroundings. This preoccupation with the immediate view would be narrow and view specific indicating a moderately high degree or awareness to visual changes. Specific to passengers, the level of preoccupation would indicate a wider, more general view indicating a moderate degree of awareness to visual changes. While this group may value aesthetics in their public spaces, they do not reside or work in the immediate community, and exhibit less sensitivity to changes in the setting. This level of values indicates a moderately low sensitivity to change. Therefore, this category of viewer would be engaged in observing their surroundings (moderate sensitivity). Due to their immediate

proximity, viewers would possess a narrow focus (moderate sensitivity) to the proposed project. In addition, considering the level of viewer familiarity with the area, viewers would lack knowledge of local values and aesthetic goals (moderately low sensitivity). As a result, regional travelers and tourists would have an average sensitivity rating considered moderate.

Commercial Drivers:

Commercial drivers would view the project from the roadway on a regular basis (daily, weekly, and monthly). Similar to other highway users, commercial drivers would be engaged in the activity and focused on the traffic and roadway conditions. This preoccupation with the immediate view would be narrow and view specific. In addition, while preoccupied with driving, the viewer would be passively engaged in observing the general surroundings. This combination indicates a moderate degree of awareness to visual changes. While this group may value aesthetics in their public spaces, they do not reside or work in the immediate community, and exhibit less sensitivity to changes in the setting. This lack of local values indicates a low sensitivity to change. Therefore, this category of viewer would participate in a combination of engaged and general observation within their surroundings (moderate sensitivity). Due to their immediate proximity, viewers would possess a narrow focus (moderate sensitivity) to the proposed project. In addition, considering the lack of familiarity with the area, viewers would lack knowledge of local values and aesthetic goals of the project (low sensitivity). As a result, commercial drivers would have an average sensitivity rating considered moderately low.

Collectively, the average sensitivity rating for highway users is considered moderate.

The analysis was performed for three (3) user groups (commuters and local motorists, regional travelers and tourists, and commercial drivers). A weighted average (based upon quantity of viewers) was considered prior to determining the average viewer rating for highway users. As a result, commuters and local motorist were assessed a greater ‘weight’ in calculating the sensitivity ratings.

Overall Viewer Sensitivity

A calculation of viewer sensitivity for viewer groups is calculated using a cumulative average of each viewer category. The analysis was performed for the two (2) user groups, (highway neighbors and users) and provides an average of the narratives for viewer sensitivity. The resulting average indicates a moderate viewer sensitivity to the proposed change in the visual environment. Collectively, the average sensitivity rating for highway neighbors and users is considered moderate.

<u>Visual Assessment Units and Analysis of Key Views</u>

The project corridor was divided into a series of "outdoor rooms" or *visual assessment units* and is typically defined by the limits of a particular viewshed. The viewshed is compromised of the following visual scenes:

- Valley floor along the SR-94 corridor
- Valley floor along the SR-125 corridor
- Residential neighborhoods (rural character)
- Hillsides with distinct boulder outcroppings
- Distant ridgelines (foothill ranges)

For this project, the following three (3) visual assessment unit and the associated key views have been identified:

- SR-125 corridor located south of Lemon Avenue
- SR-94 corridor located west of Helix Drive
- Echo Drive roadway realignment located west of SR-125

Key View Locations:

- **Key View #1 – Viewing Northeast from SR-125 just south of the Mariposa Street Bridge.** This view provides a vantage point for depicting the proposed lengthening of the current Mariposa Street bridge and associated roadway improvements along the west side of the SR-125 corridor.
- **Key View #2 – Viewing East from Echo Drive towards SR-125.** This view provides a vantage point for depicting the proposed bridge structure on Echo Drive over the new SR-94/125 connector.
- **Key View #3 - Viewing Northwest along Helix Street within the SR-94 corridor.** This view provides a vantage point for depicting the proposed improvements towards Bancroft Drive along the south side of the SR-94 corridor.

Figures 8-A to 8-E illustrate visual assessment units and key views for the project.

Environmental Consequences

The proposed build alternative would widen the existing highway cross-section; remove and replace an existing over crossing; construction retaining and sound walls; and alter the surrounding topography. In addition, the proposed build alternative would remove existing mature highway planting reducing the hues and textures of the roadside landscape. The project would increase the scale of the facility within the context of the existing corridor and further urbanize the existing visual character. Collectively, the change to the existing visual character would be considered moderate to moderately high, resulting in a diminished visual character. Similarly, the change to existing visual quality is anticipated to be moderate to moderately high, resulting in a diminished visual quality within the project view shed. As a result, the resource change associated with the project implementation would be considered moderate to moderately high.

<u>Resource Change</u>

The build alternative would result in an increase in highway-related structures and a permanent loss of vegetation within the existing view area. The proposed build-alternative would include: replacement of bridge structures; widening of paved roadway; construction of interchange ramps, retaining and sound walls, concrete barrier rails and metal guard rails, and fencing; topographic changes to surrounding slopes; and removal of vegetation. These features would alter the existing topographic patterns in the corridor creating a more dissonant relationship between built and vegetative components. The proposed project would reduce the natural hues and textures of the surround roadside areas and expand the highway facility and increase the urban character.

The proposed build alternative would increase the scale of built elements and result in a greater dominance over the existing visual setting. As a result, following completion of the project the

anticipated vividness rating would be considered moderate. The proposed project would have a moderately low change to the existing vividness rating.

In addition, the proposed build alternative would require removal of roadside vegetation during construction. The removal, specifically trees, would be a perceived change and result in a moderate impact to the existing corridor character. While the project would replace trees in available roadside locations, the trees are subject to constrained areas further from the travel way. As a result, following completion of the project the anticipated intactness would be considered moderately low.

The project proposes horizontal and vertical realignment of the highway, interchange ramps and construction of retaining walls at various locations within the project area. This proposed work would result in topographical changes to the corridor. This dissonant relationship between existing and proposed topography would result in a reduced unity within the visual setting. As a result, following completion of the project the anticipated unity would be considered moderately low.

To determine an aggregate rating for viewer response, project viewer groups were identified and analyzed for level of exposure and sensitivity. The analysis determined a moderate to moderately high level of exposure and sensitivity to changes in the project corridor. Therefore, the overall viewer response for the project would be considered moderate to moderately high.

Collectively, the aggregate visual impact of the proposed project would be moderate to moderately-high.

However, the degree of change could be reduced with the implementation of the proposed minimization measures.

The proposed build alternative would minimally increase the sources of light or glare and would not adversely affect day or nighttime views of the area. These project improvements would not change the existing visual resources; therefore, avoidance and minimization measures are not proposed for anticipate sources of light or glare.

It is anticipated temporary visual impacts would occur during the project construction. Limits of construction impacts and staging areas would be clearly defined limiting the impacts of construction operations. Temporary construction impacts would include temporary structures, contractor staging areas, dust, night lighting, movement/staging of construction materials, and traffic detours. By their nature, construction impacts would cease following completion of the project.

Scenic Resources

The proposed project would be consistent with other infrastructure improvement projects providing beneficial transportation facilities required at the SR-94 and SR-125 interchange. While the SR-125 corridor is designated a Scenic Highway from SR-94 to I-8, the proposed project would not cumulatively impact the scenic character of the corridor.

While the proposed project will provide additional highway features (two-lane freeway-to-freeway connector, retaining walls, sound walls, additional pavement width, and roadway delineation), it is not anticipated that the proposed project would result in cumulative changes to the existing visual character.

Key View Locations:

Key View #1 – Viewing Northeast from SR-125 just south of the Mariposa Street Bridge. This view provides a vantage point for depicting the proposed lengthening of the current Mariposa Street bridge and associated roadway improvements along the west side of the SR-125 corridor.

Resulting Visual Impact

Within this Key View, the construction of the Option 1 would result in a moderate change to the existing visual resources. The viewer response to the key viewpoint location would be considered moderate. As a result, the visual impact associated with the project would be considered moderate.

Within this Key View, the construction of the Option 2 would result in a moderate change to the existing visual resources. The viewer response to the change in the key viewpoint location would be considered moderate. As a result, the visual impact would be considered moderate.

Key View #2 – Viewing East from Echo Drive towards SR-125. This view provides a vantage point for depicting the proposed bridge structure on Echo Drive over the new SR-94/125 connector.

Resulting Visual Impact

Within this Key View, the proposed project would result in a moderately high change to the existing visual resources. The viewer response to the visual change in the key viewpoint location would be considered moderate. As a result, the visual impact would be considered moderately high.

Key View #3 - Viewing Northwest along Helix Street within the SR-94 corridor. This view provides a vantage point for depicting the proposed improvements towards Bancroft Drive along the south side of the SR-94 corridor.

Within this Key View, the construction would result in a moderate change to the existing visual resources. The viewer response to the visual change in the key viewpoint location would be considered moderately high. As a result, the visual impact would be considered moderately high.

Visual minimization measures would be considered necessary for the project. The duration of construction would be approximately 18 to 24 months.

No-Build Alternative

No visual impacts or improvements will result from the No-Build Alternative.

Avoidance, Minimization, and/or Mitigation Measures

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

Visual mitigation would adhere to the following design requirements in consultation with the District Landscape Architect (DLA). The requirements are arranged by project feature and

include options to be implemented in order of effectiveness. Some of the mitigation measures have been incorporated as project features to minimize adverse impacts and are depicted in key observation viewpoint simulations. In addition, the SR-94/SR-125 Design Guidelines (Guidelines) will be developed prior to approval of the project construction documents. The Guidelines will supplement the mitigation requirements described in this document and provide more detailed architectural and landscape mitigation measures. In addition, these Guidelines will respond to comments provided by engaged stakeholders (community groups, city staff members, regulatory agencies, project development team members).

Highway Planting

To provide a guideline for mitigation for the proposed project, a Landscape Concept Plan should be developed for the vegetation of roadside areas disturbed by the project. The plan identifies opportunities for highway planting and establishes a landscape theme for the corridor.

The Landscape Concept Plan (LCP) should be developed in consultation with the project stakeholders (DLA, local community, planning groups, agency staff, and the project development team).

The LCP would recommend a southern California native or drought-tolerant plant palette. Plantings would: control erosion; improve water quality; be sustainable, low maintenance, and drought tolerant requiring low or minimal irrigation. All disturbed areas (sloped and flat) would receive a hydroseed application of southern California native plants. The seed source would originate from San Diego or Orange County. In appropriate areas, slope areas would be planted with one-gallon native or drought-tolerant shrubs installed at eight feet increments in each direction. Larger tree species would be a minimum of 15-gallon size and include native or drought-tolerant species. Smaller tree/shrub species would be a minimum of 5-gallon size and include native or drought-tolerant species. In addition, the following highway planting components should be included in the project.

- The project should receive drought tolerant, low maintenance plant material compatible with the adjacent vegetative community, sustainable horticultural practices, and consistent with the Caltrans statewide drought policies.
- Trees would be planted in the vicinity of existing and proposed structures to partially screen and diminish the visual size and scale of the facilities.
- In areas of topographically lower elevation, riparian trees would be planted to enhance the existing valleys traversing the project. These areas would provide opportunities for greater tree diversity.
- Native shrubs would be used on all disturbed slopes located adjacent to natural areas to facilitate visual transition from proposed roadway edge to right-of-way limit. Selection of native plant species should be coordinated with the District Biologist.
- Where appropriate, the project should recommend the use of inert materials (wood mulch, cobble, gravel, decomposed granite) for ground coverage. This material should be selected to: reduce or eliminate use of irrigation; reduce maintenance; and enhance visual complexity of the facility.
- Slopes shall be graded 2:1 or flatter. Grading shall utilize techniques such as slope rounding and sculpting, and variable gradients to approximate the appearance of the natural topography.

- The project proposes expansion of the highway facility and would result in the permanent loss of existing roadside planting areas. The project should include measures to provide replacement planting areas within the freeway facility. These highway plantings locations options include: the edge of shoulder, between concrete median and barriers; and between barriers and retaining and/or sound walls (with available horizontal width). A minimum width of 2' would be provided for planting areas between barriers and wall structures, and 6' between median and barriers. Safety barriers located at the outside edge of shoulder should facilitate tree planting in roadside areas too narrow to meet standard clear recovery setbacks for highway planting.
- In locations where the proposed highway facilities are in close proximity to local frontage streets/roads, highway planting buffer zones should be developed between the highway pavement and street pavement. The zones would include as appropriate complete street components (street trees and shrubs, sidewalks, and cast-in-place or masonry block walls to provide access control. Installation of this mitigation measure is contingent on local agency approval and commitment to maintain the improvements in perpetuity.
- Roadside area with highway planting or hydraulically seeded areas would receive fully automatic irrigation systems. These areas would be temporarily irrigated for a five-year establishment period. Following the five (5) year period, overhead irrigation delivery systems would be abandoned and point (flood bubbler) delivery systems would be maintained permanently beyond the plant establishment period. Irrigation mainline sleeves and crossovers shall be provided under paved areas. The crossover/sleeve material would be 10" CHDPE conduit with a 4" CL 315 PVC waterline and a 4" CL 315 sprinkler control conduit.

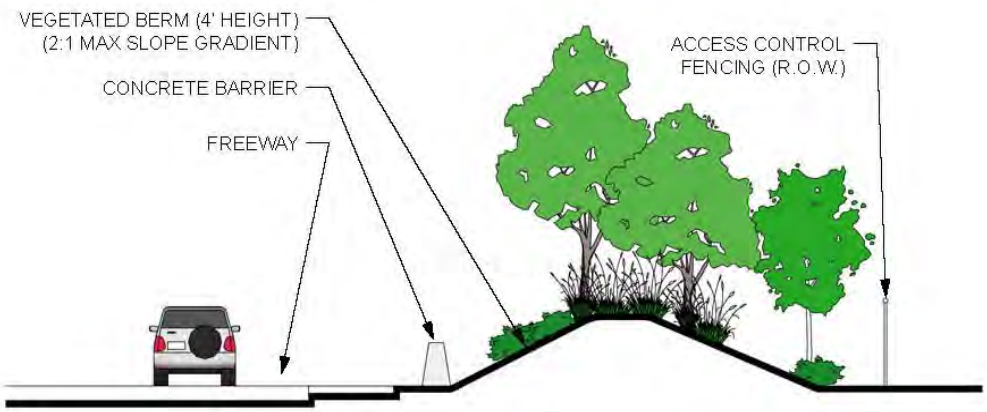
Landscape Protection Areas

Vegetated areas outside of the construction footprint shall be protected. If these areas are not identified as Environmentally Sensitive Areas (ESA), they are designated as Landscape Protection Areas (LPA) and protected by temporary fencing installed prior to clearing and grubbing of the site. No equipment, material storage, vehicles or access paths are allowed within an LPA. Limited access to LPA is allowed for irrigation check and test, irrigation removal, and irrigation contract work. LPA boundaries and restricted access requirements would be determined by the DLA during the design phase and location of proposed Contractor Use Areas would be coordinated with DLA to minimize impacts.

Noise Barriers

Noise Berm (Fill Section)

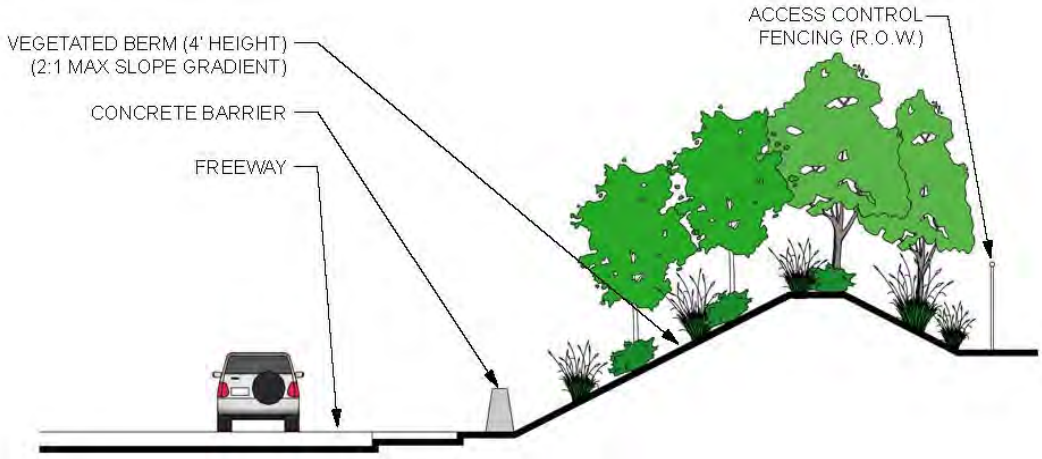
When feasible, earthen berms should be used for noise attenuation and are the preferred visual mitigation measure. Generally, a vegetative solution is the most visually compatible with surrounding land uses. Below, see cross-section of noise berm (fill section).



Section – Berm (Fill)

Noise Berm (Cut Section)

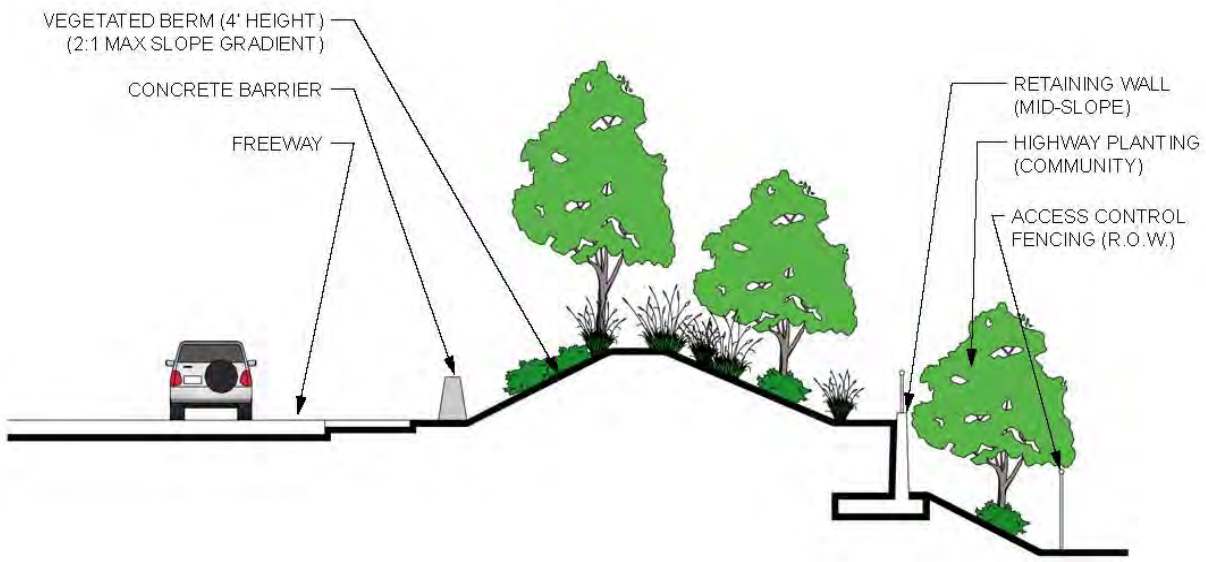
Below see cross-section of noise berm (cut section).



Section – Berm (Cut)

Noise Berm/Retaining Wall

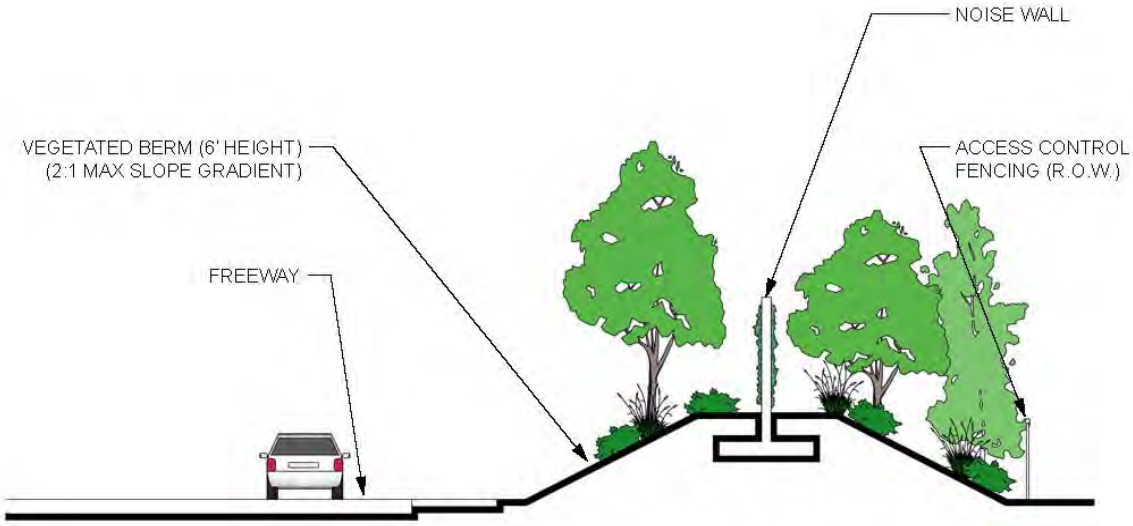
In roadside areas where the right-of-way is not sufficiently wide enough to accommodate full earthen noise berms, a retaining wall may be used in combination with a berm to avoid building a noise wall. Below, see cross-section of noise berm/retaining wall.



Section - Noise Berm/Retaining Wall

Noise Berm/Noise Wall

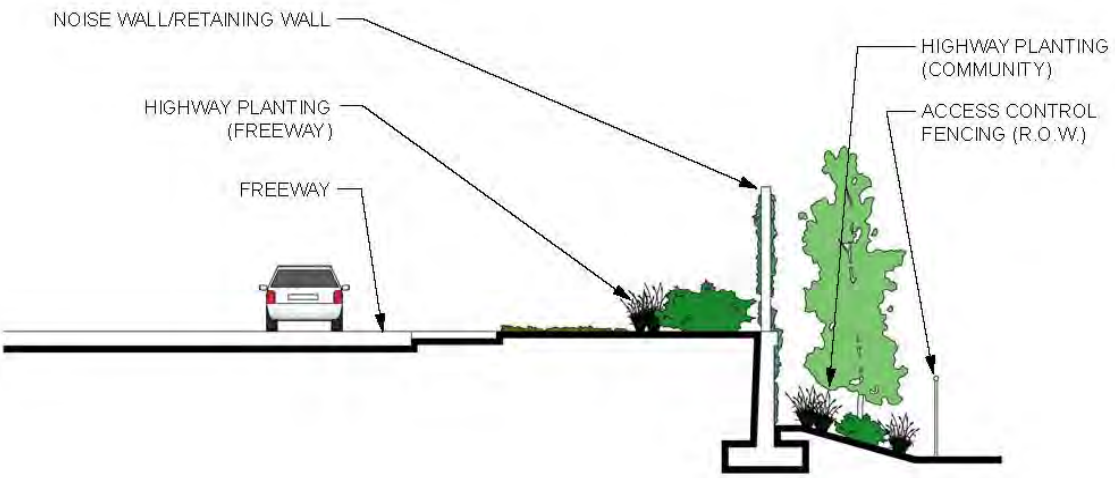
In roadside areas where right-of-way is not sufficiently wide enough to accommodate full earthen noise berms, a partial earthen berm may be used in combination with a noise wall to avoid building a taller noise wall. This combination should be used where there is not sufficient space for highway planting. Below, see cross-section of noise berm/noise wall.



Section – Noise Berm/Noise Wall

Noise Wall (Landscape Buffers)

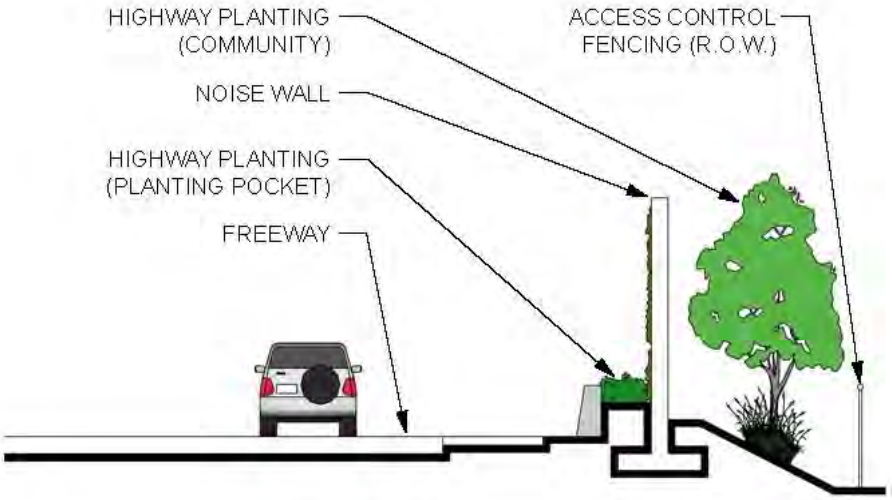
Whether full or partial earthen noise attenuation berms are implemented, highway planting should be used (on both sides of structure) to minimize the apparent height and minimize the visual impact. In some cases, a retaining wall may be necessary to provide adequate area for planting treatment. Below, see cross-section of combination noise wall/retaining wall with highway planting.



Section – Buffer Planting

Noise Wall (Planting Pockets)

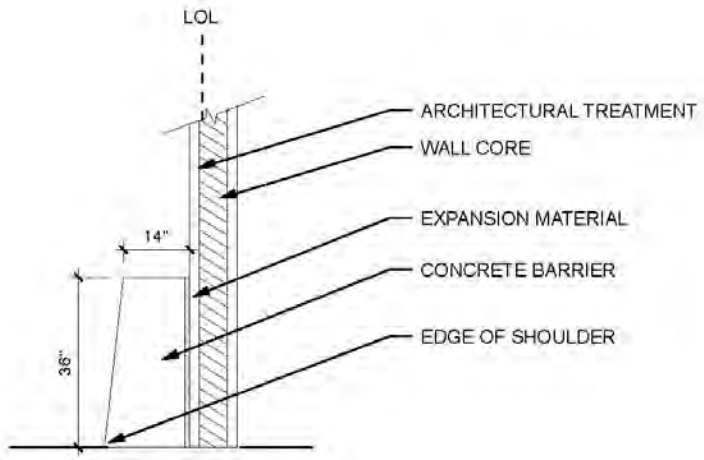
In highway roadside areas too constrained for the mitigation measures described above, a concrete safety barrier should be used to create a planting pocket allowing for vine planting between concrete safety barrier and noise barrier. A minimum width of 4' should be provided between the back of safety barrier and the surface of noise barrier. Below, see cross-section of planting pocket.



Section – Planting Pocket

Noise Wall (Set-Back)

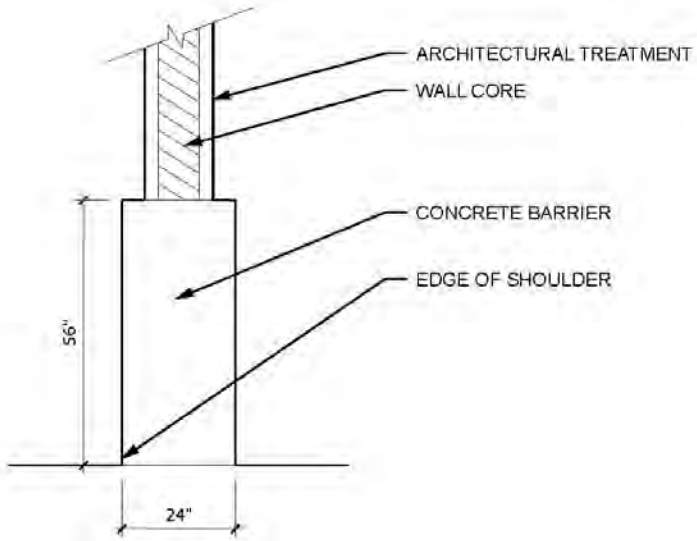
In roadside areas too constrained to allow planting pockets, the noise wall should be recessed behind the face of the barriers at a sufficient distance to allow for an architectural surface treatment on the wall. Avoid placement of noise wall directly to top of the concrete barrier.



Section – Noise Wall (Set-Back)

Concrete Safety Barriers (Vertical)

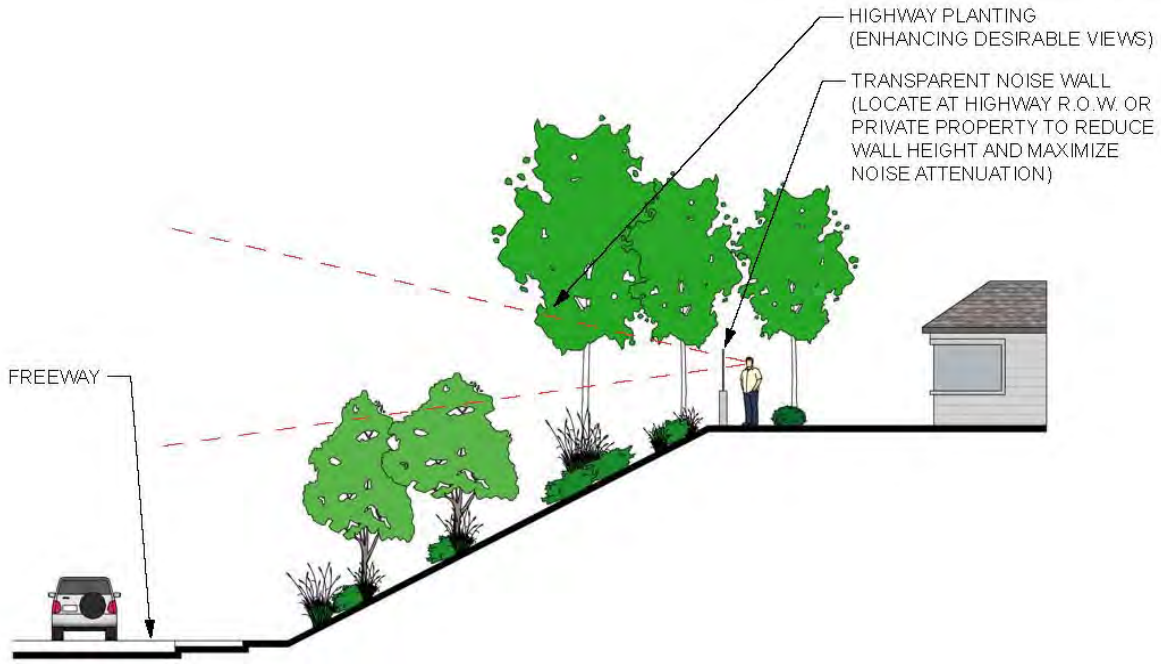
In roadside areas without available space for architectural surface treatment, the project team should consider vertical concrete safety barriers. Vertical barriers add additional width (12”) necessary for architectural surface treatments and elements (pilasters and wall caps).



Section – Concrete Safety Barrier (Vertical)

Transparent Noise Walls (Private Property)

Where noise receptors are located above the elevation of the highway, transparent noise walls should be located at the top-of-slope at the right-of-way line or located within the private property of the benefitted receptor. Transparent walls should be considered if the property owner agrees to maintain the wall surface. Locating wall near the receptors should achieve a 'line of sight' sound reduction and substantially reduce the wall height.



Section - Transparent Noise Wall

Architectural Detailing (Noise Walls)

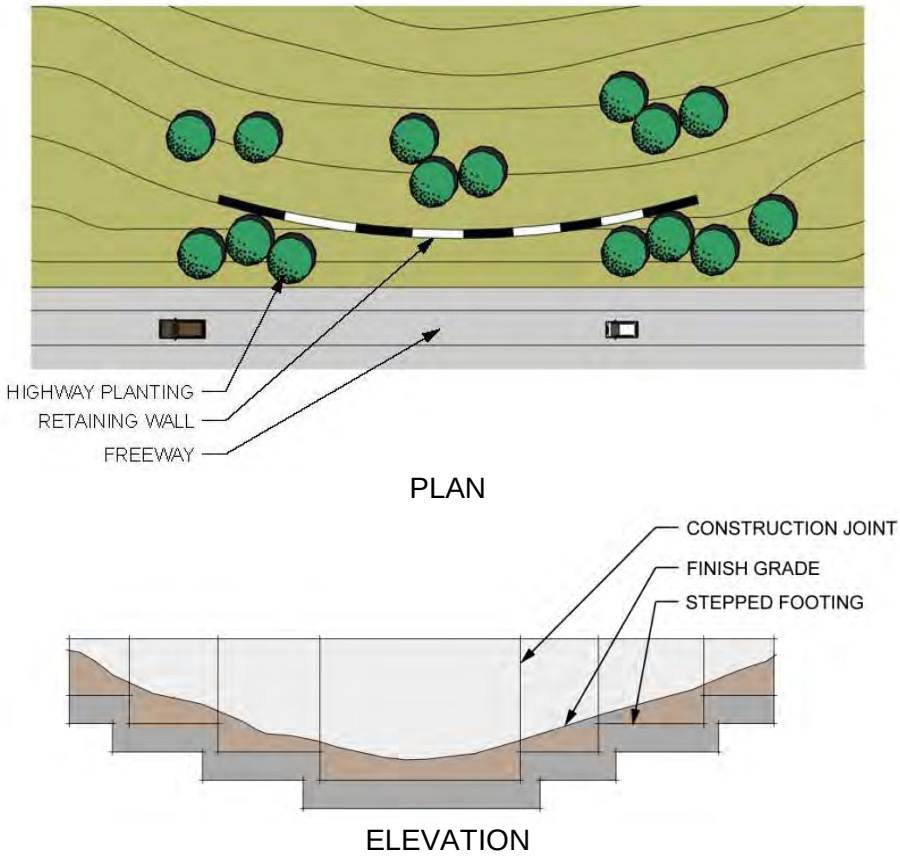
Noise walls would be designed to be visually compatible with the surrounding community. Architectural detailing including pilasters, wall caps, block patterns, and varied wall alignments would reduce the 'visual' height of the walls and improve visual character of the setting. The proposed block configuration would match existing noise wall located at the SR-125/Spring Street off ramp. The proposed noise walls would be constructed of split-face concrete masonry units; integrally colored earth tone (tan/brown) to blend with the hues of the surrounding landscape. The grout joints would match the color of the block. The block texture would allow vines to adhere firmly to the wall. The vine planting would deter application of graffiti.

Retaining Walls

Terrain Contoured Retaining Walls (Cut Sections)

Where appropriate, retaining walls would follow the contours of the topography and maintain a constant elevation at the top of wall. Wall alignment and profile should be composed of long radius curves avoiding tangents or abrupt changes in profile. With available roadside area, walls

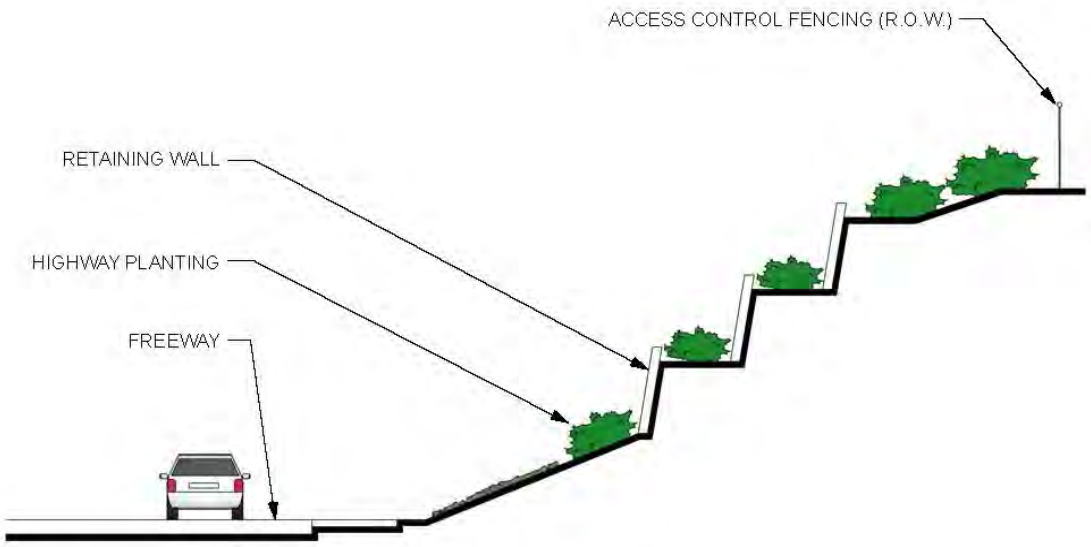
should be placed at mid-slope. This placement is visually compatible with the surrounding terrain and provides available area, both above and below, for highway planting.



Retaining Wall (Terrain – Contoured)

Retaining Wall (Terraced)

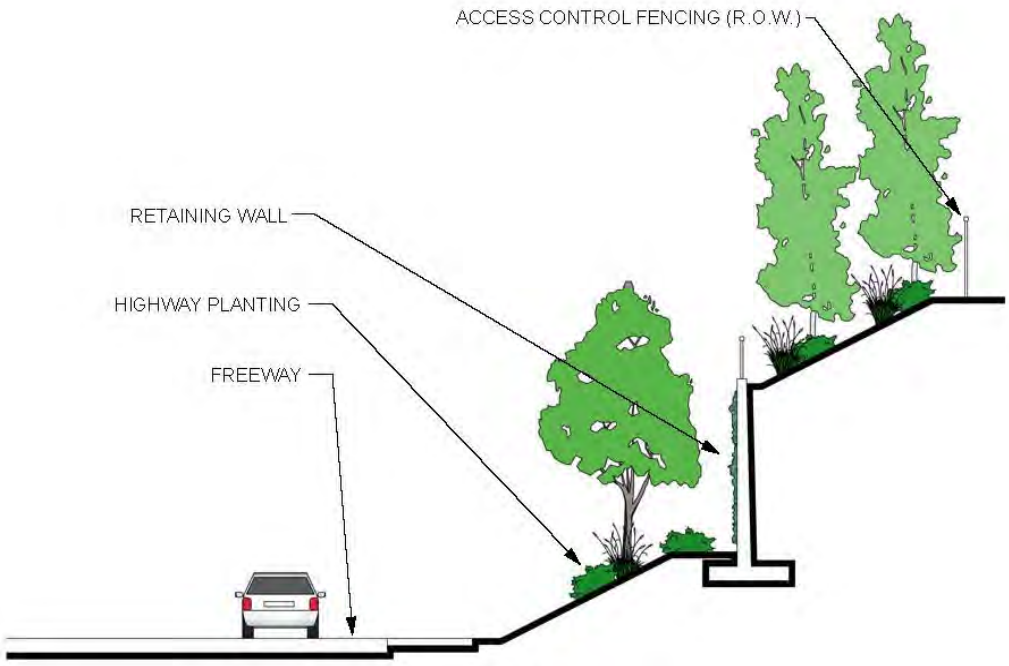
Where site conditions permit, retaining wall height over 12' should be divided into separate retaining structures (terraced) creating an available planting area between structures.



Section - Terraced Retaining Wall

Retaining Wall (Mid-Slope)

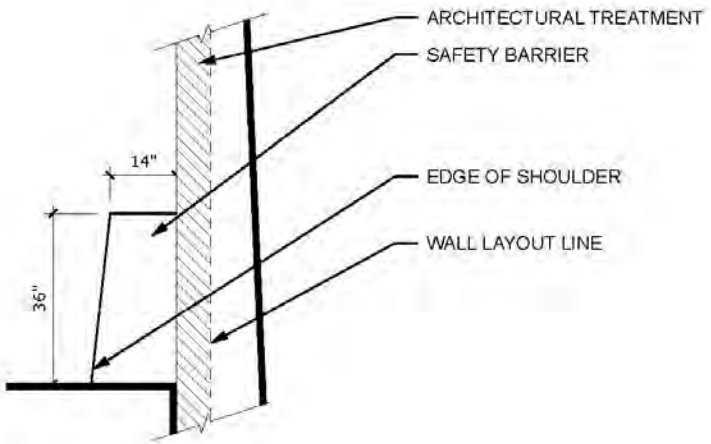
Where feasible, locate retaining walls at mid-slope areas providing area for highway planting between the wall and the highway.



Section - Mid-Slope Retaining Wall

Retaining Wall/Concrete Safety Barrier (Wall Set-Back)

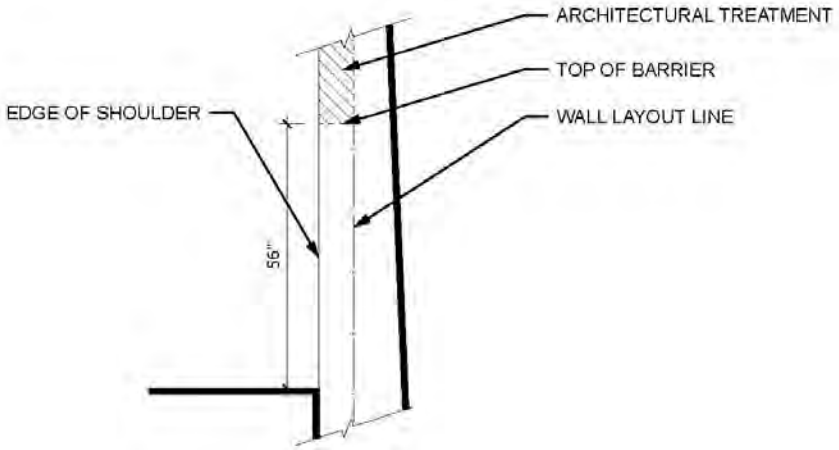
In roadside areas too constrained to provide planting pockets, the retaining wall should be recessed behind the face of the barriers at a sufficient distance to allow for an architectural treatment on the exposed wall surface.



Section – Retaining Wall/Concrete Safety Barrier (Wall Set-Back)

Retaining Wall/Concrete Safety Barrier (Vertical)

In roadside areas without available space for architectural surface treatment, the project team would consider vertical concrete safety barriers. Vertical barriers add additional width (12”) necessary for architectural surface treatments and components.



Retaining Wall/Concrete Safety Barrier (Vertical)

Vehicular Facilities

The proposed project would improve the continuity and minimize the conflict inherent with vehicular and pedestrian facilities. Wherever possible this would be achieved by converting existing non-stop highway ramp (free-turning) ingress/egress points into controlled highway

ramp connections. These proposed highway ramps would connect with the local city street perpendicular to the flow of traffic.

Pedestrian Facilities

A major component of 'Complete Street' goals is the establishment of a continuous pedestrian environment. This would be accomplished by incorporating design features including: street trees; parkways (located between sidewalk and curb); enriched sidewalk paving (continuous across freeway ramps); median islands (refuge in city street); decorative lighting. The proposed pedestrian and transit facilities would conform to SANDAG Pedestrian Design Guidelines and any applicable local streetscape design standards and guidance. In addition, urban design features (benches, trash receptacles, bollards, directional signage) would be selected to enhance the street environment.

Bicycle Facilities

Bicycles facilities would be preserved or upgraded to conform to the San Diego Regional Bike Plan, applicable local standards, and General Plan circulation goals.

Highway Planting

The highway planting would reinforce the existing visual character and visual goals of the community. Enhanced highway planting would be considered where the responsible local agency would provide maintenance in perpetuity.

Storm Water Treatment Facilities

Detention basins and bioswales located at interchanges, or within areas of high visibility, would incorporate the following design features:

- Detention basins would be located at least 10' from clear recovery areas, wherever possible, to allow for installation of highway planting. Whenever possible, the planting would screen the basin from the highway viewer.
- Basins would have a natural form, similar to seasonal streambeds or riparian pools, and shaped in an informal, curvilinear manner.
- Basin slopes would incorporate slope rounding and variable gradients, similar to the surrounding topography, to deemphasize a 'manufactured' edge condition.
- Basins would include maintenance access drives located in unobtrusive areas consisting of inert materials or herbaceous groundcover. The material would be visually compatible with the surrounding visual setting.
- Perimeter fence material (chain link fabric) would not be used to control access to the basin.
- Concrete structures and surfaces would be of special design and adhere to the corridor design guidelines.
- Rock slope protection would consist of whole rock material (various sizes).

Similar to basins, bioswales would be located in non-obtrusive areas, designed to appear as natural features, and incorporate the applicable mitigation measures listed for detention basins.

Street Appurtenances

Wherever possible, the use of Caltrans standard freeway appurtenances on local streets would be avoided or minimized. The project would specify functional alternatives more consistent with community design standards. Crash cushions, metal beam guardrails, end anchor assemblies, concrete barriers, sign standards, light standards, signal standards, and chain link fencing are examples of features to be addressed in the Guidelines. The use of access control fencing at interchanges would be minimized and, if necessary, located in unobtrusive locations and, where appropriate, be a non-standard design composed of enhanced materials. Wherever possible, utility equipment pedestals (electrical control cabinets and other utility boxes) would be installed in unobtrusive locations away from sidewalks.

Cast-in-Place, Soil Nail, and Tie-back Retaining Walls

Architectural features, textures and integral concrete colors should be used to mitigate the appearance of cast-in-place, soil nail, and tie-back retaining wall surfaces. Walls would incorporate architectural features (pilasters and caps) to provide relief from monolithic appearance, create shadow line, and reduce the visual scale of the structure. Additionally, the proposed surface textures would deter application of graffiti.

Mechanically Stabilized Earth Retaining Walls

The use of mechanically stabilized earth (MSE) walls would require special consideration due to their design constraints. MSE walls would have custom designed panels that include integral color, enhanced surface texture, and a 4” minimum pattern reveal on the panel. When located near MSE wall structures, the placement of vegetated slopes, noise walls, concrete barriers, drainage conveyances, and other roadway features may require special design consideration.

Safety Barriers (Low Profile)

Low-profile (Caltrans Type 60S) or “see through” (Caltrans Type 80) safety barrier rails in areas where standard height barriers would diminish view of scenic resources from the freeway.

Freeway Overcrossing

At proposed overcrossing structure locations, the abutments would be short-seat type abutments located at the top of slopes. The proposed project design would minimize or eliminate high cantilever abutments located at the edge of paving.

The abutments would be the same structural type and exhibit a symmetrical appearance. Where the project requires temporary tie-back walls to facilitate bridge construction, the walls would be terrain contoured walls receiving architectural textures consistent with permanent retaining walls constructed within the project. The temporary walls would be removed when overcrossing structures are completed.

Similarly, in locations where retaining walls are incorporated into abutments, walls would be terrain-contoured and located away from the edge of shoulder. This would allow for sufficient area for highway planting between wall and highway.

Slope paving would be recommended under the bridge structure. The paved surfaced would be poured-in-place integral color concrete with decorative texture – or textured surface, scored veneer block, or natural rock.

Bridge-mounted signage would be designed to visually integrate with proposed bridge architecture. Concrete sign pedestals would be consistent in appearance and appropriate scale with bridge structure.

With available area, sidewalks would be provided on both sides of overcrossings and have a 6' minimum width. Two (2) lane structures would have a minimum width of 6' and wider overcrossing would have minimum width of 8'. All sidewalks would receive score patterns and/or surface texture.

The selection of enhanced fencing and railings, decorative (pedestrian) lighting, and other urban amenities would be specified for overcrossing structures and designed consistent with local values and goals. As requested by the local jurisdiction, container trees may be located on structures where the local agency has agreed to maintain in perpetuity.

With available spacing, bicycle paths, lanes, or shoulders would be provided on both sides of the overcrossing. The classification/type of facility would be consistent with regional and local planning goals. A minimum shoulder width of 4' would be provided for Class 3 bicycle facilities.

Freeway Undercrossing

Bridge widening would be performed using cast-in-place box girder construction. The proposed girder design would be similar in appearance on either side of the bridge producing a symmetrical appearance.

For these structures, bridge abutment type would be consistent for each side of the structure and provide a symmetrical appearance.

Where widening requires tie back walls, proposed structures would be terrain contoured and incorporate architectural features consistent with corridor aesthetics.

Whenever possible, the deck of elevated lanes would include low-profile (Caltrans Type 60S) or "see through" (Caltrans Type 80) safety barrier rails in areas where standard height barriers would diminish view of scenic resources from the freeway. The barrier would include integral color and enhanced textures matching or complementing the architectural aesthetic of the girders, bents, columns, and/or supporting walls.

Wherever possible, pedestrian sidewalks would be 10' in width (minimum) located on both directions of the city street. On the local street, the existing sidewalk configurations would continue, uninterrupted, across the Caltrans right-of-way.

The selection of decorative (pedestrian) lighting, including bridge soffit lighting, would be specified at each undercrossing structure. With available spacing, bicycle paths, lanes, or shoulders would be provided on both sides of the undercrossing. The classification/type of facility would be consistent with regional and local planning goals. A minimum shoulder width of 4' would be provided for Class 3 bicycle facilities.

Proposed slope paving would be enhanced with course textured surface materials (scored veneer block or natural rock). The material selection would be consistent with existing architectural character and add visual interest to the setting.

Similar to overcrossings, the slope paving would be recommended under the bridge structure. The paved surface would be poured-in-place integral color concrete with decorative texture or textured surface material, scored veneer block, or natural rock. Proposed surface textures would deter application of graffiti.

Bridges

The visual mitigation measures listed for overcrossing and undercrossing structures, abutment and supporting wall design, sidewalks, slope paving, bicycle routes, and urban design improvements would apply to other freeway bridge structures.

Pedestrian Overcrossing

The pedestrian overcrossing structures would be a minimum of 15’ in width. The design would incorporate the visual mitigation measures listed for overcrossing structures. The selection of enhanced fencing and railings, decorative lighting, and other urban design amenities would be specified for pedestrian overcrossing structures and designed consistent with local values and goals.

Other Corridor Features

Manufactured Slopes

Manufactured slopes would be contoured to a gradient of 2:1 or flatter to support highway planting and/or inert materials (rock mulches). The grading would utilize techniques for slope rounding and sculpting, and incorporate variable gradients to approximate the appearance of natural topography. Consistent with Caltrans policy, embankment slopes steeper than 4:1 would require an approved design exception.

Median Barriers and Edge Barriers

To preserve desirable views and reduce the visual scale of the highway facility, concrete median barriers, would be low-profile (Type 60S) and/or “see through” (Type 736). Median barriers would include an integral concrete color and heavy sandblast texture to exposed surface visible from the freeway. The sandblast texture would create an irregular surface relief to a depth of 3/8”.

Drainage and Water Quality Facilities

Concrete drainage devices located in roadside areas would receive integral concrete color to match the hues (color) of surrounding soil. Wherever possible, porous alternatives (earthen swales), concrete culverts, and slope protection (rock) would be utilized wherever possible. As appropriate, detention basins and bio-swales would be contoured to simulate natural water features and planted with compatible native and/or drought-tolerant ornamental groundcover. Concrete interceptor ditches would not be placed at the toe of slopes adjacent to highly visible areas (residential properties or pedestrian use areas). Wherever possible, consider specification of a subsurface drainage alternative or planted geo-synthetic reinforced material.

2.8 CULTURAL RESOURCES

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 (NHPA) of 1966 , as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation [36 Code of Federal Regulations (CFR) 800]. On January 1, 2004, a Section 106 Programmatic Agreement (PA) between the Advisory Council, the Federal Highway Administration (FHWA), State Historic Preservation Officer (SHPO), and the Caltrans 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 CA Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet the National Register of Historic Places listing criteria. It further specifically requires Caltrans to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

Affected Environment

A *Historic Property Survey Report* (HPSR) was prepared for the Project in May 2014. The First Supplemental HPSR was completed in March 2015 to address proposed noise barriers that were not addressed in the original HPSR. In addition, a Historical Resources Evaluation Report (HRER; April 2014), an Archaeological Survey Report (ASR; April 2014), public coordination and Native American consultation was completed for the proposed project.

The following is a summary of findings from these studies. The direct Area of Potential Effect (APE) was surveyed for archaeological resources, and the entire APE was surveyed for built environment resources. Field surveys of the properties within the APE resulted in the identification and evaluation of 16 built environmental resources. These include 14 single-family residences; one duplex; and one property with commercial and residential units. State Historic Preservation Office (SHPO) concurred that none of these resources were eligible for listing in the National Register, but one is listed in the City of La Mesa’s local register and qualifies as a historical resource pursuant to the CEQA. The property is the Clifford Sawyer House.

The Clifford Sawyer House was built in 1929 on three acres for Clifford and Jennie Sawyer, who established a Fuerte avocado grove on the property. Today the property is considerably smaller than it originally was; it is bordered by State Route 125 and Merritt Boulevard on the west, north, and east sides. The avocado groves have been removed from the property. All of these changes have diminished the historic setting and the property's ability to convey its association with the early 20th century avocado industry in La Mesa. The house is a relatively rare example of the Tudor Revival style in La Mesa, but is not a representative example of the style. No evidence was found indicating that it is the work of a master or exhibits unique construction methods or materials or high artistic values. It was determined that the residence is unlikely to yield important information in prehistory or history. The property is currently designated as a local landmark.

The Native American Heritage Commission (NAHC) was contacted for a records search of their Sacred Lands Files. The results of the search indicated that no sacred lands were recorded within a one-half mile radius of the APE.

No prehistoric archaeological resources were observed within the APE, although archival research indicates the presence of archaeological sites within a 0.25-mile radius of the APE. The majority of the APE is located on land that has been graded and subjected to cut and fill for construction of SR-94 and SR-125. The APE has been heavily disturbed by development, and the likelihood of encountering intact subsurface archaeological deposits is low.

One prehistoric bedrock milling site that exhibits limited use, CA-SDI-4622, is located on an outcrop of granitic boulders situated on a steep slope. The site was originally recorded in 1974 (Gross 1974).

In accordance with Section 106 Programmatic Agreement Stipulation IX.A, it has been determined that a Finding of No Historic Properties Affected is appropriate for this undertaking.

Environmental Consequences

Of the cultural resources within the proposed project APE, only one constitutes a resource qualifying for protection under CEQA. The Clifford Sawyer House, built for Clifford and Jennie Sawyer in 1929, is marginally associated with the avocado industry in La Mesa dating to the late 1920s. The proposed project would construct a sound wall at the rear property line adjacent to the freeway. While the residence's integrity of setting would be minimally changed by the addition of the sound wall, the other six aspects of integrity (location, design, materials, workmanship, feeling, and association) would be unaffected by the proposed undertaking and none of the character-defining features of the residence would be directly or indirectly impacted. Therefore, the proposed wall would not diminish the historical significance of this resource.

No archaeological resources were identified within the project APE, and there is no evidence for subsurface cultural deposits. Based on the absence of known archaeological resources within or adjacent to the APE and the disturbed nature of the APE, the likelihood of encountering any archaeological resources during project related ground-disturbing activities is low.

No potentially eligible National Register historic districts, historic landscapes, or other historic properties were identified within or partially within the project APE. A concurrence letter from the State Historic Preservation Officer dated June 17th, 2014, is included in Chapter 3 – Comments and Coordination.

No-Build Alternative

The No-Build Alternative proposes no improvements and will not impact any historical resources.

Avoidance, Minimization, and/or Mitigation Measures

The following measures are standard provisions for cultural resources.

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

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to CA Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC), which would then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains would contact Kevin Hovey, Caltrans District 11, Environmental Analysis Branch D Chief, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

Additional Cultural Resource studies would be needed if the project limits are extended beyond the present survey limits.

Physical Environment

2.9 HYDROLOGY AND FLOODPLAIN

Regulatory Setting

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

To comply, the following must be analyzed:

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

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

Affected Environment

Information in this section is drawn from the Preliminary Drainage Report prepared for this project, dated December 31, 2014.

The existing interchange does not provide a direct freeway-to-freeway-connection from southbound SR-125 to eastbound SR-94. This project would provide a two-lane direct connection for that movement. In addition to the connector itself, auxiliary lanes on southbound SR-125 and eastbound SR-94 would be provided. Bridges would be widened or replaced, noise barriers and retaining walls would be constructed as needed. The proposed connector would be constructed below the existing SR-125, with retaining walls on either side for most of its length. It would also pass under the eastbound Bancroft Drive off-ramp, Echo Drive, and Panorama Drive.

The existing drainage system within the proposed project area would be modified to accommodate the construction of the connector and freeway widening. Proposed drainage improvements would maintain the area’s overall drainage patterns. Improvements consist of concrete channels, inlets and Reinforced Concrete Pavement (RCP) storm drains. The new connector would increase the impervious area by 5.91 acres; however, due to incorporation of three detention basins, the increase in peak flows are mitigated.

Existing storm drains were analyzed using 100-year flow rates that were calculated using the modified rational method. The existing storm drain located in the eastbound Bancroft Drive Off-ramp flows into Spring Valley Creek, a 20-foot wide lined channel.

A Federal Emergency Management Agency (FEMA) Zone A Flood Plain is located on Bancroft Drive where Spring Valley Creek floods onto the roadway. Figures 3-A, 3-B, and 3-D show the areas that represent the FEMA Flood Plain in the proposed project area. The proposed improvements at SR-94 and Bancroft Drive are to widen the Bancroft Drive undercrossing bridge. No column or abutment work would occur within the documented floodplain, and the proposed improvements to the bridge would include the bridge spanning over the existing floodplain.

Proposed storm drains and ditches were analyzed using 100-year flows. They are shown with preliminary sizes that would safely convey a 100-year storm. Proposed inlets would be located to maintain spread widths within the shoulders of the connector using 25-year flows. They are shown in this report in similar locations to the anticipated final design; however, inlets were not sized at this phase of the project.

Environmental Consequences

The proposed project currently crosses over Spring Valley Creek. According to the May 15, 2014 Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Spring Valley Creek is mapped as a “Zone A” floodplain. Due to the lack of water surface elevations (WSE) documented on the FEMA mapping, it is assumed that the FEMA study was conducted using approximate methodologies.

The proposed improvements at SR-94 and Bancroft Drive are to widen the Bancroft Drive undercrossing bridge. These improvements occur approximately 17 feet above ground elevation. No column or abutment work would occur within the documented floodplain, and the proposed improvements to the bridge would include the bridge spanning over the existing floodplain. Therefore, there is no impact to the existing FEMA floodplain.

Storm Drain

Elevations were assumed for use in the hydraulic modelling of storm drains and detention basins along Bancroft Drive based on the mapped FEMA flood plain limits. It is anticipated during a 100-year flood the storm drain system on Bancroft Drive would be inundated and site drainage would overflow onto the surface of Bancroft Drive. The detention basins have been located at a high enough elevation that they would still be effective in reducing peak flows to pre-project levels.

Avoidance, Minimization, and/or Mitigation Measures

No Mitigation Measures are required for this section.

2.10 WATER QUALITY AND STORM WATER RUNOFF

Regulatory Setting

Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source[1] 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 an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).

- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCB) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).

- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

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

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

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

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

which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic 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 the Wetlands and Other Waters section.

State Requirements: Porter-Cologne Water Quality Control Act

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

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

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

State Water Resources Control Board and Regional Water Quality Control Boards

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

- **National Pollutant Discharge Elimination System (NPDES) Program**

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water discharges, including Municipal Separate Storm Sewer Systems (MS4s). An MS4 is defined as “any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that is designed or used for collecting or conveying storm water.” The SWRCB has identified Caltrans as an owner/operator of an MS4 under federal regulations. 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.

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

Construction General Permit

Construction General Permit (Order No. 2009-009-DWQ), adopted on September 2, 2009, became effective on July 1, 2010. The permit regulates storm water discharges from construction sites that result in 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 DSA less than one acre.

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the United States must obtain a 401 Certification, which certifies that the project will 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.

Affected Environment

Information and analysis in this section is drawn from the Long-Form Storm Water Data Report, dated October 2014.

Existing Drainage System

The entire project area is part of the Sweetwater River basin. The Sweetwater River is located around 4.3 miles south of the project area. For this report, the existing drainage system is divided into basins that are designated by a letter, i.e. Basin F. Each basin corresponds to a

drainage outfall location from the project area. Each basin is further divided into sub-basins where intermediate flow calculations are needed, such as at catch basins.

Basin A is 4.03 acres located at the far eastern portion of the project along SR-94, near the Kenwood Drive Off-ramp. The upper extent of the basin is located south of SR-94 above an existing cut slope on private property. Runoff flows in an easterly direction and is collected in a lined ditch. The ditch flows into a 6-foot by 6-foot reinforced concrete box at the outfall location used for this study. Downstream of the project the RCB leads to an open channel that is approximately 40 feet wide.

Basin B receives runoff from the existing cut slope south of SR-94 and the eastbound lanes of SR-94. It has an area of 5.69 acres. There is a lined ditch located west of the cut slope where storm water flows into a 20-foot wide lined channel. The study outfall location for Basin B is located in the 20-foot wide concrete lined channel on Spring Valley Creek. Basins B, C, D, and F combine in the channel at this junction.

Basin C is 0.90 acres and includes most of the eastbound Bancroft Drive on-ramp and a small area between the ramp and the right-of-way line. Runoff from the on-ramp is collected along an AC dike and flows over an AC spillway on the south side of the ramp. It then flows to the east in a lined ditch. The study outfall location for Basin C is located in the 20-foot wide concrete lined channel on Spring Valley Creek. Basins B, C, D, and F combine in the channel at this junction.

Basin D covers 0.67 acres of the eastbound lanes of SR-94 just north of the Bancroft Drive On-ramp. It is located at a low point on the roadway where an AC spillway directs flows into a catch basin connected to a triple box culvert. The study outfall location for Basin D is located in the 20-foot wide concrete lined channel on Spring Valley Creek after flow enters the box culvert located under SR-94. Basins B, C, D, and F combine in the channel at this junction.

Basin E is located at the intersection of Bancroft Drive and the eastbound SR-94 ramps. It includes 0.35 acres of the off-ramp and the intersection itself. Runoff is conveyed in gutters south on Bancroft Drive. The basin outfall for this study is located south of the intersection at the gutter flow line.

Basin F includes 30.84 acres located on the developed hillside north of SR-94 and west of Bancroft Drive as well as the section of SR-94 roadway from Bancroft Drive to the Campo Road Overcrossing. Runoff on the hills north of SR-94 is conveyed along Terrace Drive and Merritt Boulevard. It flows into two curb inlets on Merritt Boulevard and another on Campo Road then into a 24-inch Reinforced Concrete Pipe (RCP) storm drain under SR-94 flowing along the north side of westbound SR-94. Additional flows from SR-94 join this storm drain, which then flows into a lined ditch. The ditch leads to a headwall and 30-inch RCP that flows to the south across SR-94 to a catch basin on the Bancroft Off-ramp. A 24-inch RCP storm drain and a lined ditch convey drainage from the hill above Green view Place to the same catch basin on the Bancroft Off-ramp. A 30-inch RCP storm drain continues down the off-ramp and is joined by two other inlets and a pipe conveying drainage from the median of SR-94. The storm drain changes to a 38-inch by 24-inch oval RCP before crossing Bancroft Drive and entering a concrete lined channel. The study outfall location for Basin F is located in the 20-foot wide concrete lined channel on Spring Valley Creek. Basins B, C, D, and F combine in the channel at this junction.

Basin G has a total area of 206.53 acres. The majority of the area is developed with single-family homes. The general direction of flow is in a southeasterly direction. The upstream portion of the basin is at Alpine Avenue in La Mesa. A 30-inch storm drain system in Mission Bell Lane,

Scenic Lane, and Bellflower Drive collects runoff from the surrounding neighborhood. A large inlet collects surface flow on the west side of Echo Drive and directs it into the storm drain. From Echo Drive to across SR-125 the storm drain is a 60-inch RCP. On the east side of SR-125, the pipe transitions to a 54-inch RCP. Catch basins along Panorama Drive and the Westbound SR-94 to Northbound SR-125 ramp lead to the 54-inch storm drain. From here, the storm drain runs to the southeast. Catch basins collect runoff from the median of SR-94 and drain to the same 54-inch storm drain. The storm drain then increases to a 60-inch pipe. The pipe curves to the southwest and continues offsite. Additional runoff from the hill on the southeast side of Campo Road drains into an inlet on Campo Road then through a 24-inch pipe to the 72-inch pipe. The outfall of Basin G for this study is after the 72-inch pipe crosses the northbound Campo Road On-ramp.

Basin H is 3.32 acres located along the southeast portion of the project. It includes portions of southbound SR-125 and the Spring Street Off-ramp. The upstream end of Basin H is located just north of the Panorama Drive Undercrossing. Runoff sheet flows across the southbound lanes of SR-125 then collects in an earthen swale along the shoulder. A catch basin located near the westbound SR-94 Spring Street Off-ramp conveys the runoff to an existing storm drain. The outfall location used for this study is at the catch basin.

Basin I covers 6.49 acres of southbound SR-125 and the slope on the west side of the roadway. Runoff is conveyed along a bench in the middle of the existing slope to a catch basin next to the shoulder of SR-125. There is a low point on SR-125 located at the catch basin. 2.87 acres of SR-125 drain into the same catch basin. A 24-inch CSP carries flows from the catch basin east across SR-125 to an existing channel along Bancroft Drive. The outfall of Basin I is at the catch basin for this study.

Basin J has an area of 1.60 acres. It covers an area from the high point on the Lemon Avenue On-ramp to the end of the ramp merge. The southbound lanes of SR-125 are included in this area. Runoff flows along a berm at the edge of the shoulder to an AC spillway that leads to an existing channel on the west side of SR-125. The channel crosses SR-125 here in a 6’x5’ box culvert. The outfall of Basin J is at the AC spillway for this study.

Environmental Consequences

The proposed project is located within the City of La Mesa and the County of San Diego. Both of these communities are identified as MS4 municipalities (Order No. R9-2013-0001). 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 proposed improvements would add impervious area to the region, however any increase in peak flows due to additional paved surfaces would be retained on site; therefore there would be no increase in peak flow leaving the project site. Runoff from the SR-94 portion of the project area would drain to a lined channel running north to south just east of Bancroft Drive. SR-125 runoff is collected in a 60 inch RCP storm drain running north to south through the interchange area. There is a potential for increased sediment loads due to an increase in the area of cut and fill surfaces prior to establishment of proposed permanent ground cover.

The proposed project would result in a soil disturbance of 17.65 acres, which would include new slopes and modify some existing slopes. In general, fill slopes would be a maximum of 4:1 and

cut slopes a maximum of 2:1. North of Mariposa Street along SR-125 a steeper cut slope, up to 0.75:1, is proposed in the rock hillside. When feasible, each of these slopes would be re-vegetated and erosion would be limited to pre-construction rates. Existing fill slopes have been flattened where possible. Slopes would be rounded to minimize the formation of concentrated flows. Prior to the application of duff, the slopes would be roughened by creating furrows or track-marks along contour lines of the slope.

Drainage patterns would be maintained throughout the project area where possible. In some locations it is necessary to direct or intercept surface runoff. The existing SR-125 freeway runoff north of SR-125/SR-94 interchange is collected in a ditch west of the freeway. The existing ditch would be removed to accommodate the widening necessary to facilitate the construction of the auxiliary lane and the connector ramp. A proposed ditch would run west of the widening and function similar to the existing ditch in preventing runoff from affecting mainline traffic. A proposed culvert would convey flow underneath Mariposa Street. Ditches would be proposed in other locations as necessary to prevent runoff from causing erosion or having adverse effects on traffic. A storm drain system consisting of new grated inlets and RCP would be constructed to drain the new connector. It would drain into the existing storm drain system that is located within the interchange.

Clearing and grubbing would occur throughout the proposed project area: along SR-125, where the widening for the auxiliary lane would be; along the connector from Echo Drive to SR-94; and along SR-94, where the widening for the auxiliary lane would be. Vegetation outside the work limits would be preserved to the maximum extent practicable.

No-Build Alternative

The No-Build Alternative proposes no improvements and will not result in additional water quality impacts.

Avoidance, Minimization, and/or Mitigation Measures

The proposed project lies within the jurisdiction of the San Diego Regional Water Quality Control Board, Region 9. The proposed project would conform to the requirements of the National Pollutant Discharge Elimination System (NPDES) Permit for General Construction Activities No. CAS000002, Order No. 2009-0009-DWQ, and the NPDES Permit for the State of California Department of Transportation Properties, Facilities, and Activities, No. CAS000003, Order NO. 2012-11-DWQ, issued by the SWRCB. This Caltrans permit hereafter referred to as the “Permit” regulate all activities including construction. No Negotiation Agreements with the RWQCB have occurred.

This proposed project would be designed in conformance with NPDES requirements. Caltrans guidance documents would be used to assess any potential storm water issues. Best Management Practices (BMPs) that would reduce or eliminate run-off of sediment or other contaminants from the proposed work area during construction would be given priority consideration on the project. Post construction BMPs would be implemented as a standard practice whenever feasible. The Project Planning and Design Guide Manual would be used to determine the appropriate BMPs.

Treatment BMPs

The proposed project is required to consider treatment BMPs because it involves major reconstruction with indirect discharge to surface waters and it creates more than one acre of impervious area.

The proposed project would mitigate for short-term water quality impacts from erosion and pollutant discharges using appropriate BMP methods. To avoid potential long-term impacts to water quality, the proposed project would be designed to include biofiltration swales at this phase of the project.

Biofiltration Swales

Treatment of the proposed project runoff is to the maximum extent practicable. Any proposed Treatment BMP locations, or ancillary project features in the Storm Water Data Report (SWDR) are included to comply with the Caltrans Stormwater Permit requirements. The preliminary locations are for planning purposes and further evaluation must occur within the environmental division as necessary. Documentation must take place in an approved environmental document; taking into account feasibility, environmental impacts and mitigation where appropriate.

Biofiltration devices are proposed along SR-125 and the new connector to provide permanent stormwater treatment. Due to site constraints along SR-94 and the Bancroft Drive interchange, treatment of equivalent impervious areas are proposed. The proposed biofiltration swales are anticipated to have side slopes of 4:1 with a minimum 3-foot wide invert.

The total proposed treated impervious area is 6.17 acres while the net added impervious area is 5.91 acres. The proposed biofiltration swales for the proposed project would provide treatment of over 100% of the added impervious area. Details of the proposed biofiltration devices would be developed during the design phase and included in the contract plans.

Storm Water Pollution Prevention Plan

A Storm Water Pollution Prevention Plan (SWPPP) must be submitted by the Contractor prior to the start of construction. The SWPPP shall include a Construction Site Monitoring Program (CSMP) that presents the procedures and methods related to visual monitoring and sampling plans for non-visible pollutants, sediment and turbidity, and pH.

Rain Event Action Plan

A Rain Event Action Plan (REAP) would be prepared 48 hours prior to any likely precipitation event. A likely precipitation event is any weather pattern that is forecast to have a 50% or greater probability of producing precipitation in the area. The quantity of REAPs is 51, which was calculated based on the Estimating Guidance for CGP (September 2010). Precipitation data was obtained from the NOAA station in La Mesa, Ca.

Construction Site BMP Strategy

The construction site BMP strategy for this project shall consist of:

- Soil Stabilization Measures
- Sediment Control Measures

- Tracking Control
- Non-Storm Water Management Measures
- General Construction Site Management
- Stormwater Sampling and Analysis

The design of all construction BMPs would comply with the design requirements found in the Caltrans *Storm Water Quality Handbooks: Project Planning and Design Guide (PPDG)* and *Construction Site Best Management Practices (BMPs) Manual*.

Soil Stabilization Measures

The following minimum soil stabilization measures would be considered for this project:

- Move-in/Move-out (Erosion Control)
- Temporary Hydraulic Mulch
- Temporary Cover

Multiple mobilization move-in/move-out locations are suggested for the project to implement temporary erosion control throughout the proposed project area. Temporary hydraulic mulch should be placed on any existing disturbed soils and unprotected slopes that may be susceptible to erosion from either runoff or wind. Temporary cover may also be used to protect slopes from erosion.

Tracking Controls

To prevent the tracking of mud and dirt off-site, stabilized construction entrances/exits should be placed at access points to the proposed project area. Specific locations to be determined during design.

Construction Site Management

Construction site management consists of controlling potential sources of water pollution before they enter storm water systems or courses. This includes training employees and subcontractors. The training provided shall include the proper selection, deployment, and repair of construction site BMPs used within the proposed project limits.

Storm Water Sampling and Analysis

Storm water sampling would be required at all discharge locations during a qualifying rain event would be required. The samples would be analyzed for both pH and turbidity, and are subject to numeric action levels (NAL).

Maintenance BMPs (Drain Inlet Stenciling)

The proposed project would require drain inlet stenciling in areas where there is pedestrian access. Stenciling would not be required along the connector or auxiliary lanes as there would be no pedestrian access. Stenciling would be required on Panorama Drive and Bancroft Drive. The stenciling shall have a message warning citizens not to dump pollutants into the storm drain.

2.11 GEOLOGY/SOILS/SEISMIC/TOPOGRAPHY

Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects "outstanding examples of major geological features." Topographic and geologic features are also protected under the California Environmental Quality Act (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. Caltrans Office of Earthquake Engineering is responsible for assessing the seismic hazard for Caltrans projects. Structures are designed using the Caltrans' Seismic Design Criteria (SDC). The SDC provides the minimum seismic requirements for highway bridges designed in California. A bridge's category and classification would 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, and Seismic Design Criteria.

Affected Environment

Analysis in this section is drawn from the *Preliminary Geotechnical Design Report*, dated November, 2014.

Physiography

The site is located in the La Mesa-Spring Valley area of San Diego County in southern California in the Peninsular Ranges geomorphic province. The Peninsular Ranges province extends southward from the Transverse Ranges into Baja Mexico and is bordered to the east by the Colorado Desert geomorphic province. The Peninsular Ranges province is characterized by a series of northwest-southeast trending mountains that are separated by several active faults, including the San Jacinto and Elsinore Fault zones.

Relief in the province ranges from below sea level in the western part of Peninsular Ranges offshore from the southern California coast to over 10,800 feet at Mount San Jacinto in the northeastern portion of the province. The site is at an elevation of about 400 to 560 feet. The principal drainage in the area is the Sweetwater River located south of the proposed project site. The Spring Valley Creek flows through the proposed project area and crosses beneath SR-94 and the proposed connecter via a box culvert just east of the Bancroft Drive undercrossing. The Spring Valley Creek drains into the Sweetwater River.

Topography and Drainage

SR-125 and SR-94 pass through the valleys between several peaks of foothills surrounding Mount Helix which lies approximately 1.75 miles northeast of the SR-125/SR-94 intersection.

As SR-125 enters the project area from the north, it lies at the base of a steep cut slope into a peak to the west that extends more than 100 ft. above road grade along SR-125. The southern face of that peak has a much milder slope descending gradually to the valley below near the intersection of SR-125 and SR-94. In the northeast corner of the intersection of SR-125 and SR-94 lay another peak that extends over 100 ft. above the valley. In the southeast corner of the

intersection of SR-125 and SR-94 lies a twin-peaked mountain that extends about 100 ft. above SR-94. The slopes of the peaks to the east of SR-125 are generally mild similar to the southern face of the peak to the west of SR-125.

Road grade along the proposed connector would fall about 125 ft. in elevation from the northern end of the project along SR-125 to the eastern end of the project along SR-94.

The area surrounding the project is densely populated with private residences, retail and commercial development. Surface drainage is through sheet flow across paved roads with curb inlets to storm drains. The only drainage facility the proposed connector would encounter would be the box culvert that crosses beneath SR-94 just east of the intersection with Bancroft Drive. The culvert carries surface runoff from the north side of SR-94 to the south away from the proposed project area.

Lithology

Geologic materials underlying the site primarily consist of Jurassic metavolcanic rocks of the Santiago Peak volcanics and mid-Cretaceous granitic rocks of the southern California batholith. Artificial fill is present in the immediate vicinity of the existing SR-125 and SR-94 roadways. Limited areas of alluvium may also be present in the area of Bancroft Drive.

Alluvium: Borings performed prior to construction of the Bancroft Drive undercrossing indicate probable alluvium composed of interbedded silt, sand, clay and gravel.

Granitic rocks: These rocks are mid-Cretaceous in age and consist of quartz diorite intruding into and interfingering with the older Santiago Peak volcanics. Where exposed along the alignment the granitic rocks appear hard and pale gray. The rocks are hard and highly resistant to erosion.

Santiago Peak volcanics: The Santiago Peak volcanics are the oldest rocks in the project area dating to late Jurassic in age. They are characterized by mildly metamorphosed volcanic rocks comprised predominantly of dark brown to black dacite and andesite. The rocks are hard and highly resistant to erosion.

Geologic Structure

The mountains of the Peninsular Ranges are composed largely of an igneous and metamorphic basement complex overlain by younger sedimentary rocks. The basement complex comprises Mesozoic-age meta-volcanic, meta-sedimentary and plutonic (granitic) rocks. The oldest of these rocks are the Jurassic Santiago Peak Volcanics. These rocks have experienced low-grade metamorphism and deformation during the mid-Cretaceous as plutonic rocks of the southern California batholith were intruded. Subsequent to intrusion of the batholith, regional uplift and erosion occurred and marine and non-marine sedimentary rocks were deposited during the late Cretaceous and Tertiary periods.

The major surficial geologic units in the site area are the Santiago Peak volcanics and late-Cretaceous granitic rocks of the southern California batholith.

Major active faults in San Diego County include the San Jacinto Fault Zone, Elsinore Fault Zone and Rose Canyon Fault Zone. The La Nacion Fault is located about 3.5 miles southwest of the

proposed project site. This fault is Quaternary in age but not generally considered to be Holocene.

Geologic Hazards

The proposed project site is primarily underlain by granitic and meta-volcanic rocks. These rocks are very hard and resistant to erosion and do not generally contain continuous planes of weakness such as may be found in sedimentary rock. This results in slopes that are generally stable and not prone to landsliding or local slope failures. Cut slopes adjacent to the existing roadways were observed to be in good condition with no evidence of slope failure despite the steep gradient. The slopes were well vegetated with grasses and scrub in many areas. Areas with little to no vegetation were also observed to be in good condition with no significant sloughing, rilling or other erosional features. No mapped landslides are located in the proposed project site area and the proposed project site is not considered to be in a zone of soil-slip susceptibility.

The proposed project site is located far from the ocean so tsunamis are not a hazard. There are no volcanoes in the region. No active faults pass near the proposed project site so the ground rupture hazard is considered low. The proposed project site could experience ground shaking in the event of an earthquake on one of the many active faults in southern California and northern Mexico.

Previous borings along the project alignment have shown groundwater may be present at elevations of 455 to 464 feet in some areas, however, it is not anticipated that shallow groundwater would be significant to the proposed project.

Based on the available subsurface data liquefaction potential for the project is anticipated to be low. This is due to the absence of non-cohesive soils and the depth to groundwater.

Seismicity

Earthquake activity in the San Diego region appears to have been relatively inactive in historical time. The most historically active sources of large earthquakes are quite distant from the region, i.e. on the San Miguel fault in Mexico to the south, and the San Jacinto and Elsinore fault systems to the east, and the offshore faults to the west. The Peninsular Ranges seismotectonic province has a low level of seismicity compared to the surrounding areas. The few earthquakes that do occur within the province appear to be randomly distributed and do not correspond to known faults.

The largest historical earthquakes in the San Diego region were the 6.5 magnitude earthquake in 1800, which damaged the mission at San Juan Capistrano (then under construction) and adobe barracks at San Diego, the 1803 magnitude 5.0 earthquake and the 1862 magnitude 5.9 earthquake, believed to have occurred on either the Rose Canyon or Coronado Bank faults. In the summers of 1985 and 1986, swarms of small earthquakes occurred below San Diego Bay.

Surface Water

The area immediately surrounding the project is densely populated with surface water largely directed to storm drains through v-ditches along the freeway shoulders and curbs and inlets along city streets. The largest undeveloped area along the connector alignment is within the Caltrans right of way near the intersection of SR-125 and SR-94. There are no engineered

drainage facilities within the Caltrans right of way such as detention or infiltration basins. Storm water infiltrates into the ground in these areas that have generally mild slopes and are covered with light to moderate vegetation and ground cover.

Scour: There is no channel or basin that conveys water at the proposed project site; therefore, scour potential should not be a design issue.

Erosion: Most of the exposed slopes within the proposed project limits are within the Caltrans right-of-way at the intersection of SR-125 and SR-94. Most of the slopes are mildly inclined and have moderate vegetation or ground cover with a low erosion potential.

The most prominent exposed slopes surrounding the proposed project area are the large cut slopes on the north and east ends of the project. The slopes were cut as part of the construction of the SR-125 and SR-94 freeways. North of Mariposa Street, on the west side of SR-125 there are two slopes along the freeway shoulder that extend between 60 and 100 ft. above road grade. The slopes are covered with very sparse vegetation with some large granitic rock outcrops, particularly in the northern cut slope. East of Bancroft Drive, on both sides of SR-94 there are slopes that extend between 60 and 100 ft. above road grade. The slopes are more mildly inclined than the slopes along SR-125 with an approximately 1.5:1 inclination. The cut slopes are covered with tall grass and there are no significant granitic outcrops protruding through the vegetation. Both sets of slopes are cut into granitic bedrock that are considered highly resistant to erosion.

In general, the erosion potential of soils within the project area is considered low and there are no new significant cut slopes proposed as part of the project improvements. However, provisions for site drainage, slope planting and other measures in accordance with Caltrans requirements should be fulfilled to provide adequate protection against erosion.

Subsurface Soil Conditions

Subsurface conditions along the majority of the project alignment consist of relatively shallow granitic bedrock overlain by very dense and stiff residual soil and fill.

Slightly different conditions were encountered in the southeast portion of the project alignment at the Bancroft Drive undercrossing. About 20 to 25 ft. of very soft/loose to stiff/medium dense alluvium was encountered near natural grade along Bancroft Drive overlying moderately to intensely weathered sandstone. However, the soft alluvium was only encountered in the area immediately near the Bancroft Drive undercrossing. Bancroft Drive undercrossing lies in a valley with lower ground elevation than the nearby hills and rock outcrops. Where the Bancroft Drive undercrossing on and off-ramps to SR-94 meet grade with SR-94 (a few hundred feet east and west of Bancroft Drive), bedrock is much shallower and cut slopes along the ramp shoulders expose shallow bedrock.

Groundwater

Structures along the northern portion of the alignment from the Mariposa Street undercrossing to the Campo Road overcrossing do not indicate any encountered groundwater. Shallow groundwater was encountered at the Bancroft Drive undercrossing, at about 400 ft. elevation; less than 10 ft. below existing grade along Bancroft Drive. The shallow valley where Bancroft Drive appears to be a natural drainage channel for Spring Valley Creek prior to the construction of Bancroft Drive.

Soil Corrosivity

There were no recently completed corrosion studies in the immediate project vicinity that were available for review. Fine-grained soils (silts and clays) are the typical soil types responsible for corrosive site conditions. Existing structures indicate alluvium and residual soils above the intact bedrock containing pockets, lenses and layers of silt and clay; therefore, soil corrosivity is expected to be a design issue. A soil corrosion study should be performed during the design phase of the project. If site soils are found to be corrosive, possible mitigation measures can include increased cover for reinforcing steel and corrosion resistant cement (in case of concrete piles and shallow foundations), and sacrificial steel (used to prevent rusting) can be provided for steel surfaces in contact with the proposed project site soils.

Environmental Consequences

Earthwork

Earthwork should be conducted in accordance with Section 19 of the Caltrans Standard Specifications (2010). In areas where compacted fill would be placed, the existing compressible surficial materials including topsoil, loose or soft alluvium or fill soil, dry or saturated soil, and otherwise unsuitable materials must be removed prior to fill placement. A minimum overexcavation of 2 feet is recommended within areas to receive fill; the overexcavation should extend horizontally a minimum distance of 2 feet from edges of new fills. Fill placed on sloping ground should be properly keyed and benched into existing ground and placed as specified in Caltrans Standard Specifications. Overexcavations should be observed by qualified geotechnical personnel to verify that firm and unyielding bottoms are exposed. Overexcavated areas should be cleaned of loose materials and debris and should be observed to be firm and unyielding before receiving fill. Excavations are anticipated to be performed within existing artificial fill, alluvium and bedrock.

The material above the bedrock can be excavated using conventional heavy-duty earth-moving equipment and is not expected to pose a rippability problem. The bedrock at the proposed project site is very hard to hard granitic rock with high compressional wave velocity. Difficult excavation is anticipated using conventional excavation equipment. Excavation techniques suitable for hard rock including, but not limited to, jack hammering, drilling closely spaced holes to wedge rock blocks, and expansive agents (Dexpan) would likely be required. The production rates for excavations are expected to be low. Conventional blasting of rock is not anticipated to be feasible due to proximity of the site to private residences.

Soil Expansion Potential

On-site soils are primarily alluvium underlain by metavolcanic bedrock. Structure footings are anticipated to be founded on bedrock that is considered to be non-expansive or have a very low expansion potential. Alluvial soils include pockets, layers and lenses of silt and clay that may be potentially expansive. Soil expansion potential should be evaluated during Design. Where feasible, expansive soils should be removed from the backfill behind cut retaining walls or positive drainage measures should be included in the wall design.

Soil Erosion Potential

Native soils are composed of predominantly weathered bedrock and there are no significant new slopes proposed as part of the project. The proposed branch connector would lie primarily

at or below existing grade along its entire length and the majority of the excavations would be supported with new retaining walls that would be constructed as part of the proposed project improvements. The soil erosion potential for the proposed project is considered low. However, provisions for site drainage, and slope planting should be implemented in the project plans to minimize the potential for surface soil erosion. Surficial stability of fill embankments and cut slopes are addressed in sections that follow.

Liquefaction Potential and Seismically-Induced Settlement

Liquefaction is a phenomenon whereby saturated granular soils lose their inherent shear strength due to increased pore water pressures, which may be induced by cyclic loading such as that caused by an earthquake. Low density (loose) granular soils, shallow groundwater, and long duration/high acceleration seismic shaking are some of the factors favorable to cause liquefaction.

Based on the available information, the ground conditions along the majority of the alignment consist of shallow bedrock overlain by unsaturated very dense/stiff residual soils and alluvium. Such conditions are not susceptible to liquefaction. The liquefaction potential along the majority of the proposed Branch Connector alignment is considered low.

At the Bancroft Drive undercrossing, about 20 ft. of very loose to medium dense sand was encountered below shallow ground water. The liquefaction potential for structures immediately adjacent to Bancroft Drive is considered to be moderate.

With the exception of the area immediately around Bancroft Drive, due to the low potential for liquefaction, seismically-induced settlement is expected to be negligible and therefore not expected to impact the project. Seismically-induced settlement near Bancroft Drive is anticipated to be on the order of a couple of inches.

Embankment Settlement

The majority of the proposed connector alignment would be constructed at existing grade or in cut sections; fourteen of the eighteen retaining walls are cut walls. Near Bancroft Drive, there would be sliver fills placed for the Bancroft Drive undercrossing widening and the Bancroft Drive eastbound on-ramp. Those fills would vary in height up to 22 ft. but would be less than about 12 ft. in width. The profile for the eastbound off-ramp would also be elevated for a short portion of its length to accommodate the new Bancroft Drive eastbound Off-Ramp overcrossing. That fills would be less than 10 ft. in height and approximately 40 ft. in width.

The proposed project site soils around Bancroft Drive are composed of predominately coarse grained alluvium underlain by meta-volcanic bedrock. The maximum settlement beneath new fills is estimated to be less than an inch. Because the subsurface soils are predominantly granular, settlement period should be immediate. The settlement magnitude and settlement period should be evaluated using site-specific soil borings and laboratory test results during the PS&E phase.

Stability of Embankment Slopes

All of the new embankment fill placed around Bancroft Drive would be retained by the proposed retaining walls which would be designed for global stability with a minimum factor of safety for static and pseudo-static conditions per Caltrans (2003) guidelines.

Cut Slopes

Side slopes of embankments should be constructed (where possible) no steeper than 4:1. However, to improve safety and reduce slope erosion, the same requirement should be applied to cut slopes from a geotechnical point of view. Therefore, cut slopes should not be constructed steeper than 4:1. However, like fill slopes, constructing cut slopes with inclinations of 4:1 or flatter is based on the assumptions that adequate space is available, that there are no physical obstructions interfering with the slope, and that earthwork costs are not prohibitive. Where space is limited by right-of-way or other physical constraints, or when cut quantities and associated earthwork costs become unreasonable, stable cut slopes can be constructed with inclinations steeper than 4:1.

The most critical cut sections are located along the northern end of the Branch Connector west of SR-125. There are two existing cut slopes that extend over 100 ft. above the freeway road grade that are inclined at a gradients varying between1:1 and 1.2:1. To accommodate the Branch Connector, the existing slopes would be but back at a similar inclination. Based on the surface mapping performed by our Engineering Geologist, the slope is composed primarily of granitic rock of the Santiago Peak volcanics. Based on the condition of the existing slope which shows no adverse bedding, nor any signs of global instability, cut excavations at similar inclinations are expected to be globally stable.

Some other minor cut excavations are also anticipated near the proposed Panorama Drive overcrossing and the SR-94/SR-125 connector undercrossing. For cut slopes with a gradient of 4:1 or flatter, surficial stability should not be a design concern. Due to the presence of shallow bedrock where permanent cut slopes are proposed, cut slopes with a gradient of 2:1 are also anticipated to be globally stable. The following mitigations or a combination of the following mitigations can be used to minimize surficial instability for cut slopes with a gradient of 2:1:

- Cover the upper 4 feet of slope face with materials with a minimum internal friction angle of 30 degrees and a minimum cohesion of 180 psf. This Select Material should be properly keyed and benched into the sloping ground, and this would require over-cutting the slope and re-building the slope with the above Select Material.
- Cover the slope face with special man-made erosion control mats or geofabric.
- Plant the slope face with low-maintenance ground cover that is adaptable to the arid conditions; a landscape architect specializes in arid environment should be consulted to select the proper ground cover.
- Use slope benching to flatten the overall gradient of the cut slope; the bench would also reduce the velocity of water flowing past the slope face. However, benching alone would not eliminate erosion of the slope face; treatment of the slope face using Select Material, slope planting or special matting is still required.

In all cases, proper maintenance with erosion protection and drainage control in accordance with Section 21 of Caltrans Standard Specifications (2010) are also recommended.

Global and surficial stability of all cut slopes would require evaluation during the PS&E phase of the project.

Earth Retaining Structures

There are a total of eighteen new retaining walls proposed as part of the project. A description of proposed retaining walls are provided in project description and can be seen on Figures 3A – 3E: Project Features Maps.

Future Geotechnical Investigations

Excavation of numerous exploratory borings throughout the project area, during the Design phase of the project, has been recommended to investigate site-specific soils and conditions and to collect samples of subsurface soils for laboratory testing. The locations and depths of the borings should be selected once the locations and extent of proposed improvements have been finalized.

Soil samples recovered during the future geotechnical field investigations should be tested to determine soil type, soil shear strength, collapse characteristics, Sand Equivalent, R-value, compaction characteristics and corrosion potential.

Additionally, seismic lines should be performed in locations where excavations are anticipated to encounter bedrock to determine the rippability of the bedrock. At a minimum, seismic lines should be performed along the two tall cut slopes to the west of SR-125, near the proposed SR-94 and SR-125 connector undercrossing, and near the proposed Bancroft Drive eastbound off-ramp overcrossing.

No-Build Alternative

The No-Build Alternative proposes no improvements and will not result in changes to soils, geology, seismic conditions or topography of the area.

Avoidance, Minimization, and/or Mitigation Measures

Trained personnel should be present during project construction to observe all cuts, foundation subgrade, and embankment subgrade to assure that the provisions set forth in the documents are appropriately enforced. If unanticipated conditions are encountered, the geotechnical personnel should make recommendations to the Resident Engineer who would in turn direct the contractor. Instrumentation for measuring settlement or slope distress is likely to be included in final geotechnical recommendations. A program of periodic surveying for ground movement should be included in project construction where the potential for ground movement and failure exists.

All grading and roadway work would be performed in accordance with the Caltrans Standard Plans and Specifications. Final recommendations and Special Provisions should be based on the findings of subsurface exploration, testing, and analysis as presented in final Geotechnical Design Reports and Foundation Reports.

To minimize erosion of slopes, surface water should not be directed to flow over slope faces. Faces of finished slopes should be planted as soon as possible, after grading is completed, to minimize erosion.

BMPs proposed in the Water Quality Section (Section 2.11), would stabilize and reduce erosion during construction.

2.12 HAZARDOUS WASTE / MATERIALS

Regulatory Setting

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

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

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

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

California regulates hazardous materials, waste, and substances under the authority of the California 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 cleanup of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and clean up contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

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

Affected Environment

Information and analysis in this section is based upon the following reports:

- "Initial Site Assessment, SR-94/SR-125 Connector Project, La Mesa & Spring Valley, California" dated April, 2015
- "Aerially Deposited Lead Study, SR-94/SR-125 Connector Project, La Mesa and Spring Valley, California" dated April, 2015

These reports provide an evaluation of the potential hazardous waste concerns within the proposed project study area. The following pertain to all proposed build alternatives, and not the no build alternative.

In general, the work included:

- Review of available information to describe the general geology and hydrogeology at the Site and adjacent areas;
- Review of the files provided by the User;
- Interviews with the User and the owners of the Acquisition Parcels;
- Search of regulatory records regarding possible hazardous material handling, spills, storage or production at the Site or in its vicinity;
- Review of the online data available from the Department of Toxic Substances Control (DTSC) and California State Water Resources Control Board (SWRCB);
- Request agency records from the DTSC, San Diego Air Pollution Control District (SDAPCD), San Diego County Department of Environmental Health (DEH), San Diego Industrial Wastewater, and San Diego Regional Water Quality Control Board (SDWQCB);
- Review of historic aerial photographs; historic topographic maps; Sanborn fire maps, Building Permit Reports, and Department of Oil and Gas maps;
- Reconnaissance of the Site and the immediately surrounding area;
- Development of conclusions and findings; and
- Preparation of a report describing the assessment and presenting the results and findings.

The Aerially Deposited Lead (ADL) Study included an investigation of all proposed alternative locations except no build, for the presence of hazardous and/or non-hazardous ADL. This was performed in the areas of exposed excavation of soil to the depth of proposed excavation (2.5 feet).

Based on the results from the ADL Study, it was determined that there are areas within the proposed project area that contain hazardous and non-hazardous concentrations of ADL.

In addition, the following general hazardous waste related issues were identified:

Traffic stripe and thermoplastic pavement marking (yellow) within the proposed project limits may contain hazardous concentrations of lead. Treated wood waste as telephone poles and guardrail posts exist within the proposed project limits as well. There may be Asbestos Containing Materials (ACM) and Lead Based Paint (LBP) in residential structures and in bridge structures to be demolished.

Exposed soil along the shoulders and median of State Route 94/125 contain hazardous and non-hazardous concentrations of ADL.

Environmental Consequences

An ISA was completed, focusing on the project alignment including Caltrans right of way, City/County right of way, state-owned property, and the nine Acquisition Parcels. This assessment revealed no evidence of Recognized Environmental Conditions (RECs) in connection with the Project. However, eight Areas of Concerns (AOCs) and Historical Recognized Conditions (HRECs) were identified that may warrant additional investigation or best management practices.

The following specific properties with potential hazardous waste issues were identified:

APN 494-890-10; 8906 Mariposa St, La Mesa, CA:

- A portion of the driveway on or near the acquisition area has been repaved with asphalt. This location has been identified by the property owner as the former location of the septic system removed from service in 2009. The owner believes it was abandoned in place. If septic waste is encountered it must be managed appropriately.
- A utility pole is located within or near the proposed acquisition area for this parcel. The utility pole consists of creosote treated wood. If removed during the proposed project, the pole should be managed as Treated Wood Waste (TWW).
- An overhead transformer appears to be mounted on the utility pole within or near the proposed acquisition area for this parcel. Historically, pole-mounted transformers have contained Printed Circuit Boards (PCBs), which need to be profiled and managed appropriately if present.

SR-94/SR-125 Interchange: Multiple soil highway construction debris stockpiles have been placed in the immediate vicinity of the alignment of the proposed SR-94/SR-125 connector ramp.

9065 Campo Road, Spring Valley, CA and 9111 Campo Road, Spring Valley, CA: The properties, located at the intersection of Campo Road and Bancroft Drive, are gas stations, one operated by Arco and the other by Chevron, respectively. Petroleum hydrocarbons as MTBE, TBA, ethylbenzene, xylenes, and gasoline range petroleum hydrocarbons have been reported in groundwater in the vicinity of Caltrans right of way. Groundwater flow is towards Caltrans right of way and is 7 to 12 feet below grade. Refer to Project Features Map, Figure 3-D for location of these service stations relative to the proposed project limits.

Echo Drive and Panorama Drive, La Mesa, CA: Utility poles exist along Echo Drive and Panorama Drive that may require removal in support of the Project. The poles consist of creosote treated wood and are considered Areas of Contamination (AOCs).

State-Owned Rental Property, Echo Drive, La Mesa, CA: The state-owned rental property on Echo Drive will be removed in support of the Project. Depending on the structure's age, it may contain Asbestos Containing Material (ACM) and Lead Based Paint (LBP). The presence of these materials will need to be investigated prior to removal of the structure in order to comply with environmental and safety regulatory requirements for ACM and LBP.

In addition, the following general hazardous waste related issues were identified:

Traffic stripe and thermoplastic pavement marking (yellow) within the proposed project limits may contain hazardous concentrations of lead. Treated wood waste as telephone poles and guardrail posts exist within the proposed project limits as well. There may be Asbestos Containing Materials (ACM) and Lead Based Paint (LBP) in residential structures and in bridge structures to be demolished.

Exposed soil along the shoulders and median of State Route 94/125 contain hazardous and non-hazardous concentrations of ADL.

No-Build Alternative

The No-Build Alternative proposes no improvements and will not impact any hazardous waste/ materials.

Avoidance, Minimization, and/or Mitigation Measures

Based on the environmental consequences presented above, avoidance/minimization measures are as follows:

A Health and Safety Plan must be developed for the proposed project by a Certified Industrial Hygienist (CIH) in accordance with the Caltrans Guidance. The Plan will identify health and safety requirements and best management practices for the handling impacts discussed below.

Exposed excavated soil with ADL (hazardous and non-hazardous) along the shoulders and median of State Route 94/125 shall be managed by being reused onsite when possible or surplus will be properly disposed in accordance with the Department of Toxic Substance Control (DTSC) Lead Variance, Caltrans Special Provisions, and Federal, State, and Local hazardous waste guidance/regulations.

If reuse of hazardous ADL is performed, this material may be reused onsite by being placed beneath 1 foot of clean material or a paved surface in accordance with the Special Provisions and the DTSC Lead Variance issued to Caltrans.

Treated Wood Waste (TWW), transformers, removed yellow traffic stripe, and abandoned septic system and/or impacted soil, if encountered during construction, will need to be appropriately managed. Management of these waste items shall comply with Federal, State, and Local hazardous waste regulatory requirements, and Caltrans Special Provisions during construction.

If construction is planned that will encounter the groundwater at the SR-94 and Bancroft Drive interchange, site-specific groundwater contamination data for petroleum hydrocarbons will be needed prior to construction. This will be performed to evaluate proper methods to manage and dispose of the groundwater that might be removed during construction.

A hazardous building materials survey, including Asbestos Containing Material (ACM) and Lead Based Paint (LBP), shall be conducted on structures at the state-owned or acquired residential properties and in bridge structures to be demolished prior to construction. If found, ACMs, and LBP shall be handled and disposed in accordance with Caltrans Special Provisions, Federal, State, and Local regulations during construction.

The soil stockpiles of unknown origin located on the proposed connecter ramp location shall be sampled and tested prior to construction. These samples shall be analyzed for total petroleum hydrocarbons, volatile organic compounds, and metals in order to determine the appropriate disposal or re-use options for the soil during construction.

A Lead Compliance Plan is required to mitigate health and safety issues regarding handling lead impacted oils and traffic stripe.

2.13 AIR QUALITY

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), which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM_{10}) and particles of 2.5 micrometers and smaller ($PM_{2.5}$), and sulfur dioxide (SO_2). In addition, national and state standards exist for lead (PB) and 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 State Implementation Plan (SIP) for attainting the NAAQS. “Transportation Conformity” applies to highway and transit projects and takes place on two levels: the regional—or, 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 TIP). RTP and FTIP conformity uses travel demand and emission models to determine whether or not the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements of the Clean Air Act and the SIP are met. 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 "open-to-traffic" 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 measure a violation of the relevant standard and the U.S. EPA officially designates the area nonattainment. Areas that were previously designated as nonattainment areas but subsequently meet the standard may be officially re-designated 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.

Affected Environment

Information and analysis in this section is drawn from the SR-94/SR-125 Air Quality Report, dated October 2013.

The proposed project is located in the San Diego Air Basin (SDAB), which uses the same jurisdictional boundaries as San Diego County. The climate of San Diego County is characterized by warm, dry summers and mild winters. One of the main determinants of the climatology is a semi-permanent 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 re-designation 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 re-designation 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). See Table 16 below.

Table 16: 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 17 below for California and national standards. Information in Table 17 is provided by the California Air Resources Board and was updated in June 2013.

Table 17: State and Federal Criteria Air Pollutant Standards, Effects, and Sources

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	35 ppm (40 µg/m^3)	-	Non-Dispersive Infrared
	8 Hour	9.0 ppm (10 µg/m^3)		9 ppm (10 µg/m^3)	-	

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]
	8 Hour (Lake Tahoe)	6 ppm (7 µg/m^3)	Photometry (NDIR)	-	-	Photometry (NDIR)
Nitrogen Dioxide (NO_2)[9]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	-	Gas Phase Chemiluminescence
	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; Spectrophotometry (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 (8/1/14)

1. 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.

2. 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 µg/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.

3. 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.

4. 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.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. 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.
8. On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 were also retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
9. 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.
10. 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.
11. 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.
12. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/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.
13. 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.

Environmental Consequences

Regional Conformity

The proposed project is listed in the 2050 San Diego RTP: Our Region, Our Future financially constrained Regional Transportation Plan (RTP) which was found to conform by the SANDAG Board on October 28, 2011. The FHWA and FTA made a regional conformity determination finding on December 2, 2011. The proposed project is listed on page A-10 of the 2050 San Diego RTP, in Table A.1, the Capital Improvements-Revenue Constrained Plan, as SR-94/SR-125, South to East and West to North.

On September 26, 2014, the SANDAG Board of Directors adopted the 2014 RTIP and the FHWA and FTA issued a finding of conformity on December 15, 2014. The 2014 RTIP has been amended one time since the original approval. The proposed project is listed on page 37 of the 2014 RTIP, Chapter 3: Project Listings. The proposed project is identified as SR-94/SR-125 southbound to eastbound connector, from SR-94 to SR-125 – near La Mesa and Lemon Grove on SR-125 from Mariposa St. to SR-94 and on SR-94 from SR-125 to Bancroft Dr. Construct freeway connector, replace and widen bridges.

The proposed project is fully funded and is in the 2050 RTP and 2014 RTIP, as stated above. The design concept and scope of the proposed project is consistent with the project description in the 2050 RTP, the 2014 RTIP and the assumptions in SANDAG's regional emissions analysis.

On April 15, 2004, the USEPA designated the San Diego air basin as non-attainment for the new 8-Hour O_3 standard. This designation took effect on June 15, 2004. The Final Transportation Conformity Rule Amendments for the new 8-hour O_3 and $PM_{2.5}$ NAAQS requires that conformity of the RTP and the RTIP for nonattainment areas be determined to the 8-Hour O_3 standard by June 15, 2005.

Project Level Conformity

Local Air Quality ("Hot Spots")

Carbon Monoxide

The Transportation Conformity Rules require a statement that:

> *Federal projects must not cause or contribute to any new localized CO violations or increase the frequency or severity of any existing CO violations in CO nonattainment and maintenance areas.*

The CO portion of the requirement applies to the proposed project because the SDAB is a federal CO maintenance area. The air quality analyses of projects included in the RTP and RTIP do not include the analyses of local CO impacts; these must be addressed on a project level.

Procedures and guidelines for use in evaluating the potential local-level CO impacts of a project are contained in Transportation Project-Level Carbon Monoxide Protocol (the Protocol) (UCD ITS 1997). The Protocol provides a methodology for determining the level of analysis, if any, required on a project. On January 5th, 2007, the FHWA approved the EMFAC2007 model for use in the State of California (USEPA 2003). As of July 31st, 2007, Caltrans, through a notice on its website, has required the use of EMFAC2007 for use in all CO Hot Spot Analysis in new projects, which require their approval (Caltrans 2008). The guidelines comply with the federal CAA, federal and state conformity rules, the National Environmental Policy Act, and the California Environmental Quality Act (CEQA).

The SDAB was redesignated as a CO attainment area subsequent to the passage of the 1990 federal CAA amendments. Continued attainment has been verified with the APCD. In areas meeting those conditions, in accordance with the Protocol, only projects that are likely to worsen air quality necessitate further analysis. Projects that worsen air quality are defined as those that substantially increase the percentage of vehicles in cold start mode, defined as an increase in the number of vehicles operating in cold start mode of 2 percent or more; those that substantially increase traffic volumes, defined as an increase in volume in excess of 5 percent; and those that worsen traffic flow, defined for intersections as increasing average delay at signalized intersections operating at level of service (LOS) of E or F.

These criteria were evaluated for all the intersections within the SR-94/SR-125 proposed project area. Based on this evaluation, three intersections were chosen that represent, from an air quality standpoint, the highest potential locations for adverse concentrations of CO:

- Westbound SR-94 ramps at Kenwood Drive
- Eastbound SR-94 ramps at Kenwood Drive
- Westbound SR-94 Ramps at Spring Street

These intersections were chosen due to their potential to create LOS E or F conditions in the horizon year (2040) that would be worse than with the No Build Alternative. According to the traffic information provided by Caltrans, while other intersections in the area may also be operating at an LOS of E or F, they would operate more efficiently with the proposed project than without, i.e., less delay time at intersections, which would represent a decrease in the potential for harmful build-up of CO at project intersections. A summary of the projected LOS and delay for project affected intersections is provided in Table 18.

All of the intersections in Table 18 were evaluated based on LOS, Delay and Volume to determine the three worst intersections. Also, the locations of the intersections were taken into consideration for the decision process. The proposed build alternative of the SR-94/SR-125 connector was designed to connect southbound State Route 125 to eastbound State Route 94. The alignment starts just after Lemon Avenue, on SR-125 south, and ends just West of Kenwood Drive on SR-94 east. Based on the criterion listed above, Kenwood Drive westbound and eastbound ramps were selected for the analysis. Spring Street was also selected based on this same criterion.

Table 18: Summary of Intersection Level of Service and Delay Analysis

Intersection	Control	Alternative	2020				2040			
			AM		PM		AM		PM	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
WB SR-94 Ramps / Bancroft Dr.	Signal	Existing	12	B	18	B	12	B	18	B
		Alternative 1: No Build	15	B	17	B	17	B	24	C
		Alternative 2: Build	15	B	17	B	17	B	24	C
EB SR-94 Ramps / Bancroft Dr.	Signal	Existing	15	B	12	B	15	B	12	B
		Alternative 1: No Build	18	B	20	C	22	C	120	F
		Alternative 2: Build	18	B	20	C	21	C	22	C
WB SR-94 Ramps / Kenwood Dr.	AWSC	Existing	13	B	11	B	13	B	11	B
		Alternative 1: No Build	18	C	12	B	120	F	13	B
		Alternative 2: Build	18	C	12	B	78	F	13	B
EB SR-94 Ramps / Kenwood Dr.	AWSC	Existing	9	A	11	B	9	A	11	B
		Alternative 1: No Build	10	B	12	B	11	B	14	B
		Alternative 2: Build	10	B	12	B	11	B	14	B
WB SR-94 Ramps / Spring St.	Signal	Existing	20	C	35	D	20	C	35	D
		Alternative 1: No Build	21	C	43	D	24	C	87	F
		Alternative 2: Build	20	C	16	B	29	C	18	B
NB SR-125 / Lemon Ave.	OWSC	Existing	13	B	16	C	13	B	16	C
		Alternative 1: No Build	14	B	18	C	16	C	23	C
		Alternative 2: Build	14	B	18	C	16	C	23	C
NB SR-125 Ramp/EB SR-94 Ramp/Campo Rd.	Signal	Existing	36	C	20	C	36	C	20	C
		Alternative 1: No Build	25	C	21	C	40	D	21	C
		Alternative 2: Build	25	C	17	B	28	C	17	C
Campo Rd. / Bancroft Dr.	Signal	Existing	25	C	28	C	25	C	28	C
		Alternative 1: No Build	31	C	30	C	37	D	40	D
		Alternative 2: Build	29	C	30	C	38	D	36	D
Spring St. / Broadway	Signal	Existing	24	C	24	C	24	C	24	C
		Alternative 1: No Build	21	C	22	C	38	D	34	C
		Alternative 2: Build	22	C	22	C	27	C	20	C

AWSC – All Way Stop Control; OWSC – One-Way Stop Control; Delay is measured in seconds per vehicle

For purposes of this CO analysis, the receptors are located on the sidewalks at each of the intersection corners, as these locations would represent the point of maximum exposure. The following assessment is based on the maximum concentration calculated from these locations for each intersection. Figures 3-C and 3-E show the locations of CO receptors.

As required by the CO Protocol, a detailed CO Concentration Analysis was conducted for the intersections of westbound SR-94 ramps at Kenwood Dr., eastbound SR-94 ramps at Kenwood Dr., and westbound SR-94 Ramps at Spring St. for the year 2040 for the Build Alternative and the No Build Alternative. CO impacts were modeled under worst-case wind angle conditions at 3 meters from the roadway edge as public sidewalks occur along all existing roadways, and concentrations at these locations would represent the greatest concentrations of CO due to limited dispersion area.

Based on meteorological data and traffic volumes, the CO analysis indicated that the proposed project future traffic conditions would cause CO concentrations to decrease or remain the same. Westbound SR-94 ramps at Kenwood Drive experience no change in CO concentration levels from No Build to Build as well as the eastbound SR-94 ramps at Kenwood Drive. Furthermore,

the westbound SR-94 Ramps at Spring Street experience a decrease in the CO concentration levels from No Build to Build. CO concentration levels due to the proposed project are presented in Table 19.

As indicated in Table 19, the federal and state 1-hour CO standards are 35 parts per million (ppm) and 20 ppm, respectively and the federal and state 8-hour CO standards are 9 ppm and 9.0 ppm, respectively. As shown in Table 18, the proposed project's future traffic conditions would not lead to any exceedances of these thresholds during the AM or PM peak periods at either of the analyzed intersections. All other intersections in the project area are predicted to experience less delay time and improved operating conditions with the proposed build alternative than with the No Build Alternative. Therefore, the proposed project would not result in or contribute to any significant local air quality impacts due to future operations.

Table 19: CO Concentrations 2040 (1-Hour and 8-Hour Concentrations, ppm)

Intersection	No Build Alternative		Build Alternative	
	AM	PM	AM	PM
1-Hour CO Concentrations				
WB SR-94 Ramps / Kenwood Dr.	2.2	2.2	2.2	2.2
EB SR-94 Ramps / Kenwood Dr.	2.1	2.2	2.1	2.2
WB SR-94 Ramps / Spring St.	2.4	2.6	2.3	2.3
Federal standard	35			
State standard	20			
8-Hour Concentrations[1]				
WB SR-94 Ramps / Kenwood Dr.	1.3	1.3	1.3	1.3
EB SR-94 Ramps / Kenwood Dr.	1.3	1.3	1.3	1.3
WB SR-94 Ramps / Spring St.	1.4	1.6	1.4	1.4
Federal standard	9			
State standard	9			

8-hour concentrations are extrapolated based on a 0.6 persistence factor.

On October, 1, 2015, Caltrans submitted to the Federal Highway Administration (FHWA) a complete request for a project level conformity determination for the SR-94/SR-125 Interchange Project. The project level conformity analysis submitted by Caltrans indicates that the project-level transportation conformity requirements have been met. The FHWA concurrence letter can be found in Chapter 3 – Comments and Coordination.

PM_{10} and $PM_{2.5}$

On March 10, 2006, the USEPA published a final rule that established the transportation conformity criteria and procedures for determining which transportation projects must be analyzed for local air quality impacts in $PM_{2.5}$ and PM_{10} nonattainment and maintenance areas. Based on that rule, the USEPA and FHWA published *Transportation Conformity Guidance for Qualitative Hot-spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas* (PM Guidance) (FHWA 2006b). While the SDAB is not a federally designated $PM_{2.5}$ or PM_{10} nonattainment or maintenance area, it is designated as a state nonattainment area for both pollutants. Thus, to meet state requirements, the proposed project is assessed using the procedure outlined in the PM Guidance.

A hot spot analysis is defined in 40 CFR 93.101 as an estimation of likely future localized $PM_{2.5}$ or PM_{10} pollutant concentrations and a comparison of those concentrations to the relevant air quality standards. A hot spot analysis assesses the air quality impacts on a scale smaller than an entire nonattainment or maintenance area, including, for example, congested roadway intersections and highways or transit terminals. Such an analysis is a means of demonstrating that a transportation project meets Clean Air Act (CAA) conformity requirements to support state and local air quality goals with respect to potential localized air quality impacts. When a hot spot analysis is required, it is included within the project-level conformity determination that is made by the FHWA or FTA.

The PM Guidance describes qualitative and quantitative hot spot analyses. Quantitative $PM_{2.5}$ and PM_{10} hot spot analyses would be required when appropriate methods and modeling guidance are available. Qualitative hot spot analyses involve more streamlined reviews of local factors such as local monitoring data near a proposed project location.

Projects of Air Quality Concern (POAQC)

To meet statutory requirements, the March 10, 2006, final rule requires $PM_{2.5}$ and PM_{10} hot spot analyses to be performed for “projects of air quality concern.” Qualitative hot spot analyses would be done for these projects. Projects not identified as projects of air quality concern (POAQC) are considered to meet statutory requirements without any further hot spot analyses.

The PM Guidance defines POAQC as projects within a federally designated $PM_{2.5}$ or PM_{10} nonattainment or maintenance area, funded or approved by the FHWA or FTA, and one of the following types of projects:

- New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;
- Projects affecting intersections that are LOS D, E, or F with a significant number of diesel vehicles, or those that would change to LOS D, E, or F, because of increased traffic volumes from a significant number of diesel vehicles related to the project;
- New bus and rail terminals, and transfer points, that have a significant number of diesel vehicles congregating at a single location;
- Expanded bus and rail terminals, and transfer points, that significantly increase the number of diesel vehicles congregating at a single location; and
- Projects in, or affecting locations, areas, or categories of sites that are identified in the $PM_{2.5}$ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Appendix A of the PM Guidance contains examples of POAQC and examples of projects that are not an air quality concern. Under the example of POAQC, a significant volume for a new highway or expressway is defined as facilities with an annual average daily traffic (AADT) volume of 125,000 or more, and a significant number of diesel vehicles is defined as 8 percent or more of the total AADT is diesel truck traffic.

The proposed project is not located in a federally designated as a $PM_{2.5}$ and PM_{10} nonattainment or maintenance area. Therefore, the proposed project does not meet the criteria of a POAQC as defined in the PM Guidance. PM_{10} and $PM_{2.5}$ hot spot analyses are required by the USEPA Transportation Conformity Rule (40 CFR § 93.116 and 40 CFR § 93.123) to

determine project-level conformity in PM_{10} and $PM_{2.5}$ nonattainment or maintenance areas (FHWA 2006a). The SDAB is not a federally designated PM_{10} or $PM_{2.5}$ nonattainment or maintenance area; thus, the proposed project does not require PM_{10} or $PM_{2.5}$ hot spot analyses.

However, the SDAB is in nonattainment for PM_{10} and $PM_{2.5}$ State standards as stated above. Following the PM Guidance, the proposed SR-94/SR-125 project does not meet the requirement set forth as a Project of Air Quality Concern. As defined above, the proposed SR-94/SR-125 project would not add traffic capacity to the corridor, rather it would create a connector between southbound SR-125 and eastbound SR-94, improving traffic flow, and would not have a significant increase in diesel truck traffic, only 5% diesel trucks. The proposed SR-94/SR-125 project would not affect intersections that are LOS D, E, or F with a significant number of diesel vehicles, or change those to LOS D, E, or F, because of increased traffic volumes from a significant number of diesel vehicles related to the proposed project. The proposed SR-94/SR-125 project would not create new bus or rail terminals, or transfer points, that would have a significant number of diesel vehicles congregating at a single location. The proposed SR-94/SR-125 project would not expand bus and rail terminals, and transfer points, that significantly increase the number of diesel vehicles congregating at a single location. The proposed SR-94/SR-125 project would not significantly increase the number of diesel vehicles congregating at a single location affecting locations, areas, or categories of sites that are identified in the $PM_{2.5}$ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation. The proposed SR-94/SR-125 project does not meet the criteria of a POAQC as defined in the PM Guidance and therefore does not require PM_{10} or $PM_{2.5}$ hot spot analyses. No further analysis is required.

Mobile-Source Air Toxics (MSAT)

The FHWA developed a tiered approach with three categories for analyzing MSAT in NEPA documents, depending on specific project circumstances:

1. No analysis is required for projects with no potential for meaningful MSAT effects;
2. Qualitative analysis is required for projects with low potential MSAT effects; or
3. Quantitative analysis is required to differentiate alternatives for projects with higher potential MSAT effects.

The proposed SR-94/SR-125 project would fall into category 2 because it is not an exempt project and it is only projected to create, at the most, 104,200 trips by 2040. For the proposed build alternative in this IS/EA, the amount of MSAT emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT estimated for the proposed build alternative is slightly higher than that for the No Build Alternative, because the direct connector increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. This increase in VMT would lead to slightly higher MSAT emissions for the preferred alternative along the highway corridor, and only at some locations along the SR-125 and SR-94 corridors.

In other areas, emission would stay the same, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOVES2010b model, emissions of all of the priority MSAT decrease as speed increases. Because the estimated VMT under the proposed build alternative is nearly the same, varying by less than 2 percent, it is expected there would be no appreciable difference in overall MSAT emissions among the alternatives considered. Also, regardless of the alternative chosen, emissions would likely be lower than

present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 80 percent between 2010 and 2050.

Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

Moreover, EPA regulations for vehicle engines and fuels would cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES model forecasts a combined reduction of over 80 percent in the total annual emission rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 100 percent. This would both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from the proposed project.

Construction (Short-term) Impacts

Regional Emissions

The principal criteria pollutants emitted during construction would be PM_{10} and $PM_{2.5}$. The source of the pollutants would be fugitive[3] 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. Generally, the distance that particles drift from their source depends on their size, emission height, and wind speed. About 50 percent of fugitive dust is made up of relatively large particles, greater than 100 microns in diameter. These particles are responsible for the reduced visibility often associated with construction, as well as the nuisance caused by the deposition of dust on vehicles, and in exterior areas used by people for recreation and business. Given their relatively large size, these particles tend to settle within 20 to 30 feet of their source. Small particles, less than 100 microns in diameter, can travel nearly 330 feet before settling to the ground, depending on wind speed. 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 the engine exhaust from construction equipment. The principal pollutants of concern would be NO_X and ROG (Reactive Organic Gases) 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 be complete in 2020 and last less than 5 years; 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.

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

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

Diesel particulate emissions may be a potential concern. 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 proposed project alignment, Spring Valley Elementary School, is approximately 0.04 miles from the eastern most portion of the proposed project.

No-Build Alternative

The No-Build Alternative proposes no improvements and will not result in additional impacts to air quality.

Avoidance, Minimization, and/or Mitigation Measures

Most of the construction impacts to air quality are short-term in duration and, therefore, will 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 will reduce any air quality impacts resulting from construction activities:

- The construction contractor shall comply with Caltrans' Standard Specifications in Section 14(2010).
    - Section 14-9.01specifically 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 they leave the right-of-way 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 re-vegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- Locate equipment and materials storage sites as far away from residential and park uses as practical. Keep construction areas clean and orderly.
- Establish Environmentally Sensitive Areas (ESAs) or their equivalent near sensitive air receptors within which construction activities involving extended idling of diesel equipment would be prohibited, to the extent feasible.
- 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.
- Promptly and regularly remove dust and mud that are deposited on paved, public roads due to construction activity and traffic to decrease particulate matter.
- 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 particulates in the area. Be aware that certain methods of mulch placement, such as straw blowing, may themselves cause dust and visible emission issues, and may need to use controls such as dampened straw.
- Locate construction equipment and truck staging and maintenance areas as far as feasible and nominally downwind of schools, active recreation areas, and other areas of high population density.

Climate Change

Climate change is analyzed in the Climate Change Section of this document (Section 2.25). Neither the United States Environmental Protection Agency (U.S. EPA) nor Federal Highway Administration (FHWA) has issued explicit guidance or methods to conduct project-level greenhouse gas analysis.

As stated on FHWA's climate change website (http://www.fhwa.dot.gov/hep/climate/index.htm), 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 aid 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 easily 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.

Because there have been more requirements set forth in California legislation and executive orders on climate change, the issue is addressed in a separate California Environmental Quality Act (CEQA) discussion at the end of this chapter and may be used to inform the National Environmental Policy Act (NEPA) decision. The four strategies set forth by FHWA to lessen climate change impacts do correlate with efforts that the State has undertaken and is undertaking to deal with transportation and climate change; the strategies include improved transportation system efficiency, cleaner fuels, cleaner vehicles, and reduction in the growth of vehicle hours travelled.

2.14 NOISE

Regulatory Setting

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

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless those measures are not feasible. The CEQA noise analysis is included at the end of this section.

NATIONAL ENVIRONMENTAL POLICY ACT AND 23 CFR 772

For highway transportation projects with FHWA (and Caltrans, as assigned) involvement, the federal-Aid Highway Act of 1970 and the associated implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations include noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 dBA) is lower than the NAC for commercial areas (72 dBA). The following table (Table 20) lists the noise abatement criteria for use in the NEPA 23 CFR 772 analysis.

Table 20: Noise Abatement Criteria

Activity Category	NAC, Hourly A-Weighted Noise Level, Leq(h)	Description of activity category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B[1]	67 (Exterior)	Residential.
C[1]	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A–D or F.
F	No NAC—reporting only	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical, etc.), and warehousing.
G	No NAC—reporting only	Undeveloped lands that are not permitted.

[1] Includes undeveloped lands permitted for this activity category.

Table 21 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise levels discussed in this section with common activities.

Table 21: Noise Levels of Common Activities

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet Fly-over at 300m (1000 ft)		
	100	
Gas Lawn Mower at 1 m (3 ft)		
	90	
Diesel Truck at 15 m (50 ft), at 80 km (50 mph)		Food Blender at 1 m (3 ft)
	80	Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime		
Gas Lawn Mower, 30 m (100 ft)	70	Vacuum Cleaner at 3 m (10 ft)
Commercial Area		Normal Speech at 1 m (3 ft)
Heavy Traffic at 90 m (300 ft)	60	
		Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night,
	20	Concert Hall (Background)
		Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

According to Caltrans' Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, May 2011, a noise impact occurs when the predicted future noise level with the project substantially exceeds the existing noise level (defined as a 12 dBA or more increase) or when the future noise level with the project approaches or exceeds the NAC. Approaching the NAC is defined as coming within 1 dBA of the NAC.

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

Caltrans' Traffic Noise Analysis Protocol sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering consideration. Noise abatement must be predicted to reduce noise by at least 5

dBA at an impacted receptor to be considered feasible from an acoustical perspective. A "benefited receptor" is the recipient of an abatement measure that receives a noise reduction at or above the minimum threshold of 5 dBA. The number of benefited receptors per soundwall is multiplied by the current cost allowance to determine the overall cost allowance per soundwall. Feasibility may be restricted by any of the following: topography, access requirements for driveways, presence of local cross streets, underground utilities, other noise sources in the area, and safety considerations.

Reasonableness of noise abatement is more subjective than the determination of its feasibility. Reasonableness is a combination of social, economic, and environmental factors considered in the evaluation of a noise abatement measure. The overall reasonableness of noise abatement is determined by three factors: noise reduction design goal, cost of noise abatement, and viewpoints of benefited receptors that include property owners and residents of the benefited receptors. Caltrans' noise reduction design goal requires that a minimum 7 dBA reduction in the future noise level must be achieved at one or more benefited receptors per soundwall for an abatement measure to be considered reasonable.

Affected Environment

A Noise Study Report (NSR) dated December 2014 was prepared for the proposed project and is incorporated by reference. The report assesses the proposed projects potential noise impacts by evaluating the impacts the proposed project will have on noise receivers within the proposed project area. A Preliminary Noise Abatement Decision Report (NADR) dated June, 2015, was prepared and presents the preliminary noise abatement decision as required by the Caltrans' Traffic Noise Analysis Protocol (May 2011).

The proposed project location was divided into two areas for analysis in the NSR. Area 1 extends from Spring Street to Lemon Avenue while Area 2 extends from SR-125 to Kenwood Drive along SR-94.

As part of the noise analysis, Areas 1 and 2 were further subdivided into eight segments (A through H). Following is a description of land uses and sensitive receptors in each of the areas and segments. Figure 9 shows the location of the areas and segments. The locations of noise receiver sites and proposed noise wall/berm locations can be seen in Figures 3A through 3E of the Project Features Map.

Area 1

Segment A is located along the southbound side of SR-125 bordered at the north by Mariposa Street and at the south by Spring Street. This segment is represented by receivers R121 through R149 and contains primarily single-family residences along with four multi-family residences and two places of worship (La Mesa Adventist Community Church and Word of Life Worship Center).

Segment B is located along the southbound side of SR-125 bordered at the north by Lemon Avenue and at the south by Mariposa Street. This segment is represented by receivers R184 through R220 and contains primarily single-family residences along with one multi-family residence.

Segment C is located along the northbound side of SR-125 bordered at the north by Mariposa Street and at the south by Spring Street. This segment is represented by receivers R101

through R120 and contains primarily single-family residences along with two multi-family residences.

Segment D is located along the northbound side of SR-125 bordered at the north by Lemon Avenue and at the south by Mariposa Street. This segment is represented by receivers R150 through R183 and contains primarily single-family residences along with two multi-family residences. This segment also contains Eucalyptus Park and a Helix Water District Public Service Building.

Area 2

Segment E is located along the eastbound side of SR-94 bordered at the east by Bancroft Drive and at the west by SR-125. This segment is represented by receivers R1 through R28 and contains primarily single-family residences along with five multi-family residences, one business (Steve Bancroft Motors), and one school (Spring Valley Elementary).

Segment F is located along the eastbound side of SR-94 bordered at the east by Kenwood Drive and at the west by Bancroft Drive. This segment is represented by receivers R51 through R76 and contains primarily single-family residences with seven multi-family residences.

Segment G is located along the westbound side of SR-94 bordered at the west by SR-125 and at the east by Bancroft Drive. This segment is represented by receivers R29 through R50 and contains primarily single-family residences along with six multi-family residences.

Segment H is located along the westbound side of SR-94 bordered at the west by Bancroft Drive and bordered at the east by Kenwood Drive. It is represented by receivers R77 through R92 and contains five single-family residences, four multi-family residences, one business (Lonjean Cheveaux Studio Hair Stylist), two places of worship (Faith Chapel Church and Saint Mary Protectress Ukrainian Orthodox Church), eight active sport areas (Astiz Tennis Ranch Private Club), and one motel (Crown Inn & Suites).

Environmental Consequences

The proposed project would be considered a Type I project. FHWA defines a Type I project as a proposed federal or federal-aid highway project for the construction of a highway on a new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment of the highway, adds through-traffic lane(s), or includes the addition of a through-traffic lane that functions as a high-occupancy vehicle (HOV) lane, high-occupancy toll (HOT) lane, bus lane, or truck climbing lane.

Long and short-term noise measurements were conducted throughout the proposed project area in order to characterize the general existing noise environment and to provide a basis for the noise model. Short-term monitoring of 20-minute duration at each site was conducted at 17 locations on March 18th-22nd (2013). Short-term monitoring was conducted at 16 Activity Category B and one Activity Category C land use locations. Long-term monitoring was conducted at seven locations in order to identify variations in sound levels throughout the day.

The FHWA Traffic Noise Model (TNM) Version 2.5 was used to estimate existing noise levels, as well as predict future noise levels and evaluate potential abatement measures (as discussed below). The sound measurement locations (as identified above) were taken to determine existing noise levels and to calibrate the TNM model. The measurement locations were selected

as being representative of similar noise sensitive areas within the proposed project area. Based on traffic volumes in the traffic study (Traffic Analysis for SR-94/SR-125 Direct Connector Project, April 2013), the PM peak hour traffic volumes would constitute the worst-case scenario for the noise model. Noise receiver sites in the proposed project area and their existing noise level are presented in Table 22.

The noise receivers in the proposed project area were evaluated based on future predicted noise levels. A receiver was evaluated for abatement when future predicted noise levels would approach (within one dBA) or exceed the NAC (67 dBA for activity category B) or substantially increase (by 12 dBA) existing noise levels. Soundwall heights from 8 feet to 16 feet were considered. Table 22 shows the predicted peak hour noise levels for the 217 receiver locations associated with the proposed build alternative. As shown in the table, noise levels would not increase by 12 dBA or more at any of the receiver locations. Therefore, no substantial increase in noise levels would occur under the proposed build alternative. However, the peak hour noise levels at 114 receivers would approach or exceed the NAC without abatement. These receiver locations represent a total of 92 single-family residences, 16 multi-family residences, 1 public service building, 2 places of worship, and 3 active sport areas.

During the construction phases of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Table 23 summarizes noise levels produced by construction equipment commonly used on roadway construction projects. As indicated, equipment involved in construction is expected to generate noise levels ranging from 80 to 89 dBA at a distance of 50 feet. Noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance.

Table 23: 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, 2006

Construction noise varies greatly depending on the construction process, type and condition of equipment used, as well as layout of the construction site. Many of these factors are traditionally left to the contractor's discretion, which makes it difficult to accurately estimate levels of construction noise. Construction noise estimates are approximate because of the lack of specific information available at the time of the assessment. Temporary construction noise impacts would be unavoidable at areas located immediately adjacent to the proposed project alignment.

No-Build Alternative

Under the No-Build Alternative, some noise receivers experience an increase from 0-4 decibels. A change of 3 decibels is barely perceptible by the human ear. The No-Build Alternative proposes no improvements and will not result in changes to existing noise levels.

Avoidance, Minimization, and/or Abatement Measures

A Noise Abatement Decision Report (NADR), dated April 2015, was prepared for this project and is incorporated by reference. The report documents the decision of the overall feasibility and reasonableness of providing abatement measures.

Feasibility of noise abatement is an engineering consideration. Noise abatement must be predicted to reduce noise by at least 5 dBA at an impacted receiver to be considered feasible from an acoustical perspective. A “benefited receptor” is the recipient of an abatement measure that receives a minimum 5 dBA noise reduction.

Reasonableness of noise abatement is more subjective than the determination of its feasibility. Reasonableness is a combination of social, economic, and environmental factors considered in the evaluation of a noise abatement measure. The overall reasonableness of noise abatement is determined by three factors: noise reduction design goal, cost of noise abatement, and viewpoints of benefited receptors that include property owners and residents of the benefited

receptors. Caltrans' noise reduction design goal requires that a minimum 7 dB reduction in the future noise level must be achieved at one or more benefited receptors per soundwall for an abatement measure to be considered reasonable.

The preliminary reasonableness determination is made by calculating an allowance that is considered a reasonable amount of money per benefited residence to spend on abatement. This reasonable allowance is then compared to the engineer's cost estimate of the abatement. If the engineer's cost estimate is less than the allowance, the preliminary determination is that the abatement is reasonable. If the cost estimate is greater than the allowance, the preliminary determination is that abatement is not reasonable.

Proposed abatement is based on preliminary designs. If during final project design the conditions change substantially, the abatement may be changed or not provided so long as there is no major change in impact conclusions. A final decision on soundwall specifics will be made based on the final design noise analysis and based on community acceptance. The following is a discussion of the soundwalls considered in the NADR.

Area 1

Segment A

Soundwall S763 would be 8 feet in height and approximately 240 feet long. It would be located along the west side of SR-125 between stations 762+13 to 763+20 (receiver sites R131, R132, and R133). This wall would provide feasible noise reduction for three single-family residences. The reasonable cost allowance is $192,000 for the three benefited receptors. The estimated construction cost with all easements is $157,269, which is below the reasonable cost allowance and therefore wall S763 is considered reasonable from a cost perspective. Soundwall S763 is both feasible and reasonable with all easement costs and is preliminarily recommended for construction.

Soundwall S765 would be 10 feet in height and approximately 79 feet long. It would be located along the west side of SR-125 between stations 765+52 to 766+07 (receiver site R135). This wall would provide feasible noise reduction for one single-family residence. The reasonable cost allowance is $64,000 for the single benefited receptor. The estimated construction cost with all easements is $56,150, which is below the reasonable cost allowance and therefore wall S765 is considered reasonable from a cost perspective. Soundwall S765 is both feasible and reasonable with all easement costs and is preliminarily recommended for construction.

Soundwall S773 would be 14 feet in height and approximately 801 feet long. It would be located along the west side of SR-125 between stations 769+69 to 777+72 (receiver sites R141 to R149). This wall would provide feasible noise reduction for 15 single-family residences. The reasonable cost allowance is $960,000 for the 15 benefited receptors. The estimated construction cost with all easements is $665,711, which is below the reasonable cost allowance and therefore wall S773 is considered reasonable from a cost perspective. Soundwall S773 is both feasible and reasonable with all easement costs and is preliminarily recommended for construction.

Segment B

Soundwall S781 would be 8 feet in height and approximately 167 feet long. It would be located along the west side of SR-125 between stations 779+51 to 781+25 (receiver site R185). This

wall would provide feasible noise reduction for one single-family residence. The reasonable cost allowance is $64,000 for the single benefited receptor. The estimated construction cost with all easements is $107,318, which exceeds the reasonable cost allowance and therefore wall S781 is considered not reasonable to construct. Soundwall S781 is not recommended for construction.

Soundwall S799 would be 12 feet in height and approximately 555 feet long. It would be located along the west side of SR-125 between stations 795+71 to 801+28 (receiver sites R203, R210 to R211). This wall would provide feasible noise reduction for three single-family residences. The reasonable cost allowance is $192,000 for the three benefited receptors. The estimated construction cost with all easements is $325,510, which exceeds the reasonable cost allowance and wall S799 is considered not reasonable to construct. Construction of S799 is feasible but not reasonable due to the estimated construction cost exceeding the total cost allowance and therefore construction of S799 is not recommended.

Segment C

Soundwall S596-PP would be 16 feet in height and approximately 100 feet long. It would be located along the east side of SR-125 between stations 596+22 to 596+80 (receiver site R101). This wall would provide feasible noise reduction for one single-family residence. The reasonable cost allowance is $64,000 for the one benefited receptor. This wall does not meet the acoustical design goal of 7 dB noise reduction, therefore it is not reasonable to construct. Furthermore, the estimated construction cost with all easements is $95,116, which exceeds the reasonable cost allowance. Construction of S596-PP is not recommended.

Soundwall S598 would be 10 feet in height and approximately 120 feet long. It would be located southeast of the 94/125 interchange between stations 596+67 to 597+60 (receiver site R104). This wall would provide feasible noise reduction for one single-family residence. Private construction easements would be required to construct S598. The reasonable cost allowance is $64,000 for the single benefited receptor. The estimated construction cost with all easements is $85,939, which exceeds the reasonable cost allowance and this wall is therefore considered not reasonable to construct. Construction of S598 is feasible but not reasonable due to the estimated construction cost exceeding the total cost allowance for soundwall S598. The wall may be reasonable if negotiations of easement cost with the homeowner result in the cost of the wall being less than the reasonable allowance. Letters have been sent to the property owners to begin discussions regarding the easements. Based on responses from the property owners, construction of S598 is preliminarily recommended, however, additional coordination may be required prior to construction.

Soundwall S600-PP would be 12 feet in height and approximately 61 feet long. It would be located along the east side of SR-125 between stations 598+96 to 599+37 (receiver site R106). This wall would provide feasible noise reduction for one single-family residence. The reasonable cost allowance is $64,000 for the one benefited receptor. The estimated construction cost with all easements is $57,082, which is below the reasonable cost allowance and is considered reasonable. Soundwall S600-PP is recommended for construction.

Soundwall S770 would be 16 feet in height and approximately 1403 feet long. It would be located along the east side of SR-125 between stations 762+41 to 776+46 (receiver sites R107 to R120). This wall would provide feasible noise reduction for 12 single-family residences. The reasonable cost allowance is $768,000 for the 12 benefited receptors. The estimated construction cost with all easements is $1,017,806, which exceeds the reasonable cost

allowance and this wall is not considered reasonable. Soundwall S770 is not recommended for construction.

Segment D

Soundwall S780-PP would be 16 feet in height and approximately 137 feet long. It would be located along the east side of SR-125 between stations 779+91 to 781+20 (receiver site R153). This wall would provide feasible noise reduction for one single-family residence. This wall does not meet the acoustical design goal of 7 dB noise reduction, therefore it is not reasonable to construct. Furthermore, the estimated construction cost with all easements is $162,351, which exceeds the reasonable cost allowance. Soundwall S780-PP is not recommended for construction.

Soundwall S788-PP would be 12 feet in height and approximately 51 feet long. It would be located along the east side of SR-125 between stations 787+48 to 787+87 (receiver site R159). This wall would provide feasible noise reduction for one single-family residence. Private construction easements would be required to construct S788-PP. The reasonable cost allowance is $64,000 for the single benefited receptor. The estimated construction cost with all easements is $75,812, which exceeds the reasonable cost allowance and this wall is therefore considered not reasonable. The wall may be reasonable if negotiations of easement cost with the homeowner result in the cost of the wall being less than the reasonable allowance. Letters have been sent to the property owners to begin discussions regarding the easements. Based on responses from the property owners, construction of S788-PP is preliminarily recommended. However, additional coordination may be required prior to construction.

Soundwall S790-PP would be 8 feet in height and approximately 71 feet long. It would be located along the east side of SR-125 between stations 790+91 to 791+26 (receiver site R160). This wall would provide feasible noise reduction for one single-family residence. Private construction easements would be required to construct S790-PP. The reasonable cost allowance is $64,000 for the single benefited receptor. The estimated construction cost with all easements is $77,126, which exceeds the reasonable cost allowance and this wall is therefore considered not reasonable. The wall may be reasonable if negotiations of easement cost with the homeowner result in the cost of the wall being less than the reasonable allowance. Letters have been sent to the property owners to begin discussions regarding the easements. Based on responses from the property owners, construction of S790-PP is preliminarily recommended. However, additional coordination may be required prior to construction.

Soundwall S796 would be 14 feet in height and approximately 985 feet long. It would be located along the east side of SR-125 between stations 793+95 to 803+62 (receiver sites R164 to R175). This wall would provide feasible noise reduction for 14 single-family residences. The reasonable cost allowance is $896,000 for the 14 benefited receptors. The estimated construction cost with all easements is $484,136, which is below the reasonable cost allowance and is considered reasonable. Soundwall S796 is recommended for construction.

Area 2

Segment E

Soundwall S746 would be 16 feet in height and approximately 285 feet long. It would be located along the south side of SR-94 between stations 744+23 to 746+87 (receiver sites R1 to R3). This wall would provide feasible noise reduction for four single-family residences and one

commercial property. The reasonable cost allowance is $320,000 for the 5 benefited receptors. The estimated construction cost with all easements is $254,921, which is below the reasonable cost allowance and wall S746 is considered reasonable from a cost perspective. This wall is currently recommended for construction.

Soundwall S610 would be 14 feet in height and approximately 1362 feet long. It would be located along the south side of SR-94 between stations 600+15 to 613+42 (receiver sites R12 to R24). This wall would provide feasible reduction for 13 single-family residences. The reasonable cost allowance is $832,000 for the 13 benefited receptors. The estimated construction cost with all easements is $1,106,757, which exceeds the reasonable cost allowance. The wall may be reasonable if negotiations of easement cost with the homeowner result in the cost of the wall being less than the reasonable allowance. Letters have been sent to the property owners to begin discussions regarding the easements. Based on responses from the property owners, construction of S610 is preliminarily recommended. However, additional coordination may be required prior to construction.

Segment F

Soundwall combination S624/S628 would be 14 feet in height and approximately 747 feet long. It would be located along the north side of SR-94 between stations 622+79 to 626+52 and 626+23 to 629+84 (receiver sites R53 to R60). This wall would provide feasible noise reduction for 14 multi-family residences and two single-family residences. The reasonable cost allowance is $1,024,000 for the 16 benefited receptors. The estimated construction cost with all easements is $438,799, which is below the reasonable cost allowance and wall S624/S628 is considered reasonable and is currently recommended for construction.

Soundwall S650 would be 14 feet in height and approximately 444 feet long. It would be located along the south side of SR-94 between stations 641+52 to 645+96 (receiver sites R67 to R69). This wall would provide feasible noise reduction for three single-family residences. The reasonable cost allowance is $192,000 for the three benefited receptors. The estimated construction cost with all easements is $202,030, which exceeds the reasonable cost allowance and wall S650 is not considered reasonable and is not recommended for construction.

Segment G

Soundwall S595-PP would be 8 feet in height and approximately 48 feet long. It would be located along the north side of SR-94 between stations 599+35 to 599+52 (receiver site R32). This wall would provide feasible noise reduction for one single-family residence. Private construction easements would be required to construct S595-PP. The reasonable cost allowance is $64,000 for the single benefited receptor. The estimated construction cost with all easements is $37,146, which is below the reasonable cost allowance and wall S595-PP is considered reasonable and is currently recommended for construction.

Soundwall S597-PP would be 12 feet in height and approximately 28 feet long. It would be located along the north side of SR-94 between stations 600+61 to 600+76 (receiver site R33-B). This wall would provide feasible noise reduction for one single-family residence. Private construction easements would be required to construct wall S597-PP. The reasonable cost allowance is $64,000 for the single benefited receptor. The estimated construction cost with all easements is $22,022, which is below the reasonable cost allowance and wall S597-PP is considered reasonable and is currently recommended for construction.

Soundwall S599-PP would be 16 feet in height and approximately 79 feet long. It would be located along the north side of SR-94 between stations 597+89 to 598+37 (receiver site R36). This wall would provide feasible noise reduction for one single-family residence. Private construction easements would be required to construct wall S599-PP. The reasonable cost allowance is $64,000 for the single benefited receptor. This wall does not meet the acoustical design goal of 7 dB noise reduction, therefore it is not reasonable to construct. Furthermore, the estimated construction cost with all easements is $73,032, which exceeds the reasonable cost allowance. Construction of S599-PP is not recommended.

Soundwall S601-PP would be 16 feet in height and approximately 76 feet long. It would be located along the north side of SR-94 between stations 599+69 to 600+19 (receiver site R37). This wall would provide feasible noise reduction for one single-family residence. Private construction easements would be required to construct S601-PP. The reasonable cost allowance is $64,000 for the single benefited receptor. The estimated construction cost with all easements is $181,559, which exceeds the reasonable cost allowance and wall S601-PP is not considered reasonable. Construction of S601-PP may be recommended for construction if negotiation with the property owners would result in estimated costs that do not exceed the reasonable allowance. If the total cost cannot be reduced to less than or equal to the reasonable allowance, construction is not recommended.

Soundwall S605-PP would be 8 feet in height and approximately 75 feet long. It would be located along the north side of SR-94 between stations 602+43 to 602+86 (receiver site R42). This wall would provide feasible noise reduction for one single-family residence. Private construction easements would be required to construct S605-PP. The reasonable cost allowance is $64,000 for the single benefited receptor. The estimated construction cost with all easements is $60,389, which is below the reasonable cost allowance and is considered reasonable. The homeowner does not want S605-PP constructed on their property, therefore wall S605-PP is currently not recommended for construction.

Soundwall S607-PP would be 8 feet in height and approximately 78 feet long. It would be located along the north side of SR-94 between stations 606+12 to 606+59 (receiver site R46). This wall would provide feasible noise reduction for one single-family residence. Private construction easements would be required to construct wall S607-PP. The reasonable cost allowance is $64,000 for the single benefited receptor. The estimated construction cost with all easements is $65,875, which exceeds the reasonable cost allowance and wall S607-PP is not considered reasonable and is currently not recommended for construction. However, this wall may become recommended if negotiations with the property owners result in estimate costs that do not exceed the reasonable cost allowance. Letters have been sent to the property owners to begin discussions regarding the easements. Additional coordination may be required prior to construction.

Soundwall S611 would be 16 feet in height and approximately 568 feet long. It would be located along the north side of SR-94 between stations 609+18 to 615+07 (receiver sites R49 to R50). This wall would provide feasible noise reduction for three multi-family residences. The reasonable cost allowance is $192,000 for the three benefited receptors. The estimated construction cost with all easements is $508,053, which exceeds the reasonable cost allowance and wall S611 is not considered reasonable and is currently not recommended for construction.

Segment H

Soundwall S647 would be 16 feet in height and approximately 1531 feet long. It would be located along the north side of SR-94 between stations 640+77 to 655+88 (receiver sites R82 to R92). This wall would provide feasible noise reduction for one single-family residence, four multi-family residences, two places of worship, eight active sport areas, and one motel. The reasonable cost allowance is $1,024,000 for the 16 benefited receptors. The estimated construction cost with all easements is $1,163,237, which exceeds the reasonable cost allowance and wall S647 is not considered reasonable and is currently not recommended for construction.

Figure 3A through 3E: Project Features Map – shows receivers and proposed wall/ berm locations.

Biological Environment

Analysis in the following sections are drawn from the *Natural Environment Study*, dated April 2014. The Study utilized general field surveys, species-specific field surveys, and vegetation and species mapping for its report.

2.15 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 2.20. Wetlands and other waters are discussed in Section 2.17.

Affected Environment

The proposed project's Biological Study Area (BSA) totals approximately 75 acres of urban and developed land, adjacent landscaping, and ruderal vegetation (a plant species that is first to colonize disturbed lands). Figures 10-A, 10-B, and 10-C show the area that represents the BSA. A native vegetation community, disturbed coastal sage scrub, was identified within the BSA. This vegetation community is found in isolated patches and is surrounded by development; therefore, it provides marginal habitat. One hundred twenty seven sensitive species were evaluated for presence within the La Mesa, El Cajon, National City, and Jamul Mountains United States Geological Survey (USGS) 7.5 minute topographic quadrangles, where the proposed project is located.

Proposed project activities would mostly take place in the right-of-way of the existing roads which are paved and disturbed. The proposed project would increase impervious surfaces by approximately 4.1 acres. These new impervious surfaces are in disturbed areas that contain little or no biological value.

Detailed descriptions for each vegetation community are included below. Based on the California Natural Diversity Database (CNDDB) search, sensitive vegetation communities with the potential to occur in the general area include Maritime Succulent Scrub, San Diego Mesa Claypan Vernal Pool, San Diego Mesa Hardpan Vernal Pool, Southern Coastal Salt Marsh, Southern Cottonwood Willow Riparian Forest, Southern Interior Cypress Forest, Southern Riparian Scrub, Southern Sycamore Alder Riparian Woodland, and Valley Needlegrass Grassland. However, landscaped areas and ruderal vegetation comprise the two dominant vegetation communities in the BSA.

Ornamentals in the BSA include gum tree (*Eucalyptus* sp.) and Allepo pine (*Pinus halepensis*). Additional ornamental plant species include Mexican fan palm (*Washingtonia robusta*), Canary Islands palm (*Phoenix canariensis*), shrubby prostate acacia (*Acacia redolens*), and Peruvian pepper (*Schinus molle*). The understory of non-native ornamental vegetation includes iceplant (*Carpobrotus edulis*), rip-gut grass (*Bromus diandrus*), fountaingrass (*Pennisetum setaceum*), Bermuda grass (*Cynodon dactylon*), smilo grass (*Piptatherum miliaceum*), wild radish

(*Raphanus sativus*), broadleaf filaree (*Erodium botrys*), Russian thistle (*Salsola tragus*), and mustard (*Brassica sp.*). Approximately 13.8 acres of ornamental, non-native vegetation occurs within the BSA.

Diegan coastal sage scrub is characterized by low, soft to woody subshrubs that are most active in winter and early spring (Holland 1986). This vegetation community is typically dominated by coastal sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*), together with laurel sumac (*Malosma laurina*) and broom baccharis (*Baccharis sarothroides*). Other components of this community in the BSA include disturbed vegetation, including oat (*Avena* sp.), rip-gut grass, Russian thistle, mustard, and fountaingrass. Approximately 1.9 acres of disturbed coastal sage scrub habitat occurs within the BSA, specifically 1.3 acres on a 1:1 steep cut-slope just north of the Mariposa Street Bridge and 0.6 acre at the top of the slope of SR-94 and Panorama Drive. California buckwheat dominates areas at SR-94 and Panorama Drive while bush sunflower (*Encelia californica*) and California buckwheat dominates the SR-125 north of Mariposa Street Bridge.

In the roadsides that are not landscaped, habitat consists of bare ground and vegetation typical of disturbed habitat, including fountaingrass, mustard, and Russian thistle, which are the most commonly found species. Species observed in disturbed habitat include rip-gut grass, wild radish, mustard, cheeseweed (*Malva parviflora*), Bermuda grass, smilo grass, and wild oat (*Avena barbata*). Approximately 21.8 acres of disturbed habitat occurs within the BSA.

The remainder of the BSA consists of developed land including roads and residential and commercial developments. Approximately 37.5 acres of developed habitat occur within the BSA.

Environmental Consequences

The BSA comprises approximately 75 acres. Vegetation that would be directly impacted by the proposed project consists primarily of landscaped areas and areas vegetated with ruderal species. Impacts to vegetation would be minor since most of the proposed project activities would be restricted to the existing disturbed right-of-way. These areas are shown on Figures 10-A to 10-C.

There are not enough contiguous suitable habitats in the BSA to support any of these species; therefore, no temporary or permanent impacts are anticipated to species.

Construction of the proposed project would impact natural communities for a total of 1.2 acres of disturbed coastal sage scrub habitat, but the natural community is fragmented and provides marginal habitat for biological species. Approximately 0.6 acre of disturbed coastal sage scrub on the steep slope above SR-125 would be impacted by widening of the roadway and installation of a retaining wall.

The proposed improvements associated with this proposed project would increase the quantity of impervious surfaces by 4.1 acres. The proposed project would not substantially disturb the overall natural environment of the proposed project area or surrounding areas.

<u>No-Build Alternative</u>

The No-Build Alternative proposes no improvements and will not result in impacts to natural communities within the proposed project limits.

Avoidance, Minimization, and/or Mitigation Measures

Although disturbed coastal sage scrub was not found to support any sensitive species, it represents a natural community and permanent impacts to this habitat would be mitigated at a 1:1 ratio at Rancho San Diego, an offsite Caltrans mitigation bank. Temporary impacts would be mitigated onsite with restoration to pre-existing conditions and seeding with an appropriate native mix. Impacts to a 0.07 acre jurisdictional feature with disturbed wetland habitat would be mitigated at a 2:1 ratio at Rancho San Diego (See Figure 10-D).

Permanent impacts to disturbed coastal sage scrub would be mitigated with coastal sage scrub credits at a 1:1 ratio at Rancho San Diego, an offsite Caltrans mitigation bank (See Figure 10-D). Mitigation credits have already been debited for the project. An additional 0.6 acre of coastal sage scrub may be impacted by staging/storing. Temporary impacts would be mitigated onsite by restoring the areas to pre-existing conditions and seeding affected areas with a native coastal sage scrub mix.

2.16 WETLANDS AND OTHER WATERS

Regulatory Setting

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

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army 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 would 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 would 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 Section 2.11: Water Quality for additional details.

Affected Environment

Disturbed wetlands are areas permanently or periodically inundated by water, which have been modified by human activity. This includes portions of wetlands with obvious artificial structures such as concrete lining or rip-rap. Approximately 0.07 acres of disturbed wetland habitat dominated by giant reed (*Arundo donax*) and cattail (*Typha* sp.) occurs within the BSA. Figure 10-A shows the area of disturbed wetlands that are within the BSA.

Environmental Consequences

Approximately 0.07 acre of jurisdictional waters along SR-94 would be permanently impacted by the proposed project improvements. The proposed project does not have the potential of

reducing habitats of fish or wildlife species, nor would it eliminate any special-status plants or reduce the number or range of endangered plant or animal species.

Most drains along SR-94, SR-125, and local roadways are either pipelined under the BSA or are concrete-lined drainage channels draining roadside runoff through the area. These features are not state or federal jurisdictional features and would either be avoided or relocated during construction. However, one drainage along SR-94 and local roadways has created a disturbed wetland feature that has been determined to be a jurisdictional waters of the U.S. under the U.S. Army Corps of Engineers (USACE) and a jurisdictional waters of the State by CDFW, within the BSA. Approximately 0.07 acre of this jurisdictional area would be impacted by placing retaining walls along the proposed alignment. A Section 404 Nationwide Permit will be obtained prior to construction. Figure 10-A shows the area of disturbed wetlands that are within the BSA.

No-Build Alternative

The No-Build Alternative proposes no improvements and will not result in additional impacts to wetlands and other waters.

Avoidance, Minimization, and/or Mitigation Measures

The temporary construction staging areas, access roads, and equipment storage shall be strategically placed at a determined distance after evaluating the areas to avoid impacts to jurisdictional waters.

Permanent impacts to jurisdictional waters would be mitigated with native marsh/riparian/scrub/floodplain credits at a 2:1 ratio at Rancho San Diego.

Erosion-Control Measures shall be implemented during construction. To minimize the mobilization of sediment to adjacent water bodies, the following erosion-control and sediment-control measures would be included in the Storm Water Pollution Prevention Plan (SWPPP) to be included in the construction specifications, based on standard Caltrans measures and standard dust-reduction measures.

- Soil exposure should be minimized through the use of temporary BMPs, groundcover, and stabilization measures;
- All stockpile areas adjacent to the jurisdictional wetlands should be surrounded by a filter fabric fence. Side slopes should not be steeper than 2:1;
- Where appropriate, bare areas should be covered with mulch and cleared areas should be re-vegetated with native species; and

The contractor shall conduct periodic maintenance of erosion- and sediment-control measures.

Best Management Practices (BMPs) would be incorporated into construction of the project to minimize impacts on the environment. Implementation of BMPs would prevent impacts from occurring outside of the construction footprint.

BMPs would be used to reduce sedimentation and release of pollutants (oil, fuel, etc.) as a result of construction activities.

2.17 PLANT SPECIES

Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Please see the Threatened and Endangered Species (Section 2.20) in this document for detailed information about these species.

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

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

Affected Environment

Much of the BSA is developed or paved, and therefore, lacks vegetation. When vegetation is present, it primarily consists of ornamental plantings for the purpose of landscaping and ruderal vegetation along SR-94 and SR-125. Two small areas of native vegetation communities (disturbed coastal sage scrub) were identified within the BSA, but most existing vegetation includes introduced non-native species.

Based on the USFWS database and CNDDB searches, 65 sensitive plant species have the potential to occur in this area. The habitat present in the BSA has the potential to support 29 of these species (Table 24).

Table 24: Sensitive Plants with the Potential to Occur Within the Project Vicinity

Scientific Name	Common Name
Acanthomintha ilicifolia	San Diego thorn-mint
Adolphia californica	California adolphia
Ambrosia chenopodifolia	San Diego bur-sage
Ambrosia monogyra	Singlewhorl burrobrush
Ambrosia pumila	San Diego ambrosia
Aphanisma blitoides	Aphanisma
Astragalus deanei	Dean's milk-vetch
Atriplex pacificia	South coast saltscale
Bergerocactus emoryi	Golden-spined cereus
Bloomeria clevelandii	San Diego goldenstar
Chorizanthe polygonoides var. *longispina*	Long-spined spineflower
Clinopodium chandleri	San Miguel savory
Cylindropuntia californica var. *californica*	Snake cholla
Deinandra conjugens	Otay tarplant
Dudleya variegata	Variegated dudleya
Ericameria palmeri var. *palmeri*	Palmer's goldenbush
Euphorbia misera	Cliff spurge
Ferocactus viridescens	San Diego barrel cactus
Harpagonella palmeri	Palmer's grapplinghook
Heterotheca sessiliflora ssp. *sessiliflora*	Beach goldenaster
Isocoma menziesii var. *decumbens*	Decumbent goldenbush
Lepechinia ganderi	Gander's pitcher sage
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass
Lotus nuttallianus	Nuttall's lotus
Monardella linoides ssp. *viminea*	Willowy monardella
Quercus dumosa	Nuttall's scrub oak
Senecio aphanactis	Chaparral ragwort
Stylocline citroleum	Oil neststraw
Tetracoccus dioicus	Parry's tetracoccus

None of these plant species were observed during biological surveys of the BSA and the habitat that occurs within the BSA is sub-optimal. No resource protection areas were identified within the project limits.

Environmental Consequences

The BSA comprises approximately 75 acres. Vegetation that would be directly impacted by the proposed project consists primarily of landscaped areas and areas vegetated with ruderal species. Impacts to vegetation would be minor since most project activities are restricted to the existing disturbed right-of-way. Figures 10-B and 10-C show the areas of vegetation that are within the BSA.

No-Build Alternative

The No-Build Alternative proposes no improvements and will not result in additional impacts to sensitive plant species.

Avoidance, Minimization, and/or Mitigation Measures

No mitigation measures are required for this section.

2.18 ANIMAL SPECIES

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 2.20 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

Affected Environment

Habitats within the BSA are not accommodating for many wildlife species due to its developed nature and a strong human presence. Resident species are defined as those wildlife species that spend their entire life cycle within a single habitat or habitat complex. Based on the USFWS database and CNDDB searches, 62 sensitive animal species have the potential to occur in this area. The habitat present in the BSA has the potential to support eighteen of these species (Table 25).

Table 25: Sensitive Animals with the Potential to Occur Within the Project Vicinity

Scientific Name	Common Name
INVERTEBRATES	
Euphydryas editha quino	Quino Checkerspot butterfly
Lycaena hermes	Hermes copper butterfly
REPTILES	
Anniella pulchra pulchra	Silvery legless lizard
Aspidoscelis hyperythra	orangethroat whiptail
Phrynosoma blainvillii	Coast horned lizard
Salvadora hexalepis virgultea	Coast patch-nosed snake
BIRDS	
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow
Amphispiza belli belli	Bell's sage sparrow
Athene cunicularia	Burrowing owl
Campylorhynchus brunneicapillus sandiegensis	Coastal cactus wren
Polioptila californica californica	Coastal California gnatcatcher
MAMMALS	
Antrozous pallidus	Pallid bat
Chaetodipus californicus femoralis	Dulzura pocket mouse
Chaetodipus fallax fallax	Northwestern San Diego pocket mouse
Eumops perotis californicus	Western mastiff bat
Lepus californicus bennettii	San Diego black-tailed jackrabbit
Neotoma lepida intermedia	San Diego desert woodrat
Perognathus longimembris pacificus	Pacific pocket mouse

Environmental Consequences

The BSA provides very poor foraging habitat for animal species due to its developed nature and low prey base. Species observed during field surveys include cabbage white butterfly (*Pieris rapae*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), and northern rough-winged swallows (*Stelgidopteryx semipennis*).

Following analysis of the sensitive wildlife species listed in Table 25 based on USFWS database and CNDDB searches and biological field surveys of the BSA, it was determined that the BSA does not provide adequate habitat for any of the sensitive species; therefore, no impacts are anticipated.

Migratory bird species are protected by the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711) which makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). In addition, section 33503 of the California Fish and Game Code prohibits the take, possession, or needless destruction of the nest or eggs or any bird, except as otherwise provided by the California Fish and Game Code or other regulation. No impacts to MBTA birds are expected.

No-Build Alternative

The No-Build Alternative proposes no improvements and will not result in impacts to special status animal species.

Avoidance, Minimization, and/or Mitigation Measures

If shrub or tree removal is to take place during the breeding season (February 1 to August 31), a pre-construction breeding bird survey shall be conducted within 7 days of these activities. A no-disturbance buffer shall be established around any active nest or breeding pair territory to limit the impacts of construction activities. The buffer shall not be removed until after the breeding season or until after a qualified wildlife biologist determines that the young have fledged. The extent of these buffers shall be determined by the biologist (coordinating with USFWS and CDFW) and would depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species.

All trash shall be kept in wildlife-proof receptacles and any non-natural food and water sources would not be left unattended for the duration of the project construction.

2.19 THREATENED AND ENDANGERED SPECIES

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and 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.

Affected Environment

There are a total of **21** threatened, endangered, or candidate species, and/or designated critical habitat on the species list obtained from USFWS (See Table 26 below). Species on this list are the species that may be affected by the proposed project and could include species that exist in another geographic area. For example, certain fishes may appear on the species list because a project could cause downstream effects on the species.

Table 26: Critical Species List that may be affected by the project

SPECIES	STATUS	RESOURCE	FINDINGS
Arroyo Toad (*Anaxyrus californicus*)	Endangered	Carlsbad Fish And Wildlife Office	No Effect
California Condor (*Gymnogyps californianus*)	Endangered	Carlsbad Fish And Wildlife Office	No Effect
California Least Tern (*Sterna antillarum browni*)	Endangered	Carlsbad Fish And Wildlife Office	No Effect
Southwestern Willow Flycatcher (*Empidonax traillii extimus*)	Endangered	Carlsbad Fish And Wildlife Office	No Effect
Coastal California gnatcatcher (*Polioptila californica californica*) Population: Entire	Threatened	Carlsbad Fish And Wildlife Office	No Effect
Least Bell's vireo (*Vireo bellii pusillus*) Population: Entire	Endangered	Carlsbad Fish And Wildlife Office	No Effect
Light-Footed Clapper rail (*Rallus longirostris levipes*) Population: U.S.A. only	Endangered	Carlsbad Fish And Wildlife Office	No Effect
Crustaceans			
Riverside fairy shrimp (*Streptocephalus woottoni*) Population: Entire	Endangered	Carlsbad Fish And Wildlife Office	No Effect

San Diego fairy shrimp (*Branchinecta sandiegonensis*)	Endangered	Carlsbad Fish And Wildlife Office	No Effect
Flowering Plants			
California Orcutt grass (*Orcuttia californica*)	Endangered	Carlsbad Fish And Wildlife Office	No Effect
Del Mar manzanita (*Arctostaphylos glandulosa ssp. crassifolia*)	Endangered	Carlsbad Fish And Wildlife Office	No Effect
Mexican Flannelbush (*Fremontodendron mexicanum*)	Endangered	Carlsbad Fish And Wildlife Office	No Effect
Otay Tarplant (*Deinandra (=Hemizonia) conjugens*)	Threatened	Carlsbad Fish And Wildlife Office	No Effect
San Diego ambrosia (*Ambrosia pumila*)	Endangered	Carlsbad Fish And Wildlife Office	No Effect
San Diego button-celery (*Eryngium aristulatum var. parishii*)	Endangered	Carlsbad Fish And Wildlife Office	No Effect
San Diego mesa-mint (*Pogogyne abramsii*)	Endangered	Carlsbad Fish And Wildlife Office	No Effect
San Diego thornmint (*Acanthomintha ilicifolia*)	Threatened	Carlsbad Fish And Wildlife Office	No Effect
Spreading navarretia (*Navarretia fossalis*)	Threatened	Carlsbad Fish And Wildlife Office	No Effect
Thread-leaved Brodiaea (*Brodiaea filifolia*)	Threatened	Carlsbad Fish And Wildlife Office	No Effect
Willowy monardella (*Monardella viminea*)	Endangered	Carlsbad Fish And Wildlife Office	No Effect
Insects			
Quino Checkerspot butterfly (*Euphydryas editha quino (=e. e. wrighti)*) Population: Entire	Endangered	Carlsbad Fish And Wildlife Office	No Effect

Source: U.S. Fish & Wildlife Service, May 14th, 2015

Environmental Consequences

Following analysis of the sensitive wildlife species listed in Table 26 based on USFWS database and CNDDB searches and biological field surveys of the BSA, it was determined that the BSA does not provide adequate habitat for any of the sensitive species; therefore, no impacts are anticipated. Figures 10-A to 10-C show the areas that represent sensitive species habitat within the BSA.

No-Build Alternative

The No-Build Alternative proposes no improvements and will not result in impacts to threatened or endangered species.

Avoidance, Minimization, and/or Mitigation Measures

No mitigation measures are required for this section.

2.20 INVASIVE SPECIES

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 to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

Affected Environment

Analysis in this section is drawn from the *Natural Environment Study*, dated April 2014. The Study utilized general field surveys, species-specific field surveys, and vegetation and species mapping for its report.

Environmental Consequences

None of the species on the California list of invasive species is used by Caltrans for erosion control or landscaping. All equipment and materials would be inspected for the presence of invasive species.

During project construction, all invasive species included on the National Invasive Species Management Plan, the State of California Noxious Weed List, and the California Invasive Plant Council (Cal-IPC) Invasive Plant Inventory list found growing within the proposed project right-of-way would be removed. Weed removal would be conducted within the proposed project right-of-way as needed during the construction. Special care would be taken during transport, use, and disposal of soils containing invasive weed seeds, and all weedy vegetation removed during construction would be properly disposed of to prevent spread into areas outside of the construction area. Erosion control measures for the proposed project shall be designed to prevent the spread of invasive plant species. Landscaping designs for the proposed project shall not contain invasive species in the plant selections or seed mixtures.

No-Build Alternative

The No-Build Alternative proposes no improvements and will not result in changes to existing invasive species issues.

Avoidance, Minimization, and/or Mitigation Measures

Erosion control measures for the proposed project shall be designed to prevent the spread of invasive plant species. Landscaping designs for the proposed project shall not contain invasive species in the plant selections or seed mixtures. Construction equipment shall be cleaned before mobilizing to arrive at the proposed project site and before leaving the proposed project site.

Construction Impacts

Construction of the proposed project would be completed in stages. This would minimize traffic impacts by avoiding simultaneous closures on both SR-94 and SR-125. The anticipated major stages are as follows:

Stage 1:

- Construct the SB-EB Connector Undercrossing (Move-in Bridge) offsite.
- Construct Bridge footings for Move-in Bridge (Overnight lane closures).
- Construct the SR-94 auxiliary lane between the EB Bancroft Drive on-ramp and EB Kenwood Drive off-ramp (Shoulder closure and overnight lane closures).

Stage 2:

- Move in Bridge on SR-125 (Weekend full closure of SR-125).
- Construct retaining walls and excavate beneath bridge.
- Demo Echo Drive and existing house. (Echo Drive Closed)
- Construct connector grading, retaining walls, and drainage improvements south of Panorama Drive to NB Campo Road On-ramp Undercrossing.
- Construct Echo Drive Overcrossing.
- Re-construct EB Bancroft Drive On-ramp. (EB On-ramp Closed)
- Construct widening of Bancroft Drive Undercrossing (Shoulder closure).

Stage 3:

- Construct grading, retaining walls, and drainage improvements between NB Campo Road On-ramp Undercrossing and Campo Road Overcrossing.
- Demo and re-construct Mariposa Street Overcrossing (Mariposa Street Closed, Overnight Closures on SR-125).
- Construct the SR-125 auxiliary lane between SB Lemon Avenue On-ramp and Mariposa Street (Shoulder closure).

Stage 4:

- Construct EB Bancroft Dr. Off-ramp Overcrossing (EB Bancroft Dr. Off-ramp Closed).
- Construct connector grading and retaining walls from Campo Road Overcrossing to Bancroft Drive Undercrossing (Shoulder closure, overnight lane closures).
- Construct drainage improvements.
- Construct new EB Bancroft Drive Off-ramp.
- Construct Panorama Drive Overcrossing (Panorama Drive Closed).

- Construct grading, retaining walls, and drainage improvements from Panorama Drive to Connector exit.

Stage 5:

- Construct new connector pavement (Overnight lane closures on SR-125 and SR-94).
- Install signing and striping on connector.

Avoidance, Minimization, and/or Mitigation Measures

Preceding roadway design approval, a final Transportation Management Plan (TMP) would be prepared to reduce potential construction related traffic conflicts, detours, and delays. The elements to be considered for the proposed project include, but are not limited to:

- Development of a Public Awareness Campaign to sufficiently inform residents and motorists prior to construction. This may include the establishment of a public information center, brochures and mailers, media releases, paid advertising, and/or establishment of a project website.
- Provide motorist information through traffic radio announcements, changeable message signs, temporary roadside signs, and/or the Caltrans Highway Information Network (CHIN or 511).
- Provide incident management through the use of a transportation management center, a traffic management team, freeway service patrol, and/ or dedicated law enforcement through the Construction Zone Enhanced Enforcement Program (COZEEP).
- Construction strategies including the use of Lane Requirement Charts provided by Caltrans, construction staging, full facility closures on SR-125 and some ramps, night work, innovative construction techniques, and/or incentive/disincentive clauses in the construction contract.
- Demand management through the encouragement of regular commuters to telecommute, or vary work hours during construction.
- Provide alternate routes or detours.
- Development of traffic and contractor contingency plans. The traffic contingency plan, prepared by Caltrans, evaluates measures to be implemented when traffic delays exceed anticipated limits during construction activities. The contractor contingency plan, prepared by the contractor, addresses all factors affecting construction activities within the contractor’s control in the work zone. Overall, a TMP contingency plan defines factors that necessitate removal of lane closures (such as inclement weather, excessive traffic volumes, etc.), identifies lines of communication and authority, and describes the responsibilities of specific parties when lane closures are implemented.

Implementation of a Construction Advisory Team (CAT) to refine TMP strategies prior to construction and evaluate TMP activities during construction.

Please see Section 2.6: Traffic and Transportation for more details on mitigation measures.

Cumulative Impacts

Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this 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.

Affected Environment

The proposed project could have a cumulative effect on the following resources:

Biological Resources

Riparian wetlands areas may be the most important natural habitat in the western United States. Although comprising less than 1 percent of land area, riparian habitats support the most diverse and abundant wildlife communities. Yet they are disappearing at an alarming rate. In California, an estimated 95 percent of riparian habitat has disappeared during the last hundred years.

Riparian wetland areas or streamsides are found at the bottom of canyons and valleys throughout San Diego County, wherever a stream is present. One drainage along SR-94 and local roadways has created a disturbed wetland feature that has been determined to be jurisdictional waters of the U.S. under the U.S. Army Corps of Engineers (USACE) and jurisdictional waters of the State by CDFW within the BSA.

Coastal sage scrub habitat was developed rapidly from the 1940's to 1990's for agriculture, grazing, and urban areas, and is considered now one of the most endangered habitats in the U.S. Coastal sage scrub is considered a sensitive habitat by the City and County of San Diego. The USFWS has estimated that coastal sage scrub habitat has been reduced by 70 to 90% of its historical extent, primarily due to historical agricultural land uses and urban expansion along the Southern California coastal plain. Additional evidence of the decline of this once common habitat is the growing number of declining plant and animal species that are associated with it. The proposed project’s Biological Study Area (BSA) totals approximately 75 acres of urban and

developed land, adjacent landscaping, and ruderal vegetation. Disturbed coastal sage scrub was identified within the BSA.

The resource study area (RSA) for Biological Resources is defined as the area permanently and temporarily affected by the proposed project plus a 100 ft. buffer. The RSA is located in the City of La Mesa and the unincorporated community of Spring Valley, San Diego County, California. It lies between the elevations of roughly 440 feet above mean sea level (AMSL) and 560 feet AMSL. Land within the RSA is essentially fully developed and is without any unaltered areas. The previously existing vegetation and wildlife habitat has been displaced by commercial and residential land uses. The urban habitat is characterized by commercial and residential developments comprised of buildings, parking lots, associated landscaping, and other areas of pavement/asphalt surfaces with graded and disturbed soils.

Traffic

A Traffic Analysis Report (July 2014) was prepared to analyze the existing and future traffic conditions in the proposed project area. The study area is approximately 8 miles east of downtown San Diego within the City of La Mesa in San Diego County. It includes SR-94 from east of the Lemon Grove Avenue interchange to east of Kenwood Drive and SR-125 from just north of Jamacha Road to just north of Lemon Avenue.

The existing (2011) high traffic volumes in both directions of SR-94 within the proposed project limits contribute to unacceptable (LOS E or worse) conditions during the AM peak period for WB traffic and for the PM peak period for EB traffic. Six mainline sections in the EB direction and four sections in the WB direction are estimated to operate at LOS F during the AM and PM peak periods. Five mainline sections were analyzed in the NB direction and six sections in the SB direction of SR-125. The existing high traffic volumes on the freeway section between Lemon Avenue and Spring Street, in both directions of SR-125, contribute to unacceptable (LOS E or worse) conditions during both AM and PM peak periods. One mainline section in the NB direction and one section in the SB direction are estimated to operate at LOS F during the PM peak period. The LOS F in both directions in the PM peak is expected due to the balanced traffic volumes on this section of SR-125.

The resource study area (RSA) for Traffic and Transportation is defined as the SR-94 from east of the Lemon Grove Avenue interchange to east of Kenwood Drive; and SR-125 from just north of Jamacha Road to just north of Lemon Avenue.

Visual

The proposed project alternative would result in an increase in highway-related structures and permanent loss of vegetation within the existing view area. The proposed build-alternative would include: replacement of bridge structures; widening of paved roadway; construction of interchange ramps, retaining and sound walls, concrete barrier rails and metal guard rails, and fencing; topographic changes to surrounding slopes; and removal of vegetation. The proposed project would revise the roadway alignment altering the existing form and line of the facility. The proposed project would reduce the natural hues and textures of the surrounding roadside areas and add the monochromatic hues and textures of a highway facility thereby increasing the urban character.

The resource study area (RSA) for Visual Resources is the *corridor* or *project corridor* which is defined as the area of land that is visible from, adjacent to, and outside the highway right-of-

way, and is determined by topography, vegetation, and viewing distance. The proposed project is located at the juncture of SR-94 and SR-125 in the eastern region in San Diego County, California. The landscape is characterized by suburban communities, hills, valleys, riparian communities, boulders/rock outcroppings, naturalized waterways, Oak and Sycamores trees, and other native highway planting lining the roadways. The land use within the corridor is primarily suburban – coupled with commercial and open space.

Air/Quality

The project is located in the San Diego Air Basin (SDAB), uses the same jurisdictional boundaries as San Diego County. The SDAB currently meets the federal standards for all criteria pollutants except O_3 (Ozone). The SDAB currently falls under a federal "maintenance plan" for CO (Carbon Monoxide), following a 1998 re-designation as a CO attainment area. The proposed project is included in the SANDAG 2050 Regional Transportation Plan (RTP) and in the 2014 Regional Transportation Improvement Program (RTIP) and the 2015 Federal Statewide Transportation Improvement Program (FSTIP).

The resource study area (RSA) for Traffic and Transportation is defined as the SR-94 from east of the Lemon Grove Avenue interchange to east of Kenwood Drive; and SR-125 from just north of Jamacha Road to just north of Lemon Avenue.

Environmental Consequences

Build Alternative

Biological resources

One drainage along SR-94 and local roadways has created a disturbed wetland feature that has been determined to be jurisdictional waters of the U.S. under the U.S. Army Corps of Engineers (USACE) and jurisdictional waters of the State by CDFW within the RSA. Approximately 0.07 acre of this jurisdictional area would be impacted by placing retaining walls along the proposed new alignment. In addition, the proposed project would result in 1.2 acres of disturbed habitat loss. Mitigation measures discussed in the Biological Environment Section will reduce project specific and cumulative impacts to below a level of significance.

Traffic

Traffic within the proposed project area is expected to increase over the next twenty years. The biggest benefit of the proposed project is that the direct connector would provide the missing connection from SB SR-125 to EB SR-94, which reduces the use of arterial streets and intersections, and provide transportation improvements consistent with the adopted 2050 RTP. The project does not generate traffic and provides missing movements to aid in operations of the facility. Therefore, cumulative impacts to traffic and transportation under the proposed build alternative are not expected.

Visual

The proposed project, while having moderate changes to character due to the expansion of the proposed roadway facility, would result in a moderately low change to the existing vividness rating. Similarly, due to similarities in the proposed features, the project would result in a moderately low change to existing intactness and unity. As a result, the change to existing visual quality would be moderately low. While the proposed build alternative could cause a

moderate impact, it is not expected to cause the resource to degrade. Therefore, cumulative impacts are not anticipated for visual resources.

Air Quality

The analysis of proposed 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. The proposed project would conform to the assumptions in the air quality conformity analyses for the 2050 RTP and 2014 RTIP, which are long-range planning documents that include roadway projects throughout the region. Therefore, the proposed project would not result in a cumulative impact to air quality.

As part of the cumulative effort, a search was conducted on the Office of Planning and Research's State Clearinghouse CEQAnet database to determine past, present and reasonably foreseeable projects in the project vicinity. As part of this research, it was determined that there are relatively few projects that have been posted to the State Clearing house website in the vicinity of the project in La Mesa, Lemon Grove, or Spring Valley areas. Those projects that were posted would not contribute cumulatively to the proposed project.

Due to the minor impacts from the proposed project and lack of projects in the adjacent areas, it is not anticipated that the project would have cumulatively considerable impact including natural communities, traffic and visual impacts.

No-Build Alternative

Under the No-Build Alternative, no construction or grading activities would occur, and no associated cumulative impacts would occur.

Avoidance, Minimization, and/or Mitigation Measures

Minimization measures for adverse and cumulatively considerable impacts can be found in each section including avoidance, minimization, and/or mitigation sections. Implementation of the measures in each respective section would mitigate adverse effects of the proposed project to less than considerable.

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)[4].

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. [5]

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 1) year 2000 levels by 2010, 2) year 1990 levels by 2020, and 3) 80 percent below

[4] http://climatechange.transportation.org/ghg_mitigation/
[5] http://www.fhwa.dot.gov/environment/climate_change/mitigation/

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. [6] 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.

[6] 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.

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

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

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

U.S. EPA's authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six greenhouse gases constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and EPA's assessment of the scientific evidence that form the basis for EPA's regulatory actions. U.S. EPA in conjunction with NHTSA issued the first of a series of GHG emission standards for new cars and light-duty vehicles in April 2010.[7]

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

[7] http://www.c2es.org/federal/executive/epa/greenhouse-gas-regulation-faq

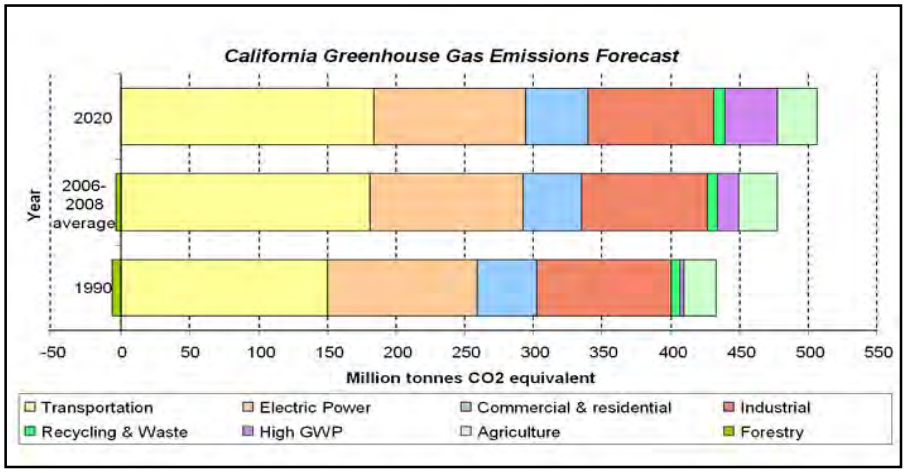
efficiency standards for the medium- and heavy-duty highway vehicle sector. The agencies estimate that the combined standards will reduce CO2 emissions by about 270 million metric tons and save about 530 million barrels of oil over the life of model year 2014 to 2018 heavy duty vehicles.

Project Analysis

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contributions of all other sources of GHG.[8] In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines Sections 15064(h)(1) and 15130). To make this determination, the incremental 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.

Table 27: California Greenhouse Gas Forecast



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

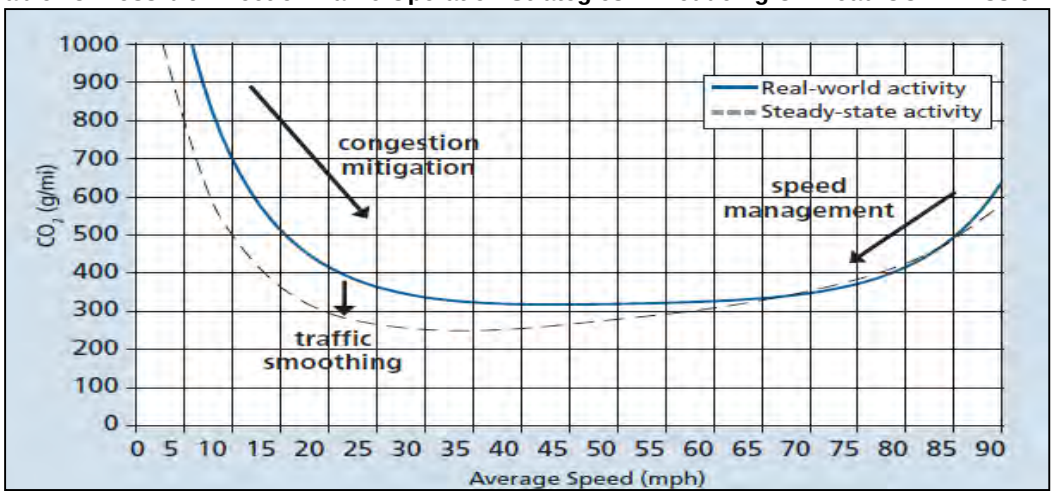
Caltrans and its parent agency; the Transportation Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human

[8] 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).

made GHG emissions are from transportation, Caltrans has created and is implementing the Climate Action Program at Caltrans that was published in December 2006.[9]

One of the main strategies in the Caltrans Climate Action Program to reduce GHG emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide (CO_2) from mobile sources, such as automobiles, occur at stop-and-go speeds (0-25 miles per hour) and speeds over 55 miles per hour; the most severe emissions occur from 0-25 miles per hour (see Table 28 below). To the extent that a project relieves congestion by enhancing operations and improving travel times in high congestion travel corridors GHG emissions, particularly CO_2, may be reduced.

Table 28: Possible Effect of Traffic Operation Strategies in Reducing On-Road CO2 Emission[10]



The purpose of the proposed project is to provide a direct freeway to freeway connection from southbound SR-125 to eastbound SR-94; accommodate traffic generated by current and future local and regional growth; and improve the operations of local streets and arterials.

The proposed project is included in the SANDAG 2050 Regional Transportation Plan (RTP) and in the 2014 Regional Transportation Improvement Program (RTIP) and the 2015 Federal Statewide Transportation Improvement Program (FSTIP). The 2050 RTP was adopted on October 28, 2011. The 2014 RTIP/2015 FSTIP received federal approval on December 15, 2014. The design concept and scope of the proposed project is consistent with the project description in the 2014 RTIP/2015 FSTIP.

The biggest benefit of the proposed project is that the direct connector would provide a connection from SB SR-125 to EB SR-94, which reduces the use of arterial streets/ intersections, and provide transportation improvements consistent with the adopted 2050 RTP.

[9] 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

[10] Traffic Congestion and Greenhouse Gases: Matthew Barth and Kanok Boriboonsomsin (TR News 268 May-June 2010)<http://onlinepubs.trb.org/onlinepubs/trnews/trnews268.pdf>

Quantitative Analysis

To estimate the potential beneficial or negative effect of the proposed project on San Diego regional GHG levels, the California Air Resources Board (CARB) EMFAC 2011 vehicle emissions model for the San Diego Air Basin was used to calculate carbon dioxide (CO_2) emissions for the San Diego metropolitan area with and without the proposed project. The SANDAG regional travel demand model was used to calculate VMT from which the GHG emissions were estimated. Because SANDAG's regional travel demand model is limited to specific analysis years, the years closest to the project analysis years within SANDAG's model, 2011 and 2018, were used to estimate GHG emissions for existing (2010) and opening (2020) conditions, respectively.

The results of the effects of the project relative to regional vehicle miles traveled (VMT), fuel consumption, and CO_2 emissions models are shown in Table 29.

Table 29: Anticipated Emission Levels

Scenarios	Year	VMT	CO2 (tons/day)
Existing	2010	78,110,000	42,660
No-build	2020	85,121,000	46,280
Variation 1 (with Aux Lane)	2020	85,125,000	46,270
Variation 1 (without Aux Lane)	2040	85,104,000	46,270
No build	2040	107,722,000	58,810
Variation 1 (with Aux Lane)	2040	107,700,000	58,810
Variation 1 (without Aux Lane)	2040	107,632,000	58,790

All proposed build alternatives would result in an increase in CO_2 emissions when compared to existing conditions.

Compared to the 2020 no build alternative, implementation of the proposed build alternative is estimated to result in a moderate reduction in CO_2 emissions in the San Diego region by up to 10 tons per day in 2020. Emissions would be reduced by up to 20 tons per day in 2040 under Variation 1 without an auxiliary lane, while there would be no change in emissions from the 2040 no build emissions to the 2040 Variation 1 with auxiliary lane. The anticipated emissions reduction would be due to decreased congestion on local streets and improved travel times in the proposed project area.

CO_2 emissions numbers are only useful for a comparison between alternatives. The numbers are not necessarily an accurate reflection of what the true CO_2 emissions will be because CO_2 emissions are dependent on other factors that are not part of the model such as the fuel mix (EMFAC model emission rates are only for direct engine-out CO_2 emissions, not full fuel cycle; fuel cycle emission rates can vary dramatically depending on the amount of additives like ethanol and the source of the fuel components), rate of acceleration, and the aerodynamics and efficiency of the vehicles.

Construction Emissions

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

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

CEQA Conclusion

While construction may result in a slight increase in GHG emissions during construction, it is anticipated that any increase in GHG emissions due to construction will be offset by the improvement in operational GHG emissions. While 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 impact and its contribution on the cumulative scale to climate change. However, Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

Table 30: Mobility Pyramid

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 Table 30: The 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, light and heavy-duty trucks; Caltrans is doing this by supporting ongoing research efforts at universities, by supporting legislative efforts to increase fuel economy, and by participating on the Climate Action Team. It is important to note, however, that control of fuel economy standards is held by the U.S. EPA and ARB.

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 31 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 31: Climate Change/CO2 Reduction Strategies						
Strategy	**Program**	**Partnership**		**Method/Process**	Estimated CO_2 Savings Million Metric Tons (MMT)	
		Lead	**Agency**		2010	2020
Smart Land Use	Intergovernmental Review (IGR)	Caltrans	Local governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	0.975	7.8
Operational Improvements & Intelligent Transportation System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	0.07	2.17
Mainstream Energy & GHG into Plans and Projects	Office of Policy Analysis & Research; Division of Environmental Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	Interdepartmental, CalEPA, ARB, CEC		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	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
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

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)[11] provides a comprehensive overview of activities undertaken by Caltrans statewide to reduce greenhouse gas emissions resulting from agency operations.

Climate Change Reduction Strategies

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

Retro reflective signs will be used throughout the project and will reduce the requirements for sign lighting and decrease energy consumption.

Landscaping reduces surface warming and, through photosynthesis, decreases CO_2. The project proposes planting in the intersection slopes, drainage channels, and planting a variety of different-sized plant material and scattered trees where appropriate. Vegetation and trees will help offset any potential CO_2 emissions increase.

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 will also help reduce the project's CO_2 emissions.[12]

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.

Adaptation Strategies

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

[11] http://www.dot.ca.gov/hq/tpp/offices/orip/climate_change/projects_and_studies.shtml

[12] Knoxville Business Journal, "LED Lights Pay for Themselves," May 19, 2008 at http://www.knoxnews.com/news/2008/may/19/led-traffic-lights-pay-themselves/.

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[13], outlining the federal government's progress in expanding and strengthening the Nation's capacity to better understand, prepare for, and respond to extreme events and other climate change impacts. The report provides an update on actions in key areas of federal adaptation, including: building resilience in local communities, safeguarding critical natural resources such as freshwater, and providing accessible climate information and tools to help decision-makers manage climate risks .

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

On November 14, 2008, 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)[14], which summarizes the best-known science on climate change impacts to California, assesses California's vulnerability to the identified impacts, and then outlines solutions that can be implemented within and across state agencies to promote resiliency.

The strategy outline is in direct response to EO S-13-08 that specifically asked the Resources Agency to identify how state agencies can respond to rising temperatures, changing precipitation patterns, sea level rise, and extreme natural events. Numerous other state agencies were involved in the creation of the Adaptation Strategy document, including the California Environmental Protection Agency; Business, Transportation and Housing; Health and Human Services; and the Department of Agriculture. The document is broken down into strategies for different sectors that include: Public Health; Biodiversity and Habitat; Ocean and Coastal Resources; Water Management; Agriculture; Forestry; and 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[15] to recommend how California should plan for future sea level rise. The report was released in June 2012 and included:

[13] http://www.whitehouse.gov/administration/eop/ceq/initiatives/adaptation

[14] http://www.energy.ca.gov/2009publications/CNRA-1000-2009-027/CNRA-1000-2009-027-F.PDF

[15] *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.

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

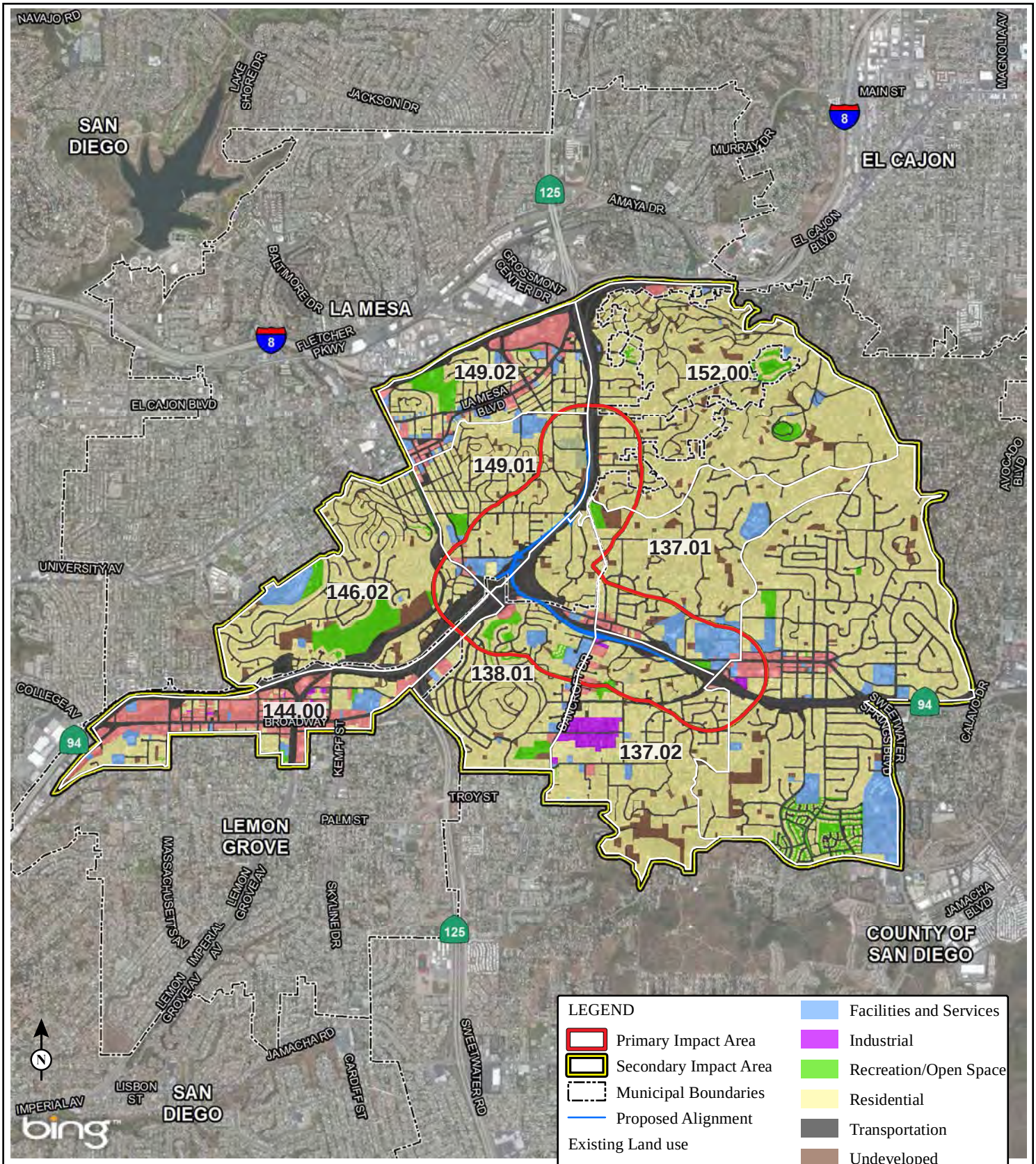
In 2010, interim guidance was released by The Coastal Ocean Climate Action Team (CO-CAT) as well as Caltrans as a method to initiate action and discussion of potential risks to the states infrastructure due to projected sea level rise. Subsequently, CO-CAT updated the Sea Level Rise guidance to include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

All state agencies that are planning to construct projects in areas vulnerable to future sea level rise are directed to consider a range of sea level rise scenarios for the years 2050 and 2100 to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. Sea level rise estimates should also be used in conjunction with information on local uplift and subsidence, coastal erosion rates, predicted higher high water levels, storm surge and storm wave data. The proposed project is outside the coastal zone and direct impacts to transportation facilities due to projected sea level rise are not expected.

Executive Order S-13-08 also directed the Transportation 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.



SOURCE: Bing Maps (2012); TYLin (2014); SanGIS (2014)

Figure 4
Land Use Map of Study Area

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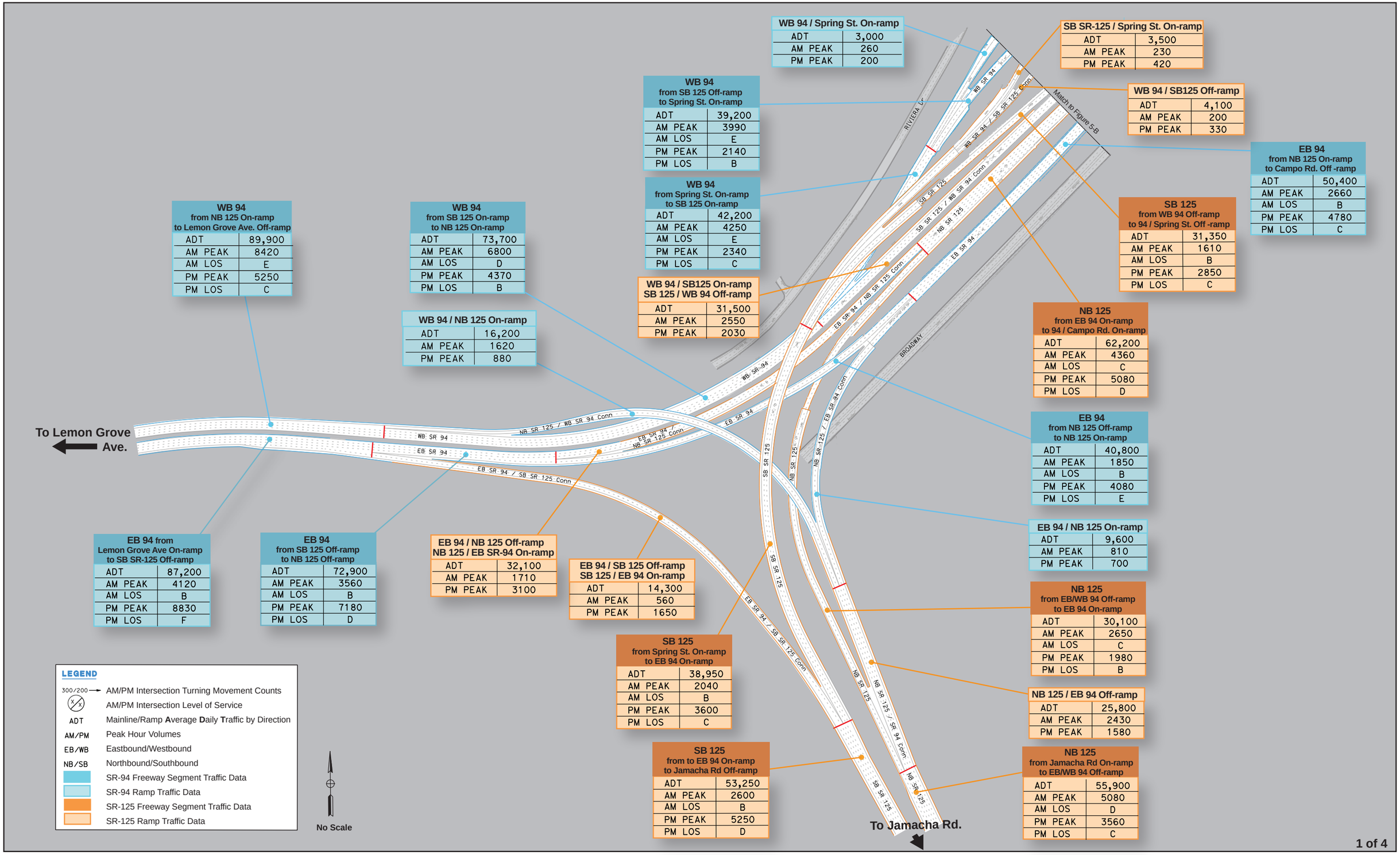


WB 94 / Spring St. On-ramp

ADT	3,000
AM PEAK	260
PM PEAK	200

SB SR-125 / Spring St. On-ramp

ADT	3,500
AM PEAK	230
PM PEAK	420

WB 94 / SB125 Off-ramp

ADT	4,100
AM PEAK	200
PM PEAK	330

WB 94
from SB 125 Off-ramp
to Spring St. On-ramp

ADT	39,200
AM PEAK	3990
AM LOS	E
PM PEAK	2140
PM LOS	B

EB 94
from NB 125 On-ramp
to Campo Rd. Off -ramp

ADT	50,400
AM PEAK	2660
AM LOS	B
PM PEAK	4780
PM LOS	C

WB 94
from Spring St. On-ramp
to SB 125 On-ramp

ADT	42,200
AM PEAK	4250
AM LOS	E
PM PEAK	2340
PM LOS	C

SB 125
from WB 94 Off-ramp
to 94 / Spring St. Off -ramp

ADT	31,350
AM PEAK	1610
AM LOS	B
PM PEAK	2850
PM LOS	C

WB 94
from NB 125 On-ramp
to Lemon Grove Ave. Off-ramp

ADT	89,900
AM PEAK	8420
AM LOS	E
PM PEAK	5250
PM LOS	C

WB 94
from SB 125 On-ramp
to NB 125 On-ramp

ADT	73,700
AM PEAK	6800
AM LOS	D
PM PEAK	4370
PM LOS	B

WB 94 / SB125 On-ramp
SB 125 / WB 94 Off-ramp

ADT	31,500
AM PEAK	2550
PM PEAK	2030

WB 94 / NB 125 On-ramp

ADT	16,200
AM PEAK	1620
PM PEAK	880

NB 125
from EB 94 On-ramp
to 94 / Campo Rd. On-ramp

ADT	62,200
AM PEAK	4360
AM LOS	C
PM PEAK	5080
PM LOS	D

EB 94
from NB 125 Off-ramp
to NB 125 On-ramp

ADT	40,800
AM PEAK	1850
AM LOS	B
PM PEAK	4080
PM LOS	E

EB 94 / NB 125 On-ramp

ADT	9,600
AM PEAK	810
PM PEAK	700

EB 94 from
Lemon Grove Ave On-ramp
to SB SR-125 Off-ramp

ADT	87,200
AM PEAK	4120
AM LOS	B
PM PEAK	8830
PM LOS	F

EB 94
from SB 125 Off-ramp
to NB 125 Off-ramp

ADT	72,900
AM PEAK	3560
AM LOS	B
PM PEAK	7180
PM LOS	D

EB 94 / NB 125 Off-ramp
NB 125 / EB SR-94 On-ramp

ADT	32,100
AM PEAK	1710
PM PEAK	3100

EB 94 / SB 125 Off-ramp
SB 125 / EB 94 On-ramp

ADT	14,300
AM PEAK	560
PM PEAK	1650

NB 125
from EB/WB 94 Off-ramp
to EB 94 On-ramp

ADT	30,100
AM PEAK	2650
AM LOS	C
PM PEAK	1980
PM LOS	B

SB 125
from Spring St. On-ramp
to EB 94 On-ramp

ADT	38,950
AM PEAK	2040
AM LOS	B
PM PEAK	3600
PM LOS	C

NB 125 / EB 94 Off-ramp

ADT	25,800
AM PEAK	2430
PM PEAK	1580

SB 125
from to EB 94 On-ramp
to Jamacha Rd Off-ramp

ADT	53,250
AM PEAK	2600
AM LOS	B
PM PEAK	5250
PM LOS	D

NB 125
from Jamacha Rd On-ramp
to EB/WB 94 Off-ramp

ADT	55,900
AM PEAK	5080
AM LOS	D
PM PEAK	3560
PM LOS	C

LEGEND

300/200	AM/PM Intersection Turning Movement Counts
X/X	AM/PM Intersection Level of Service
ADT	Mainline/Ramp **A**verage **D**aily **T**raffic by Direction
AM/PM	Peak Hour Volumes
EB/WB	Eastbound/Westbound
NB/SB	Northbound/Southbound
	SR-94 Freeway Segment Traffic Data
	SR-94 Ramp Traffic Data
	SR-125 Freeway Segment Traffic Data
	SR-125 Ramp Traffic Data

Figure 5-A
2008 Existing ADT and LOS

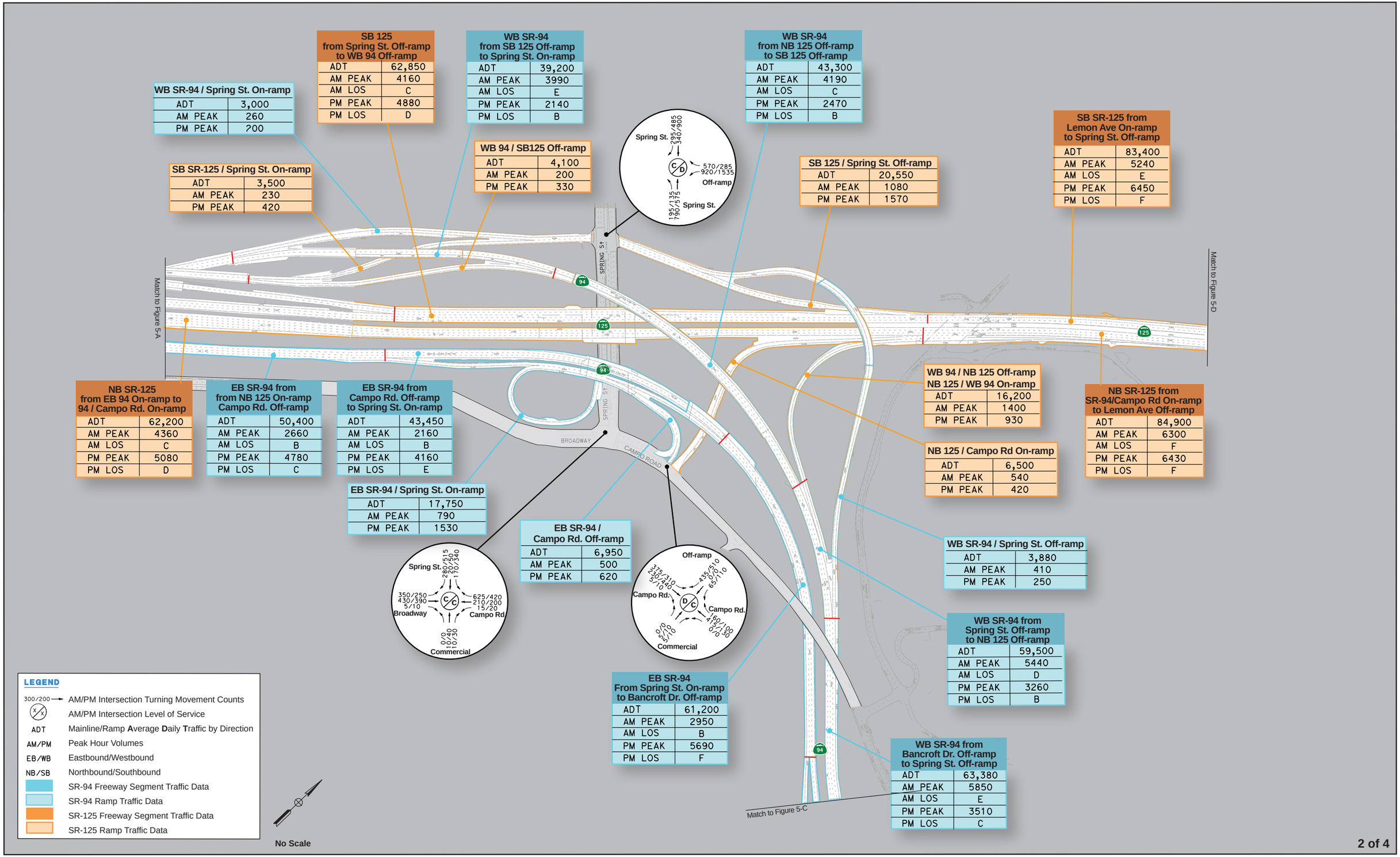


Figure 5-B
2008 Existing ADT and LOS

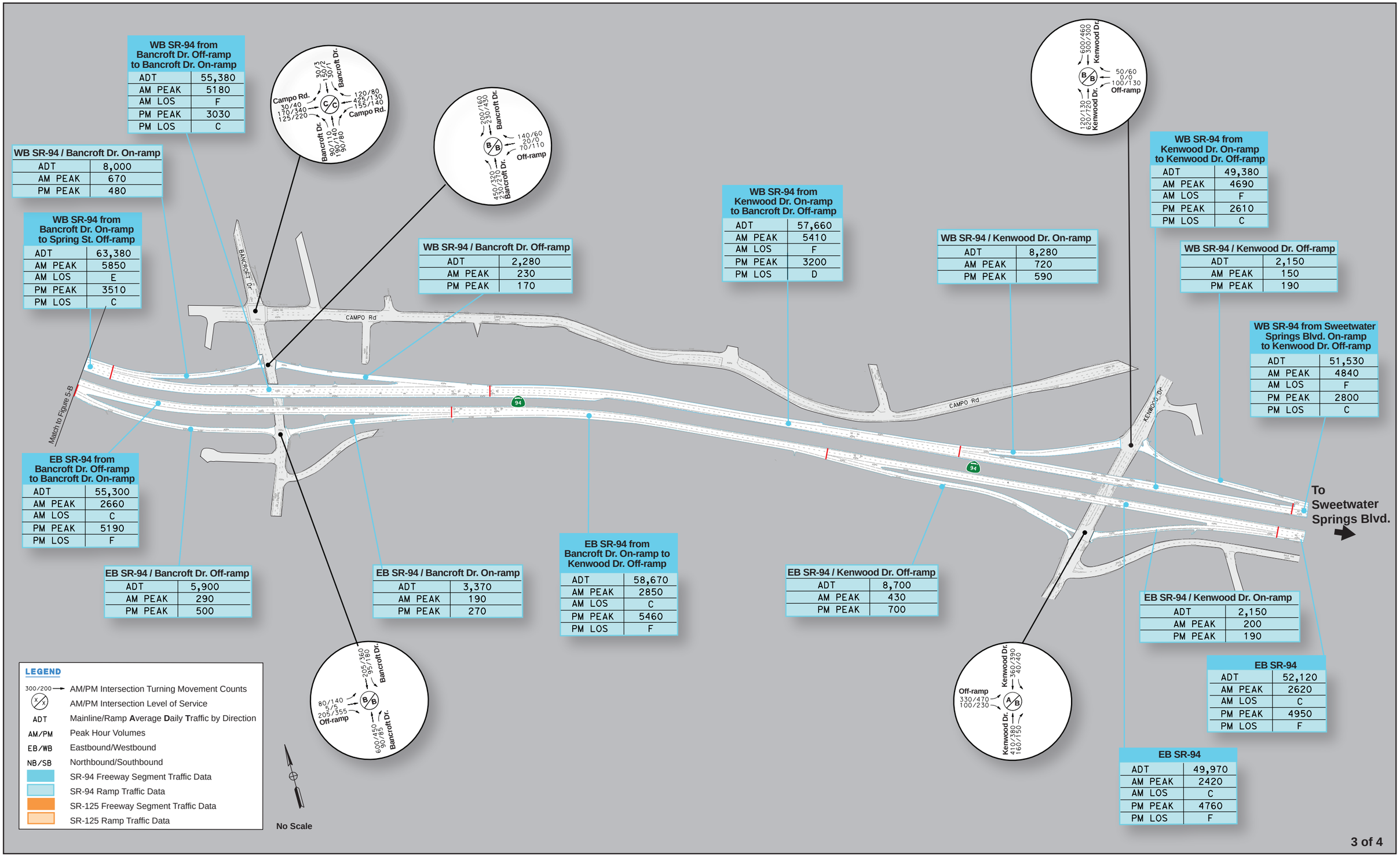


Figure 5-C
2008 Existing ADT and LOS

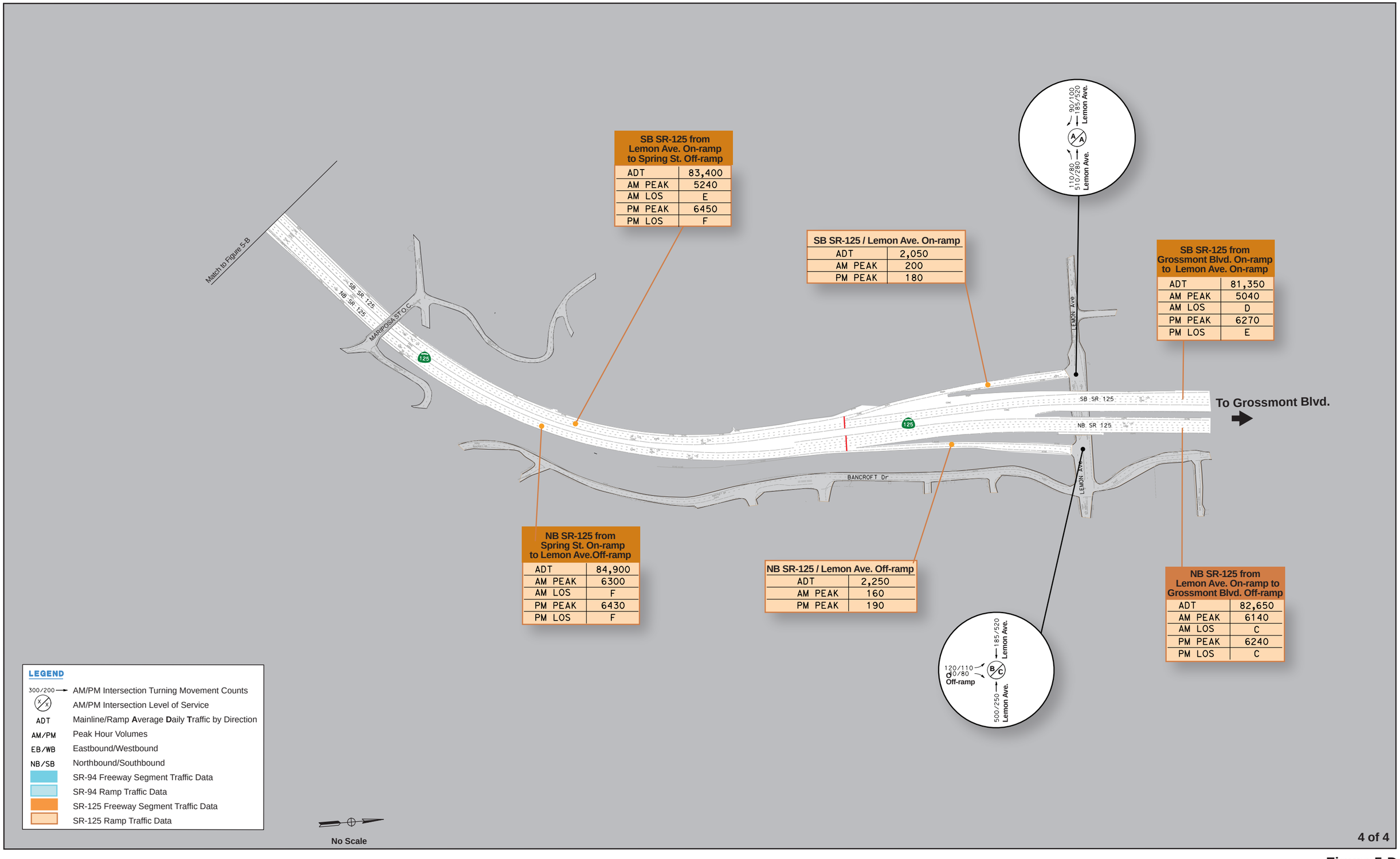
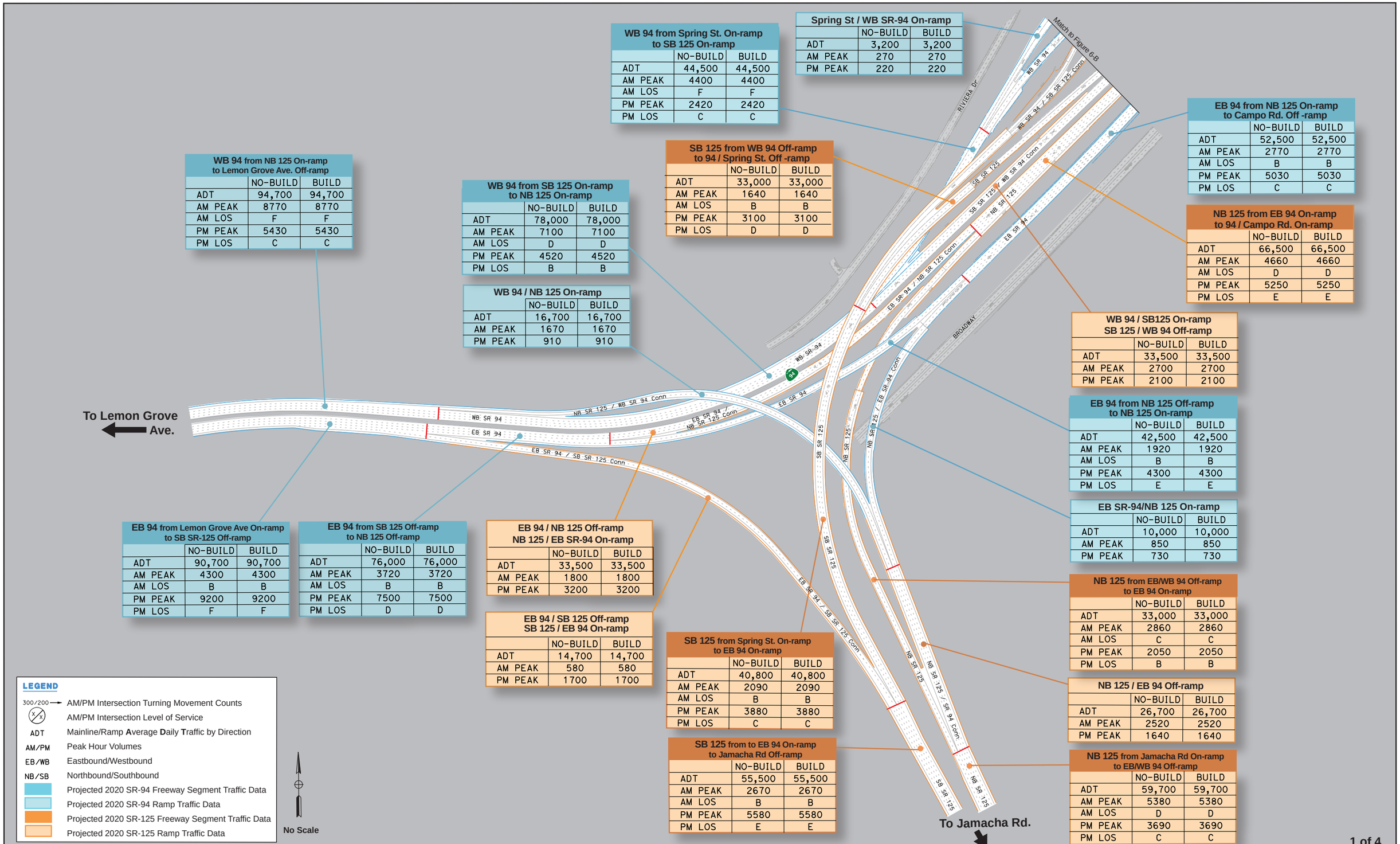


Figure 5-D
2008 Existing ADT and LOS



Spring St / WB SR-94 On-ramp

	NO-BUILD	BUILD
ADT	3,200	3,200
AM PEAK	270	270
PM PEAK	220	220

WB 94 from Spring St. On-ramp to SB 125 On-ramp

	NO-BUILD	BUILD
ADT	44,500	44,500
AM PEAK	4400	4400
AM LOS	F	F
PM PEAK	2420	2420
PM LOS	C	C

EB 94 from NB 125 On-ramp to Campo Rd. Off -ramp

	NO-BUILD	BUILD
ADT	52,500	52,500
AM PEAK	2770	2770
AM LOS	B	B
PM PEAK	5030	5030
PM LOS	C	C

SB 125 from WB 94 Off-ramp to 94 / Spring St. Off -ramp

	NO-BUILD	BUILD
ADT	33,000	33,000
AM PEAK	1640	1640
AM LOS	B	B
PM PEAK	3100	3100
PM LOS	D	D

WB 94 from NB 125 On-ramp to Lemon Grove Ave. Off-ramp

	NO-BUILD	BUILD
ADT	94,700	94,700
AM PEAK	8770	8770
AM LOS	F	F
PM PEAK	5430	5430
PM LOS	C	C

WB 94 from SB 125 On-ramp to NB 125 On-ramp

	NO-BUILD	BUILD
ADT	78,000	78,000
AM PEAK	7100	7100
AM LOS	D	D
PM PEAK	4520	4520
PM LOS	B	B

NB 125 from EB 94 On-ramp to 94 / Campo Rd. On-ramp

	NO-BUILD	BUILD
ADT	66,500	66,500
AM PEAK	4660	4660
AM LOS	D	D
PM PEAK	5250	5250
PM LOS	E	E

WB 94 / NB 125 On-ramp

	NO-BUILD	BUILD
ADT	16,700	16,700
AM PEAK	1670	1670
PM PEAK	910	910

WB 94 / SB125 On-ramp SB 125 / WB 94 Off-ramp

	NO-BUILD	BUILD
ADT	33,500	33,500
AM PEAK	2700	2700
PM PEAK	2100	2100

EB 94 from NB 125 Off-ramp to NB 125 On-ramp

	NO-BUILD	BUILD
ADT	42,500	42,500
AM PEAK	1920	1920
AM LOS	B	B
PM PEAK	4300	4300
PM LOS	E	E

EB SR-94/NB 125 On-ramp

	NO-BUILD	BUILD
ADT	10,000	10,000
AM PEAK	850	850
PM PEAK	730	730

EB 94 from Lemon Grove Ave On-ramp to SB SR-125 Off-ramp

	NO-BUILD	BUILD
ADT	90,700	90,700
AM PEAK	4300	4300
AM LOS	B	B
PM PEAK	9200	9200
PM LOS	F	F

EB 94 from SB 125 Off-ramp to NB 125 Off-ramp

	NO-BUILD	BUILD
ADT	76,000	76,000
AM PEAK	3720	3720
AM LOS	B	B
PM PEAK	7500	7500
PM LOS	D	D

EB 94 / NB 125 Off-ramp NB 125 / EB SR-94 On-ramp

	NO-BUILD	BUILD
ADT	33,500	33,500
AM PEAK	1800	1800
PM PEAK	3200	3200

NB 125 from EB/WB 94 Off-ramp to EB 94 On-ramp

	NO-BUILD	BUILD
ADT	33,000	33,000
AM PEAK	2860	2860
AM LOS	C	C
PM PEAK	2050	2050
PM LOS	B	B

EB 94 / SB 125 Off-ramp SB 125 / EB 94 On-ramp

	NO-BUILD	BUILD
ADT	14,700	14,700
AM PEAK	580	580
PM PEAK	1700	1700

SB 125 from Spring St. On-ramp to EB 94 On-ramp

	NO-BUILD	BUILD
ADT	40,800	40,800
AM PEAK	2090	2090
AM LOS	B	B
PM PEAK	3880	3880
PM LOS	C	C

NB 125 / EB 94 Off-ramp

	NO-BUILD	BUILD
ADT	26,700	26,700
AM PEAK	2520	2520
PM PEAK	1640	1640

SB 125 from to EB 94 On-ramp to Jamacha Rd Off-ramp

	NO-BUILD	BUILD
ADT	55,500	55,500
AM PEAK	2670	2670
AM LOS	B	B
PM PEAK	5580	5580
PM LOS	E	E

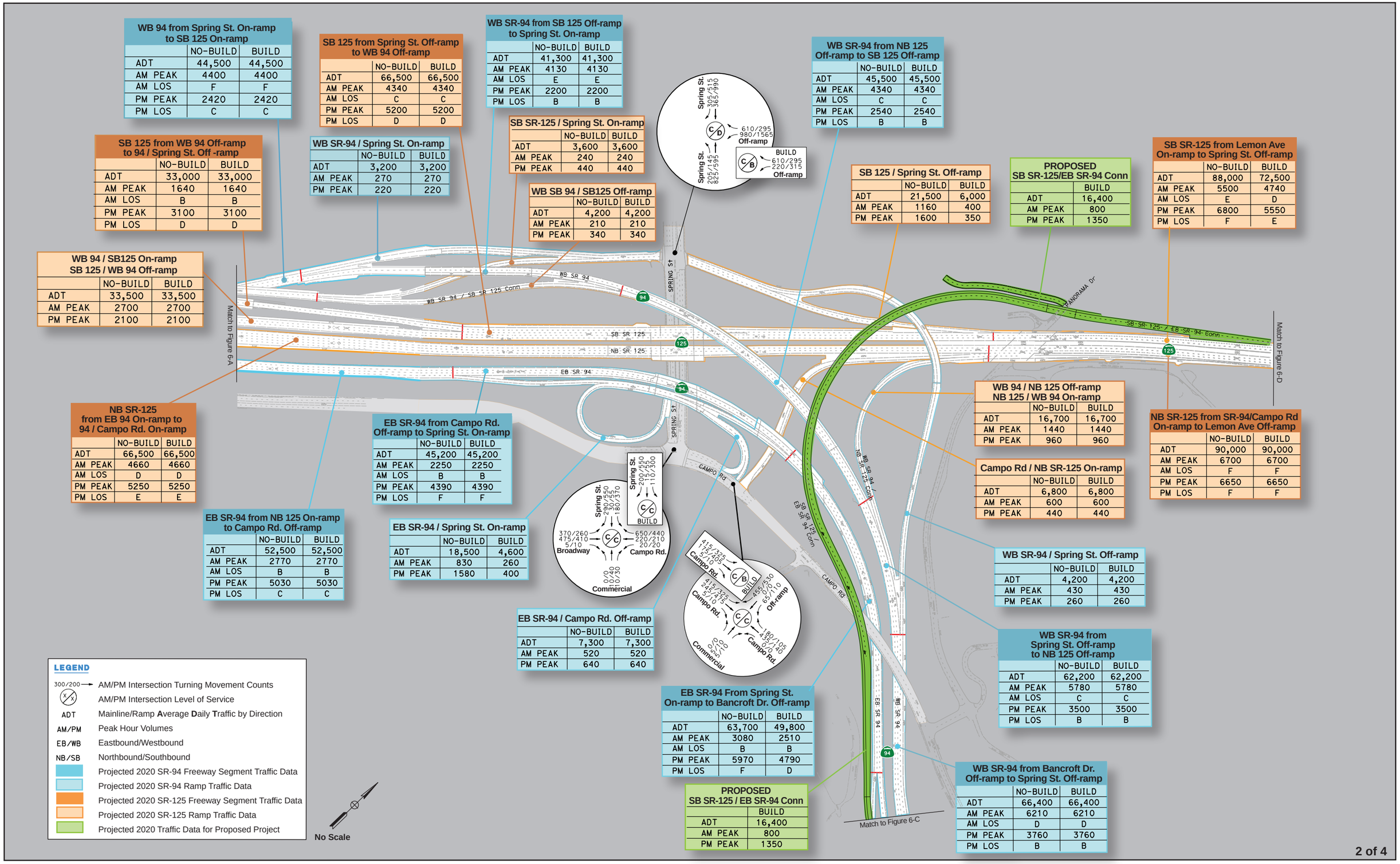
NB 125 from Jamacha Rd On-ramp to EB/WB 94 Off-ramp

	NO-BUILD	BUILD
ADT	59,700	59,700
AM PEAK	5380	5380
AM LOS	D	D
PM PEAK	3690	3690
PM LOS	C	C

LEGEND

- 300/200 → AM/PM Intersection Turning Movement Counts
- X/X AM/PM Intersection Level of Service
- ADT Mainline/Ramp **A**verage **D**aily **T**raffic by Direction
- AM/PM Peak Hour Volumes
- EB/WB Eastbound/Westbound
- NB/SB Northbound/Southbound
- Projected 2020 SR-94 Freeway Segment Traffic Data
- Projected 2020 SR-94 Ramp Traffic Data
- Projected 2020 SR-125 Freeway Segment Traffic Data
- Projected 2020 SR-125 Ramp Traffic Data

Figure 6-A
2020 Projected ADT and LOS



WB 94 from Spring St. On-ramp to SB 125 On-ramp

	NO-BUILD	BUILD
ADT	44,500	44,500
AM PEAK	4400	4400
AM LOS	F	F
PM PEAK	2420	2420
PM LOS	C	C

SB 125 from Spring St. Off-ramp to WB 94 Off-ramp

	NO-BUILD	BUILD
ADT	66,500	66,500
AM PEAK	4340	4340
AM LOS	C	C
PM PEAK	5200	5200
PM LOS	D	D

WB SR-94 from SB 125 Off-ramp to Spring St. On-ramp

	NO-BUILD	BUILD
ADT	41,300	41,300
AM PEAK	4130	4130
AM LOS	E	E
PM PEAK	2200	2200
PM LOS	B	B

WB SR-94 from NB 125 Off-ramp to SB 125 Off-ramp

	NO-BUILD	BUILD
ADT	45,500	45,500
AM PEAK	4340	4340
AM LOS	C	C
PM PEAK	2540	2540
PM LOS	B	B

SB 125 from WB 94 Off-ramp to 94 / Spring St. Off -ramp

	NO-BUILD	BUILD
ADT	33,000	33,000
AM PEAK	1640	1640
AM LOS	B	B
PM PEAK	3100	3100
PM LOS	D	D

WB SR-94 / Spring St. On-ramp

	NO-BUILD	BUILD
ADT	3,200	3,200
AM PEAK	270	270
PM PEAK	220	220

SB SR-125 / Spring St. On-ramp

	NO-BUILD	BUILD
ADT	3,600	3,600
AM PEAK	240	240
PM PEAK	440	440

WB SB 94 / SB125 Off-ramp

	NO-BUILD	BUILD
ADT	4,200	4,200
AM PEAK	210	210
PM PEAK	340	340

SB 125 / Spring St. Off-ramp

	NO-BUILD	BUILD
ADT	21,500	6,000
AM PEAK	1160	400
PM PEAK	1600	350

PROPOSED SB SR-125/EB SR-94 Conn

	BUILD
ADT	16,400
AM PEAK	800
PM PEAK	1350

SB SR-125 from Lemon Ave On-ramp to Spring St. Off-ramp

	NO-BUILD	BUILD
ADT	88,000	72,500
AM PEAK	5500	4740
AM LOS	E	D
PM PEAK	6800	5550
PM LOS	F	E

WB 94 / SB125 On-ramp SB 125 / WB 94 Off-ramp

	NO-BUILD	BUILD
ADT	33,500	33,500
AM PEAK	2700	2700
PM PEAK	2100	2100

WB 94 / NB 125 Off-ramp NB 125 / WB 94 On-ramp

	NO-BUILD	BUILD
ADT	16,700	16,700
AM PEAK	1440	1440
PM PEAK	960	960

NB SR-125 from SR-94/Campo Rd On-ramp to Lemon Ave Off-ramp

	NO-BUILD	BUILD
ADT	90,000	90,000
AM PEAK	6700	6700
AM LOS	F	F
PM PEAK	6650	6650
PM LOS	F	F

NB SR-125 from EB 94 On-ramp to 94 / Campo Rd. On-ramp

	NO-BUILD	BUILD
ADT	66,500	66,500
AM PEAK	4660	4660
AM LOS	D	D
PM PEAK	5250	5250
PM LOS	E	E

EB SR-94 from Campo Rd. Off-ramp to Spring St. On-ramp

	NO-BUILD	BUILD
ADT	45,200	45,200
AM PEAK	2250	2250
AM LOS	B	B
PM PEAK	4390	4390
PM LOS	F	F

Campo Rd / NB SR-125 On-ramp

	NO-BUILD	BUILD
ADT	6,800	6,800
AM PEAK	600	600
PM PEAK	440	440

EB SR-94 from NB 125 On-ramp to Campo Rd. Off-ramp

	NO-BUILD	BUILD
ADT	52,500	52,500
AM PEAK	2770	2770
AM LOS	B	B
PM PEAK	5030	5030
PM LOS	C	C

EB SR-94 / Spring St. On-ramp

	NO-BUILD	BUILD
ADT	18,500	4,600
AM PEAK	830	260
PM PEAK	1580	400

WB SR-94 / Spring St. Off-ramp

	NO-BUILD	BUILD
ADT	4,200	4,200
AM PEAK	430	430
PM PEAK	260	260

EB SR-94 / Campo Rd. Off-ramp

	NO-BUILD	BUILD
ADT	7,300	7,300
AM PEAK	520	520
PM PEAK	640	640

WB SR-94 from Spring St. Off-ramp to NB 125 Off-ramp

	NO-BUILD	BUILD
ADT	62,200	62,200
AM PEAK	5780	5780
AM LOS	C	C
PM PEAK	3500	3500
PM LOS	B	B

EB SR-94 From Spring St. On-ramp to Bancroft Dr. Off-ramp

	NO-BUILD	BUILD
ADT	63,700	49,800
AM PEAK	3080	2510
AM LOS	B	B
PM PEAK	5970	4790
PM LOS	F	D

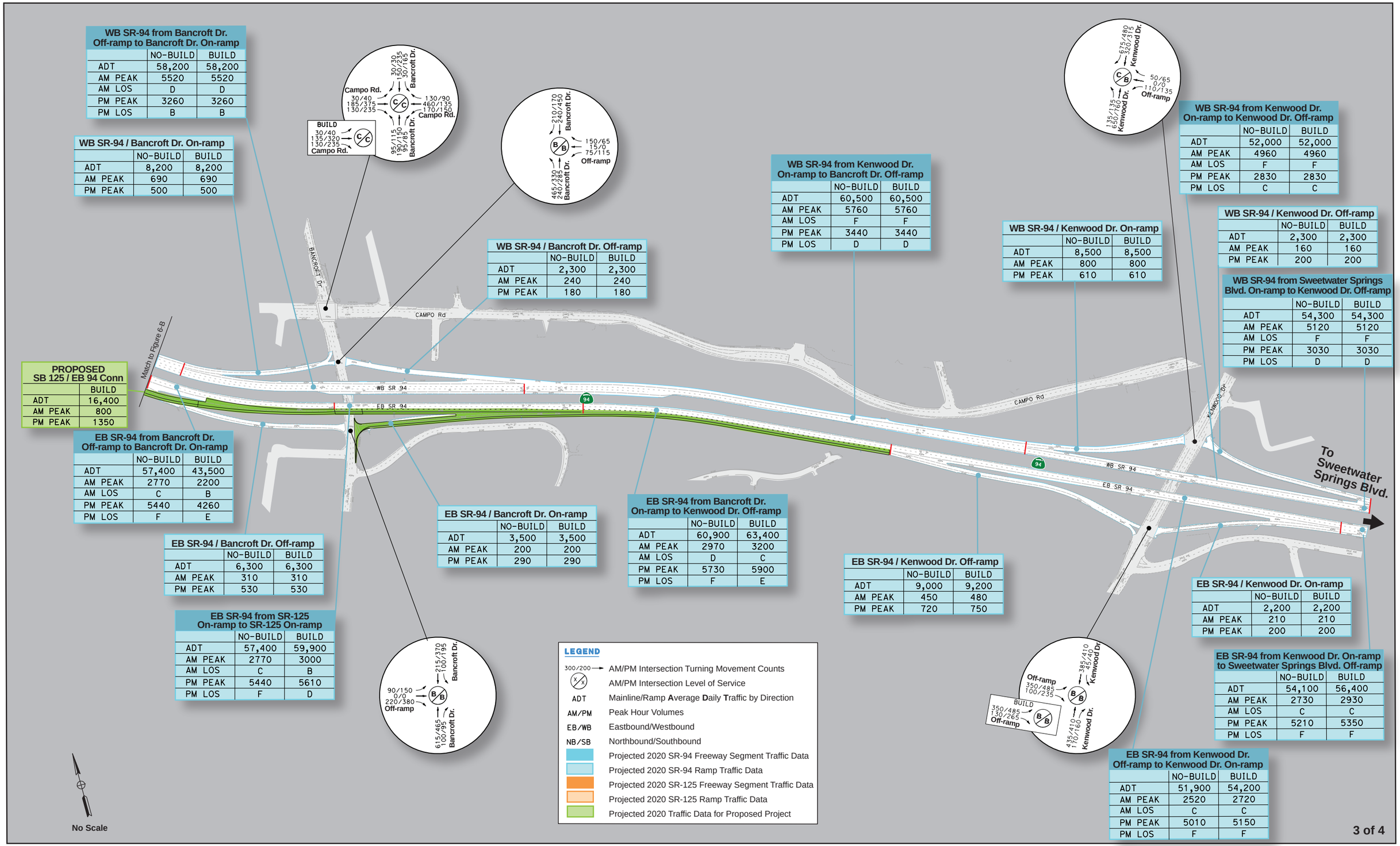
PROPOSED SB SR-125 / EB SR-94 Conn

	BUILD
ADT	16,400
AM PEAK	800
PM PEAK	1350

WB SR-94 from Bancroft Dr. Off-ramp to Spring St. Off-ramp

	NO-BUILD	BUILD
ADT	66,400	66,400
AM PEAK	6210	6210
AM LOS	D	D
PM PEAK	3760	3760
PM LOS	B	B

Figure 6-B
2020 Projected ADT and LOS



WB SR-94 from Bancroft Dr. Off-ramp to Bancroft Dr. On-ramp

	NO-BUILD	BUILD
ADT	58,200	58,200
AM PEAK	5520	5520
AM LOS	D	D
PM PEAK	3260	3260
PM LOS	B	B

WB SR-94 / Bancroft Dr. On-ramp

	NO-BUILD	BUILD
ADT	8,200	8,200
AM PEAK	690	690
PM PEAK	500	500

WB SR-94 / Bancroft Dr. Off-ramp

	NO-BUILD	BUILD
ADT	2,300	2,300
AM PEAK	240	240
PM PEAK	180	180

WB SR-94 from Kenwood Dr. On-ramp to Bancroft Dr. Off-ramp

	NO-BUILD	BUILD
ADT	60,500	60,500
AM PEAK	5760	5760
AM LOS	F	F
PM PEAK	3440	3440
PM LOS	D	D

WB SR-94 / Kenwood Dr. On-ramp

	NO-BUILD	BUILD
ADT	8,500	8,500
AM PEAK	800	800
PM PEAK	610	610

WB SR-94 from Kenwood Dr. On-ramp to Kenwood Dr. Off-ramp

	NO-BUILD	BUILD
ADT	52,000	52,000
AM PEAK	4960	4960
AM LOS	F	F
PM PEAK	2830	2830
PM LOS	C	C

WB SR-94 / Kenwood Dr. Off-ramp

	NO-BUILD	BUILD
ADT	2,300	2,300
AM PEAK	160	160
PM PEAK	200	200

WB SR-94 from Sweetwater Springs Blvd. On-ramp to Kenwood Dr. Off-ramp

	NO-BUILD	BUILD
ADT	54,300	54,300
AM PEAK	5120	5120
AM LOS	F	F
PM PEAK	3030	3030
PM LOS	D	D

PROPOSED SB 125 / EB 94 Conn

	BUILD
ADT	16,400
AM PEAK	800
PM PEAK	1350

EB SR-94 from Bancroft Dr. Off-ramp to Bancroft Dr. On-ramp

	NO-BUILD	BUILD
ADT	57,400	43,500
AM PEAK	2770	2200
AM LOS	C	B
PM PEAK	5440	4260
PM LOS	F	E

EB SR-94 / Bancroft Dr. Off-ramp

	NO-BUILD	BUILD
ADT	6,300	6,300
AM PEAK	310	310
PM PEAK	530	530

EB SR-94 from SR-125 On-ramp to SR-125 On-ramp

	NO-BUILD	BUILD
ADT	57,400	59,900
AM PEAK	2770	3000
AM LOS	C	B
PM PEAK	5440	5610
PM LOS	F	D

EB SR-94 / Bancroft Dr. On-ramp

	NO-BUILD	BUILD
ADT	3,500	3,500
AM PEAK	200	200
PM PEAK	290	290

EB SR-94 from Bancroft Dr. On-ramp to Kenwood Dr. Off-ramp

	NO-BUILD	BUILD
ADT	60,900	63,400
AM PEAK	2970	3200
AM LOS	D	C
PM PEAK	5730	5900
PM LOS	F	E

EB SR-94 / Kenwood Dr. Off-ramp

	NO-BUILD	BUILD
ADT	9,000	9,200
AM PEAK	450	480
PM PEAK	720	750

EB SR-94 / Kenwood Dr. On-ramp

	NO-BUILD	BUILD
ADT	2,200	2,200
AM PEAK	210	210
PM PEAK	200	200

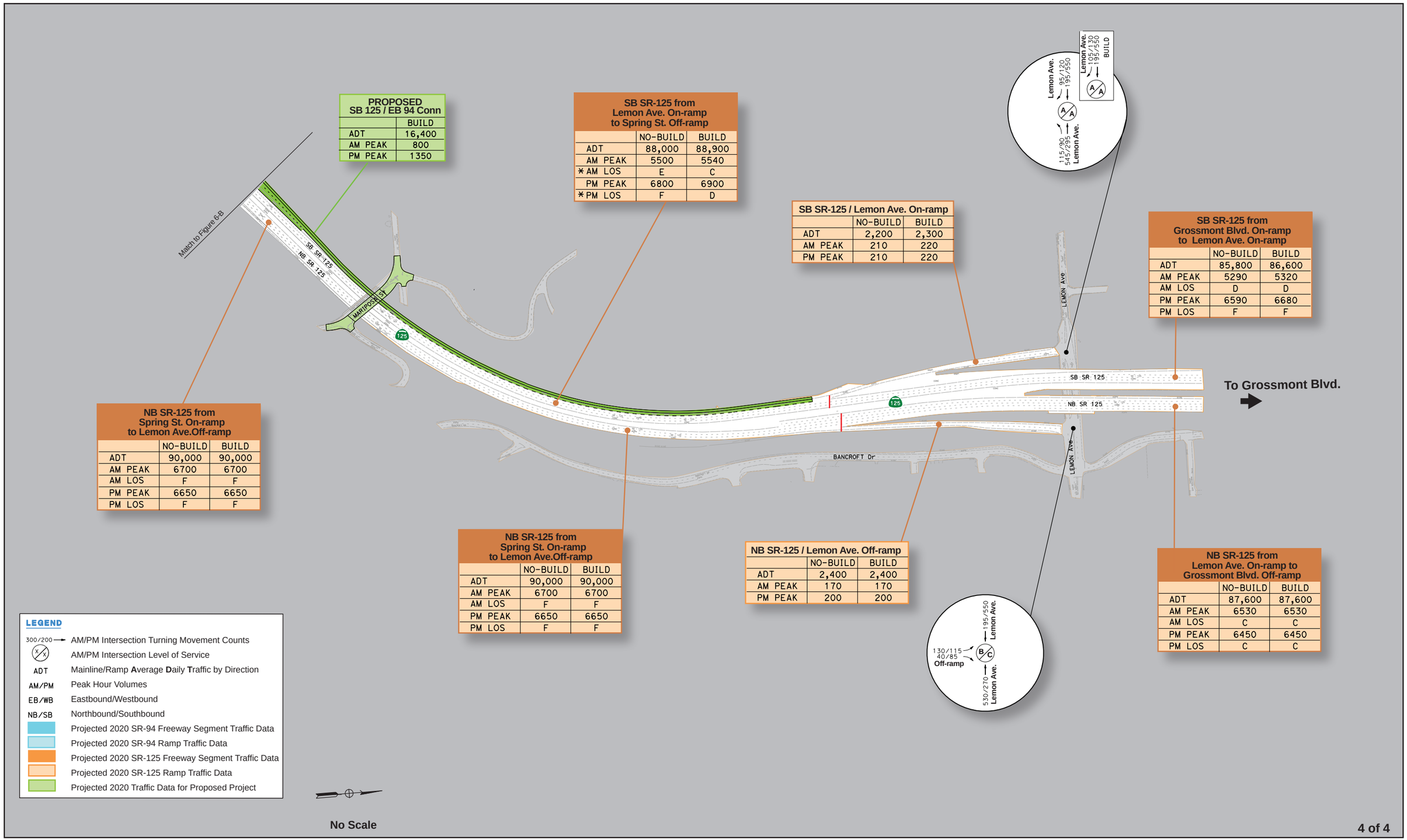
EB SR-94 from Kenwood Dr. On-ramp to Sweetwater Springs Blvd. Off-ramp

	NO-BUILD	BUILD
ADT	54,100	56,400
AM PEAK	2730	2930
AM LOS	C	C
PM PEAK	5210	5350
PM LOS	F	F

EB SR-94 from Kenwood Dr. Off-ramp to Kenwood Dr. On-ramp

	NO-BUILD	BUILD
ADT	51,900	54,200
AM PEAK	2520	2720
AM LOS	C	C
PM PEAK	5010	5150
PM LOS	F	F

Figure 6-C
2020 Projected ADT and LOS



PROPOSED SB 125 / EB 94 Conn

	BUILD
ADT	16,400
AM PEAK	800
PM PEAK	1350

SB SR-125 from Lemon Ave. On-ramp to Spring St. Off-ramp

	NO-BUILD	BUILD
ADT	88,000	88,900
AM PEAK	5500	5540
*AM LOS	E	C
PM PEAK	6800	6900
*PM LOS	F	D

SB SR-125 / Lemon Ave. On-ramp

	NO-BUILD	BUILD
ADT	2,200	2,300
AM PEAK	210	220
PM PEAK	210	220

SB SR-125 from Grossmont Blvd. On-ramp to Lemon Ave. On-ramp

	NO-BUILD	BUILD
ADT	85,800	86,600
AM PEAK	5290	5320
AM LOS	D	D
PM PEAK	6590	6680
PM LOS	F	F

NB SR-125 from Spring St. On-ramp to Lemon Ave.Off-ramp

	NO-BUILD	BUILD
ADT	90,000	90,000
AM PEAK	6700	6700
AM LOS	F	F
PM PEAK	6650	6650
PM LOS	F	F

NB SR-125 from Spring St. On-ramp to Lemon Ave.Off-ramp

	NO-BUILD	BUILD
ADT	90,000	90,000
AM PEAK	6700	6700
AM LOS	F	F
PM PEAK	6650	6650
PM LOS	F	F

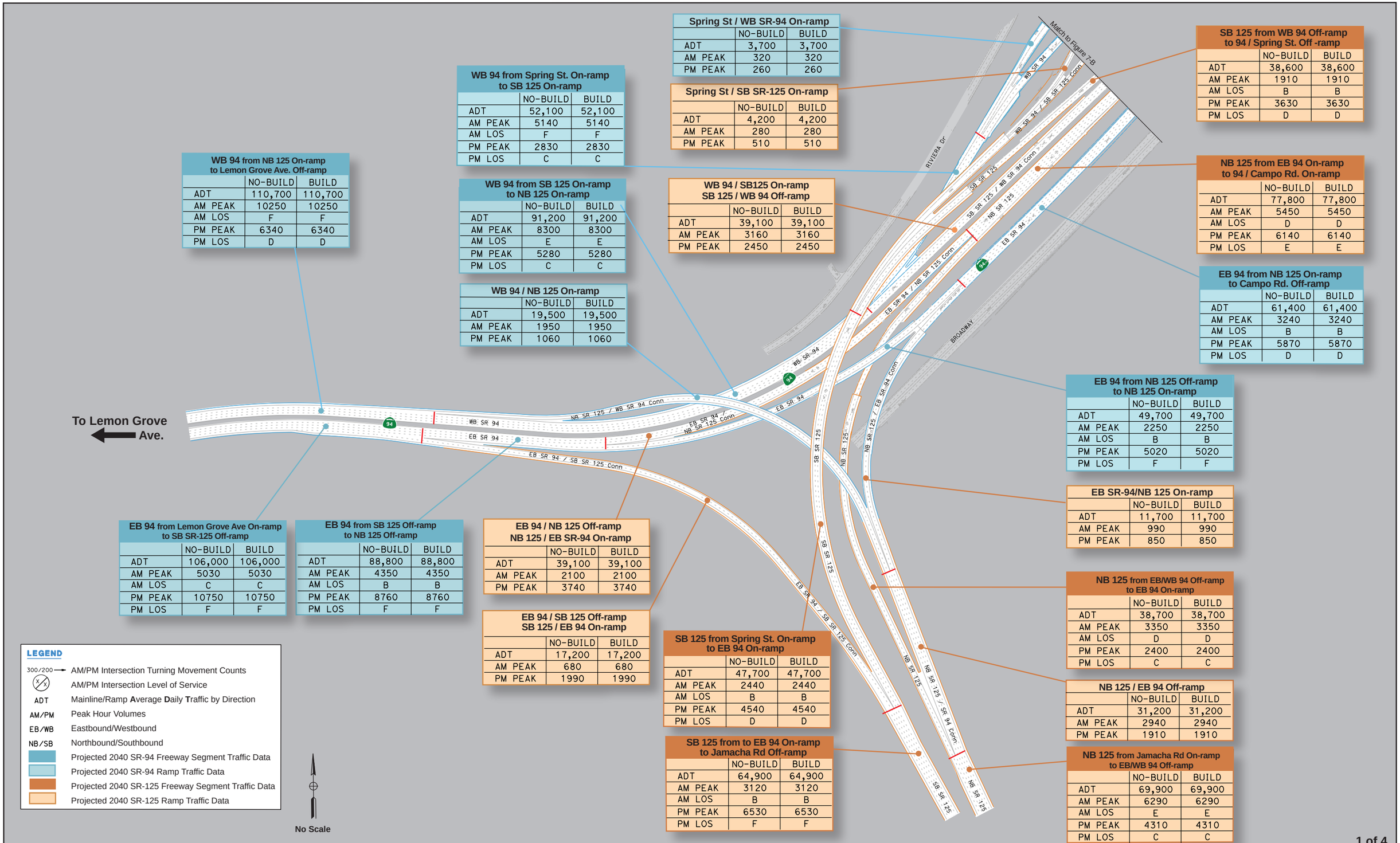
NB SR-125 / Lemon Ave. Off-ramp

	NO-BUILD	BUILD
ADT	2,400	2,400
AM PEAK	170	170
PM PEAK	200	200

NB SR-125 from Lemon Ave. On-ramp to Grossmont Blvd. Off-ramp

	NO-BUILD	BUILD
ADT	87,600	87,600
AM PEAK	6530	6530
AM LOS	C	C
PM PEAK	6450	6450
PM LOS	C	C

Figure 6-D
2020 Projected ADT and LOS



Spring St / WB SR-94 On-ramp

	NO-BUILD	BUILD
ADT	3,700	3,700
AM PEAK	320	320
PM PEAK	260	260

Spring St / SB SR-125 On-ramp

	NO-BUILD	BUILD
ADT	4,200	4,200
AM PEAK	280	280
PM PEAK	510	510

SB 125 from WB 94 Off-ramp to 94 / Spring St. Off -ramp

	NO-BUILD	BUILD
ADT	38,600	38,600
AM PEAK	1910	1910
AM LOS	B	B
PM PEAK	3630	3630
PM LOS	D	D

WB 94 from Spring St. On-ramp to SB 125 On-ramp

	NO-BUILD	BUILD
ADT	52,100	52,100
AM PEAK	5140	5140
AM LOS	F	F
PM PEAK	2830	2830
PM LOS	C	C

WB 94 from NB 125 On-ramp to Lemon Grove Ave. Off-ramp

	NO-BUILD	BUILD
ADT	110,700	110,700
AM PEAK	10250	10250
AM LOS	F	F
PM PEAK	6340	6340
PM LOS	D	D

WB 94 / SB125 On-ramp SB 125 / WB 94 Off-ramp

	NO-BUILD	BUILD
ADT	39,100	39,100
AM PEAK	3160	3160
PM PEAK	2450	2450

NB 125 from EB 94 On-ramp to 94 / Campo Rd. On-ramp

	NO-BUILD	BUILD
ADT	77,800	77,800
AM PEAK	5450	5450
AM LOS	D	D
PM PEAK	6140	6140
PM LOS	E	E

WB 94 from SB 125 On-ramp to NB 125 On-ramp

	NO-BUILD	BUILD
ADT	91,200	91,200
AM PEAK	8300	8300
AM LOS	E	E
PM PEAK	5280	5280
PM LOS	C	C

EB 94 from NB 125 On-ramp to Campo Rd. Off-ramp

	NO-BUILD	BUILD
ADT	61,400	61,400
AM PEAK	3240	3240
AM LOS	B	B
PM PEAK	5870	5870
PM LOS	D	D

WB 94 / NB 125 On-ramp

	NO-BUILD	BUILD
ADT	19,500	19,500
AM PEAK	1950	1950
PM PEAK	1060	1060

EB 94 from NB 125 Off-ramp to NB 125 On-ramp

	NO-BUILD	BUILD
ADT	49,700	49,700
AM PEAK	2250	2250
AM LOS	B	B
PM PEAK	5020	5020
PM LOS	F	F

EB SR-94/NB 125 On-ramp

	NO-BUILD	BUILD
ADT	11,700	11,700
AM PEAK	990	990
PM PEAK	850	850

EB 94 from Lemon Grove Ave On-ramp to SB SR-125 Off-ramp

	NO-BUILD	BUILD
ADT	106,000	106,000
AM PEAK	5030	5030
AM LOS	C	C
PM PEAK	10750	10750
PM LOS	F	F

EB 94 from SB 125 Off-ramp to NB 125 Off-ramp

	NO-BUILD	BUILD
ADT	88,800	88,800
AM PEAK	4350	4350
AM LOS	B	B
PM PEAK	8760	8760
PM LOS	F	F

EB 94 / NB 125 Off-ramp NB 125 / EB SR-94 On-ramp

	NO-BUILD	BUILD
ADT	39,100	39,100
AM PEAK	2100	2100
PM PEAK	3740	3740

NB 125 from EB/WB 94 Off-ramp to EB 94 On-ramp

	NO-BUILD	BUILD
ADT	38,700	38,700
AM PEAK	3350	3350
AM LOS	D	D
PM PEAK	2400	2400
PM LOS	C	C

EB 94 / SB 125 Off-ramp SB 125 / EB 94 On-ramp

	NO-BUILD	BUILD
ADT	17,200	17,200
AM PEAK	680	680
PM PEAK	1990	1990

SB 125 from Spring St. On-ramp to EB 94 On-ramp

	NO-BUILD	BUILD
ADT	47,700	47,700
AM PEAK	2440	2440
AM LOS	B	B
PM PEAK	4540	4540
PM LOS	D	D

NB 125 / EB 94 Off-ramp

	NO-BUILD	BUILD
ADT	31,200	31,200
AM PEAK	2940	2940
PM PEAK	1910	1910

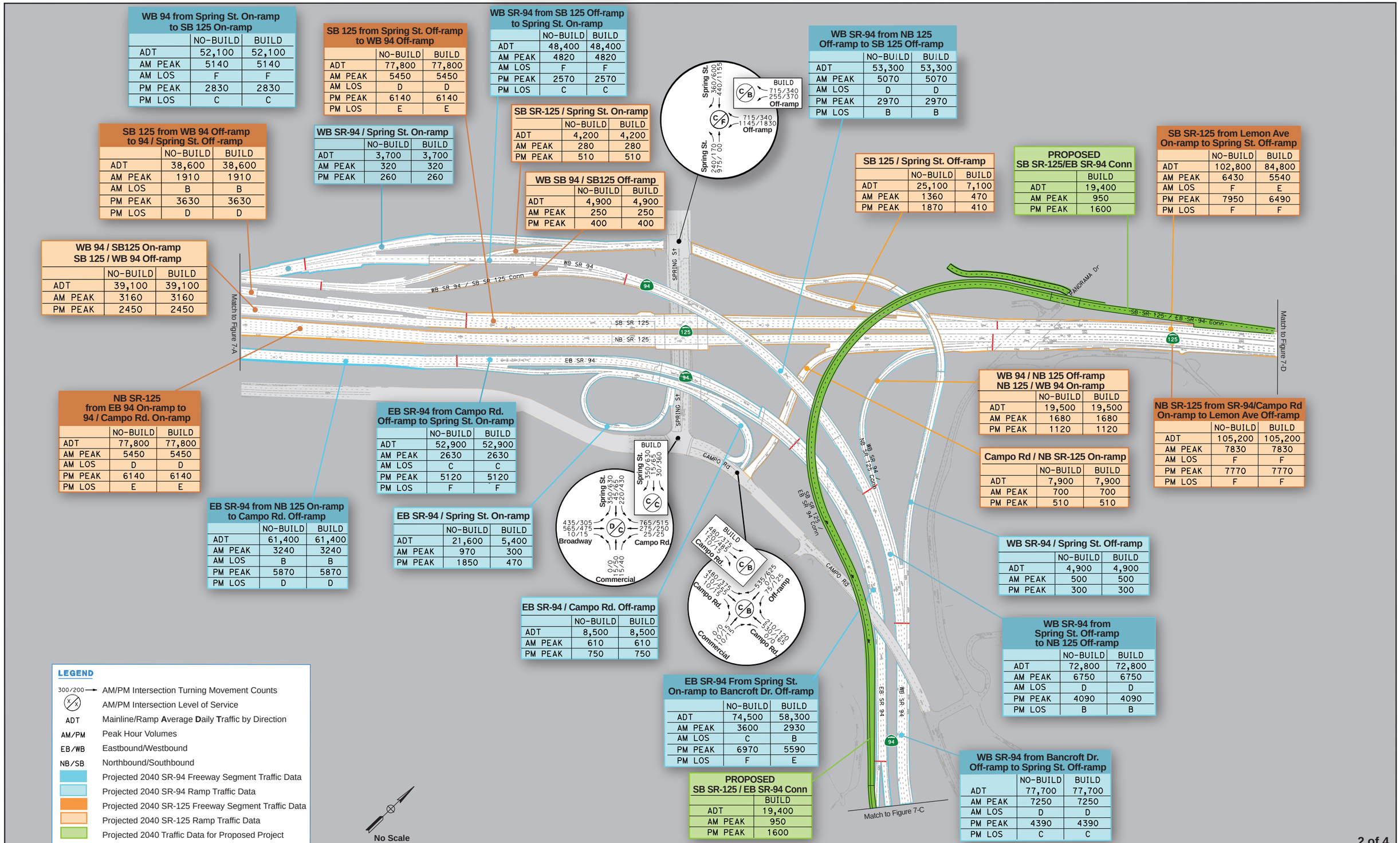
SB 125 from to EB 94 On-ramp to Jamacha Rd Off-ramp

	NO-BUILD	BUILD
ADT	64,900	64,900
AM PEAK	3120	3120
AM LOS	B	B
PM PEAK	6530	6530
PM LOS	F	F

NB 125 from Jamacha Rd On-ramp to EB/WB 94 Off-ramp

	NO-BUILD	BUILD
ADT	69,900	69,900
AM PEAK	6290	6290
AM LOS	E	E
PM PEAK	4310	4310
PM LOS	C	C

Figure 7-A
2040 Projected ADT and LOS



WB 94 from Spring St. On-ramp to SB 125 On-ramp

	NO-BUILD	BUILD
ADT	52,100	52,100
AM PEAK	5140	5140
AM LOS	F	F
PM PEAK	2830	2830
PM LOS	C	C

SB 125 from Spring St. Off-ramp to WB 94 Off-ramp

	NO-BUILD	BUILD
ADT	77,800	77,800
AM PEAK	5450	5450
AM LOS	D	D
PM PEAK	6140	6140
PM LOS	E	E

WB SR-94 from SB 125 Off-ramp to Spring St. On-ramp

	NO-BUILD	BUILD
ADT	48,400	48,400
AM PEAK	4820	4820
AM LOS	F	F
PM PEAK	2570	2570
PM LOS	C	C

WB SR-94 from NB 125 Off-ramp to SB 125 Off-ramp

	NO-BUILD	BUILD
ADT	53,300	53,300
AM PEAK	5070	5070
AM LOS	D	D
PM PEAK	2970	2970
PM LOS	B	B

SB 125 from WB 94 Off-ramp to 94 / Spring St. Off -ramp

	NO-BUILD	BUILD
ADT	38,600	38,600
AM PEAK	1910	1910
AM LOS	B	B
PM PEAK	3630	3630
PM LOS	D	D

WB SR-94 / Spring St. On-ramp

	NO-BUILD	BUILD
ADT	3,700	3,700
AM PEAK	320	320
PM PEAK	260	260

SB SR-125 / Spring St. On-ramp

	NO-BUILD	BUILD
ADT	4,200	4,200
AM PEAK	280	280
PM PEAK	510	510

WB SB 94 / SB125 Off-ramp

	NO-BUILD	BUILD
ADT	4,900	4,900
AM PEAK	250	250
PM PEAK	400	400

SB 125 / Spring St. Off-ramp

	NO-BUILD	BUILD
ADT	25,100	7,100
AM PEAK	1360	470
PM PEAK	1870	410

PROPOSED SB SR-125/EB SR-94 Conn

	BUILD
ADT	19,400
AM PEAK	950
PM PEAK	1600

SB SR-125 from Lemon Ave On-ramp to Spring St. Off-ramp

	NO-BUILD	BUILD
ADT	102,800	84,800
AM PEAK	6430	5540
AM LOS	F	E
PM PEAK	7950	6490
PM LOS	F	F

WB 94 / SB125 On-ramp SB 125 / WB 94 Off-ramp

	NO-BUILD	BUILD
ADT	39,100	39,100
AM PEAK	3160	3160
PM PEAK	2450	2450

NB SR-125 from EB 94 On-ramp to 94 / Campo Rd. On-ramp

	NO-BUILD	BUILD
ADT	77,800	77,800
AM PEAK	5450	5450
AM LOS	D	D
PM PEAK	6140	6140
PM LOS	E	E

EB SR-94 from Campo Rd. Off-ramp to Spring St. On-ramp

	NO-BUILD	BUILD
ADT	52,900	52,900
AM PEAK	2630	2630
AM LOS	C	C
PM PEAK	5120	5120
PM LOS	F	F

WB 94 / NB 125 Off-ramp NB 125 / WB 94 On-ramp

	NO-BUILD	BUILD
ADT	19,500	19,500
AM PEAK	1680	1680
PM PEAK	1120	1120

NB SR-125 from SR-94/Campo Rd On-ramp to Lemon Ave Off-ramp

	NO-BUILD	BUILD
ADT	105,200	105,200
AM PEAK	7830	7830
AM LOS	F	F
PM PEAK	7770	7770
PM LOS	F	F

Campo Rd / NB SR-125 On-ramp

	NO-BUILD	BUILD
ADT	7,900	7,900
AM PEAK	700	700
PM PEAK	510	510

EB SR-94 from NB 125 On-ramp to Campo Rd. Off-ramp

	NO-BUILD	BUILD
ADT	61,400	61,400
AM PEAK	3240	3240
AM LOS	B	B
PM PEAK	5870	5870
PM LOS	D	D

EB SR-94 / Spring St. On-ramp

	NO-BUILD	BUILD
ADT	21,600	5,400
AM PEAK	970	300
PM PEAK	1850	470

WB SR-94 / Spring St. Off-ramp

	NO-BUILD	BUILD
ADT	4,900	4,900
AM PEAK	500	500
PM PEAK	300	300

EB SR-94 / Campo Rd. Off-ramp

	NO-BUILD	BUILD
ADT	8,500	8,500
AM PEAK	610	610
PM PEAK	750	750

WB SR-94 from Spring St. Off-ramp to NB 125 Off-ramp

	NO-BUILD	BUILD
ADT	72,800	72,800
AM PEAK	6750	6750
AM LOS	D	D
PM PEAK	4090	4090
PM LOS	B	B

EB SR-94 From Spring St. On-ramp to Bancroft Dr. Off-ramp

	NO-BUILD	BUILD
ADT	74,500	58,300
AM PEAK	3600	2930
AM LOS	C	B
PM PEAK	6970	5590
PM LOS	F	E

PROPOSED SB SR-125 / EB SR-94 Conn

	BUILD
ADT	19,400
AM PEAK	950
PM PEAK	1600

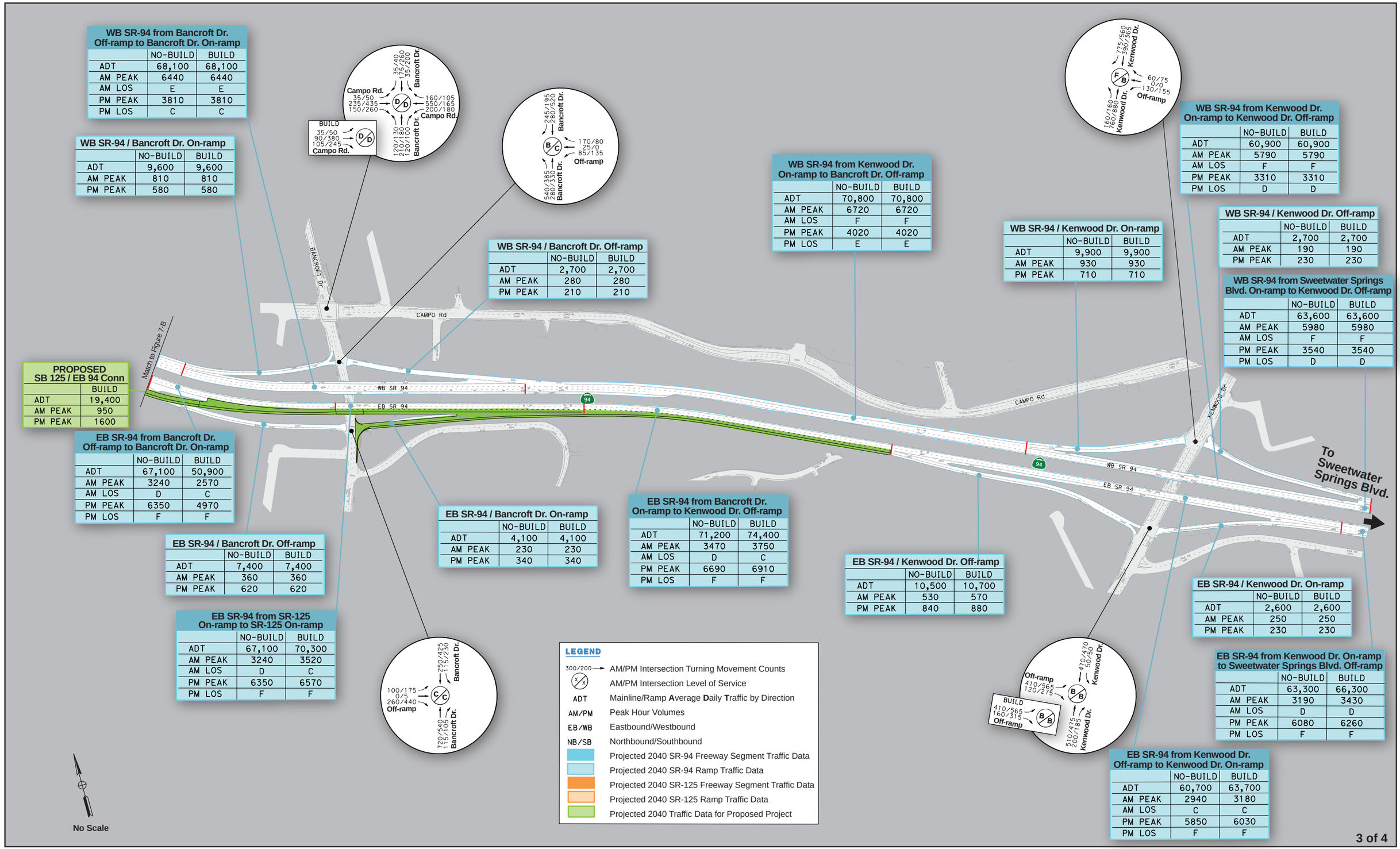
WB SR-94 from Bancroft Dr. Off-ramp to Spring St. Off-ramp

	NO-BUILD	BUILD
ADT	77,700	77,700
AM PEAK	7250	7250
AM LOS	D	D
PM PEAK	4390	4390
PM LOS	C	C

LEGEND

- 300/200 → AM/PM Intersection Turning Movement Counts
- X/X AM/PM Intersection Level of Service
- ADT Mainline/Ramp **A**verage **D**aily **T**raffic by Direction
- AM/PM Peak Hour Volumes
- EB/WB Eastbound/Westbound
- NB/SB Northbound/Southbound
- Projected 2040 SR-94 Freeway Segment Traffic Data
- Projected 2040 SR-94 Ramp Traffic Data
- Projected 2040 SR-125 Freeway Segment Traffic Data
- Projected 2040 SR-125 Ramp Traffic Data
- Projected 2040 Traffic Data for Proposed Project

Figure 7-B
2040 Projected ADT and LOS



WB SR-94 from Bancroft Dr. Off-ramp to Bancroft Dr. On-ramp	NO-BUILD	BUILD
ADT	68,100	68,100
AM PEAK	6440	6440
AM LOS	E	E
PM PEAK	3810	3810
PM LOS	C	C

WB SR-94 / Bancroft Dr. On-ramp	NO-BUILD	BUILD
ADT	9,600	9,600
AM PEAK	810	810
PM PEAK	580	580

WB SR-94 / Bancroft Dr. Off-ramp	NO-BUILD	BUILD
ADT	2,700	2,700
AM PEAK	280	280
PM PEAK	210	210

WB SR-94 from Kenwood Dr. On-ramp to Bancroft Dr. Off-ramp	NO-BUILD	BUILD
ADT	70,800	70,800
AM PEAK	6720	6720
AM LOS	F	F
PM PEAK	4020	4020
PM LOS	E	E

WB SR-94 / Kenwood Dr. On-ramp	NO-BUILD	BUILD
ADT	9,900	9,900
AM PEAK	930	930
PM PEAK	710	710

WB SR-94 from Kenwood Dr. On-ramp to Kenwood Dr. Off-ramp	NO-BUILD	BUILD
ADT	60,900	60,900
AM PEAK	5790	5790
AM LOS	F	F
PM PEAK	3310	3310
PM LOS	D	D

WB SR-94 / Kenwood Dr. Off-ramp	NO-BUILD	BUILD
ADT	2,700	2,700
AM PEAK	190	190
PM PEAK	230	230

WB SR-94 from Sweetwater Springs Blvd. On-ramp to Kenwood Dr. Off-ramp	NO-BUILD	BUILD
ADT	63,600	63,600
AM PEAK	5980	5980
AM LOS	F	F
PM PEAK	3540	3540
PM LOS	D	D

PROPOSED SB 125 / EB 94 Conn	BUILD
ADT	19,400
AM PEAK	950
PM PEAK	1600

EB SR-94 from Bancroft Dr. Off-ramp to Bancroft Dr. On-ramp	NO-BUILD	BUILD
ADT	67,100	50,900
AM PEAK	3240	2570
AM LOS	D	C
PM PEAK	6350	4970
PM LOS	F	F

EB SR-94 / Bancroft Dr. On-ramp	NO-BUILD	BUILD
ADT	4,100	4,100
AM PEAK	230	230
PM PEAK	340	340

EB SR-94 from Bancroft Dr. On-ramp to Kenwood Dr. Off-ramp	NO-BUILD	BUILD
ADT	71,200	74,400
AM PEAK	3470	3750
AM LOS	D	C
PM PEAK	6690	6910
PM LOS	F	F

EB SR-94 / Bancroft Dr. Off-ramp	NO-BUILD	BUILD
ADT	7,400	7,400
AM PEAK	360	360
PM PEAK	620	620

EB SR-94 / Kenwood Dr. Off-ramp	NO-BUILD	BUILD
ADT	10,500	10,700
AM PEAK	530	570
PM PEAK	840	880

EB SR-94 / Kenwood Dr. On-ramp	NO-BUILD	BUILD
ADT	2,600	2,600
AM PEAK	250	250
PM PEAK	230	230

EB SR-94 from SR-125 On-ramp to SR-125 On-ramp	NO-BUILD	BUILD
ADT	67,100	70,300
AM PEAK	3240	3520
AM LOS	D	C
PM PEAK	6350	6570
PM LOS	F	F

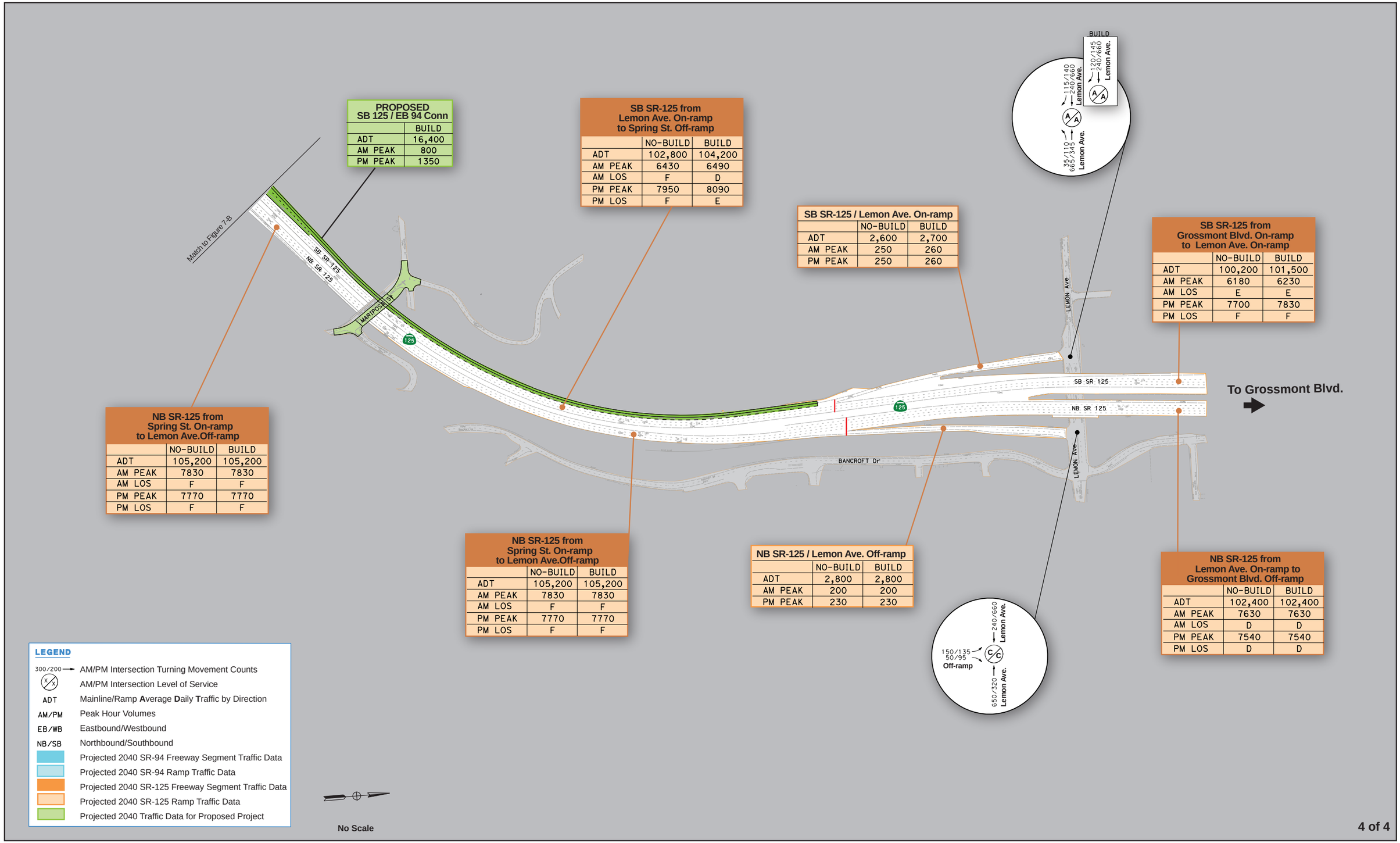
EB SR-94 from Kenwood Dr. On-ramp to Sweetwater Springs Blvd. Off-ramp	NO-BUILD	BUILD
ADT	63,300	66,300
AM PEAK	3190	3430
AM LOS	D	D
PM PEAK	6080	6260
PM LOS	F	F

EB SR-94 from Kenwood Dr. Off-ramp to Kenwood Dr. On-ramp	NO-BUILD	BUILD
ADT	60,700	63,700
AM PEAK	2940	3180
AM LOS	C	C
PM PEAK	5850	6030
PM LOS	F	F

LEGEND

300/200 →	AM/PM Intersection Turning Movement Counts
X/X	AM/PM Intersection Level of Service
ADT	Mainline/Ramp **A**verage **D**aily **T**raffic by Direction
AM/PM	Peak Hour Volumes
EB/WB	Eastbound/Westbound
NB/SB	Northbound/Southbound
	Projected 2040 SR-94 Freeway Segment Traffic Data
	Projected 2040 SR-94 Ramp Traffic Data
	Projected 2040 SR-125 Freeway Segment Traffic Data
	Projected 2040 SR-125 Ramp Traffic Data
	Projected 2040 Traffic Data for Proposed Project

Figure 7-C
2040 Projected ADT and LOS



PROPOSED SB 125 / EB 94 Conn

	BUILD
ADT	16,400
AM PEAK	800
PM PEAK	1350

SB SR-125 from Lemon Ave. On-ramp to Spring St. Off-ramp

	NO-BUILD	BUILD
ADT	102,800	104,200
AM PEAK	6430	6490
AM LOS	F	D
PM PEAK	7950	8090
PM LOS	F	E

SB SR-125 / Lemon Ave. On-ramp

	NO-BUILD	BUILD
ADT	2,600	2,700
AM PEAK	250	260
PM PEAK	250	260

SB SR-125 from Grossmont Blvd. On-ramp to Lemon Ave. On-ramp

	NO-BUILD	BUILD
ADT	100,200	101,500
AM PEAK	6180	6230
AM LOS	E	E
PM PEAK	7700	7830
PM LOS	F	F

NB SR-125 from Spring St. On-ramp to Lemon Ave.Off-ramp

	NO-BUILD	BUILD
ADT	105,200	105,200
AM PEAK	7830	7830
AM LOS	F	F
PM PEAK	7770	7770
PM LOS	F	F

NB SR-125 from Spring St. On-ramp to Lemon Ave.Off-ramp

	NO-BUILD	BUILD
ADT	105,200	105,200
AM PEAK	7830	7830
AM LOS	F	F
PM PEAK	7770	7770
PM LOS	F	F

NB SR-125 / Lemon Ave. Off-ramp

	NO-BUILD	BUILD
ADT	2,800	2,800
AM PEAK	200	200
PM PEAK	230	230

NB SR-125 from Lemon Ave. On-ramp to Grossmont Blvd. Off-ramp

	NO-BUILD	BUILD
ADT	102,400	102,400
AM PEAK	7630	7630
AM LOS	D	D
PM PEAK	7540	7540
PM LOS	D	D

Figure 7-D
2040 Projected ADT and LOS

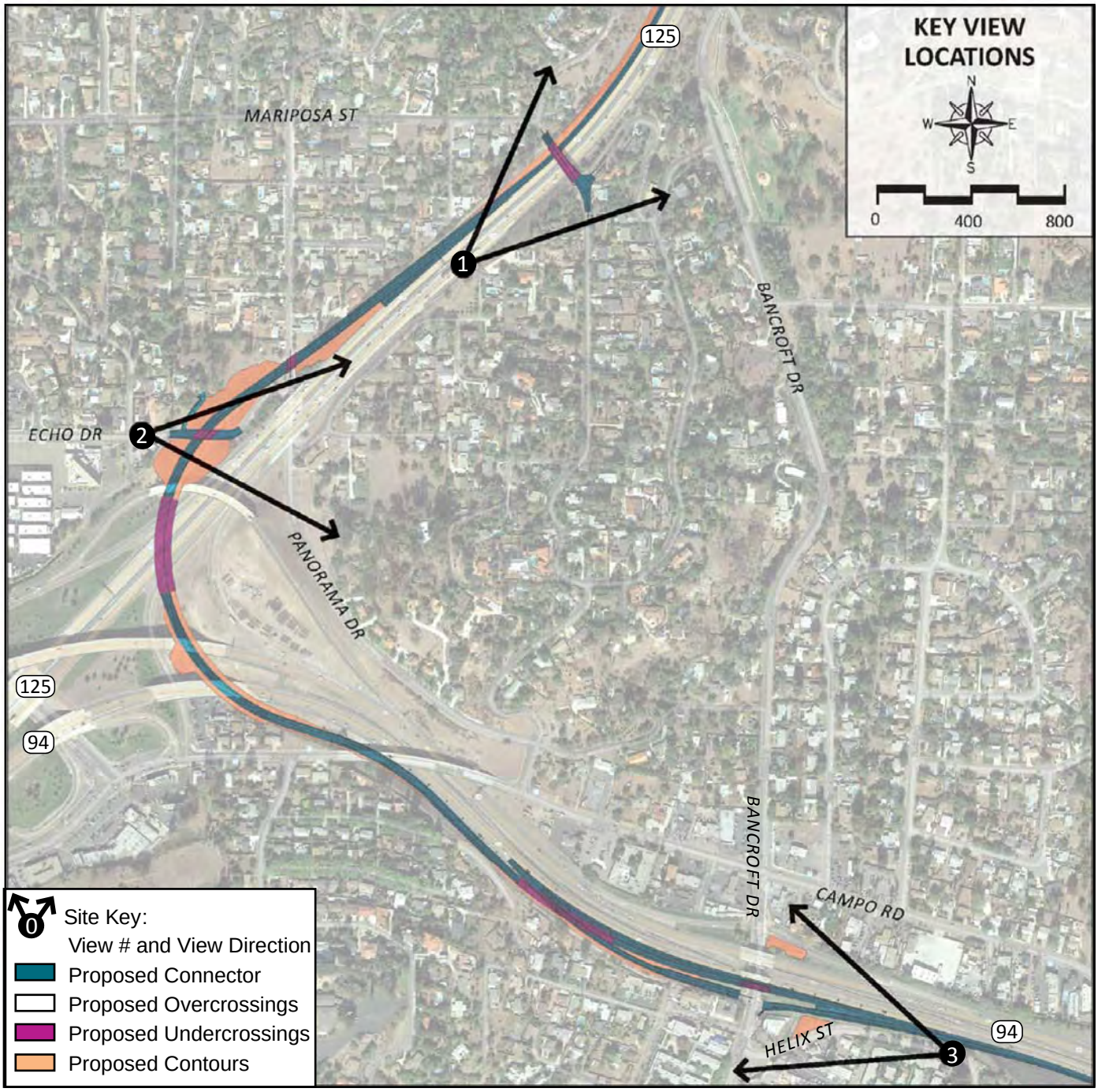


Figure 8-A
Key View Location Map

Current view from State Route 125 northbound looking toward the Mariposa Overcrossing

Simulated view from State Route 125 northbound of the proposed Mariposa Overcrossing with Option A

Figure 8-B
Key View 1/Photo Simulation: View of Mariposa Overcrossing, Option A

Current view from State Route 125 northbound looking toward the Mariposa Overcrossing

Simulated view from State Route 125 northbound of the proposed Mariposa Overcrossing with Option B

Figure 8-C

Key View 1/Photo Simulation: View of Mariposa Overcrossing, Option B

Current view of Echo Drive looking toward area east of State Route 125

Simulated view of proposed Echo Drive modifications

Figure 8-D
Key View 2/Photo Simulation: View from Echo Drive

Current view from Helix Street looking west toward State Route 94 and Bancroft Drive undercrossing.

Simulated view from Helix Street of proposed State Route 94 modifications.

Figure 8-E
Key View 3/Photo Simulation: View from Helix Street

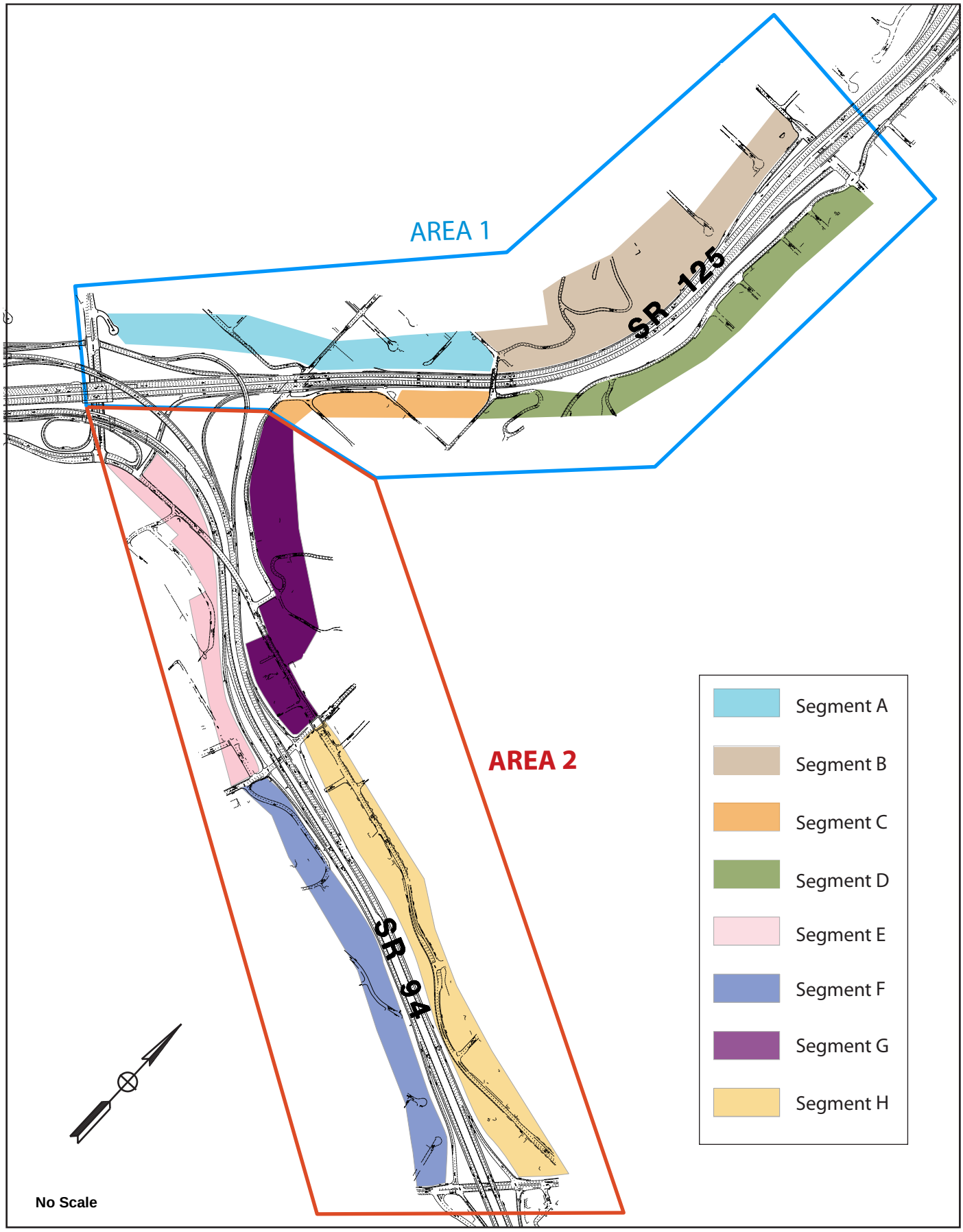


Figure 9
Noise Study Areas and Segments

Figure 10-A
Wetlands

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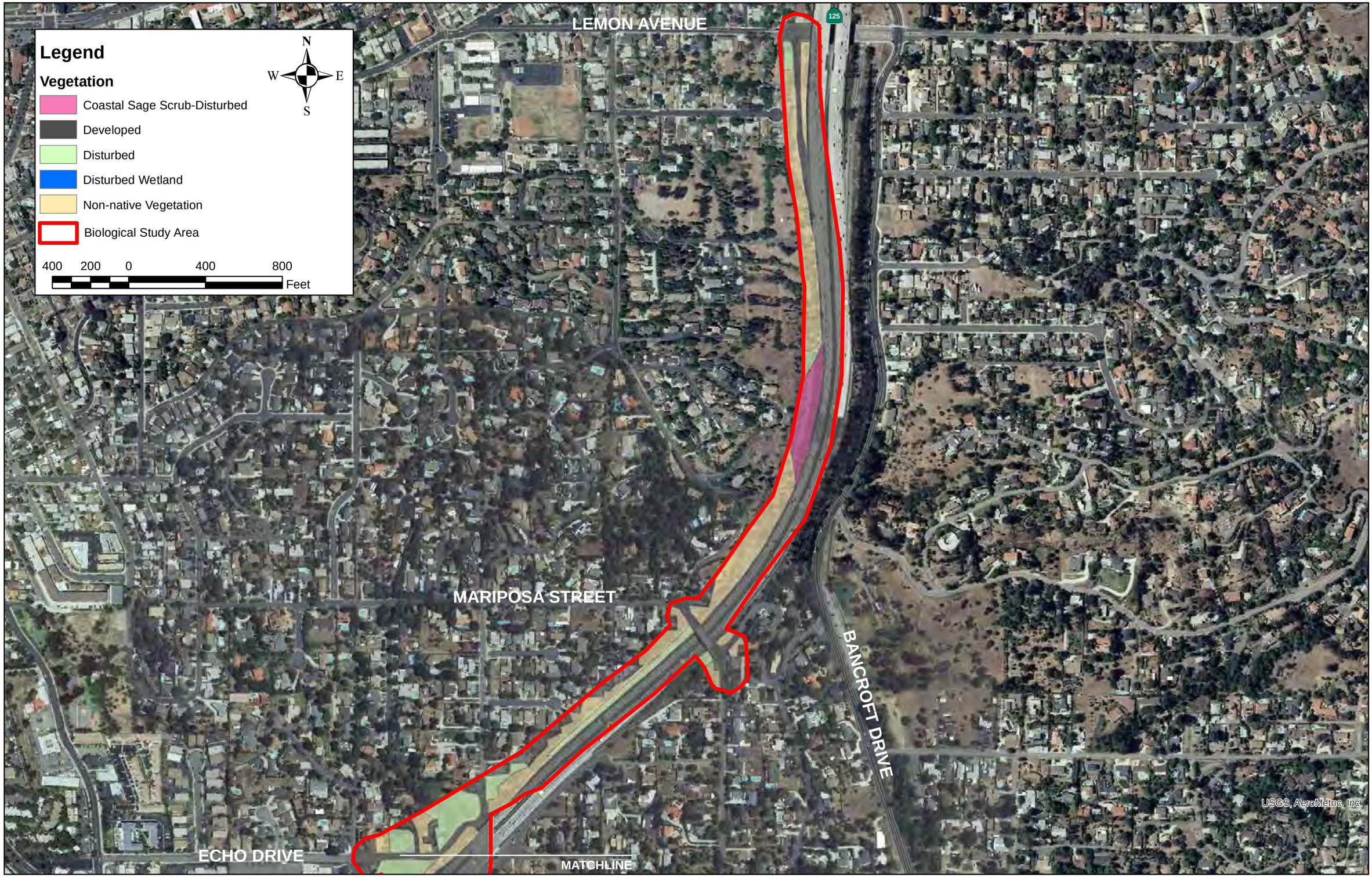

Figure 10-B
Vegetation Map - North

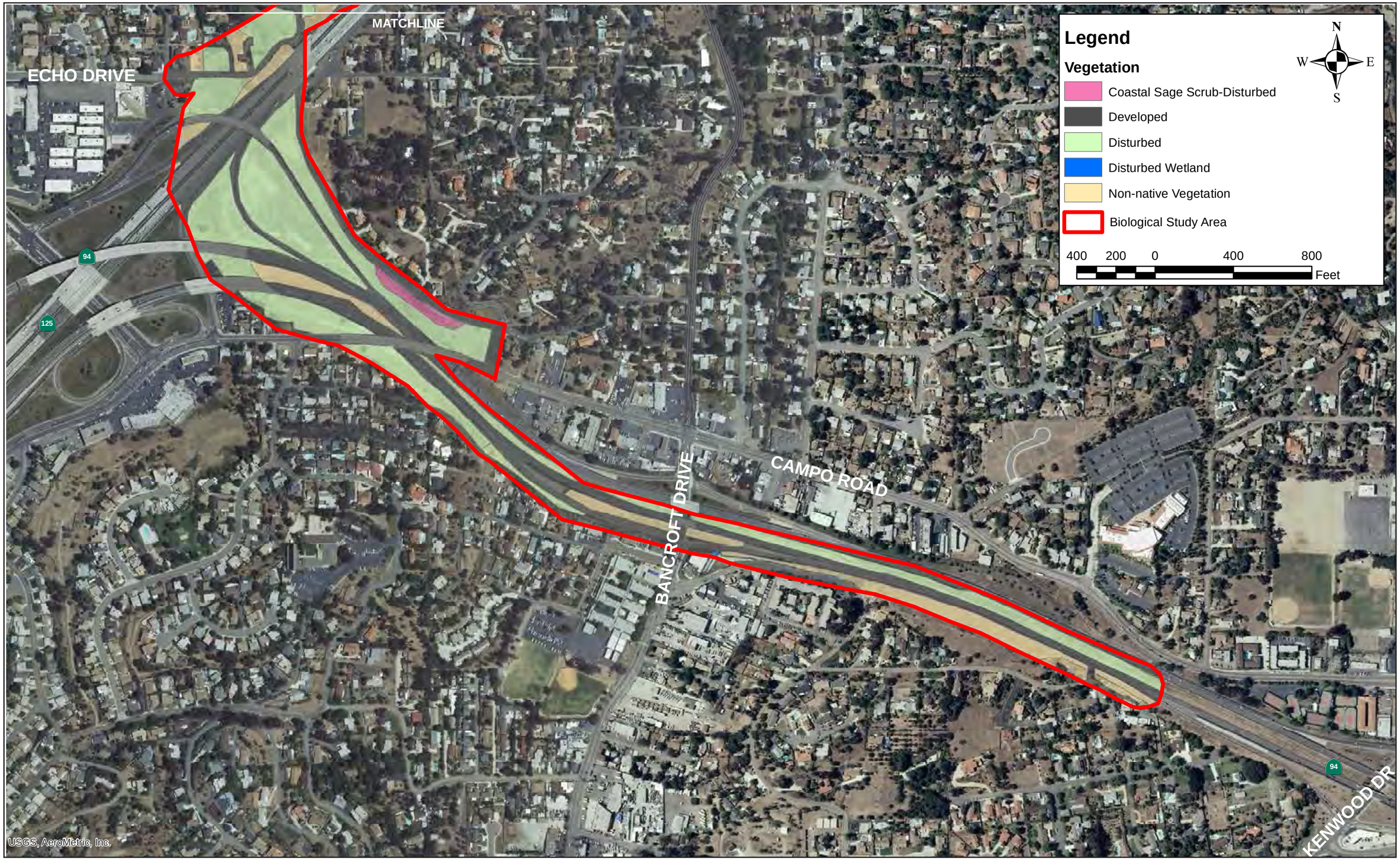

Figure 10-C
Vegetation Map - South

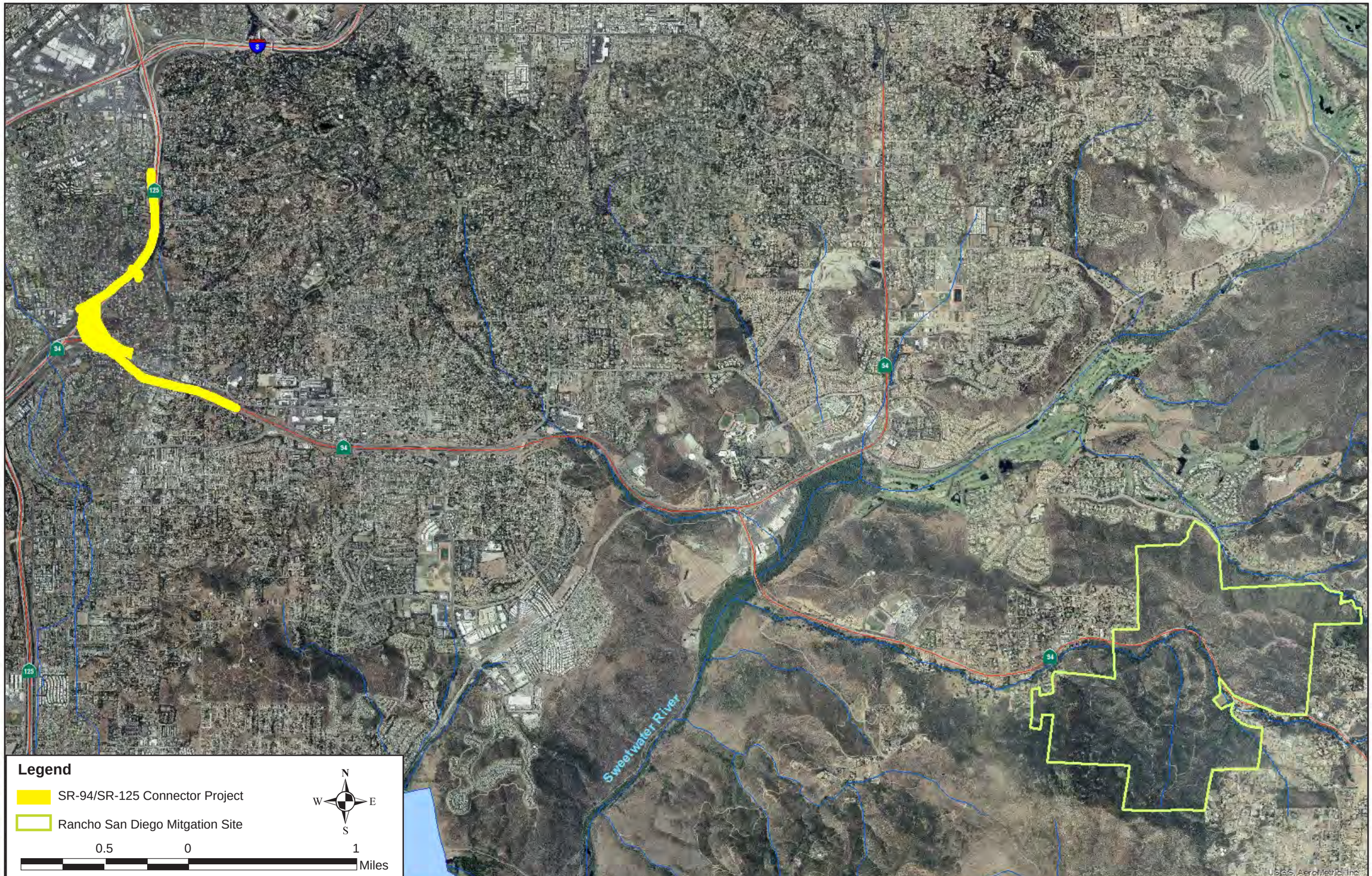

Figure 10-D
Mitigation Site

Chapter 3 – Comments and Coordination

Documenting Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation 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 Project Development Team (PDT) meetings and interagency coordination meetings. This chapter summarizes the results of the Caltrans' efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

Meetings with Stakeholders for SR-94/SR-125 Connector Project (PA/ED) Phase

During the Project Approval/Environmental Document Phase, the Project Manager and some task managers met with the following groups on a monthly; quarterly; or semi-annual basis. The meetings were either held at the District 11 Caltrans offices, or the County Supervisor's offices.

1. Grossmont – Mt. Helix Improvement Association
2. County of San Diego Engineering Department
3. City of La Mesa Engineering Department
4. County of San Diego Supervisor for District 2 – Dianne Jacob and Staff

Caltrans staff, led by Project Manager, held a meeting on Wednesday, August 6th, 2014 at the City of La Mesa to update community leaders on the project schedule and milestones, and to answer attendee's questions about the proposed project. The meeting was held in the City of La Mesa Police Department community room, located adjacent to La Mesa City Hall.

Meeting invitees included community leaders from the City of La Mesa, County of San Diego, La Mesa Planning Commission, La Mesa Traffic Commission, local community planning groups and chambers of commerce, and emergency responders including local police and fire departments.

Among the attendees were two members of the La Mesa Planning Commission, one member of the La Mesa Traffic Commission, four City of La Mesa staff, SANDAG, two local emergency responders, and a representative of Supervisor Dianne Jacob. The meeting format included a PowerPoint presentation, followed by a question and answer period. The presentation featured information about the history of the project, project goals, the project traffic study, project design, project milestones, and the project schedule moving forward. The meeting included a question and answer period, during which, Caltrans staff representing different project disciplines were available to answer questions.

<u>Public Hearing</u>

Caltrans held a public hearing for the proposed project on July 28th, 2015at the La Mesa Police Department Community Room located at 8085 University Avenue, La Mesa, CA. The meeting was conducted in an "open forum" format. The public was invited to view displays of the project and discuss the project with Caltrans representatives. Facilities were available for the public to

make written comments for the record. More than 50 people (not including Caltrans personnel) attended.

The letters and public hearing comments are included in this section along with Caltrans responses to the comments.

United States Army Corps of Engineers

One drainage along SR-94 and local roadways has created a disturbed wetland feature that has been determined to be a jurisdictional waters of the U.S. under the U.S. Army Corps of Engineers (USACE) and a jurisdictional waters of the State by CDFW, within the Biological Study Area (BSA). Approximately 0.07 acre of this jurisdictional area would be impacted by placing retaining walls along the proposed alignment. A Section 404 Nationwide Permit will be obtained prior to construction.

U.S. Department of Transportation
Federal Highway Administration

Federal Highway Administration
California Division

650 Capitol Mall, Suite 4-100
Sacramento, CA 95814
(916) 498-5001
(916) 498-5008 (fax)

October 19, 2015

In Reply Refer To:
HDA-CA

Ms. Laurie Berman
District Director California Department of Transportation
District 11
44050 Taylor Street
San Diego, CA 92110

Attention: Russel Simpson

SUBJECT: Project Level Conformity Determination for the SR-94/SR-125 Interchange Project (EA 14665)

Dear Ms. Berman:

On October 1, 2015, the California Department of Transportation (Caltrans) submitted to the Federal Highway Administration (FHWA) a complete request for a project level conformity determination for the SR-94/SR-125 Interchange Project. The project is in an area that is designated Non-Attainment or Maintenance for CO and Ozone.

The project level conformity analysis submitted by Caltrans indicates that the project-level transportation conformity requirements of 40 CFR Part 93 have been met. The project is included in the San Diego Association of Governments' (SANDAG) current Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP), as amended. The design concept and scope of the preferred alternative have not changed significantly from those assumed in the regional emissions analysis.

The analyses demonstrate that the project will not create any new violations of the standards or increase the severity or number of existing violations.

Based on the information provided, FHWA finds that theSR-94/SR-125 Interchange Project conforms with the State Implementation Plan (SIP) in accordance with 40 CFR Part 93.

If you have any questions pertaining to this conformity finding, please contact Joseph Vaughn at (916) 498-5346 or by email at Joseph.Vaughn@dot.gov.

Sincerely,

For: Vincent P. Mammano
Division Administrator

From:	Nagy Jr, David@DOT
To:	Simpson, Russell K@DOT
Subject:	FW: SR-94/SR-125 Interchange Project
Date:	Tuesday, August 11, 2015 6:50:41 AM

From: Dillingham, Tim@Wildlife
Sent: Monday, August 10, 2015 4:59 PM
To: Nagy Jr, David@DOT
Subject: SR-94/SR-125 Interchange Project

The Department has reviewed the Initial Study/Mitigated Negative Declaration for the SR-94/SR-125 Interchange Project (EA-14665) (SCH#2015071036). The Department has no additional comments to provide on this project.

Thank you,

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

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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

June 17, 2014 Reply To: FHWA_2014_0519_001

Kevin Hovey, Chief
Environmental Analysis, Branch D
Caltrans District 11
4050 Taylor Street, M.S. 242
San Diego, CA 92110

Re: Determinations of Eligibility for the Proposed State Route 94/125 Missing Connector Project, San Diego County, CA

Dear Mr. Hovey:

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

Caltrans has determined that the following properties are not eligible for the NRHP:

- 8906 Mariposa Street, La Mesa, CA
- 8907 Mariposa Street, La Mesa, CA
- 8901 Mariposa Street, La Mesa, CA
- 4420 Merritt Boulevard, La Mesa, CA (Clifford Sawyer House)
- 8875 Joris Way, La Mesa, CA
- 8865 Joris Way, La Mesa, CA
- 4295 Panorama Drive, La Mesa, CA
- 4296 Panorama Drive, La Mesa, CA
- 4284 Panorama Drive, La Mesa, CA
- 8784 Campo Road, La Mesa, CA
- 8815-8817 Campo Road, Spring Valley, CA
- 8848 Greenview Place, Spring Valley, CA
- 8858 Greenview Place, Spring Valley, CA
- 9239 Campo Road/3955 Helix Street, Spring Valley, CA
- 9248 Hillside Drive, Spring Valley, CA
- 9355 Hillside Drive, Spring Valley, CA

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

Thank you for considering historic properties during project planning. If you have any questions, please contact Natalie Lindquist of my staff at (916) 445-7014 or email at natalie.lindquist@parks.ca.gov .

Sincerely,

Carol Roland-Nawi, Ph.D.
State Historic Preservation Officer

1 LA MESA, CALIFORNIA, STATE OF CALIFORNIA

2 FOR THE COUNTY OF SAN DIEGO

3

4

5

6

7 TAKEN ON: TUESDAY JULY 28, 2015

8

9 TAKEN AT: 8085 UNIVERSITY AVENUE
LA MESA, CALIFORNIA

10

11 REPORTER: GLORIA D. MAZON
CSR NO. 9356

12

13

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24

25

1 CALTRANS PUBLIC HEARING, TUESDAY, JULY 28, 2015
2 LA MESA POLICE DEPARTMENT COMMUNITY ROOM
3 8085 UNIVERSITY AVENUE, LA MESA, CALIFORNIA 91942
4 5:00 a.m. - 8:00 p.m.
5 * * *
6
7 MS. PARKER: This is us here. We're at this
8 Parcel No. 138. (indicating)
9 And then, this is Page 33, where it says that
10 our parcel number would be a full acquisition.
A-1
11 And then, but it's listed incorrectly on the
12 map. This should be "R138," and it's incorrectly listed
13 as "R139."
14 I think that's it, other than it needs to be
15 corrected.
16 COURT REPORTER: Can you state your name,
17 please.
18 MS. PARKER: It's Marie and Michael Parker.
19 COURT REPORTER: Thank you.
20
21 MR. LEANDER: The thing that I'm happy about
22 that I hope obviously to stay, is this lady I just spoke
23 with and my understanding is, that I live on Mariposa
24 Lane. I'm at 8875 Mariposa, and this is the end of our
25 lane and that the soundwall would be 14 feet here and

CALTRANS PUBLIC HEARING - STATE ROUTE 94/SR-125 2

A-1: Receiver R138 represents the frequent human use area (FHUA) of the home at 4283 Panorama Drive, La Mesa, CA. Receiver R139 represents the FHUA of the home at 4285 Panorama Drive, La Mesa, CA. Both of these receivers have no impacts. Receiver R138 reaches a max of 65 dBA which is below the Noise Abatement Criterion (NAC – 67 dBA for residential); Receiver R139 reaches a max of 62 dBA which is also below the NAC. Proposed Right-of-Way acquisitions are shown on page 34.

B-1

B-2

that's a good thing; that's good.

So hopefully that's not going to change from the plans that we're seeing right now and that's what I've been told that it's 14 feet, the soundwall here. (indicating)

And as I told -- about a year ago, I had email contacts with Lou Melendez and also Bruce Johnson who's the PR representative for Caltrans.

And then the concern is, I want to make sure they do at the time, is that the noise from the freeway here is such that little kids and pets, they can't hear cars coming on the lane, so you can literally walk to your mailbox here and you can hear cars coming in each direction, so we've been very concerned for a long time now, somebody is going to get hit. Like I said, you could walk up to your mailbox. I live several houses up here, if -- I see cars are coming out of this area, what you might call it cars are coming out of this area. I'll go to my mailbox and I'm very careful. I'm looking at both sides because the freeway noise, all of a sudden, you see one of the neighbors coming up and driving in each direction.

So the fact is, as I understand it, it's going to move 12 feet closer and I understand 12 feet closer, and hopefully this soundwall, this 14-foot soundwall as I

CALTRANS PUBLIC HEARING - STATE ROUTE 94/SR-125 3

B-1: Receptors R146 and R147 are the receptors that are closest to representing your property at 8875 Mariposa Lane. It is recommended in the Noise Study Report that a minimum 14 foot sound wall be constructed to provide feasible abatement for your property and the surrounding area. The Noise Abatement Decision Report may propose a higher sound wall (16 feet) if it is reasonable to build based on cost.

B-2: Please refer to response B-1.

B-2 CONT.

1 understand it, will just abate that noise and just make
2 it a little bit safer.

B-3

3 Obviously, you know, there's, you know, just
4 pollution from the dirt, from the freeway and the carbon
5 monoxide, whatever, but that's a big concern is that

B-4

6 noise, especially if the adults can't differentiate it.
7 The kids can't either. The noise makes the lane
8 dangerous because you can't tell the traffic on the way
9 with the traffic on the freeway.
10 So I'm happy with that. If they're going to
11 keep it the way it is. I think that's going to help us
12 along; so that's all.
13 My name is Mark Leander and I live at 8875
14 Mariposa Lane, La Mesa.
15

C-1

16 MR. VALLEY: I am Michael Valley and I'm
17 commenting on the SR 94/125 project. The southbound
18 lane should be opened up in the future. Who knows when,
19 so I am concerned about the northbound lane right now.
20 The Northbound 125 has available lanes. They're right
21 around the corner. When this project starts coming
22 south, they have a northbound lane available and hasn't
23 been striped or anything for years-and-years. Let's get
24 the northbound striped and get going on that and you can
25 do project SR 94/125. That's that one.

CALTRANS PUBLIC HEARING - STATE ROUTE 94/SR-125 4

B-3: Please refer to Section 2.13 AIR QUALITY for a discussion regarding air pollution, including CO. The proposed project does not conflict with or obstruct implementation of the applicable air quality plan. It does not violate any Air Quality standard or contribute substantially to an existing or projected Air Quality violation. The project is included in the current 2050 Regional Transportation Plan and 2014 Regional Transportation Improvement Program.

B-4: The proposed 14 foot sound wall (S773) is the minimum height sound wall that will provide abatement for noise impacts to your property located at 8875 Mariposa Lane as well as the surrounding area.

C-1: Caltrans is aware of the lane striping from northbound SR-125 from Spring Street to just north of Mariposa Street where the facility does go from 3 lanes to 5. In 2013 the Department performed work on SR-125 between Mariposa and Lemon Streets. The lanes were restriped and it extended the lane taper to create a smoother transition into the two additional lanes thus allowing traffic access to the other two additional lanes much sooner as one way to deal with the bottleneck. However at this time we cannot restripe the highway differently before Mariposa because of the existing geometric configuration. There is currently 56 feet of width between the concrete median barrier and the Mariposa Bridge abutments. There are three 12 foot lanes and a 10 foot inner (left) shoulder and a 10 foot outer (right) shoulder.

And another one I have, but I'll be back.

(Brief pause.)

C-2

This is on the northbound 125 north of the Mariposa bridge, that I'd like to meet with Marcelo, the Deputy Traffic Operations.

And I've talked about the northbound lanes on the 125.

D-1

MS. THOMAS: Basically I just want you to please reconsider the sound abatement for my property which is R115, because my decibels only go up but the sound and the visuals, there needs to be something there. It's as it is, it's very loud. It's going to be even louder and so I would like reconsideration for some sort of a wall or a berm or something else, because right now the proposal is for a 1.1 million-dollar wall that would address the concerns of my neighbors, myself and I think it's R105-to-R120 or something like that, and they denied it because it's cost-prohibitive.

So I think the difference is $300,000, but there needs to be some other alternative; so yeah, that's the thing.

My name is Melanie Thomas and my father-in-law is also on title, Richard Kirby.

CALTRANS PUBLIC HEARING - STATE ROUTE 94/SR-125 5

C-1 CONT.: In order to provide 4 full lanes, a minimum of 64 feet width would be needed according to design standards if 12 foot lanes, a 10 foot outer shoulder and a 5 foot inner shoulder are provided. The proposed connector project provides for an Option A and an Option B at the Mariposa Bridge. Option B would cut into the existing slope along the NB SR-125 approaching the Mariposa Street Overcrossing to allow room for a lane addition to be completed as a future project following this project.

C-2: If you have any outstanding questions, please contact the Project Manager, Lou Melendez.

D-1: The property is represented by receiver R115 and is located at 4310 Merritt Blvd, La Mesa. Existing noise is 71 dBA. Based on preliminary designs, future noise with the project would be 73 dBA. S770 was considered in accordance with 23 CFR772 and found to be not reasonable to construct as the estimated cost to construct exceeded the reasonable allowance.

1 MS. PROVENCHER: My name is Jean Provencher.
2 My address is 4292 Panorama Drive, La Mesa.
3 I'm Sound Receptor Site R134 -- actually I'm not. I take
4 that back. I'm "Sound Receptor Site 132."
5 My concern is the model used to calculate my
6 noise. I question whether or not that is the actual
7 noise that I experienced in my main living outside patio
8 area.
E-1
9 So my question is, will that ever be doubled
10 checked or confirmed on my property, because I believe
11 it's much higher than what the model is telling them
12 it is.
13 And then my other concern is, is that on
14 Receptor Site 132, it was previously a property owned by
15 Caltrans but they've now raised the house so it's a
16 vacant lot.
17 Would they be willing to put in any kind of
18 greenscape trees, anything like that planted along the
E-2
19 property line that would help the noise, in our
20 experience, with that not being there? This is what I
21 ask of Caltrans. It's now gone and it's an empty lot
22 between two other residences. They're not going to do
23 anything with it obviously, so my question is, you know,
24 would they be willing to put some kind of green barrier
25 there to help out with the noise?

CALTRANS PUBLIC HEARING - STATE ROUTE 94/SR-125 6

E-1: R132 represents 4292 Panorama Drive. Existing noise level is 62dBA and future with project is predicted to be 67dBA. S763 is an 8-foot high sound wall preliminarily recommended to be constructed. Based on the current design, an 8-foot high sound wall is being proposed to provide noise abatement for the parcel(s) represented by R132. Final consideration of the wall construction depends upon whether the proposed wall would achieve a reduction in noise levels of at least 5 DBA, whether it is cost effective, and the affected receptors have an opportunity to vote on the wall. Refer to Section 2.14 – NOISE for more information regarding the noise analysis process.

E-2: Vegetation is not an effective measure to minimize traffic noise. S763 is preliminarily recommended to be constructed along Caltrans Right of Way, which is adjacent to 4292 Panorama Drive.

1 That's all.

2

3 MS. STRAUS: So my question is, since there is

4 a bridge going in on Panorama Drive and there's already

5 an overpass on Panorama Drive, the 94 goes over Panorama

6 Drive and then the new one is going to go almost the same

7 exact place under, is there -- we have had a problem with

8 that bridge for years because there's no lights on it --

9 Is there a possibility of doing all this work that we

10 could have lights put on there because people walk under

11 there. It is dark; sometimes people live under that

F-1 12 bridge. We report them and all kinds of dumping takes

13 place there.

14 So we just want to know, is it possible to get

15 lights put on the Panorama overpass when they're doing

16 all this work?

17

18 MR. VOLEY: My name is Mitch Voley. I own the

19 six-unit apartment building at 3910 Spring Place, R27 on

20 your map. The property is at the bottom of the eastbound

21 Bancroft off-ramp very close to the bridge over Bancroft.

22 Even though our property is heavily impacted, I

23 never received the package. If the tenant wouldn't have

24 told me on Saturday, I wouldn't even be here. This

25 morning, I had to call to confirm what day this hearing

CALTRANS PUBLIC HEARING - STATE ROUTE 94/SR-125 7

F-1: Thank you for bringing this issue to our attention. During the final design stage, we will consider the feasibility of adding lighting under both the existing and the proposed bridges.

G-1

1 was taking place. The page titled general information
2 about this document had a date "Thursday the 28th of
3 July," since today is "Tuesday," not "Thursday" I would
4 guess that the public hasn't been properly informed of
5 this public hearing, because some people will show up on
6 Thursday.

G-2

7 As the owner of a property adjacent to the
8 reconstruction of the eastbound off-ramp to Bancroft and
9 the construction of the Bancroft bridge expansion and the
10 connector to the 94, I'm concerned about the loss of
11 rental income.
12 During the two-year construction period, and in
13 the future, will there be any compensation for my losses
14 if this project does improve?

G-3

15 In looking at the map on "Page 33" of the
16 document, I see a soundwall along both the entire length
17 of the southside of Highway 94 from the 125 interchange
18 to Bancroft Street, yet the three multi-tenant
19 residential buildings along the Bancroft off-ramp do not
20 get sound barriers in the plan. There are 20-to-25 units
21 in these three buildings; your map, the property is R25,
22 R26 and R27. They are very close to the freeway.
23 Now, I understand the roadway will now be 20
24 feet closer to my property, and the other property along
25 the off-ramp. They're widening the connector ramp to be

CONT →

CALTRANS PUBLIC HEARING - STATE ROUTE 94/SR-125 8

G-1: The public notice of meeting was advertised correctly in the San Diego Union Tribune and several local publications as well as a posting on Caltrans website and social media applications. We understand that there was a typo in the document and as a result, we did have representatives from Caltrans available on Thursday, July 30th, at the meeting site in order to answer any questions.

G-2: Property value impacts are dynamic and not easily quantified. Negative impacts, such as increased noise or negative visual effects, are not expected to adversely affect the areas adjacent to the 94/125 Interchange Project. A more efficient transportation system in the area could possibly increase the potential marketability of adjacent properties.

G-3: In the vicinity of R25, the Bancroft Drive exit ramp is moving approximately 5 feet closer to the residences and this distance tapers to zero as you approach R26 and R27. The new connector ramp is being added between the freeway and the Bancroft Dr. exit ramp. In accordance with 23 CFR 772 and the Traffic Noise Analysis Protocol a traffic noise impact occurs when the future predicted noise level approaches/exceeds the Noise Abatement Criteria. (NAC) For residential land use the NAC is 67 dBA and approach is defined as 66 dBA. R25, R26 and R27 existing noise levels are 64, 64 and 63 dBA respectively. Future noise levels are 64, 62 and 65 dBA. There is no identified traffic noise impact and therefore no consideration of noise abatement. S610 located adjacent to R25, R26 and R27 is not recommended to be constructed, therefore there is no wall to extend to Bancroft Drive. The guardrail on the connector retaining walls near R25, R26, and R27 will be non-see-through concrete.

G-3 CONT.

1 even closer to the property, yet somehow we don't get a
2 soundwall.
3 I understand that the document from the
4 document, that the railing on the connector wall will be
5 a see-through guardrail.
6 Why can't it be a sound barrier wall along the
7 connector ramp as it crosses Bancroft? Putting fast
8 moving traffic within 20 feet close to my property -- all
9 three of these properties warrants a soundwall.
10 Under the section on noise barriers, it says --
11 I read sections regarding protocol with sentences such as
12 "noise abatement must be predicted to reduce sound noise,
13 and both reasonableness of noise abatement is more
14 subjective than the determination of feasibility"
15 How can you possibly predict that the three
16 multifamily properties on the Bancroft off-ramp will have
17 no increase in noise, yet the buildings will be now 20
18 feet closer to the roadway?
19 There are 60-to-80 people living in these
20 properties, since the reasonableness of noise abatement,
21 is in part determined by the viewpoints of the property,
22 owners of the residences of these three properties.
23 I urge you to reconsider the measurements taken
24 at these locations to extend the soundwall to Bancroft
25 Drive.

CALTRANS PUBLIC HEARING - STATE ROUTE 94/SR-125 9

G-4

1 I can only conclude that this project will
2 negatively impact the value of my property. My ability
3 to track tenants and my future income. I'm sure the same
4 applies to the other property owners along the off-ramp;
5 therefore, I do not support the project; that's it.
6 Signed Mitch Voley. My phone number is
7 858.342.5070.
8

H-1

9 MR. LABASTIDA: They said that the thing they
10 might be able to change these devaluations of our house
11 because we have a 180-degree piece of realty and they're
12 going to put a block wall because sound barrier it's on
13 the right-of-way, and they don't put the glass walls
14 because it's on the right-of-way, even though the
15 right-of-way is right in front of our house with
16 180-degree view, so that's our main concern. We just
17 want glass if possible, and it's a very long wall.
18 I mean, we have a long property in front of our
19 house. So ...
20 This is Rudy Labastida and Roberta Labastida
21 and phone number is 619.460.5418.
22

I-1

23 MS. LAFAVER: My name is Barbara Lafaver and I
24 live at 8906 Mariposa Street and it's a side street
25 And it's a side where there are other homes so

CALTRANS PUBLIC HEARING - STATE ROUTE 94/SR-125 10

G-4: Please refer to response G-2.

H-1: The property located at 8907 Greenview Place is represented by receptor R16. Sound wall S610 was found to be not reasonable to construct in the Noise Abatement Decision Report.

I-1: S773 cannot be extended to benefit R185 as it would block access on Mariposa Street. Comment should reference sound wall "S781" instead of sound wall "S773". Sound wall S781 cannot be extended because the purpose of a sound wall is to only block noise to the outdoor frequent human use area (FHUA) and not the entire property. Proposed sound wall S781 blocks noise to the FHUA.

I-1 CONT.

1 it's on a dead end street, so I am concerned that they
2 said they're not going to put a soundwall there because
3 there's just one person and it only affects me, you know,
4 and the noise is still -- because like she's (indicating)
5 lucky enough to be with some other people. She's 8907
6 Mariposa across the street and so they will get a
7 soundwall. I know it's just proposed.
8 But I just want to have it stated for the
9 record, that I don't think it's equitable to not have
10 that soundwall extend, you know, because we're taxpayers
11 and it should be extended.
12 So that's mainly my comment and concern; thank
13 you.
14
15 MR. CASCIA: All right, yeah, my name is Albert
16 Cascia.

J-1

17 And my concern is the area that passes under
18 Panorama and under Echo Drive and also north of that,
19 that the retaining wall should be -- should include
20 something above ground to make sure that foreign objects
21 don't get dropped into this new section of interchange;
22 yeah.
23 So I live on Panorama, so my concern is right
24 here, this section here (indicating) where you have these
25 accessing streets, kids can get in there and drop things

CALTRANS PUBLIC HEARING - STATE ROUTE 94/SR-125 11

J-1: Thank you for bringing this issue to our attention. During the final design stage, we will consider potential methods to prevent debris from collecting in these areas.

J-1 CONT.

1 on down on the cars and could be not only kids, but
2 adults too.

J-2

3 We've had illegal dumping as well in this area
4 and graffiti, so people can do things that we don't
5 expect them to do.
6

K-1

7 MS. DIGGDON: My name is Ann Diggdon, at the
8 property at 9260 Hillside Drive and it's No. R34 on the
9 drive.
10 And I just found out, and I know our property
11 is impacted with soundwalls, and we need to be sure
12 there's a soundwall put in behind our house.
13 So there was a question about if there's room
14 to do that behind our house, but there definitely is room
15 and we definitely need a soundwall. We can't even use
16 our patio now and it's going to be impacting even more by
17 the update.
18 Do you want my phone number?
19 COURT REPORTER: Sure.
20 619.813.3311.
21 And my daughter and son-in-law are Mr. and
22 Mrs. John Foster, and they also live in this house, and
23 their phone number is: 619.820.4500.
24 We'd like to know something as soon as
25 possible.

CALTRANS PUBLIC HEARING - STATE ROUTE 94/SR-125 12

J-2: The California Department of Transportation, Division of Maintenance services both San Diego and Imperial counties, and is responsible for maintaining more than 1000 center lane miles, and nearly 4,000 landscaped acres throughout the San Diego region. Maintenance is very responsive to request made by the public. If there are issues that require corrective action, please use the following methods to submit maintenance related request. Maintenance Service Requests: Phone: (619) 688-6699, select Option 4 (Web: http://www.dot.ca.gov/hq/maint/msrsubmit/)

K-1: R64A is the receptor that represents the frequent human use area (FHUA) of the property located at 9260 Hillside Drive. R64/LT3/CAL also is located at 9260 Hillside Drive but represents the noise meter calibration location. The sound wall number no longer exists since this sound wall was removed from the Noise Study Report as the NSR evolved and the sound walls being evaluated were refined. Several designs were modeled with TNM but we were unable to model a feasible sound wall that would block the noise the minimum required 5 dBA. The maximum height modeled within TNM was 16 feet.

PUBLIC SPEAKER: Okay.

The engineer said I better make another comment.

K-2 There's the old existing overpass on Panorama to reduce possibility of a legal action in the area. I would suggest that lights be placed on that underpass at Panorama that's under the 125. We don't have lights there. It's pitch dark at night and so, it brings

K-3 trouble. It brings garbage, illegally dumped garbage and graffiti, and the homeless that live under the bridge as well.

K-4 So to reduce the risk in that area, they should put lights underneath that underpass.

MS. BETTS: My name is Denise Betts. I live at 8858 Greenview place. The 13 or R13 is the number on the map for our house.

L-1 I just want to say, that we're very concerned about the quality of life we have with the added noise level. The sound wall will only be good for our backyard, our living space is a level above the wall which will do no good for all of our living space; 80 percent of our windows in our home face the freeway and noise level will be greatly elevated.

CALTRANS PUBLIC HEARING - STATE ROUTE 94/SR-125 13

K-2: Please refer to response F-1.

K-3: Please refer to response J-2. Refer to Section 2.7 VISUAL/AESTHETICS for information regarding anti-graffiti coating.

K-4: Please refer to response F-1.

L-1: Comment “L-1” concerns the property represented by receiver R13. This property is located at 8858 Greenview Place, Spring Valley. Forecasts for this property indicate that it is expected to be impacted by noise because of the project and sound wall S610 was proposed to provide noise abatement in the NSR. The NADR found that wall S610 would not be cost reasonable to construct because the engineering estimate exceeds the cost allowance. However, if the property owners donated all easements, the estimated total cost to build wall S610 would be less than the reasonable total cost allowance. During final design, residences will be contacted to discuss potential easements.

L-2

1 Another issue that we have is the devaluation
2 of our home. We worked hard to buy our home and to
3 increase it's value only to have it devaluated by the
4 increase in traffic flow on the freeway and the
5 additional noise factor.
6 All the equity we have built will be greatly
7 affected as well as the quality of life. We strongly
8 feel that we should be compensated for this devaluation
9 and increase and noise level in our living area and
10 quality of life.
11 We have worked hard for our home and need to
12 persevere for what we feel is right and just.
13
14 MS. MULLERT: My name is Susan W. Mullert, and
15 my address is 4420 Merritt Boulevard, La Mesa, 91941.

M-1

16 I live in the historic 1929 Tudor Home, right
17 next to the bridge connecting Garfield and Mara
18 Boulevard. I'm very concerned about Caltrans decision
19 not to build "Soundwall S770" that would help provide
20 noise reduction for 12-single family residences along the
21 south side of 125 headed to El Cajon.
22 I've lived in this residence for 22 years and
23 the noise in our back bedrooms is very loud, at times
24 hearing the trucks, the windows vibrate, the building
25 shakes a little bit and I feel we should have a soundwall

CALTRANS PUBLIC HEARING - STATE ROUTE 94/SR-125 14

L-2: Please refer to Comment G-2. Implementation of the proposed project would direct traffic through the interchange without diverting a portion of the traffic onto surface streets. The decrease in automobile queuing, reduction in noise from braking and accelerating, and improvements to air quality could prove beneficial to the community.

M-1: Comment “M-1” concerns the property represented by receiver R120. This property is located at 4420 Merritt Blvd, La Mesa and is a historic 1929 Tudor Home (This home is the “Clifford Sawyer House” and is listed on the historic registry, http://www.cityoflamesa.com/HistoricLandmarks). Forecasts for this property indicate that it is expected to be impacted by noise because of the project and sound wall S770 was proposed to provide noise abatement in the NSR. However, the NADR found that wall S770 would not be cost reasonable to build even if all easements were donated since the engineering estimate exceeds the total reasonable cost allowance in this case by 20% (~$150,000). It is not possible to modify this wall or change the configuration so that it would be cost reasonable.

M-1 CONT.

1 along our both freeways.

M-2

2 I understand they are building "Soundwall 773"
3 along the north side of 125 and it's to provide
4 reasonable noise reduction for 15-single family
5 residences.
6 I appeal to Caltrans to provide the same noise
7 reduction soundwall on the southside of 125 through our
8 community; that's it.

M-3

9 If Caltrans is not going to build a soundwall
10 on our side of the freeway, would they consider planting
11 dense hedge foliage to help reduce the noise? I mean,
12 you know ...
13 (Whereupon Caltrans Public Hearing concluded at
14 8:00 p.m.)
15 \\
16 \\
17
18
19
20
21
22
23
24
25

CALTRANS PUBLIC HEARING - STATE ROUTE 94/SR-125 15

M-2: Although the home located at 4420 Merritt Blvd, La Mesa is impacted by noise (receptor R120, existing 73 dBA, future design build 74 dBA), it is not reasonable to construct a sound wall (S770) based on findings in the Noise Abatement Decision Report (NADR). The NADR determined that the cost to build sound wall S770 would exceed the reasonable cost allowance by approximately $150,000.

M-3: In order for vegetation to be effective as noise abatement it is required to be very dense, high enough, and wide enough. It is not practical (neither feasible nor reasonable) with the space limitations to provide enough vegetation to adequately block noise.

(Source: Federal Highways Administration, FHWA, http://www.fhwa.dot.gov/environment/noise/noise_barriers/design_construction/keepdown.cfm)

1 STATE OF CALIFORNIA)

2 COUNTY OF SAN DIEGO)

3

4

5

6 I, Gloria D. Mazon, C.S.R. No. 9356, hereby

7 certify, that the foregoing statements from this public

8 hearing were recorded true to the best of my ability by

9 electronic transcription, and supervised under my

10 supervision.

11

12 Dated in San Diego, California, this_____day,

13 of_____,2015.

14

15

16

17 _____

18 Gloria D. Mazon CSR No. 9356

19

20

21

22

23

24

25

SR-125 Connector Project SR-94

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 your written comments in the Comment Box.

Date: _____

Comment: I own the property 8740 Echo Dr. La Mesa. The drive way gives access to the main house & garage of Echo Dr. in addition it gives access the back of over half an acre to the Saddle house (guest house) and the Barn which is over seventy year old which has been in the fifties a place to buy live chicken & produce which I plan to open for the public. The property has survey well that were not dug. The only well is in the adjacent property in the Evan's property. My drive way give access to the back structure which is I chose in the future to split to multiple parcel I can because I have access to the street which is a requirement. We have told Dipe it a red for, also because the property is located in the bottom of the hill, we have wet land almost a creek in winter. The currently two can park on the drive & in front of the house at least as 4 cars other two back. To have a viable option if the drive way is taken, we need two separate drive way plus enough land to compensate for parking. The study that was done was inadequate. R170 was not utilized. The report (draft) did not follow its guidelines.

N-1

N-2

(OVER)

(Optional information, please print.)

Name Hava Merk

Organization _____

Address 8740 Echo Dr. La Mesa CA 91941

Phone 619 871-9499 *e-mail* hava.merk@cox.net

How did you hear about this meeting? ~~Flyer~~ by email & mail. after begging to get information.

Written comments may be submitted by e-mail to: david.l.nagy@dot.ca.gov. Mail your written comments to: David Nagy, Caltrans, District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by August 14, 2015.

N-1: Access to properties will be considered in the project design. Parking impacts will be considered during the appraisal process. Current preliminary design does not change legal access to the property.

N-2: Please refer to response N-1.

Since access to my property is compromi
by removing my driveway to both the
Front of the house and to the back
including barn and orchard.

N-3 I would like to get the parcel
Next door to the east of my property
to get access to my backyard and
barn. I would be willing to trade / buy
this empty parcel to protect my
property.

N-3: Access to properties will be considered in the project design. The “empty parcel” may be required for the project. If it is determined that the parcel is not needed and considered “excess,” a transaction involving this “excess parcel” may be an option.

SR-125 Connector Project SR-94

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 your written comments in the Comment Box.

Date: 7/28/15

O-1 Comment: The proposed sound wall should be longer to go past my property. The noise is deafening (Receptor) 185 & Sound Wall 781

O-2 Caltrans owns a strip of land adjacent to the freeway and in front of 8906 Mariposa. There are several dead oleander trees, which is a fire hazard and Caltrans needs to send landscaping crews out on a regular basis to maintain it

(Optional information, please print.)

Name BARBARA LAFAVER GLEASON

Organization

Address 8906 MARIPOSA ST

Phone 925-817-8777 e-mail blafaver@yahoo.com

How did you hear about this meeting? letter

Written comments may be submitted by e-mail to; david.l.nagy@dot.ca.gov. Mail your written comments to; David Nagy, Caltrans, District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by August 14, 2015.

O-1: S773 cannot be extended to benefit R185 as it would block access on Mariposa Street. Comment should reference sound wall "S781" instead of sound wall "S773". Sound wall S781 cannot be extended because the purpose of a sound wall is to only block noise to the outdoor frequent human use area (FHUA) and not the entire property. Proposed sound wall S781 blocks noise to the FHUA.

O-2: Please refer to response J-2.

SR-125 Connector Project SR-94

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 your written comments in the Comment Box.

Date: 7-28-15

Comment: 8950 MARIPOSA ST.

P-1 ① - WHY R155 DID NOT HAVE A PROPOSED SOUND WALL AS ~~#~~ CAL TRANS PROPERTY IS ADJACENT TO MINE!!

P-2 ② - WHAT DOES CALTRANS PROPERTY DESIGNATION LOOK LIKE FOR EXAMPLE. A BLOCK OR STAKE?

P-3 ③ - I'M CONCERNED THAT THE VALUE OF MY HOME WILL BE DRASTICALLY AFFECTED AS I AM POSSIBLY GOING TO SELL MY HOME SOON. ~~BE~~ I HAVE TO DISCLOSE ANY AND ALL FUTURE PROJECTS CAL TRANS & ETC ARE PLANNING.

P-4 ④ FOR 40 YEARS I'VE BEEN TOLD MY PROPERTY WOULD BE BOUGHT BY CAL TRANS AND DEMOLISHED NOW I'M TOLD THERE'S NO EFFECT ON MY HOME.

(Optional information, please print.)

Name MARIAN ZELDIN

Organization

Address 8950 MARIPOSA ST, LA MESA, CA.

Phone e-mail mzeldin@cox.net

How did you hear about this meeting? NEIGHBORHOOD

Written comments may be submitted by e-mail to; david.l.nagy@dot.ca.gov. Mail your written comments to; David Nagy, Caltrans, District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by August 14, 2015.

P-1: In accordance with 23 CFR 772 and the Traffic Noise Analysis Protocol a traffic noise impact requiring consideration of noise abatement occurs when the future predicted noise level with the project approaches and/or exceeds the Noise Abatement Criteria (NAC). The NAC for residential is 67 dBA and approach is 1 dBA less, so a traffic noise impact is predicted to occur at 66 dBA for residential outdoor areas of frequent human use. R155 does not have a soundwall because the existing noise level is 60 dBA and the future predicted noise level with the project is 61 dBA.

P-2: Record of Survey 3096 shows a monument set for the easterly side of the east-west line between parcel 499-500-35 and Caltrans property to the north. We have confirmed a 6 inch concrete CHC monument set for the corner on the west end of that line (MS Map 899).

P-3: Please refer to response G-2.

P-4: Regarding impacts to property at 8950 Mariposa Street, La Mesa, CA 9194; the current proposed project to build a connector for traffic traveling on southbound SR-125 and transitioning to eastbound SR-94 does not anticipate any acquisition impacts to the referenced property. There is in the 2050 Regional Transportation Plan (2050 RTP) a proposal to widen the SR-125 freeway from 8 lanes to 10 lanes plus 2 managed lanes (one on each side). You can find a copy of that plan on the SANDAG website at the following internet address. **http://www.sandag.org/** The document clearly states that "The 2050 RTP lays out a plan for investing an estimated $214 billion in local, state, and federal transportation funds expected to come into the region over the next 40 years."

SR-125 Connector Project SR-94

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 your written comments in the Comment Box.

Date: 7/25/15

Q1 Comment: I would like the wall on Bancroft Dr. (S796) to extend further south. Closer to R161. To ensure noise reduction in my area. Thank you

(Optional information, please print.)

Name Daniel Godinez

Organization

Address 9131 Gelondrina Dr. La Mesa CA. 91941

Phone 6148759635 e-mail Daniel03458@gmail.com

How did you hear about this meeting? Mail

Written comments may be submitted by e-mail to; david.l.nagy@dot.ca.gov. Mail your written comments to; David Nagy, Caltrans, District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by August 14, 2015.

P-4 CONT.: Due to this long range plan a widening of SR-125 could impact the referenced property but at this time it is not possible to determine what the impacts of this future project might be.

Q-1: In accordance with 23 CFR 772 and the Traffic Noise Analysis Protocol a traffic noise impact requiring consideration of noise abatement occurs when the future predicted noise level with the project approaches and/or exceeds the Noise Abatement Criteria (NAC). The NAC for residential is 67 dBA and approach is 1 dB less, so a traffic noise impact is predicted to occur at 66 dBA for residential outdoor areas of frequent human use. S796 provides feasible abatement for R165 to R175. S796 cannot be extended to provide abatement for R161 as it is does not have a traffic noise impact because the existing noise level is 56 dBA and the future predicted noise level with the project is 60 dBA.

To: Richard Nagy
Division of Environmental Analysis
California Department of Transportation
4050 Taylor Street, MS 242
San Diego CA, 92110

From: Rudy Labastida and Roberta Labastida
8907 Greenview Place
Spring Valley Ca,A, 91977

RE: SR-94/SR-125 Interchange Project

Questions of our concerns:

R-1 1. We understand no houses are to be taken from our street, Greenview Place. Is this true?
R-2 2. How high is wall in front of property R16?
R-3 3. Can we have a glass wall so our 180 degree East view isn't taken?
R-4 4. Will the value of our property drop because of freeway and lack of view?
R-5 5. Will you reimburse us for the devaluation that will occur when the construction of freeway is done?
R-6 6. We understand there is no funding for the project. Is there funding for the project?
R-7 7. The sound decimals don't change very much with or without a wall. When and how do you make the sound report?

Current value of our home: March 2015, SD Union, $382,000-$400,000.

R-1: Please refer to Section 2.4 RELOCATIONS AND REAL PROPERTY ACQUISITION for information on what properties are listed as Right of Way acquisitions. 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. No property takes are anticipated on Greenview Place. 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.

R-2: The property located at 8907 Greenview Place is represented by receptor R16. Sound wall S610 was found to be not reasonable to construct in the Noise Abatement Decision Report.

R-3: Please refer to response R-2.

R-4: Please refer to response G-2.

R-5: Please refer to response G-2.

R-6: The proposed project including funding per fiscal year is included in the SANDAG 2050 Regional Transportation Plan (RTP) and in the 2014 Regional Transportation Improvement Program (RTIP)/2015 Federal Statewide Transportation Improvement Program (FSTIP). The 2050 RTP was adopted on October 28, 2011. The 2014 RTIP/2015 FSTIP received federal approval on December 15, 2014. Project Traffic Congestion Relief Program (TCRP) funding of $52.7M is programmed but not allocated.

SR-125 Connector Project SR-94

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 your written comments in the Comment Box.

Date: _____

Comment:

Project Features MAP #3

Shows "Nereis Drive" off of Campo Road just past SPRING ST. Should be before Bancroft Rd.

S-1 This is wrong. It should read KENWOOD DRIVE.

3 people were trying to find Kenwood and I told them the map was in error.

Kenwood Drive is a U-shaped street that intersects Campo Rd twice.

I was disappointed to find out that the 4 homes on Campo Rd by the 125 on-ramp were staying. Years ago they were scheduled to be included in the right-of-way, but obviously, plans changed.

S-2 Even an owner of one of the properties was hoping his home would be taken.

To bad, since they are not well-kept and are eyesores.

(Optional information, please print.)

Name _____

Organization _____

Address _____

Phone _____ e-mail _____

How did you hear about this meeting? Newspaper

Written comments may be submitted by e-mail to; david.l.nagy@dot.ca.gov. Mail your written comments to; David Nagy, Caltrans, District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by August 14, 2015.

R-6 CONT.: The TCRP Amendment Application signed by both Caltrans and SANDAG in March 2007 explained that PS&E development (the Design Phase) would begin after completion of the PAED phase (Project Approval /Environmental Document). It was the Department's intent to propose a new TCRP application to both update the schedule and allocate the TCRP funds programmed for the PS&E phase from the TCRP Tier II account for the project. The Tier II account has sufficient funding for the next two phases of the project.

R-7: Please refer to response B-4.

S-1: Project Features Map #3 does mislabel Kenwood Dr. for Nereis Dr. The map has been updated to reflect this change.

S-2: Please refer to Section 2.4 RELOCATIONS AND REAL PROPERTY ACQUISITION for information on what properties are listed as Right of Way acquisitions. 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.

SR-125 Connector Project SR-94

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 your written comments in the Comment Box.

Date: 7-28-15

T-1 Comment: WE ARE VERY CONCERNED ABOUT THE QUALITY OF LIFE WE WILL HAVE WITH THE ADDED NOISE LEVEL. THE SOUND WALL WILL ONLY BE GOOD FOR OUR BACKYARDS. OUR LIVING SPACE IS A LEVEL ABOVE THE WALL, WHICH WILL DO TOO GOOD FOR ALL OF OUR LIVING SPACE. 80% OF THE WINDOWS IN OUR HOME FACE THE FREEWAY AND THE NOISE LEVEL WILL BE GREATLY ELEVATED.

T-2 ANOTHER ISSUE WE HAVE IS THE DEVALUATION OF OUR HOME. WE'VE WORKED HARD TO BUY OUR HOME AND TO INCREASE IN VALUE ONLY TO HAVE IT DEVALUATED BY THE INCREASE IN TRAFFIC FLOW ON THE FREEWAY AND THE ADDITIONAL NOISE FACTOR. ALL THE EQUITY WE HAVE BUILT WILL BE GREATLY AFFECTED AS WELL AS OUR QUALITY OF LIFE. WE STRONGLY FEEL THAT WE SHOULD BE COMPENSATED FOR THIS DEVALUATION AND INCREASE TO NOISE LEVEL IN OUR LIVING AREA AND QUALITY OF LIFE. WE HAVE WORKED HARD FOR OUR HOME AND WILL CONTINUE TO PRESERVE FOR WHAT WE FEEL IS RIGHT! JUST!

(Optional information, please print.)

Name DENNISE & MARC BETTS

Organization

Address 8858 GREENVIEW PL SPRING VALLEY, CA 91977

Phone (619) 602 3192 *e-mail* ddbetts@cox.net

How did you hear about this meeting? NOTICE FROM LETTER THAT I MAILED IN

Written comments may be submitted by e-mail to; david.l.nagy@dot.ca.gov. Mail your written comments to; David Nagy, Caltrans, District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by August 14, 2015.

T-1: R13 represents 8858 Greenview Place, Existing noise is 71 dBA and future is 77 dBA. S610 was found to not be cost reasonable.

T-2: Please refer to response G-2. Implementation of the proposed project would direct traffic through the interchange without diverting a portion of the traffic onto surface streets. The decrease in automobile queuing, reduction in noise from braking and accelerating, and improvements to air quality would prove beneficial to the community.

SR-125 Connector Project SR-94

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 your written comments in the Comment Box.

Date: 7/28/15

Comment:

4284 PANORAMA –

U-1 We Are THINKING OF SELLING OUR home. IF The proposed freeway HAS A NEGATIVE effect ON Price AND OF LACK of INTEREST IN purchase we will THEN HAVE other (LEGAL) ACTION to review.

P.S. BIOLOGY – TRAFFIC –

REAL ESTATE Rep ???

(Optional information, please print.)

Name ROSEMARY RUMMER

Organization

Address 4284 PANORAMA Dr. LA MESA –

Phone 619 251-7534 e-mail

How did you hear about this meeting?

Written comments may be submitted by e-mail to; david.l.nagy@dot.ca.gov. Mail your written comments to; David Nagy, Caltrans, District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by August 14, 2015.

U-1: Please refer to response G-2.

SR-125 Connector Project SR-94

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 your written comments in the Comment Box.

Date: 7/28/15

V-1 Comment: There is AN ERROR IN the Parcel Number on The MAP. Our Property parcel # APN 499-491-3800 is Shown AS parcel # R139 on the MAP should be identified as R138.

(Optional information, please print)

Name Michael Parker

Organization

Address 4285 Panorama Dr. La Mesa, Ca 91941

Phone 619 985 7275 e-mail mdpmcrider@yahoo.com

How did you hear about this meeting? Received in MAIL from Caltrans

Written comments may be submitted by e-mail to; david.l.nagy@dot.ca.gov. Mail your written comments to; David Nagy, Caltrans, District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by August 14, 2015.

V-1: Please refer to response A-1.

SR-125 Connector Project SR-94

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 your written comments in the Comment Box.

Date: July 28, 2015

W-1 Comment: THIS PROJECT IS LONG OVER DUE. THE CONNECTOR WILL SAVE TIME AND DECREASE VEHICLE EMISSIONS IN THE PROJECT AREA. TRAFFIC CONGESTION WILL BE REDUCED. THE SOONER THIS PROJECT IS COMPLETED, THE BETTER OFF ALL OF US WILL BE

(Optional information, please print.)

Name BRUCE BERLAN

Organization PRIVATE CITIZEN

Address 6444 CASSELBERRY WAY SAN DIEGO

Phone _____ *e-mail* _____

How did you hear about this meeting? NEWSPAPER NOTICE (SAN DIEGO UT)

Written comments may be submitted by e-mail to; david.l.nagy@dot.ca.gov. Mail your written comments to; David Nagy, Caltrans, District 11, 4050 Taylor Street, MS 242, San Diego, CA 92110. Please submit your comments by August 14, 2015.

W-1: Thank you for your comment and expressing your support for this project.

From: Nagy Jr, David@DOT
To: Simpson, Russell K@DOT
Subject: FW: Comments regarding proposed 94/125 interchange
Date: Friday, August 14, 2015 2:33:20 PM

please send him an email confirming receipt of his comment.

From: Ed Swauger (760)497-3664 [mailto:edswauger@gmail.com]
Sent: Friday, August 14, 2015 2:31 PM
To: Nagy Jr, David@DOT
Cc: Bob Arsanjani
Subject: Comments regarding proposed 94/125 interchange

Mr. Nagy, PLEASE CONFIRM RECEIPT

Re: Proposed 94/125 Interchange Project

I'm forwarding the comments below from my clients Efran and Bob Arsanjani, who own the apartment building at 3917 Spring Pl (adjacent to the East bound
94
Bancroft exit) and
who
are out the the country:

We are opposed to the plan as we understand it for the following reasons:

X-1 • Simply put, it significantly devalues our property because it brings the freeway and it's noise closer to our property.

X-2 • The proposed sound barrier wall does not protect our property or our tenants from the noise pollution of a freeway that would be very close to our tenant's living rooms, clearly reducing the quality of life for our tenants and therefore our rents and property value.

X-3 As property owners and investors in the San Diego community, we expect our public officials to make decisions that will not materially harm our investments. The apartment building we own at 3917 Spring Pl. represents our life's work, savings and retirement funds. We ask that you reevaluate your plan so that our and our neighbor's property values are not significantly lowered.

Ed Swauger
for Efran and Bob Arsanjani

Professionally helping our clients buy, sell and manage residential real estate.
Ed Swauger
Broker Associate
Carrington Real Estate Services (CA), Inc.

X-1: Please refer to response G-2.

X-2: In accordance with 23 CFR 772 and the Traffic Noise Analysis Protocol a traffic noise impact occurs when the future predicted noise level approaches/exceeds the Noise Abatement Criteria. (NAC) For residential land use the NAC is 67 dBA and approach is defined as 66 dBA. R25, R26 and R27 existing noise levels are 64, 64 and 63 dBA respectively. Future noise levels are 64, 62 and 65 dBA. There is no identified traffic noise impact and therefore no consideration of noise abatement. S610 located adjacent to R25, R26 and R27 is not recommended to be constructed, therefore there is no wall to extend to Bancroft Drive.

X-3: Please refer to response G-2.

Top Producer 2011, 2012, 2013 & 2014
Francis Taylor Property Management

Office: 760-466-1582
Cell: 760-497-3664
Fax: 760-239-6125
Cal BRE# 01376073

We are truly honored that you are willing to refer us to your friends and family.
Go to edswaugertestimonials.com to learn what our clients have to say.

From: Nagy Jr, David@DOT
To: Simpson, Russell K@DOT
Subject: FW: 94/125 Project. Comments Submission - Jose Duenas.
Date: Tuesday, August 11, 2015 9:52:57 AM

-----Original Message-----
From: karla duenas [mailtockdskin@gmail.com]
Sent: Tuesday, August 04, 2015 8:24 PM
To: Nagy Jr, David@DOT
Subject: 94/125 Project. Comments Submission - Jose Duenas.

>> Dear Mr. Nagy,
>>
>> My name is Jose Duenas, property and complex owner at 3920 Spring Drive, 91977. I am writing in regards to the State Route 94/125 Interchange Project.
>>
Y-1 >> In short, It has been brought to my attention that the freeway will now be 20' closer to our 6-unit complex and "No" sound wall will be installed. It appears that the sound wall runs down nearly the entire south side of the 94 and stops short of our property at the Bancroft exit.
>>
Y-2 >> As far as I'm concerned this seems unacceptable as we will be greatly impacted by the sound of the new development. We have also experienced car accidents within close proximity to the property fence line. Bringing the freeway closer will only increase the risk to our property and families here. We have owned this property for over 40 years and would like to maintain and preserve what peace we do have here. If for any reason what I have
Y-3 written is incorrect as far as your project plans go please feel free to get me fully updated with the correct information. If what I've written is correct I would like to see a written explanation as to why the sound wall fails to meet the backside of our property as well as our immediate neighbors. I am available to meet anytime. I look forward to hearing from you.
>>
>> Sincerely,
>>
>> Jose Duenas
>> Cell: 619-916-8937
>> Home: 619-465-4010
>

Y-1: Please refer to response G-3.

Y-2: Please refer to response G-3.

Y-3: In accordance with 23 CFR 772 and the Traffic Noise Analysis Protocol a traffic noise impact occurs when the future predicted noise level approaches/exceeds the Noise Abatement Criteria (NAC). For residential land use the NAC is 67 dBA and approach is defined as 66 dBA. R25, R26 and R27 existing noise levels are 64, 64 and 63 dBA respectively. Future noise levels are 64, 62 and 65 dBA. There is no identified traffic noise impact and therefore no consideration of noise abatement. S610 located adjacent to R25, R26 and R27 is not recommended to be constructed, therefore there is no wall to extend to Bancroft Drive.

State Route 94/SR-125 Interchange Initial Study with Proposed Mitigated Negative Declaration/
Environmental Assessment with Finding of No Significant Impact

Hana Merk Comments limited scope against Echo Drive La Mesa roadway realignment located west of SR-125 and auxiliary lane connector on Echo Dr. 88 foot long by 44 foot wide bridge structure on Echo Drive over the connector.

For David.l.nagy@dot.ca.gov

8740 Echo Dr. / Panorama La Mesa
historical Background significance

The residents enjoy their constitutional unalienable rights of pursuit of happiness: enjoy the country look in a urban city has been the target for eminent domain and freeway expansions because of low population density.

Z-1 The area has underground water, old chicken coup barn of over 75 years old, frequented by a red fox and uniquely isolated from the street level and neighbors.

Z-1: While the area near Echo Drive and Panorama Road may provide limited wildlife value, it is composed mainly of nonnative vegetation and disturbed habitat with nonnative grasses. This area is surrounded entirely with urban development, lacks connectivity with conserved lands, and provides very poor foraging habitat for animal species due to its developed nature and low prey base. The California Department of Fish and Wildlife considers the red fox as a species that does not occur naturally in California, a threat to native wildlife, and can pose serious management dilemmas (http://www.dfg.ca.gov/wildlife/nongame/nuis_exo/red_fox/). It is not unusual to observe these adaptive and opportunistic predators in urban areas, along with skunks, opossums, and raccoons.

General Comments/ Invalid Need to relief congestion in La Mesa

Z-2 The need for the project is not totally valid. A freeway-to-freeway connector to allow direct SR- 125 south to SR-94 east Traffic to ease congestion in La Mesa. SB125/Spring street off ramp is not in the city limits of la Mesa and hard to argue is a major cause for Spring Street backups. The claim can not be validated because Spring street is a major artery/connection between I-8 and West/East 94 and I-125.

Z-3 Spring Street lights are not well synchronized which is a major reason for backups. Adding new apartment complexes on Palm Street 4330-4350 la Mesa eliminated Palm Street as an alternative to avoid Spring Street congestion because Palm and Spring run parallel for a while.

Z-2: A Traffic Analysis Report was completed for the proposed project. The report states that the traffic numbers of the Existing Year 2011 (ADT 20,550), the Opening Year 2020 (ADT 6,000), and the Design Year 2040 (ADT 7,100) for this off-ramp, and the operational analysis of its end intersection. The report states: "The addition of the direct connector from SB SR-125 to EB SR-94 is expected to provide the missing freeway-to-freeway connection, improve the operations of local streets and arterials, and provide transportation improvements consistent with the adopted 2050 Regional Transportation Plan (RTP)." A significant portion of the traffic on the southbound SR-125 off-ramp to Spring St. will be using the new southbound to eastbound freeway-to-freeway connector. Traffic from the southbound off-ramp that would otherwise have used Spring St. will be significantly reduced by the project.

Z-3: The City of La Mesa can address any local street signalization issues. The purpose of the Caltrans connector project is to lessen congestion due to a large number of freeway trips using local roads (Spring Street and Campo Road), travelling from the southbound State Route 125 to the eastbound State Route 94.

Z-4 Need is not justifiable: Worst case PM traffic at the metered light show Peak numbers Show reasonable means for PM SB125/Spring St 1570 for all traffic going to Spring St. and EB 94 1530 bottom rt. figure 5B ,2 of 4 .

Z-4: Standard industry practices and the Caltrans Guide for the preparation of Traffic Impact Studies require the use of peak hours instead of “reasonable means” to study traffic impacts.

General comments on the project and document

Z-5 • The citizens are better served by adding more lanes to I-125 at the split of 94 East. Major backups and delays occur once 4 lanes merge into 2 lane highway.

Z-6 • Substantial saving occurs if a freeway-to-freeway connection is done to the left although non-traditional and half way between Lemon and Echo on Bancroft/ or a connector parallel to Panorama.

Z-7 • Although Caltrans claimed coordination with the public, it is not evident in my neighborhood. No information was disclosed from either the City of La Mesa or Caltrans officials.

Z-5: Although there may be other traffic needs, Caltrans and SANDAG have proposed the connector project to address the missing moves. The connector project is only one of the potential future projects to relieve traffic congestion in this vicinity. Also refer to comment P-4.

Z-6: The project development team analyzed several alternatives. One of the alternatives did propose that the freeway-to-freeway connector join eastbound SR-94 on the left side. During the analysis process this alternative was eliminated due to the non-standard left-side entrance, a higher construction cost, potential visual impacts, and potential noise impacts. The project development team did not identify any alternatives in which the connection is done either halfway between Lemon Ave. and Echo Dr.; on Bancroft Dr.; or parallel to Panorama Dr. which would result in cost savings.

Z-7: During the Project Approval/Environmental Document Phase, the Project Manager and some task managers have met with the following groups on a monthly; quarterly; or semi- annual basis. The meetings were either held at the District 11 Caltrans offices, or the County Supervisor's offices.

1. Grossmont – Mt. Helix Improvement Association
2. County of San Diego Engineering Department
3. City of La Mesa Engineering Department
4. County of San Diego Supervisor for District 2 – Dianne Jacob and Staff.

Z-7 CONT.: In addition to these meetings, a meeting was held on August 6, 2014, Caltrans staff, led by Project Manager, held a meeting on Wednesday, August 6th, 2014 at the City of La Mesa to update community leaders on the project schedule and milestones, and to answer attendee's questions about the project. The meeting was held in the City of La Mesa Police Department community room, located adjacent to La Mesa City Hall. Meeting invitees included community leaders from the City of La Mesa, County of San Diego, La Mesa Planning Commission, La Mesa Traffic Commission, local community planning groups and chambers of commerce, and emergency responders including local police and fire departments. Among the attendees were two members of the La Mesa Planning Commission, one member of the La Mesa Traffic Commission, four City of La Mesa staff, SANDAG, two local emergency responders, and a representative of Supervisor Dianne Jacob. The meeting format included a PowerPoint presentation, followed by a question and answer period. The presentation featured information about the history of the project, project goals, the project traffic study, project design, project milestones, and the project schedule moving forward. During the question and answer period, questions were answered by Caltrans staff representing different project disciplines.

Opposition to Echo Dr. Bridge

Z-8

Echo Dr. is the bottom of the hill where water collects into a major storm drain. Natural water flows should not be obstructed. In the eighties few houses were built which altered the water flow at R131 and R132 Figure 3-B of FONSI document.

It is not necessary to add a lane that practically jumps off the freeway

Z-9

The noise measurements, table 22 are not realistic for 8740 Echo Dr. and justification and projected noise can not be validated.

Elevating the street and bringing an auxiliary 2-lane freeway increased significantly noise level destroys the surrounding, value and quality of life.

No concern how residents live and use of properties, and travel patterns.

Z-10

The proposed 8740 driveway relocation destroys the character of the property and destroys the established trees and prevents access to the back of the property and destroyed half of parking spaces and trailers parking spaces.

The proposed bridge brings up the street to the house level is not a good option. A big truck on I-125 freeway rattles the house currently.

It will destroy 8740 property value and surrounding properties. The drive way at the edge maximize the parking spots and isolate incoming traffic from the house and has access to the back half of the property which has the potential to split to many parcels

Z-8: During the next phase of the project, existing drainage patterns will be analyzed in more detail and the drainage for the state and local facilities will be designed in accordance with state and local standards. Any lanes which exit the freeway will be designed according to state geometric standards. If state standards cannot be met, any deviations from the standards will be analyzed for reasonability and, if found reasonable, the deviations will be documented and mitigated.

Z-9: Comment Z-9 concerns the property represented by receiver R130. This property is located at 8740 Echo Drive, La Mesa. Forecasts for this property indicate that it is not expected to be impacted by noise because of the project. The existing noise levels at R130 and R130A are 59 dBA and 65 dBA respectively. The future predicted noise level with project is 63 dBA at R130 and 70 dBA at R130A. R130 represents the frequent human use area of the property at 8740 Echo Drive. Since this area is in the backyard and is shielded by the home, it has a lower noise impact than receiver R130A. Receiver R130A is a model calibration point and does not represent the property. Since this property is not impacted by noise, no sound wall was considered.

8740 Echo Dr. La Mesa

Z-9 CONT.: R130A/ST10 in relation to 8740 Echo Drive. Note that it is not directly in the backyard of this property. Instead, it is on the east side of the property, therefore not shielded by the home, and exposed directly to the traffic noise. Receiver R130 was not measured in the field. Instead, this point was modeled within TNM and estimated from the No-Build noise levels and measurement sites nearby. The location of this point was selected to represent the frequent human use area of 8740 Echo Drive that was determined to be the backyard of the home.

Z-10: The bridge will not substantially change the roadway profile. Property impacts will be appraised at fair market value according to the Uniform Relocation Assistance and Real Property Acquisition Policies Acts and The Uniform Standards of Professional Appraisal Practice (USPAP). This includes access, landscaping, parking, and potential uses of the parcel. Access to properties will be considered in the project design. Parking impacts will be considered during the appraisal process. Current preliminary design does not change legal access to the property.

Table 22: Noise Impact Analysis Summary PG 141

Z-11

- It appears the numbers are interpolated.
- R130 noise measurements were not taken as many residents say no one collected any data in their properties
- Some projected noise levels went down with adding extra lanes. This is not possible with more cars, example R146
- The criteria for sound barriers feasibility is random, no basis.

Z-11: Comment Z-11 concerns the property represented by receiver R130. This property is located at 8740 Echo Drive, La Mesa. Forecasts for this property indicate that it is not expected to be impacted by noise because of the project. The existing noise levels at R130 and R130A are 59 dBA and 65 dBA respectively. The future predicted noise level with project is 63 dBA at R130 and 70 dBA at R130A. R130 represents the frequent human use area of the property at 8740 Echo Drive. Since this area is in the backyard and is shielded by the home, it has a lower noise impact than receiver R130A. Receiver R130A is a model calibration point and does not represent the property. Since this property is not impacted by noise, no sound wall was considered.

R130A/ST10 in relation to 8740 Echo Drive. Note that it is not directly in the backyard of this property. Instead, it is on the east side of the property, therefore not shielded by the home, and exposed directly to the traffic noise. Receiver R130 was not measured in the field. Instead, this point was modeled within TNM and estimated from the No-Build noise levels and measurement sites nearby. The location of this point was selected to represent the frequent human use area of 8740 Echo Drive that was determined to be the backyard of the home.

Potential disruption of daily lives at Echo Dr. and Panorama Drive. La Mesa

Z-12 Massive building of two bridges and realignment will cause major problems to travel patterns and daily lives for residents at Echo Dr. and Panorama. The Figure3b-3c composite figure illustrates the magnitude of effort involved and the problems that it will face once the high water levels in the area create engineering challenges.

Z-13

Z-12: Construction will be conducted in phases to minimize impacts. Other minimization measures will include a Traffic Management Plan that includes:

- Public Information/Public Awareness Campaign
- Motorist Information Strategies
- Incident Management
- Construction TMP Strategies
- Stakeholder Coordination
- Contractor and Caltrans Emergency Contingency Plan
- Coordination with Emergency Services

Z-13: The state and local facilities will be designed to drain properly. During the contract preparation phase of the project, the detailed drainage design will be completed. This will include plans for a drainage system, which may include features such as storm drain inlets and culverts, to ensure that storm water is adequately collected and discharged so as not to cause flooding.

Z-14: While the project will result in an expansion of the highway facility, the anticipated change to the character of the project area will not be considered 'significant' or 'substantial'.

CEQA Environmental Checklist at 8740 Echo Dr.

Z-14

I. AESTHETICS: Significant Impact on all 4
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?

Z-14 CONT.:

a) A designated State Scenic Highway is identified along the SR-125 within the project boundaries. While the project includes sound walls, a large portion of the proposed project (SR-94/SR-125 interchange) will occur below the existing highway topography. As identified in early studies, the sound walls are necessary to address the anticipated increase in noise attributed to the increase in traffic volume. There are four (4) walls of concern with potential to effect the existing scenic view. Two (2) walls are located on the northbound lanes of the SR-125 and two (2) walls located on the westbound lanes of SR-94. Within the approved Noise Study Report, three (3) of the walls were determined to be 'not reasonable' due to construction cost and will not be constructed. The remaining wall is located on the SR-125 with a lower exposure (view duration) of the identified scenic asset. As a result, consistent with the analysis presented in the approved Visual Impact Assessment, the project will have no effect on the existing scenic vista.

b) As stated in response (a), there is an identified scenic vista along SR-125. With minor exceptions, the project will occur within the existing Caltrans highway right-of-way. Currently, within the right-of-way there are no scenic resources (trees, rock outcroppings, historic buildings) identified within the project boundaries. Therefore, no significant impact will occur to scenic resources.

CEQA Environmental Checklist at 8740 Echo Dr.

Z-15

AIR QUALITY: Significant Impact on all 4.

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?

Z-14 CONT.:

c) The existing visual character and visual quality are influenced by the existence of the State highway facility. The proposed project will include similar features consistent with existing facility. As a result, consistent with the analysis presented in the approved Visual Impact Assessment, and summarized in the Environmental Document, the project will have no effect on the existing visual character and visual quality of the surroundings.

d) While the project will include additional retaining walls and other structures, none of the features will cause a substantial increase in light or glare affecting day, or nighttime views, in the area. At this time, there are no additional light source determined necessary for project approval.

Z-15: Refer to Section 2.13 AIR QUALITY. The proposed project does not conflict with or obstruct implementation of the applicable air quality plan. It does not violate any Air Quality standard or contribute substantially to an existing or projected Air Quality violation. The project is included in the current 2050 Regional Transportation Plan and 2014 Regional Transportation Improvement Program.

CEQA Environmental Checklist at 8740 Echo Dr.

Z-16

HYDROLOGY AND WATER QUALITY: Significantly Impact

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

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?

Z-16: During the contract preparation phase of the project, a detailed drainage design will be completed. This will include plans for a drainage system, which may include features such as storm drain inlets and culverts to ensure that storm water is adequately collected and discharged in order to prevent flooding.

CEQA Environmental Checklist at 8740 Echo Dr.

Z-16 CONT.

HYDROLOGY AND WATER QUALITY: Significantly Impact

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

d) Substantially alter the existing drainage pattern of the site or Area which would result in flooding on- or off-site? See next slide

Z-16 CONT.: During the contract preparation phase of the project, a detailed drainage design will be completed. This will include plans for a drainage system, which may include features such as storm drain inlets and culverts to ensure that storm water is adequately collected and discharged in order to prevent flooding.

Z-17 Proposed Echo Dr. realignment and new I-125 lane is at the bottom of hill which always flooded at 8760 Echo dr. after rain

Exiting bottom of hill storm drain at 8760 Echo Dr

Proposed figure 3-B fill area and location of I-125 extra lane

Z-17: Please refer to Comment Z-16.

CEQA Environmental Checklist at 8740 Echo Dr.

Z-18

XII. NOISE: Significant Impact on b,c,d

b) Exposure of persons to or generation of excessive ground borne vibration or ground borne 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?

Z-18: There is no impact at receiver R130 because the predicted design year noise level is 63 dBA (4 dBA increase over existing noise level of 59 dBA). Noise level to increase by 4 dBA, which is perceptible but not substantial. The noise abatement criteria for impact at residences is 66 dBA or higher.

CEQA Environmental Checklist at 8740 Echo Dr.

Z-19 XVIII. MANDATORY FINDINGS OF SIGNIFICANCE: Significant Impact on b. The area is unique, ranch setting has red fox and other frequenting wild animals.

Z-20 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)?

Z-19: See Comment Z-1

Z-20: Cumulative impacts are discussed under each type of impact in the CUMULATIVE IMPACTS SECTION.

Conclusion

Z-21 Recommend against building the connector and bridge at Echo Dr. and Panorama. The citizens are better served with adding more lanes to the NB I-125 at the 94 split which have tremendous freeway backups most of the time.

Z-22 The NB-125/EB94 missing freeway-to-freeway connector is a minor inconvenience. Caltrans should reexamine the left hand side alternatives that were eliminated from the study. The study downplayed the length and effect of construction on the neighborhood.

Z-23 The proposed auxiliary lanes would further depreciate property values at Echo Dr. and Panorama dr. since Caltrans right-of-the-way 40 years rental acquisitions. Residents have been living in limbo after each property demolition. The I-125 auxiliary lanes are proposed would Increase noise levels, reduced air quality and destroy the aesthetics of the area which is a unique country look in an urban area.

Z-21: The portion of southbound SR-125 (between Lemon Avenue on ramp and the Spring Street off ramp) carries approximately 83,400 vehicles per day with an average of 20,550 vehicles per day exiting at the Spring Street off ramp. The proposed new freeway-to-freeway connector would eliminate the need for southbound SR-125 traffic to use Spring Street to connect to eastbound SR-94 and reduce delays for the freeway and local street network. The proposed project is expected to reduce the volume of traffic exiting from southbound SR-125 at Spring Street by more than 15,000 vehicles per day. This project is estimated to cost approximately $65 million. There is in the 2050 Regional Transportation Plan (2050 RTP) a proposal to widen the SR125 freeway from 8 lanes to 10 lanes plus 2 managed lanes (one on each side). That project is estimated to cost approximately $285 million. You can find a copy of that plan on the SANDAG website at the following internet address. The text of that document explains that “The 2050 RTP lays out a plan for investing an estimated $214 billion in local, state, and federal transportation funds expected to come into the region over the next 40 years.”

Z-22: It should be noted that the proposed project is Southbound (SB) SR-125 to Eastbound SR-94 freeway-to-freeway connector. The portion of southbound SR-125 (between Lemon Avenue on ramp and the Spring Street off ramp) carries approximately 83,400 vehicles per day with an average of 20,550 vehicles per day exiting at the Spring Street off ramp. The proposed new freeway-to-freeway connector would eliminate the need for southbound SR-125 traffic to use Spring Street to connect to eastbound SR-94 and reduce delays for the freeway and local street network. The proposed project is expected to reduce the volume of traffic exiting from southbound SR-125 at Spring Street by more than 15,000 vehicles per day.

Extensive engineering analysis was conducted a part of a 2008 Value Analysis study that also had a traffic analysis component. It was determined that based on the amount of available funding the connector project would return the most congestion relief benefits for the amount of investment ($65 Million).

This is a matter of what amount of investment will take care of what priority needs and at what particular time. There is in the 2050 Regional Transportation Plan (2050 RTP) a proposal to widen the SR125 freeway from 8 lanes to 10 lanes plus 2 managed lanes (one on each side). That project is estimated to cost approximately $285 million. You can find a copy of that plan on the SANDAG website at the following internet address. The text of that document explains that “The 2050 RTP lays out a plan for investing an estimated $214 billion in local, state, and federal transportation funds expected to come into the region over the next 40 years.”

With regards to the construction impacts and inconvenience Caltrans has a Transportation Management Plan that specifically addresses some such as expected detours and road closures. Alternate routes have been identified for the closures of Echo Drive, Panorama Drive, and Mariposa Street for bridge construction. To ensure minimum impacts to road users each of these will be constructed during a separate phase of the project. During the full weekend closure of SR-125 highway travelers will be notified of the closure through the public awareness campaign. It will also inform them of recommended alternate routes to SR-125. During construction at least one ramp at Bancroft will be closed for a period of time and detours will be in communicated to the public during all long term ramp and road closures.

Bike route detours will be developed and implemented when bicycle traffic cannot be accommodated through the construction zone. Pedestrian detours will be implemented to divert pedestrian traffic around the construction zone. Detailed Detour plans will be developed during the next phase of the project and be made available to La Mesa City staff for input before they are finalized.

Z-23: Please refer to Comment G-2 regarding property values. Response to reduced air quality: Air Quality impacts were assessed and reported in Section 2.13 AIR QUALITY. The project meets Transportation Conformity as it is included in the 2050 Regional Transportation Plan and 2014 Regional Transportation Improvement Program.

As required by the CO Protocol, a detailed CO Concentration Analysis was conducted for the intersections of westbound SR-94 ramps at Kenwood Dr., eastbound SR-94 ramps at Kenwood Dr., and westbound SR-94 Ramps at Spring St. for the year 2040 for the Build Alternative and the No Build Alternative. CO impacts were modeled under worst-case wind angle conditions at 3 meters from the roadway edge as public sidewalks occur along all existing roadways, and concentrations at these locations would represent the greatest concentrations of CO due to limited dispersion area. Based on meteorological data and traffic volumes, the CO analysis indicated that the proposed project future traffic conditions would cause CO concentrations to decrease or remain the same. Westbound SR-94 ramps at Kenwood Drive experience no change in CO concentration levels from No Build to Build as well as the eastbound SR-94 ramps at Kenwood Drive. Furthermore, that a transportation project meets Clean Air Act (CAA) conformity requirements to support state and local air quality goals with respect to potential localized air quality impacts.

When a hot spot analysis is required, it is included within the project-level conformity determination that is made by the FHWA or FTA.

Response to increase in noise level: Traffic noise impacts were addressed in Section 2.14 of the Draft Environmental Document. Noise levels were predicted to increase 1-8 dBA. Where traffic noise impacts were predicted, noise abatement was considered. The summary of the recommended noise abatement can be found in Section 2.14 of the Draft Environmental Document.

The existing visual character and visual quality are influenced by the existence of the State highway facility. The proposed project will include similar features consistent with existing facility. As a result, consistent with the analysis presented in the approved Visual Impact Assessment, and summarized in the Environmental Document, the project will have no effect on the existing visual character and visual quality of the surroundings.

Chapter 4 – List of Preparers

The following Caltrans staff and consultants contributed to the preparation of this IS/EA.

Claudia Barron, Graphic Designer; Bachelor of Fine Arts, Illustration, Syracuse University; 24 years of Caltrans experience

Brent Berge, Transportation Engineer (Civil); B.S. Environmental Engineering, University of Wisconsin; 8 years of Caltrans Experience

Michael Galloway, Associate Environmental Planner (Natural Sciences); B.A. Biology, University of Kansas; M.A. Marine Biology, San Francisco State University; 13 years of Caltrans experience

Joel Kloth, Engineering Geologist; B.S. Geology, California Lutheran University, Thousand Oaks; 15 years of Caltrans experience

Pauline Lamphere, Environmental Planner (Natural Sciences); MWR Water Resources, BS Biology, BBA Accounting, AS general sciences, University of New Mexico; 7 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

Tim Mann, LA 4143, Associate Landscape Architect; B.S. Accounting Theory and Practice, California State University, Northridge; Professional Certificate, Landscape Architecture, University of California, Irvine; 8 years of Caltrans experience

David Nagy, Environmental Branch Chief, Senior Environmental Planner; B.S. Forestry and Natural Resources Management, California Polytechnic State University San Luis Obispo, 15 years Caltrans experience

Russell Simpson, Environmental Planner; B.A. Environmental Studies, Sonoma State University; 6 years of Caltrans experience

Paul Swearingen, Transportation Engineer (Civil), PE; B.S. Civil Engineering, San Diego State University; 8 years of Caltrans Experience

Koji Tsunoda, Associate Environmental Planner; M.A. Anthropology, San Diego State University; B.A. International Studies, Bunkyo University, Japan; A.A. Archaeology, Palomar College, San Marcos, CA; 5 years of Caltrans experience

Consultants

David Atwater, Senior Environmental Planner; B.S. Urban and Regional Planning, California Polytechnic State University, Pomona; 6 years of Caltrans experience

Philip Brand, CA RCE 75694, QSD/QSP, Transportation Engineer; B.S. Civil Engineering, San Diego State University; 3 years of Caltrans experience (9 years civil engineering experience)

Glenn Burks, PE ch5975, Director of Environmental Services; B.S. Chemical Engineering, University of California, San Diego; Ph.D. Environmental Engineering, University of California, Los Angeles; 3 years of Caltrans experience

Bethany Dawa, CA RCE 68721, Surface Transportation Group Leader; B.S. Civil Engineering, Purdue University; 4 years of Caltrans experience (17 years of civil engineering experience)

Joseph Esposito, LLA 3591, Senior Landscape Architect; B.S. Landscape Architecture, University of Texas at Arlington, 1989

Deborah McLean, Principal/Archaeologist, M.A. Anthropology with Emphasis in Archaeology, California State University, Fullerton; Register of Professional Archaeologists (RPA # 12249), 21 years of Caltrans experience

Sarah Rieboldt, Ph.D., Senior Paleontological Resources Manager; B.A. Biology, University of Colorado, Boulder; Ph.D. Paleontology, University of California, Berkeley; 2 years of Caltrans experience

Casey Tibbet, Architectural Historian; M.A. History/Historic Preservation, University of California, Riverside; 10 years of Caltrans experience.

Chapter 5 – Distribution List

Federal, State and Local Elected Officials

The Honorable Mary Teresa Sessom Mayor, City of Lemon Grove 3232 Main Street Lemon Grove, CA 91945	The Honorable Shirley Weber Assembly Member, State Assembly-79th District 1350 Front Street Suite 6046 San Diego, CA 92101	The Honorable Mark Arapostathis Mayor, City of La Mesa 8130 Allison Ave. La Mesa, CA 91942
The Honorable Racquel Vasquez Mayor Pro Tem, City of Lemon Grove 3232 Main Street Lemon Grove, CA 91945	The Honorable Joel Anderson Senator, State Senate-38th District 1870 Cordell Ct. Suite 107 El Cajon, CA 92020	The Honorable Ruth Sterling Vice Mayor, City of La Mesa 8130 Allison Ave. La Mesa, CA 91942
The Honorable George Gastil Councilmember, City of Lemon Grove 3232 Main Street Lemon Grove, CA 91945	The Honorable Susan Davis Congresswoman United States Congress – 53rd District 2700 Adams Ave. Suite 102 San Diego, CA 92116	The Honorable Kristine C. Alessio Councilmember, City of La Mesa 8130 Allison Ave. La Mesa, CA 91942
The Honorable Jennifer Mendoza Councilmember, City of Lemon Grove 3232 Main Street Lemon Grove, CA 91945	The Honorable Barbara Boxer Senator, United States Senate 500 B Street Suite 2240 San Diego, CA 92101	The Honorable Bill Baber Councilmember, City of La Mesa 8130 Allison Ave. La Mesa, CA 91942
The Honorable Jerry Jones Councilmember, City of Lemon Grove 3232 Main Street Lemon Grove, CA 91945	The Honorable Dianne Feinstein Senator, Untied States Senate 750 B Street Suite 1030 San Diego, CA 92101	The Honorable Guy McWhirter Councilmember, City of La Mesa 8130 Allison Ave. La Mesa, CA 91942
Graham Mitchell City Manager, City of Lemon Grove 3232 Main Street Lemon Grove, CA 91945	The Honorable Dianne Jacob Supervisor, County of San Diego, County Administration Center 1600 Pacific Highway Room 335 San Diego, CA 92101	Bill Chopyk Community Development Department City of La Mesa 8130 Allison Ave. La Mesa, CA 91942
Mike James Public Works Director, City of Lemon Grove 3232 Main Street Lemon Grove, CA 91945	Cheryl Davis Planning and Zoning City of La Mesa 8130 Allison Ave. La Mesa, CA 91942	David Bond Investigations City of La Mesa 8130 Allison Ave. La Mesa, CA 91942

Thomas Bell Public Works Superintendent, City of Lemon Grove 3232 Main Street Lemon Grove, CA 91945	David E. Witt City Manager City of La Mesa 8130 Allison Ave. La Mesa, CA 91942	Robert Spanbauer Senior Policy Advisor Supervisor Dianne Jacob's Office County Administration Center 1600 Pacific Highway Room 335 San Diego, CA 92101
Carol Dick Development Services Director, City of Lemon Grove 3232 Main Street Lemon Grove, CA 91945	Yvonne Garrett Assistant City Manager City of La Mesa 8130 Allison Ave. La Mesa, CA 91942	Richard Chin Dept. of Public Works County of San Diego County Administration Center 1600 Pacific Highway San Diego, CA 92101
Greg McAlpine Deputy Fire Chief Operations Heartland Fire and Rescue Dept. 8054 Allison Av. La Mesa, CA 91942	Gregory P. Humora City Engineer, Public Works Dept. City of La Mesa 8130 Allison Ave. La Mesa, CA 91942	Preston Fouts San Miguel Fire District 2850 Via Orange Way Spring Valley, CA 91978
Mary England President/CEO La Mesa Chamber of Commerce 8080 La Mesa Blvd. #212 La Mesa, CA 91942	Marilyn Brennan President Spring Valley Lions Club P. O. Box 1812 Spring Valley, CA 91979	

Federal, State, and Local Agencies

U.S. Fish & Wildlife Service 2177 Salk Ave, Suite 250 Carlsbad, CA 92008 Attn: Sally Brown	U.S. Army Corps of Engineers Los Angeles District 915 Wilshire Blvd, Suite 930 Los Angeles, CA 90017 Attn: Stephanie Hall	San Diego Association of Governments (SANDAG) Attn: Richard Chavez 401 B Street, Suite 800 San Diego, California 92101
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	County Department of Public Works Transportation Division 5510 Overland Ave, Suite 410, Room 470 San Diego, CA 92123

Helix water district 7811 University Avenue La Mesa, CA 91942	San Diego County Sheriff William D. Gore John F. Duffy Administrative Center 9621 Ridgehaven Ct. San Diego, CA 92123	County Assessor, Recorder, Clerk Ernest J. Dronenburg, Jr. San Diego Assessor Main Office
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 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 Toxic Substances Control San Diego Field Office 2375 Northside Drive, Ste. 100 San Diego, CA 92108
San Diego Assessor Main Office 1600 Pacific Highway, Suite 103 San Diego, CA 92101	Federal Highway Administration California Division 650 Capitol Mall, Suite 4-100 Sacramento, CA 95814 Attn: Scott McHenry	

Libraries

La Mesa Public Library 8074 Allison Ave. La Mesa, CA 91942 (619) 469-2151	San Diego Public Library (Central Library) 330 Park Blvd. San Diego, CA 92101-7416 (619) 236-5800	County of San Diego: Casa De Oro 9805 Campo Rd # 180, Spring Valley, CA
Lemon Grove Public Library 3001 School Lane, Lemon Grove, CA		

Native American Organizations

Native American Heritage Commission 915 Capitol Mall, Room 364 Sacramento, CA 95814	Barona Group of the Capitan Grande Clifford LaChappa, Chairperson 1095 Barona Road Lakeside, CA 92040	La Posta Band of Mission Indians Gwndolyn Parada, Chairperson PO Box 1120 Boulevard, CA 91905

Manzanita Band of Kumeyaay Nation Leroy J. Elliot, Chairperson PO Box 1302 Boulevard, CA 91905	San Pasqual Band of Mission Indians Allen E. Lawson, Chairperson PO Box 365 Valley Center, CA 92082	Sycuan Band of the Kumeyaay Nation Daniel Tucker, Chairperson 5459 Sycuan Road El Cajon, CA 92019
Viejas Band of the Kumeyaay Indians Anthony R. Pico, Chairperson PO Box 908 Alpine, CA 91903	Kumeyaay Cultural Historic Committee Attn: Ron Christman 56 Viejas Grand Road Alpine, CA 92001	Campo Band of Mission Indians Ralph Goff, Chairperson 36190 Church Road, Suite 1 Campo, CA 91906
Jamul Indian Village Raymond Hunter, Chairperson PO Box 612 Jamul, CA 91935	Mesa Grande Band of Mission Indians Mark Romero, Chairperson P.O. Box 270 Santa Ysabel, CA 92070	Kwaaymii Laguna Band of Mission Indians Carmen Lucas PO Box 775 Pine Valley, CA 91962
Inaja Band of Mission Indians Rebecca Osuna, Chairperson 1040 East Valley Parkway Escondido, CA 92025	Kumeyaay Cultural Repatriation Committee Steve Banegas, Spokesperson 1095 Barona Rd Lakeside, CA 92040	Viejas Band of Kumeyaay Indians Attn: Julie Hagen, Cultural Resources PO Box 908 Alpine, CA 91903
Ewiiaapaayp Tribal Office Will Micklin, Executive Director 4054 Willow Road Alpine, CA 91901	IPay Nation of Santa Ysabel Clint Linton, Director of Cultural Resources PO Box 507 Santa Ysabel, CA 92070	Kumeyaay Diegueno Land Conservancy Mr. Kim Bactad, Executive Director 2 Kwaaypaay Court El Cajon, CA 91919
Inter-Tribal Cultural Resource Protection Council Frank Brown, coordinator; Viejas THPO 240 Brown Road Alpine, CA 91901	Kumeyaay Cultural Repatriation Committee Bernice Paipa, Vice Spokesperson 1095 Barona Road Lakeside, CA 92040	

Interested Groups and Individuals

Resident 4201 Spring Street, La Mesa, CA 91941	Resident 4207 Spring Gardens Rd La Mesa, CA 91941	Word of Life Worship Center 8691 Echo Dr La Mesa, CA 91941
Resident 8690 Echo Dr La Mesa, CA 91941	Resident 8710 Echo Dr La Mesa, CA 91941	Resident 8706 Echo Dr La Mesa, CA 91941
Resident 8740 Echo Dr La Mesa, CA 91941	Resident 4290 Panorama Dr La Mesa, CA 91941	Resident 4292 Panorama Dr La Mesa, CA 91941
Resident 4284 Panorama Dr La Mesa, CA 91941	Resident 4295 Panorama Dr La Mesa, CA 91941	Resident 4297 Panorama D La Mesa, CA 91941

Resident 8815 Joris Way La Mesa, CA 91941	Resident 4283 Panorama Dr La Mesa, CA 91941	Resident 4285 Panorama Dr La Mesa, CA 91941
Resident 8845 Joris Way La Mesa, CA 91941	Resident 8865 Joris Way La Mesa, CA 91941	Resident 8875 Joris Way La Mesa, CA 91941
Resident 8860 Joris Way La Mesa, CA 91941	Resident 8855 Mariposa St La Mesa, CA 91941	Resident 8865 Fabienne Way La Mesa, CA 91941
Resident 8867 Mariposa St La Mesa, CA 91941	Resident 8885 Mariposa St La Mesa, CA 91941	Resident 8901 Mariposa St La Mesa, CA 91941
Resident 8907 Mariposa St La Mesa, CA 91941	Resident 4454 Garfield St La Mesa, CA 91941	Resident 8906 Mariposa St La Mesa, CA 91941
Resident 4500 Garfield St La Mesa, CA 91941	Resident 4514 Garfield St La Mesa, CA 91941	Resident 4530 Garfield St La Mesa, CA 91941
Resident 4550 Garfield St La Mesa, CA 91941	Resident 4540 Garfield St La Mesa, CA 91941	Resident 8998 Alpine Ave La Mesa, CA 91941
Resident 4565 Garfield St La Mesa, CA 91941	Resident 4606 Skyline Ln La Mesa, CA 91941	Resident 4615 Skyline Ln La Mesa, CA 91941
Resident 8949 Alpine Ave La Mesa, CA 91941	Resident 8939 Alpine Ave La Mesa, CA 91941	Resident 8986 Alpine Ave La Mesa, CA 91941
Resident 8980 Alpine Ave La Mesa, CA 91941	Resident 8940 Alpine Ave La Mesa, CA 91941	Resident 8934 Alpine Ave La Mesa, CA 91941
Resident 4723 Garfield Ln La Mesa, CA 91941	Resident 4721 Garfield Ln La Mesa, CA 91941	Resident 8941 Highfield Ave La Mesa, CA 91941
Resident 8997 Highfield Ave La Mesa, CA 91941	Resident 8995 Highfield Ave La Mesa, CA 91941	Resident 9050 Highfield Ave La Mesa, CA 91941
Resident 8995 Johnson Dr La Mesa, CA 91941	Resident 9009 Johnson Dr La Mesa, CA 91941	Resident 9019 Johnson Dr La Mesa, CA 91941
Resident 9025 Johnson Dr La Mesa, CA 91941	Resident 9024 Johnson Dr La Mesa, CA 91941	Resident 8998 Johnson Dr La Mesa, CA 91941
Resident 4229 Panorama Dr La Mesa, CA 91941	Resident 8861 Echo Dr La Mesa, CA 91941	Resident 8862 Echo Dr La Mesa, CA 91941
Resident 8863 Echo Dr La Mesa, CA 91941	Resident 8857 Echo Dr La Mesa, CA 91941	Resident 8865 Echo Dr La Mesa, CA 91941

Resident 8881 Bowling Green Dr La Mesa, CA 91941	Resident 8870 Echo Dr La Mesa, CA 91941	Resident 8888 Echo Dr La Mesa, CA 91941
Resident 8897 Bowling Green Dr La Mesa, CA 91941	Resident 8895 Bowling Green Dr La Mesa, CA 91941	Resident 8901 Bowling Green Dr La Mesa, CA 91941
Resident 8905 Bowling Green Dr La Mesa, CA 91941	Resident 4310 Merritt Blvd La Mesa, CA 91941	Resident 4306 Merritt Blvd La Mesa, CA 91941
Resident 4316 Merritt Blvd La Mesa, CA 91941	Resident 4360 Merritt Blvd La Mesa, CA 91941	Resident 4350 Merritt Blvd La Mesa, CA 91941
Resident 4420 Merritt Blvd La Mesa, CA 91941	Resident 4390 Woodland Dr La Mesa, CA 91941	Resident 4409 Merritt Blvd La Mesa, CA 91941
Resident 4411 Merritt Blvd La Mesa, CA 91941	Resident 8951 Mariposa St La Mesa, CA 91941	Resident 8980 Mariposa St La Mesa, CA 91941
Resident 8950 Mariposa St La Mesa, CA 91941	Resident 9125 Edgewood Dr La Mesa, CA 91941	Resident 9126 Edgewood Dr La Mesa, CA 91941
Resident 9101 San Juan Pl La Mesa, CA 91941	Resident 4601 Bancroft Dr La Mesa, CA 91941	Resident 4609 Bancroft Dr La Mesa, CA 91941
Resident 9143 Lobrano St La Mesa, CA 91941	Resident 4621 Bancroft Dr La Mesa, CA 91941	Resident 4641 Bancroft Dr La Mesa, CA 91941
Resident 9141 Golondrina Dr La Mesa, CA 91941	Resident 9131 Golondrina Dr La Mesa, CA 91941	Resident 9120 Golondrina Dr La Mesa, CA 91941
Resident 9130 Golondrina Dr La Mesa, CA 91941	Resident 9135 Spice St La Mesa, CA 91941	Resident 9120 Spice St La Mesa, CA 91941
Resident 9130 Spice St La Mesa, CA 91941	Resident 4779 Bancroft Dr La Mesa, CA 91941	Resident 9111 Fletcher Dr La Mesa, CA 91941
Resident 4813 Bancroft Dr La Mesa, CA 91941	Resident 4827 Bancroft Dr La Mesa, CA 91941	Resident 9129 Johnson Dr La Mesa, CA 91941
Resident 4837 Bancroft Dr La Mesa, CA 91941	Resident 4861 Bancroft Dr La Mesa, CA 91941	Resident 4862 Bancroft Dr La Mesa, CA 91941
Resident 4863 Bancroft Dr La Mesa, CA 91941	Resident 4864 Bancroft Dr La Mesa, CA 91941	Resident 4865 Bancroft Dr La Mesa, CA 91941
Resident 9130 Johnson Dr La Mesa, CA 91941	Resident 9125 Johnson Dr La Mesa, CA 91941	Resident 8764 Campo Rd La Mesa, CA 91941

Resident 8778 Campo Rd La Mesa, CA 91941	Resident 8784 Campo Rd La Mesa, CA 91941	Resident 8759 Campo Rd La Mesa, CA 91941
Resident 8771 Campo Rd La Mesa, CA 91941	Resident 8799 Campo Rd La Mesa, CA 91941	Resident 8805 Campo Rd Spring Valley, CA 91977
Resident 8806 Campo Rd Spring Valley, CA 91977	Resident 8807 Campo Rd Spring Valley, CA 91977	Resident 8815 Campo Rd Spring Valley, CA 91977
Resident 8816 Campo Rd Spring Valley, CA 91977	Resident 8817 Campo Rd Spring Valley, CA 91977	Resident 8838 Greenview Pl Spring Valley, CA 91977
Resident 8842 Greenview Pl Spring Valley, CA 91977	Resident 8848 Greenview Pl Spring Valley, CA 91977	Resident 8858 Greenview Pl Spring Valley, CA 91977
Resident 8866 Greenview Pl Spring Valley, CA 91977	Resident 8869 Greenview Pl Spring Valley, CA 91977	Resident 8907 Greenview Pl Spring Valley, CA 91977
Resident 8900 Country Club Pl Spring Valley, CA 91977	Resident 8951 Greenview Pl Spring Valley, CA 91977	Resident 8946 Greenview Pl Spring Valley, CA 91977
Resident 8922 Spring Pl Spring Valley, CA 91977	Resident 3941 Kenwood Dr Spring Valley, CA 91977	Resident 8930 Spring Pl Spring Valley, CA 91977
Resident 8940 Spring Pl Spring Valley, CA 91977	Resident 8958 Spring Pl Spring Valley, CA 91977	Resident 8920 Spring Pl Spring Valley, CA 91977
Resident 3917 Spring Pl Spring Valley, CA 91977	Resident 3910 Spring Pl Spring Valley, CA 91977	Resident 3845 Spring Pl Spring Valley, CA 91977
Resident 4014 Helix St Spring Valley, CA 91977	Resident 4015 Helix St Spring Valley, CA 91977	Resident 4016 Helix St Spring Valley, CA 91977
Resident 3960 Helix St Spring Valley, CA 91977	Resident 3860 Helix St Spring Valley, CA 91977	Resident 3865 Helix St Spring Valley, CA 91977
Resident 3851 Helix St Spring Valley, CA 91977	Resident 3859 Helix St Spring Valley, CA 91977	Resident 9236 Hillside Dr Spring Valley, CA 91977
Resident 9242 Hillside Dr Spring Valley, CA 91977	Resident 9248 Hillside Dr Spring Valley, CA 91977	Resident 9260 Hillside Dr Spring Valley, CA 91977
Resident 9309 Hillside Dr Spring Valley, CA 91977	Resident 9340 Hillside Dr Spring Valley, CA 91977	Resident 9355 Hillside Dr Spring Valley, CA 91977
Resident 9430 Barbic Ln Spring Valley, CA 91977	Resident 9428 Barbic Ln Spring Valley, CA 91977	Resident 9426 Barbic Ln Spring Valley, CA 91977

Resident 3754 Barbic Court Spring Valley, CA 91977	Resident 3733 Barbic Court Spring Valley, CA 91977	Resident 9425 Barbic Ln Spring Valley, CA 91977
Resident 3734 Barbic Court Spring Valley, CA 91977	Resident 3723 Barbic Court Spring Valley, CA 91977	Resident 4205 Panorama Dr La Mesa, CA 91941
Resident 4206 Panorama Dr La Mesa, CA 91941	Resident 4207 Panorama Dr La Mesa, CA 91941	Resident 4193 Panorama Dr La Mesa, CA 91941
Resident 4185 Panorama Dr La Mesa, CA 91941	Resident 4177 Panorama Dr La Mesa, CA 91941	Resident 4159 Panorama Dr La Mesa, CA 91941
Resident 4201 Panorama Dr La Mesa, CA 91941	Resident 4173 Panorama Dr La Mesa, CA 91941	Resident 4130 Merritt Blvd La Mesa, CA 91941
Resident 4169 Panorama Dr La Mesa, CA 91941	Resident 4125 Merritt Blvd La Mesa, CA 91941	Resident 4115 Merritt Blvd La Mesa, CA 91941
Resident 4135 Merritt Blvd La Mesa, CA 91941	Resident 9008 Terrace Dr La Mesa, CA 91941	Resident 8955 Terrace Dr La Mesa, CA 91941
Resident 8944 Campo Rd Spring Valley, CA 91977	Resident 9000 Campo Rd Spring Valley, CA 91977	Resident 9009 Campo Rd Spring Valley, CA 91977
Resident 9023 Campo Rd Spring Valley, CA 91977	Resident 9239 Campo Rd Spring Valley, CA 91977	Resident 9245 Campo Rd Spring Valley, CA 91977
Resident 9246 Campo Rd Spring Valley, CA 91977	Resident 9247 Campo Rd Spring Valley, CA 91977	Resident 9248 Campo Rd Spring Valley, CA 91977
Resident 9249 Campo Rd Spring Valley, CA 91977	Resident 9250 Campo Rd Spring Valley, CA 91977	Resident 9251 Campo Rd Spring Valley, CA 91977
Resident 9333 Campo Rd Spring Valley, CA 91977	Resident 9346 Campo Rd Spring Valley, CA 91977	Resident 9354 Campo Rd Spring Valley, CA 91977
Resident 9400 Campo Rd Spring Valley, CA 91977	Resident 9454 Campo Rd Spring Valley, CA 91977	Resident 3805 Rogers Rd Spring Valley, CA 91977
Resident 9550 Campo Rd Spring Valley, CA 91977	Resident 9558 Campo Rd Spring Valley, CA 91977	Resident 9545 Campo Rd Spring Valley, CA 91977
Resident 9603 Campo Rd Spring Valley, CA 91977	Maxine Lafaver Trust 4479 Silverberry Ct. Concord, CA 94521	

Appendix A. CEQA Checklist

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CEQA Environmental Checklist

11-SD-94/125	SR-94 PM: 13.6/14.6 SR-125 PM: R10.5/T11.5	11-14665
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.

	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:				
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?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
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?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
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?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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. Title VI Statement

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DEPARTMENT OF TRANSPORTATION
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Flex your power!
Be energy efficient!

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 C. Summary of Relocation Benefits

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California Department of Transportation Relocation Assistance Program

RELOCATION ASSISTANCE ADVISORY SERVICES

This appendix is general in nature and is not intended to be a complete statement of federal and state relocation laws and regulations. Any questions about relocation should be addressed to Caltrans Right-of-Way. This section provides some general descriptive information on Public Law (PL) 91-646, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. This is often referred to simply as the "Uniform Act." The information in this appendix is provided only as background and is not intended as a complete statement of all the state or federal laws and regulations; for specific details, the environmental planner should contact the appropriate Caltrans District or Regional Right-of-Way Relocation Branch. After presenting an outline of the basic legal foundation for relocation policy, the appendix looks at important relocation assistance information, including advisory services and the payment program. Refer to the Caltrans Right-of-Way Manual Chapter 10, for more detailed and specific information on relocation and housing programs.

DECLARATION OF POLICY

"The purpose of this title is to establish a ***uniform policy for fair and equitable treatment*** of persons displaced as a result of federal and federally assisted programs in order that such persons ***shall not suffer disproportionate injuries*** as a result of programs designed for the benefit of the public as a whole."

The Fifth Amendment to the U.S. Constitution states, "No Person shall…be deprived of life, liberty, or property, without due process of law, nor shall private property be taken for public use without just compensation." The Uniform Act sets forth in statute the due process that must be followed in Real Property acquisitions involving federal funds. Supplementing the Uniform Act is the government-wide single rule for all agencies to follow, set forth in 49 Code of Federal Regulations (CFR) Part 24. Displaced individuals, families, businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and payments, as discussed below.

FAIR HOUSING

The Fair Housing Law (Title VIII of the Civil Rights Act of 1968) sets forth the policy of the United States to provide, within constitutional limitations, for fair housing. This act, and as amended, makes discriminatory practices in the purchase and rental of most residential units illegal. Whenever possible, minority persons shall be given reasonable opportunities to relocate to any available housing regardless of neighborhood, as long as the replacement dwellings are decent, safe, and sanitary and are within their financial means. This policy, however, does not require Caltrans to provide a person a larger payment than is necessary to enable a person to relocate to a comparable replacement dwelling.

Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displacee in order to see that all payments and benefits are fully utilized and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments. At the time of the initiation of negotiations (usually the first written offer to purchase), owner-occupants are given a detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted soon after the

initiation of negotiations and also are given a detailed explanation of the Caltrans Relocation Assistance Program. To avoid loss of possible benefits, no individual, family, business, farm, or nonprofit organization should commit to purchase or rent a replacement property without first contacting a Caltrans relocation advisor.

RELOCATION ASSISTANCE ADVISORY SERVICES

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, Caltrans will provide relocation advisory assistance to any person, business, farm or nonprofit organization displaced as a result of the acquisition of real property for public use, so long as they are legally present in the United States. Caltrans will assist eligible displacees in obtaining comparable replacement housing by providing current and continuing information on the availability and prices of both houses for sale and rental units that are “decent, safe and sanitary.” Nonresidential displacees will receive information on comparable properties for lease or purchase (for business, farm and nonprofit organization relocation services, see below).

Residential replacement dwellings will be in a location generally not less desirable than the displacement neighborhood at prices or rents within the financial ability of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displacees that are open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include the supplying of information concerning federal and state assisted housing programs and any other known services being offered by public and private agencies in the area.

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without first being given at least 90 days written notice. Residential occupants eligible for relocation payment(s) will not be required to move unless at least one comparable “decent, safe and sanitary” replacement dwelling, available on the market, is offered to them by Caltrans.

RESIDENTIAL RELOCATION PAYMENTS

The Relocation Assistance Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for or incidental to the purchase or rental of a replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacement property. Any actual moving costs in excess of the 50 miles are the responsibility of the displacee. The Residential Relocation Assistance Program can be summarized as follows:

Moving Costs
Any displaced person, who lawfully occupied the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule. Lawful occupants who move into the displacement property after the initiation of negotiations must wait until Caltrans obtains control of the property in order to be eligible for relocation payments.

Purchase Differential
In addition to moving and related expense payments, fully eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their property for 180 days or more prior to the date of the initiation of negotiations (usually the first written offer to purchase the property), may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate. The maximum combination of these three supplemental payments that the owner-occupant can receive is $22,500. If the total entitlement (without the moving payments) is in excess of $22,500, the Last Resort Housing Program will be used (see the explanation of the Last Resort Housing Program below).

Rent Differential
Tenants and certain owner-occupants (based on length of ownership) who have occupied the property to be acquired by Caltrans prior to the date of the initiation of negotiations may qualify to receive a rent differential payment. This payment is made when Caltrans determines that the cost to rent a comparable “decent, safe and sanitary” replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted under the *Down Payment* section below. The maximum amount payable to any eligible tenant and any owner-occupant of less than 180 days, in addition to moving expenses, is $5,250. If the total entitlement for rent supplement exceeds $5,250, the Last Resort Housing Program will be used.

To receive any relocation benefits, the displaced person must buy or rent and occupy a “decent, safe and sanitary” replacement dwelling within one year from the date Caltrans takes legal possession of the property, or from the date the displacee vacates the displacement property, whichever is later.

Down Payment
The down payment option has been designed to aid owner-occupants of less than 180 days and tenants in legal occupancy prior to Caltrans’ initiation of negotiations. The down payment and incidental expenses cannot exceed the maximum payment of $5,250. The one-year eligibility period in which to purchase and occupy a “decent, safe and sanitary” replacement dwelling will apply.

Last Resort Housing
Federal regulations (49 CFR 24) contain the policy and procedure for implementing the Last Resort Housing Program on federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard residential relocation as explained above. Last Resort Housing has been designed primarily to cover situations where a displacee cannot be relocated because of lack of available comparable replacement housing, or when the anticipated replacement housing payments exceed the $22,500 and $5,250 limits of the standard relocation procedure, because either the displacee lacks the financial ability or other valid circumstances.

After the initiation of negotiations, Caltrans will within a reasonable length of time, personally contact the displacees to gather important information, including the following:

- Number of people to be displaced.
- Specific arrangements needed to accommodate any family member(s) with special needs.
- Financial ability to relocate into comparable replacement dwelling which will adequately house all members of the family.
- Preferences in area of relocation.
- Location of employment or school.

NONRESIDENTIAL RELOCATION ASSISTANCE

The Nonresidential Relocation Assistance Program provides assistance to businesses, farms and nonprofit organizations in locating suitable replacement property, and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for a particular business's specific relocation needs. The types of payments available to eligible businesses, farms and nonprofit organizations are: searching and moving expenses, and possibly reestablishment expenses; or a fixed in lieu payment instead of any moving, searching and reestablishment expenses. The payment types can be summarized as follows:

Moving Expenses
Moving expenses may include the following actual, reasonable costs:

- The moving of inventory, machinery, equipment and similar business-related property, including: dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting of personal property. Items acquired in the right-of-way contract may not be moved under the Relocation Assistance Program. If the displacee buys an Item Pertaining to the Realty back at salvage value, the cost to move that item is borne by the displacee.
- Loss of tangible personal property provides payment for actual, direct loss of personal property that the owner is permitted not to move.
- Expenses related to searching for a new business site, up to $2,500, for reasonable expenses actually incurred.

Reestablishment Expenses
Reestablishment expenses related to the operation of the business at the new location, up to $10,000 for reasonable expenses actually incurred.

Fixed In Lieu Payment
A fixed payment in lieu of moving, searching, and reestablishment payments may be available to businesses that meet certain eligibility requirements. This payment is an amount equal to half the average annual net earnings for the last two taxable years prior to the relocation and may not be less than $1,000 nor more than $20,000.

ADDITIONAL INFORMATION

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or for the purpose of determining

the extent of eligibility of a displacee for assistance under the Social Security Act, or any other law, *except* for any federal law providing local “Section 8” Housing Programs.

Any person, business, farm or nonprofit organization that has been refused a relocation payment by the Caltrans relocation advisor or believes that the payment(s) offered by the agency are inadequate may appeal for a special hearing of the complaint. No legal assistance is required. Information about the appeal procedure is available from the relocation advisor.

California law allows for the payment for lost goodwill that arises from the displacement for a public project. A list of ineligible expenses can be obtained from Caltrans Right-of-Way. California’s law and the federal regulations covering relocation assistance provide that no payment shall be duplicated by other payments being made by the displacing agency.

RESIDENTIAL RELOCATION PAYMENTS PROGRAM

The links below are to the Relocation Assistance for Residential Relocation Brochure. Print them and place them in the environmental document as applicable.

- http://www.dot.ca.gov/hq/row/pubs/residential_english.pdf
- http://www.dot.ca.gov/hq/row/pubs/residential_spanish.pdf

If the project requires relocation of mobile homes, print and include the following:

- http://www.dot.ca.gov/hq/row/pubs/mobile_eng.pdf
- http://www.dot.ca.gov/hq/row/pubs/mobile_sp.pdf

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Appendix D. Environmental Commitments Record

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Task and Brief Description	PS&E Responsible Branch / Staff	Construction Responsible Branch / Staff	NSSP, SSP, Std Spec, Permit	Action Taken to Comply/Remarks	PS&E Task Completed		Construction Task Completed	
					Initial	Date	Initial	Date
Environmental PS&E Review			N/A					
Preconstruction Meeting			N/A					
Transfer Resident Engineer Book			N/A					
Prejob Meeting			N/A					
Environmental Compliance Review			N/A					
Permits and Approvals Needed								
United States Fish and Wildlife Service - Issuance of a Biological Opinion (BO).	Generalist	R.E.	N/A					
United States Army Corps of Engineers - Section 404 Permit for filling or dredging waters of the United States.	Generalist	R.E.	N/A					
Regional Water Quality Control Board - Section 401 Permit for surface waters of the United States.	Generalist	R.E.	N/A					
California Department of Fish and Wildlife - Section 1602 Permit for Streambed Alteration Agreement.	Generalist	R.E.	N/A					
Utilities/ Emergency Services								
Potholing and mark-out prior to construction, to minimize the risk of damage to utility facilities.	Design, Generalist	R.E.	N/A					
The Transportation Management Plan for the project includes notifications to emergency services as part of the public information program. This will help them plan their routes to avoid delays due to construction.	Design, Generalist	R.E.	N/A					

11-SD-94/125
PM:13.6/14.6 - R10.5/T11.5
EA: 14665
PI: 1100000078
Construct Freeway Connector

Task and Brief Description	PS&E Responsible Branch / Staff	Construction Responsible Branch / Staff	NSSP, SSP, Std Spec, Permit	Action Taken to Comply/Remarks	PS&E Task Completed		Construction Task Completed	
					Initial	Date	Initial	Date
Traffic and Transportation/Bicycle and Pedestrian Facilities								
A Public Awareness Campaign would notify the public about the project and its impacts through brochures, press releases, paid advertising, public meetings/speakers bureau, construction bulletins and the District's Website (http://www.dot.ca.gov/dist11/).	Design, Generalist	R.E.	N/A					
Motorist Information Strategies would include portable Changeable Message Signs (CMS), ground mounted signs and the use of Web cameras. These strategies provide the current road conditions and would enable the motorist to make informed decisions about their own travel plans and the options they have for alternative routes.	Design, Generalist	R.E.	N/A					
Incident Management elements include the Construction Zone Enhanced Enforcement Program (COZEEP), the Freeway Service Patrol (FSP) and the Traffic Management Team (TMT). Implementation of these elements would identify incidents that occur within the construction area and provide corrective action in a timely manner.	Design, Generalist	R.E.	N/A					
COZEEP provides California Highway Patrol (CHP) assistance and surveillance within construction areas. This can allow enforcement of speed limits and provide emergency response support within the work zones.	Design, Generalist	R.E.	N/A					
The Freeway Service Patrol provides towing service and assistance to motorists during vehicle breakdowns.	Design, Generalist	R.E.	N/A					

Task and Brief Description	PS&E Responsible Branch / Staff	Construction Responsible Branch / Staff	NSSP, SSP, Std Spec, Permit	Action Taken to Comply/Remarks	PS&E Task Completed		Construction Task Completed	
					Initial	Date	Initial	Date
Demand management techniques include promoting variable work hours to vary peak travel times; installing temporary ramp meters and/ or modifying existing ramp meters to control the volumes entering the freeway within the construction zones. The purpose of demand management is to reduce traffic volumes within the construction zones.	Design, Generalist	R.E.	N/A					
Visual/Aesthetics								
Landscape Concept Plan - A Landscape Concept Plan (LCP) will be developed in consultation with the project stakeholders. The LCP will incorporate the visual mitigation measures established in the approved Visual Impact Assessment (dated March 2015) identifying highway planting and other materials consistent with Caltrans design policies.	Landscape Architecture, Design, Generalist	R.E.	N/A					
Landscape Protection Areas - Vegetative areas located outside of the construction footprint will be protected. If these areas are not identified as Environmentally Sensitive Areas (ESA), they will be designated as Landscape Protection Areas (LPA) and protected by temporary fencing installed prior to clearing and grubbing of the site.	Landscape Architecture, Design, Generalist	R.E.	N/A					
Retaining Walls - The walls will incorporate architectural features to reduce the visual scale of the structure. Architectural features, textures, and integral concrete colors will be used to mitigate the appearance of wall structures.	Landscape Architecture, Design, Generalist	R.E.	N/A					

11-SD-94/125
PM:13.6/14.6 - R10.5/T11.5
EA: 14665
PI: 1100000078
Construct Freeway Connector

Task and Brief Description	PS&E Responsible Branch / Staff	Construction Responsible Branch / Staff	NSSP, SSP, Std Spec, Permit	Action Taken to Comply/Remarks	PS&E Task Completed		Construction Task Completed	
					Initial	Date	Initial	Date
Retaining Walls (Alignment and Profile) - Alignment and profile of retaining walls will consist of long radius curves following the contours of the proposed topography. The alignment and profile will not exhibit tangent sections or 'points-of-intersection'.	Landscape Architecture, Design, Generalist	R.E.	N/A					
Retaining Walls (Architectural Texture) - All exposed wall surfaces will receive architectural treatments consistent with a design theme established for the corridor and included within an approved aesthetic concept plan.	Landscape Architecture, Design, Generalist	R.E.	N/A					
Retaining Walls (Concrete Safety Barriers) - Unless necessary for safety requirements, concrete barriers would not be fabricated at the base of the retaining walls.	Landscape Architecture, Design, Generalist	R.E.	N/A					
Noise Barriers (Earthen Berms) -When feasible, earthen berms should be used for noise attenuation and are the preferred visual mitigation measure.	Landscape Architecture, Design, Generalist	R.E.	N/A					
Noise Barriers (Walls) - Noise walls will be designed to be visually compatible with the surrounding community. Architectural detailing will reduce the 'visual height' of the walls and improve visual character of the setting.	Landscape Architecture, Design, Generalist	R.E.	N/A					
Concrete Safety Barrier (Low Profile) - Low profile (Caltrans Type 60S) or see-through (Caltrans Type 80) safety barriers will be used in areas where standard height barriers would diminish views from the highway.	Landscape Architecture, Design, Generalist	R.E.	N/A					

Task and Brief Description	PS&E Responsible Branch / Staff	Construction Responsible Branch / Staff	NSSP, SSP, Std Spec, Permit	Action Taken to Comply/Remarks	PS&E Task Completed		Construction Task Completed	
					Initial	Date	Initial	Date
Additional Corridor Features - Site -specific mitigation measures are to preserve the continuity of scale and community character across the proposed highway facility.	Landscape Architecture, Design, Generalist	R.E.	N/A					
Replacement Highway Planting - The highway planting will reinforce the existing visual character and visual goals of the community. Enhanced highway planting will be considered where the responsible local agency will provide maintenance in perpetuity.	Landscape Architecture, Design, Generalist	R.E.	N/A					
Cultural Resources								
If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.	Cultural, Generalist	R.E.	N/A					
If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to CA Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), which will then notify the Most Likely Descendent (MLD).	Cultural, Generalist	R.E.	N/A					
Additional archaeological studies will be needed if the project limits are extended beyond the present survey limits.	Cultural, Generalist	R.E.	N/A					

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Water Quality								
A Storm Water Pollution Prevention Plan (SWPPP) must be submitted by the Contractor prior to the start of construction. The SWPPP shall include a Construction Site Monitoring Program (CSMP) that presents the procedures and methods related to visual monitoring and sampling plans for non-visible pollutants, sediment and turbidity, and pH.	NPDES, Generalist	R.E.	N/A					
Treatment BMPs (Best Management Practices) such as Biofiltration Swales, Rain Event Action Plan, Soil Stabilization Measures, Tracking Controls, Construction Site Management, Storm Water Sampling, and Maintenance BMPs must be used within the project limits.	NPDES, Generalist	R.E.	N/A					
The design of all construction BMPs will comply with the design requirements found in the Caltrans Storm Water Quality Handbooks: Project Planning and Design Guide (PPDG) and Construction Site Best Management Practices (BMPs) Manual.	NPDES, Generalist	R.E.	N/A					
Construction site best management practices (BMPs) training shall be provided for employees and subcontractors. The training provided shall include the proper selection, deployment, and repair of construction site BMPs used within the project limits.	NPDES, Generalist	R.E.	N/A					

Task and Brief Description	PS&E Responsible Branch / Staff	Construction Responsible Branch / Staff	NSSP, SSP, Std Spec, Permit	Action Taken to Comply/Remarks	PS&E Task Completed		Construction Task Completed	
					Initial	Date	Initial	Date
Geology								
Trained personnel should be present during project construction to observe all cuts, foundation subgrade, and embankment subgrade to assure that the provisions set forth in the documents are appropriately enforced. If unanticipated conditions are encountered, the geotechnical personnel should make recommendations to the Resident Engineer who will in turn direct the contractor.	Design, Generalist	R.E.	N/A					
A program of periodic surveying for ground movement should be included in project construction where the potential for ground movement and failure exists.	Design, Generalist	R.E.	N/A					
All grading and roadway work will be performed in accordance with the Caltrans Standard Plans and Specifications. Final recommendations and Special Provisions should be based on the findings of subsurface exploration, testing, and analysis as presented in final Geotechnical Design Reports and Foundation Reports.	Design, Generalist	R.E.	N/A					
BMPs proposed in the Water Quality Section, will stabilize and reduce erosion during construction.	Design, Generalist	R.E.	N/A					
Hazardous Waste/Materials								
A Health and Safety Plan must be developed for the proposed project by a Certified Industrial Hygienist (CIH) in accordance with the Caltrans Guidance. The Plan will identify health and safety requirements and best management practices for the handling impacts discussed below.	Haz. Waste, Generalist	R.E.	N/A					

Task and Brief Description	PS&E Responsible Branch / Staff	Construction Responsible Branch / Staff	NSSP, SSP, Std Spec, Permit	Action Taken to Comply/Remarks	PS&E Task Completed		Construction Task Completed	
					Initial	Date	Initial	Date
Exposed excavated soil with ADL (hazardous and non-hazardous) along the shoulders and median of State Route 94/125 shall be managed by being reused onsite when possible or surplus will be properly disposed in accordance with the Department of Toxic Substance Control (DTSC) Lead Variance, Caltrans Special Provisions, and Federal, State, and Local hazardous waste guidance/regulations.	Haz. Waste, Generalist	R.E.	N/A					
If reuse of hazardous ADL is performed, this material may be reused onsite by being placed beneath 1 foot of clean material or a paved surface in accordance with the Special Provisions and the DTSC Lead Variance issued to Caltrans.	Haz. Waste, Generalist	R.E.	N/A					
Treated Wood Waste (TWW), transformers, removed yellow traffic stripe, and abandoned septic system and/or impacted soil, if encountered during construction, will need to be appropriately managed. Management of these waste items shall comply with Federal, State, and Local hazardous waste regulatory requirements, and Caltrans Special Provisions during construction.	Haz. Waste, Generalist	R.E.	N/A					
If construction is planned that will encounter the groundwater at the SR-94 and Bancroft Drive interchange, site-specific groundwater contamination data for petroleum hydrocarbons will be needed prior to construction. This will be performed to evaluate proper methods to manage and dispose of the groundwater that might be removed during construction.	Haz. Waste, Generalist	R.E.	N/A					

Task and Brief Description	PS&E Responsible Branch / Staff	Construction Responsible Branch / Staff	NSSP, SSP, Std Spec, Permit	Action Taken to Comply/Remarks	PS&E Task Completed		Construction Task Completed	
					Initial	Date	Initial	Date
A hazardous building materials survey, including Asbestos Containing Material (ACM) and Lead Based Paint (LBP), shall be conducted on structures at the state-owned or acquired residential properties and in bridge structures to be demolished prior to construction. If found, ACMs, and LBP shall be handled and disposed in accordance with Caltrans Special Provisions, Federal, State, and Local regulations during construction.	Haz. Waste, Generalist	R.E.	N/A					
The soil stockpiles of unknown origin located on the proposed connecter ramp location shall be sampled and tested prior to construction. These samples shall be analyzed for total petroleum hydrocarbons, volatile organic compounds, and metals in order to determine the appropriate disposal or re-use options for the soil during construction.	Haz. Waste, Generalist	R.E.	N/A					
A Lead Compliance Plan is required to mitigate health and safety issues regarding handling lead impacted oils and traffic stripe.	Haz. Waste, Generalist	R.E.	N/A					
Air Quality								
The construction contractor shall comply with Caltrans' Standard Specifications in Section 14 (2010). Section 14-9.01specifically 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.	Air, Generalist	R.E.	SSP #14-9.01					
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.	Air, Generalist	R.E.	SSP #14-9.02					

Task and Brief Description	PS&E Responsible Branch / Staff	Construction Responsible Branch / Staff	NSSP, SSP, Std Spec, Permit	Action Taken to Comply/Remarks	PS&E Task Completed		Construction Task Completed	
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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.	Air, Generalist	R.E.	N/A					
Spread soil binder on any unpaved roads used for construction purposes, and all project construction parking areas.	Air, Generalist	R.E.	N/A					
Wash off trucks as they leave the right-of-way as necessary to control fugitive dust emissions.	Air, Generalist	R.E.	N/A					
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.	Air, Generalist	R.E.	N/A					
Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited re-vegetation of disturbed slopes as needed to minimize construction impacts to existing communities.	Air, Generalist	R.E.	N/A					
Locate equipment and materials storage sites as far away from residential and park uses as practical. Keep construction areas clean and orderly.	Air, Generalist	R.E.	N/A					

Task and Brief Description	PS&E Responsible Branch / Staff	Construction Responsible Branch / Staff	NSSP, SSP, Std Spec, Permit	Action Taken to Comply/Remarks	PS&E Task Completed		Construction Task Completed	
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Establish Environmentally Sensitive Areas (ESAs) or their equivalent near sensitive air receptors within which construction activities involving extended idling of diesel equipment would be prohibited, to the extent feasible.	Air, Generalist	R.E.	N/A					
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.	Air, Generalist	R.E.	N/A					
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.	Air, Generalist	R.E.	N/A					
Promptly and regularly remove dust and mud that are deposited on paved, public roads due to construction activity and traffic to decrease particulate matter.	Air, Generalist	R.E.	N/A					
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.	Air, Generalist	R.E.	N/A					
Install mulch or plant vegetation as soon as practical after grading to reduce windblown particulates in the area. Be aware that certain methods of mulch placement, such as straw blowing, may themselves cause dust and visible emission issues, and may need to use controls such as dampened straw.	Air, Generalist	R.E.	N/A					

Task and Brief Description	PS&E Responsible Branch / Staff	Construction Responsible Branch / Staff	NSSP, SSP, Std Spec, Permit	Action Taken to Comply/Remarks	PS&E Task Completed		Construction Task Completed	
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Locate construction equipment and truck staging and maintenance areas as far as feasible and nominally downwind of schools, active recreation areas, and other areas of high population density.	Air, Generalist	R.E.	N/A					
Biological Resources								
Temporary construction staging areas, access roads, and equipment storage shall be strategically placed at a determined distance after evaluating the areas to avoid impacts to jurisdictional waters.	Biology, Generlist	R.E.	N/A					
Erosion-Control Measures shall be implemented during construction. To minimize the mobilization of sediment to adjacent water bodies, the following erosion-control and sediment-control measures will be included in the Storm Water Pollution Prevention Plan (SWPPP) to be included in the construction specifications.	Biology, Generlist	R.E.	N/A					
All trash shall be kept in wildlife-proof receptacles and any non-natural food and water sources will not be left unattended for the duration of the project construction.	Biology, Generlist	R.E.	N/A					
If shrub or tree removal is to take place during the breeding season (February 1 to August 31), a pre-construction breeding bird survey shall be conducted within 7 days of these activities. A no-disturbance buffer shall be established around any active nest or breeding pair territory to limit the impacts of construction activities. The buffer shall not be removed until after the breeding season or until after a qualified wildlife biologist determines that the young have fledged.	Biology, Generlist	R.E.	N/A					

Task and Brief Description	PS&E Responsible Branch / Staff	Construction Responsible Branch / Staff	NSSP, SSP, Std Spec, Permit	Action Taken to Comply/Remarks	PS&E Task Completed		Construction Task Completed	
					Initial	Date	Initial	Date
Erosion control measures for this project shall be designed to prevent the spread of invasive plant species. Landscaping designs for this project shall not contain invasive species in the plant selections or seed mixtures.	Biology, Generlist	R.E.	N/A					
CEQA Mitigation Measures								
Although disturbed coastal sage scrub was not found to support any sensitive species, it represents a natural community and permanent impacts to this habitat would be mitigated at a 1:1 ratio at Rancho San Diego, an offsite Caltrans mitigation bank. Temporary impacts would be mitigated onsite with restoration to pre-existing conditions and seeding with an appropriate native mix.	Biology, Generlist	Stewardship	N/A					
Permanent impacts to disturbed coastal sage scrub would be mitigated with coastal sage scrub credits at a 1:1 ratio at Rancho San Diego, an offsite Caltrans mitigation bank. Mitigation credits have already been debited for the project. An additional 0.6 acre of coastal sage scrub may be impacted by staging/storing. Temporary impacts would be mitigated onsite by restoring the areas to pre-existing conditions and seeding affected areas with a native coastal sage scrub mix.	Biology, Generlist	Stewardship	N/A					

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Appendix E. Species and Habitats of Concern with the Potential to Occur within the Project Vicinity

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Appendix E: Species and Habitats of Concern with the Potential to Occur within the Project Vicinity

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Plants					
Acanthomintha ilicifolia	San Diego thorn-mint	Fed: CA: CNPS:	FT SE 1B.1	Chaparral | Coastal scrub | Valley and foothill grassland | Vernal pool | Wetland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. There is no vernal pool habitat found within the BSA. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Acmispon prostratus	Nuttall's acmispon	Fed: CA: CNPS:	None None 1B.1	Coastal dunes | Coastal scrub	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Adolphia californica	California adolphia	Fed: CA: CNPS:	None None 2.1	Chaparral | Coastal scrub | Valley and foothill grassland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Ambrosia chenopodiifolia	San Diego bur-sage	Fed: CA: CNPS:	None None 2.1	Coastal scrub	**Presumed absent:** Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Ambrosia monogyra	Singlewhorl burrobrush	Fed: CA: CNPS:	None None 2.2	Chaparral | Coastal scrub	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Ambrosia pumila	San Diego ambrosia	Fed: CA: CNPS:	FE None 1B.1	Upper terraces of rivers and drainages | Native and non-native open grasslands | Coastal sage scrub	**Presumed Absent**: No suitable habitat is at the site. No open grasslands or wetland features are present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Aphanisma blitoides	Aphanisma	Fed: CA: CNPS:	None None 1B.2	Coastal bluff scrub | Coastal dunes | Coastal scrub	**Presumed Absent**: No suitable habitat is at the site. No open grasslands or wetland features are present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Arctostaphylos glandulosa ssp. *cassifolia*	Del Mar manzanita	Fed: CA: CNPS:	FE None 1B.1	Chaparral | Closed-cone coniferous forest	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals
Arctostaphylos otayensis	Otay manzanita	Fed: CA: CNPS:	None None 1B.2	Chaparral | Cismontane woodland	**Presumed Absent**: No suitable habitat is present at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Artemisia palmeri	San Diego sagewort	Fed: CA: CNPS:	None None 4.2	Chaparral | Cismontane woodland | Riparian forest	**Presumed Absent**: No suitable habitat is at the site. No open grasslands or riparian features are present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Astragalus deanei	Dean's milk-vetch	Fed: CA: CNPS:	None None 1B.1	Chaparral | Coastal scrub | Riparian forest	**Presumed Absent**: No suitable habitat is at the site. No open grasslands or wetland features are present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Atriplex pacificia	South coast saltscale	Fed: CA: CNPS:	None None 1B.2	Chenopod scrub | Coastal bluff scrub | Coastal scrub	**Presumed Absent**: No suitable habitat is at the site. No open grasslands or wetland features are present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Bergerocactus emoryi	Golden-spined cereus	Fed: CA: CNPS:	None None 2.2	Chaparral | Coastal scrub	**Presumed Absent**: No suitable habitat is at the site. No open grasslands or wetland features are present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Bloomeria clevelandii	San Diego goldenstar	Fed: CA: CNPS:	None None 1B.1	Chaparral | Coastal scrub | Valley and foothill grassland | Vernal pool | Wetland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. No vernal pool habitat is found within the BSA. There are no large marshes or swamps within the BSA. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Brodiaea orcuttii	Orcutt's brodiaea	Fed: CA: CNPS:	None None 1B.1	Chaparral | Cismontane woodland | Closed-cone coniferous forest | Meadow and seep | Ultramafic | Valley and foothill grassland | Vernal pool | Wetland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. No vernal pool habitat is found within the BSA. There are no large marshes or swamps within the BSA.
California macrophylla	Round-leaved filaree	Fed: CA: CNPS:	None None 1B.1	Cismontane woodland | Valley and foothill grassland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Calochortus dunnii	Dunn's mariposa-lily	Fed: CA: CNPS:	None Rare 1B.2	Chaparral | Closed-cone coniferous forest | Ultramafic	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Ceanothus cyaneus	Lakeside ceanothus	Fed: CA: CNPS:	None None 1B.2	Chaparral | Closed-cone coniferous forest	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Ceanothus otayensis	Otay mountain ceanothus	Fed: CA: CNPS:	None None 2.2	Chaparral	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Ceanothus verrucosus	Wart-stemmed ceanothus	Fed: CA: CNPS:	None None 2.2	Chaparral	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Centromadia parryi ssp. *australis*	Southern tarplant	Fed: CA: CNPS:	None None 1B.1	Marsh and swamp | Salt marsh | Valley and foothill grassland | Wetland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. No wetland habitat is found within the BSA. There are no large marshes or swamps within the BSA.
Chloropyron maritimum ssp. maritimum	Salt marsh bird's-beak	Fed: CA: CNPS:	FE SE 1B.2	Marsh and swamp | Salt marsh | Coastal dunes | Wetland	**Presumed Absent**: Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Chorizanthe polygonoides var. longispina	Long-spined spineflower	Fed: CA: CNPS:	None None 1B.2	Coastal scrub | Chaparral | Meadow and seep | Valley and foothill grassland	**Presumed Absent**: No suitable habitat is at the site. No open grasslands or wetland features are present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Clarkia delicate	Delicate clarkia	Fed: CA: CNPS:	None None 1B.2	Chaparral | Cismontane woodland	**Presumed Absent**: Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Clinopodium chandleri	San Miguel savory	Fed: CA: CNPS:	None None 1B.2	Chaparral | Cismontane woodland | Coastal scrub | Riparian woodland | Valley and foothill grassland	**Presumed Absent**: No suitable habitat is at the site. No open grasslands or wetland features are present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Comarostaphylis diversifolia ssp. *diversifolia*	Summer holly	Fed: CA: CNPS:	None None 1B.2	Chaparral	**Presumed Absent**: Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Cordylanthus maritimus ssp. maritimus	Salt marsh bird's-beak	Fed: CA: CNPS:	FE None 1B.1	Alkali playa | Marsh & swamp | Wetland	**Presumed Absent**: Land cover alongside the project footprint consists largely of disturbed areas, non-native grassland, and non-native ornamentals.
Cylindropuntia californica var. californica	Snake cholla	Fed: CA: CNPS:	None None 1B.1	Coastal scrub | Chaparral	**Presumed Absent**: No suitable habitat is at the site. No open grasslands are present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Deinandra conjugens	Otay tarplant	Fed: CA: CNPS:	FT SE 1B.1	Coastal scrub | Valley & foothill grassland	**Presumed Absent**: No suitable habitat is at the site. No open grasslands are present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Dicranostegia orcuttiana	Orcutt's bird's-beak	Fed: CA: CNPS:	None None 2.1	Coastal scrub	**Presumed Absent**: No suitable habitat is at the site. No open grasslands are present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Dudleya variegata	Variegated dudleya	Fed: CA: CNPS:	None None 1B.2	Chaparral | Cismontane woodland | Coastal scrub | Valley & foothill grassland	**Presumed Absent**: No suitable habitat is at the site. No open grasslands are present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Ericameria palmeri var. palmeri	Palmer's goldenbush	Fed: CA: CNPS:	None None 1B.1	Coastal scrub | Chaparral	**Presumed Absent**: No suitable habitat is at the site. No open grasslands are present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Eryngium aristulatum var. *parishii*	San Diego button-celery	Fed: CA: CNPS:	FE SE 1B.1	Coastal scrub | Valley and foothill grassland | Vernal pool | Wetland	**Presumed Absent**: No open grassland or vernal pool habitat was found within the BSA. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Euphorbia misera	Cliff spurge	Fed: CA: CNPS:	None None 2.2	Coastal bluff scrub | Coastal scrub | Mojavean desert scrub	**Presumed Absent**: No suitable habitat is at the site. No open grasslands are present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Ferocactus viridescens	San Diego barrel caactus	Fed: CA: CNPS:	None None 2.1	Chaparral | Coastal scrub | Valley and foothill grassland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Frankenia palmeri	Palmer's frankenia	Fed: CA: CNPS:	None None 2.1	Coastal dunes | Marsh & swamp | Salt marsh | Wetland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Fremontodendron mexicanum	Mexican flannelbush	Fed: CA: CNPS:	FE Rare 1B.1	Chaparral | Cismontane woodland | Closed-cone coniferous forest | Ultramafic	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Galium proliferum	Desert bedstraw	Fed: CA: CNPS:	None None 2.2	Joshua tree woodland | Limestone | Mojavean desert scrub | Pinon & juniper woodlands	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Harpagonella palmeri	Palmer's grapplinghook	Fed: CA: CNPS:	None None 4.2	Chaparral | Coastal scrub | Valley and foothill grassland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Hesperocyparis forbesii	Tecate cypress	Fed: CA: CNPS:	None None 1B.1	Chaparral | Closed-cone coniferous forest	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Heterotheca sessiliflora ssp. sessiliflora	Beach goldenaster	Fed: CA: CNPS:	None None 1B.1	Chaparral | Coastal dunes | Coastal scrub	**Presumed Absent**: No suitable habitat occurs on the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Horkelia truncata	Ramona horkelia	Fed: CA: CNPS:	None None 1B.3	Chaparral | Cismontane woodland	**Presumed Absent**: No suitable habitat, such as chaparral or Cismontane woodland, is present within the BSA.
Isocoma menziesii var. *decumbens*	Decumbent goldenbush	Fed: CA: CNPS:	None None 1B.2	Coastal scrub	**Presumed Absent**: No suitable habitat occurs on the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Iva hayesiana	San Diego marsh-elder	Fed: CA: CNPS:	None None 2.2	Alkali playa | Marsh & swamp | Wetland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Fed: CA: CNPS:	None None 1B.1	Alkali playa | Marsh & swamp | Salt marsh | Valley & foothill grassland | Vernal pool | Wetland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Lepechinia ganderi	Gander's pitcher sage	Fed: CA: CNPS:	None None 1B.3	Chaparral | Closed-cone coniferous forest | Coastal scrub | Valley & foothill grassland	**Presumed Absent**: No suitable habitat occurs on the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Fed: CA: CNPS:	None None 1B.2	Chaparral | Coastal scrub	**Presumed Absent**: No suitable habitat occurs on the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Lotus nuttallianus	Nuttall's lotus	Fed: CA: CNPS:	None None 1B.1	Coastal dunes | Coastal scrub	**Presumed Absent**: No suitable habitat occurs on the site. Land cover alongside the project footprint consists largely of disturbed areas, non-native grassland, and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Monardella hypoleuca ssp. *lanata*	Felt-leaved monardella	Fed: CA: CNPS:	None None 1B.2	Chaparral | Cismontane woodland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Monardella linoides ssp. viminea	Willowy monardella	Fed: CA: CNPS:	FE SE 1B.1	Chaparral | Closed-cone coniferous forest | Coastal scrub | Valley & foothill grassland	**Presumed Absent**: No suitable habitat occurs on the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Myosurus minimus ssp. apus	Little mousetail	Fed: CA: CNPS:	None None 3.1	Vernal pool | Wetland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Nama stenocarpum	Mud nama	Fed: CA: CNPS:	None None 2.2	Marsh and swamp | Wetland	**Presumed Absent**: There are no large marshes or swamps within the BSA.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Navarretia fossalis	Spreading navarretia	Fed: CA: CNPS:	FT None 1B.1	Alkali playa | Chenopod scrub | Marsh and swamp | Vernal pool | Wetland	**Presumed Absent**: There are no large marshes or swamps or vernal pools within the BSA.
Navarretia prostrata	Prostrate vernal pool navarretia	Fed: CA: CNPS:	None None 1B.1	Coastal scrub | Valley & foothill grassland | Vernal pool | Wetland	**Presumed Absent**: No vernal pools are found within the BSA.
Nemacaulis denudata denudata	Coast woolly-heads	Fed: CA: CNPS:	None None 1B.2	Coastal dunes	**Presumed Absent**: No coastal dune habitat is found within the BSA.
Orcuttia californica	California Orcutt grass	Fed: CA: CNPS:	FE SE 1B.1	Vernal pool | Wetland	**Presumed Absent**: No vernal pools are found within the BSA.
Pogogyne abramsii	San Diego mesa mint	Fed: CA: CNPS:	FE SE 1B.1	Vernal pool | Wetland	**Presumed Absent**: No vernal pools are found within the BSA.
Pogogyne nudiuscula	Otay mesa mint	Fed: CA: CNPS:	FE SE 1B.1	Vernal pool | Wetland	**Presumed Absent**: No vernal pools are found within the BSA.
Quercus dumosa	Nuttall's scrub oak	Fed: CA: CNPS:	None None 1B.1	Chaparral | Closed-cone coniferous forest | Coastal scrub	**Presumed Absent**: No suitable habitat occurs on the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Senecio aphanactis	Chaparral ragwort	Fed: CA: CNPS:	None None 2.2	Chaparral | Cismontane woodland | Coastal scrub	**Presumed Absent**: No suitable habitat occurs on the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches and is sub-optimal.
Stemodia durantifolia	Purple stemodia	Fed: CA: CNPS:	None None 2.1	Sonoran desert scrub	**Presumed Absent**: No suitable habitat occurs on the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Streptanthus bernardinus	Laguna Mountains jewel-flower	Fed: CA: CNPS:	None None 4.3	Chaparral | Lower montane coniferous forest | Upper montane coniferous forest	**Presumed Absent**: No suitable habitat occurs on the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Stylocline citroleum	Oil neststraw	Fed: CA: CNPS:	None None 1.B1	Chenopod scrub | Coastal scrub	**Presumed Absent**: No chenopod scrub occurs on the site. Disturbed Diegan coastal sage scrub occurs within the BSA, however, they are sparse patches and are considered sub-optimal.
Suaeda esteroa	Estuary seablite	Fed: CA: CNPS:	None None 1.B2	Marsh & swamp | Salt marsh | Wetland	**Presumed Absent**: No suitable habitat occurs on the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Tetracoccus dioicus	Parry's tetracoccus	Fed: CA: CNPS:	None None 1B.2	Chaparral | Coastal scrub | Ultramafic	**Presumed Absent**: No coastal bluff scrub occurs on the site. Disturbed Diegan coastal sage scrub occurs within the BSA , however, they are sparse patches and are considered sub-optimal.
Animals					
Crustaceans					
Branchinecta sandiegonensis	San Diego fairy shrimp	Fed: CA:	FE None	Chaparral | Coastal scrub | Vernal pool | Wetland	**Presumed Absent**: No suitable habitat is present on the site. No vernal pool habitat is found within the BSA.
Streptocephalus woottoni	Riverside fairy shrimp	Fed: CA:	FE None	Chaparral | Coastal scrub | Vernal pool | Wetland	**Presumed Absent**: No suitable habitat occurs on the site. No vernal pool habitat is found within the BSA
Insects					
Callophrys thornei	Thorne's hairstreak	Fed: CA:	None None	Tecate Cypress forest	**Presumed Absent**: No suitable habitat is present at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Cicindela gabbii	Western tidal-flat tiger beetle	Fed: CA:	None None	Estuary | Mudhore/flats	**Presumed Absent**: No suitable habitat is present at the site. Land cover alongside the project footprint consists largely of disturbed areas, non-native grassland, and non-native ornamentals.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Cicindela latesignata latesignata	Western beach tidal beetle	Fed: CA:	None None	Mudhore/flats	**Presumed Absent**: No suitable habitat is present at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Danaus plexippus	Monarch butterfly	Fed: CA:	None None	Closed-cone coniferous forest	**Presumed Absent**: No suitable habitat is present at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Euphydryas editha quino	Quino Checkerspot butterfly	Fed: CA:	FE None	Native and nonnative grasslands | Coastal sage scrub | Open chaparral | Open plant communities	**Presumed Absent**: No suitable habitat, such as open plant communities, is present in the BSA.
Lycaena hermes	Hermes copper butterfly	Fed: CA:	None None	Chaparral | Coastal scrub	**Presumed Absent**: No suitable habitat is present at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches, is found on steep slopes, and is sub-optimal.
Reptiles					
Anniella pulchra pulchra	Silvery legless lizard	Fed: CA:	None None	Chaparral | Coastal dunes | Coastal scrub	**Presumed Absent**: No suitable habitat is present at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches, is found on steep slopes, and is sub-optimal.
Aspidoscelis hyperythra	Orangethroat whiptail	Fed: CA:	None None	Chaparral | Cismontane woodland | Coastal scrub	**Presumed Absent**: No suitable habitat is present at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches, is found on steep slopes, and is sub-optimal.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Aspidoscelis tigris stejnegeri	Coastal whiptail	Fed: CA:	None None	Chaparral | Woodland | Riparian	**Presumed Absent**: No suitable habitat is present at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Actinemys marmorata	Western pond turtle	Fed: CA:	None None	Aquatic | Artificial flowing waters | Klamath/North coast flowing waters | Klamath/North coast standing waters | Marsh and swamp | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowing waters | South coast standing waters | Wetland	**Presumed Absent**: No suitable aquatic habitat is present in the BSA. There are no large marshes or swamps within the BSA.
Charina trvirgata	Rosy boa	Fed: CA:	None None	Chaparral | Mojavean desert scrub | Sonoran desert scrub	**Presumed Absent**: No suitable habitat is present at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Chelonia mydas	Green turtle	Fed: CA:	FT None	Marine bay	**Presumed Absent**: No suitable habitat is present at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Crotalus ruber ruber	Northern red-diamond rattlesnake	Fed: CA:	None None	Chaparral | Mojavean desert scrub | Sonoran desert scrub	**Presumed Absent**: No suitable habitat is present at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Diadophis punctatus similis	San Diego ringneck snake	Fed: CA:	None None	Open, rocky areas, with litter or herbaceous vegetation | Streams	**Presumed Absent**: No suitable habitat is present at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Phrynosoma blainvillii	Coast horned lizard	Fed: CA:	None None	Chaparral | Cismontane woodland | Coastal bluff scrub | Coastal scrub | Desert wash | Pinyon and juniper woodlands | Riparian scrub | Riparian woodland | Valley and foothill grassland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches, is found on steep slopes, and is sub-optimal.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Plestiodon skiltonianus interparietalis	Coronado Island skink	Fed: CA:	None None	Chaparral | Cismontane woodland | Pinyon and juniper woodlands	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Salvadora hexalepis virgultea	Coast patch-nosed snake	Fed: CA:	None None	Coastal scrub	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub consists of small patches, is found on steep slopes, and is sub-optimal.
Thamnophis hammondii	Two-striped garter snake	Fed: CA:	None None	Marsh & swamp | Riparian scrub | Riparian woodland | Wetland	**Presumed Absent**: No suitable habitat is present in the BSA. There is no riparian habitat in the BSA.
Amphibians					
Anaxyrus californicus	Arroyo toad	Fed: CA:	FE None	Rivers with shallow gravelly pools | Sandy terraces	**Presumed Absent**: No suitable habitat is present in the BSA. There are no rivers in the BSA.
Spea hammondii	Western spadefoot	Fed: CA:	None None	Cismontane woodland | Coastal scrub | Valley and foothill grassland | Vernal pool | Wetland	**Presumed Absent**: No suitable wetland habitat occurs within the BSA. Presumed absent because Diegan coastal sage scrub within the BSA (consists of small patches, is found on steep slopes, and is sub-optimal.
Birds					
Accipiter cooperii	Cooper's hawk	Fed: CA:	None None	Cismontane woodland | Riparian forest | Riparian woodland | Upper montane coniferous forest	**Presumed Absent**: No suitable habitat, such as woodlands or riparian areas, is present in the BSA. Also, there is not a large prey base for foraging due to the highly developed nature of the BSA.
Agelaius tricolor	Tricolored blackbird	Fed: CA:	None None	Freshwater marsh | Marsh and swamp | Swamp | Wetland	**Presumed Absent:** No suitable habitat such as marsh or swamp is present in the BSA.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	Fed: CA:	None None	Chaparral | Coastal scrub	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub (chaparral) within the BSA consists of small patches, is found on steep slopes, and are sub-optimal.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Ammodramus savannarum	Grasshopper sparrow	Fed: CA:	None None	Valley and foothill grassland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Amphispiza belli belli	Bell's sage sparrow	Fed: CA:	None None	Chaparral | Coastal scrub	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub (chaparral) within the BSA consists of small patches, is found on steep slopes, and is sub-optimal.
Athene cunicularia	Burrowing owl	Fed: CA:	None None	Coastal prairie | Coastal scrub | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley and foothill grassland	**Presumed Absent:** No suitable habitat, such as coastal prairie, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, or Valley and foothill grassland, is present within the BSA. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches, is found on steep slopes, and is sub-optimal.
Campylorhynchus brunneicapillus sandiegensis	Coastal cactus wren	Fed: CA:	None None	Coastal scrub	**Presumed absent:** Diegan coastal sage scrub within the BSA consists of small patches, is found on steep slopes, and is sub-optimal.
Charadrius alexandrines nivosus	Western snowy plover	Fed: CA:	FT None	Great Basin standing waters | Sand shore | Wetland	**Presumed Absent**: No shore habitat occurs in the BSA.
Coccyzus americanus occidentalis	Western yellow-billed cuckoo	Fed: CA:	FC SE	Riparian forest	**Presumed Absent**: No riparian habitat occurs in the BSA.
Dendroica petechia brewsteri	Yellow warbler	Fed: CA:	None None	Riparian woodland	**Presumed Absent**: No riparian habitat occurs in the BSA.
Empidonax traillii	Southwestern willow flycatcher	Fed: CA:	FE SE	Dense riparian	**Presumed Absent**: No riparian habitat is present in the BSA.
Eremophila alpestris actia	California horned lark	Fed: CA:	None None	Marine intertidal & splash zone communities | Meadow & seep	**Presumed Absent**: No intertidal or meadow and seep habitat is present in the BSA.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Falco mexicanus	Prairie falcon	Fed: CA:	None None	Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland	**Presumed Absent**: Only ornamental and disturbed habitat is present in the BSA.
Icteria virens	Yellow-breasted chat	Fed: CA:	None None	Riparian forest | Riparian scrub | Riparian woodland	**Presumed Absent**: No riparian habitat occurs in the BSA.
Ixobrychus exilis	Least bittern	Fed: CA:	None None	Marsh & swamp | Wetland	**Presumed Absent**: No marsh and swamp habitat occurs in the BSA.
Laterallus jamaicensis coturniculus	California black rail	Fed: CA:	None ST	Brackish marsh | Freshwater marsh | Marsh & swamp | Salt marsh | Wetland	**Presumed Absent**: No wetlands are found within the BSA. There are no large marshes or swamps within the BSA.
Passerculus sandwichensis beldingi	Belding's savannah sparrow	Fed: CA:	None SE	Marsh & swamp | Wetland	**Presumed Absent**: There are no large marshes or swamps within the BSA.
Phalacrocorax auritus	Double-crested cormorant	Fed: CA:	None None	Riparian forest | Riparian scrub | Riparian woodland	**Presumed Absent**: No riparian habitat occurs in the BSA.
Polioptila californica californica	Coastal California gnatcatcher	Fed: CA:	FT None	Coastal bluff scrub | Coastal scrub	**Presumed Absent**: No coastal bluff scrub occurs on the site. Disturbed Diegan coastal sage scrub occurs within the BSA, however, it occurs in sparse patches, is found on steep slopes, and is considered sub-optimal.
Rallus longirostris	Light-footed clapper rail	Fed:	FE SE	Marshes	**Presumed Absent**: No marsh habitat is found within the BSA.
Sternula antillarum browni	California least tern	Fed: CA:	FE SE	Alkali playa | Wetland	**Presumed Absent**: No playas are found within the BSA.
Vireo bellii pusillus	Least Bell's vireo	Fed: CA:	FE SE	Riparian forest | Riparian scrub | Riparian woodland	**Presumed Absent**: No riparian forest, riparian scrub, or riparian woodland is present within the BSA.
Mammals					
Antrozous pallidus	Pallid bat	Fed: CA: CNPS:	None None	Chaparral | Coastal scrub | Desert wash | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Riparian woodland | Sonoran desert scrub | Upper montane coniferous forest | Valley and foothill grassland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches, is found on steep slopes, and is sub-optimal.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Chaetodipus californicus femoralis	Dulzura pocket mouse	Fed: CA:	None None	Chaparral | Coastal scrub | Valley and foothill grassland	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches, is found on steep slopes, and is sub-optimal.
Chaetodipus fallax fallax	Northwestern San Diego pocket mouse	Fed: CA:	None None	Chaparral | Coastal scrub	**Presumed Absent**: No suitable habitat is at the site. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches, is found on steep slopes, and is sub-optimal.
Choeronycteris mexicana	Mexican long-tongued bat	Fed: CA:	None None	Pinyon and juniper woodlands | Riparian scrub | Sonoran thorn woodland	**Presumed Absent**: No suitable habitat is in the BSA. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.
Corynorhinus townsendii	Townsend's big-eared bat	Fed: CA:	None None	Broadleaved upland forest | Chaparral | Chenopod scrub | Great Basin grassland | Great Basin scrub | Joshua tree woodland | Lower montane coniferous forest | Meadow & seep | Mojavean desert scrub | Riparian forest | Riparian woodland | Sonoran desert scrub | Sonoran thorn woodland | Upper montane coniferous forest | Valley & foothill grassland	**Presumed Absent**: No suitable habitat, such as broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, or North coast coniferous forest, is present in the BSA.
Eumops perotis californicus	Western mastiff bat	Fed: CA:	None None	Chaparral | Cismontane woodland | Coastal scrub | Valley & foothill grassland	**Presumed Absent**: No suitable habitat is present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches, is found on steep slopes, and are sub-optimal.
Lasiurus blossevillii	Western red bat	Fed: CA:	None None	Cismontane woodland | Lower montane coniferous forest | Riparian forest | Riparian woodland	**Presumed Absent**: No suitable habitat, such as Cismontane woodland, Lower montane coniferous forest, or riparian habitat, is present in the BSA.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Lasiurus cinereus	Hoary bat	Fed: CA:	None None	Broadleaved upland forest | Cismontane woodland | Lower montane coniferous forest | North coast coniferous forest	**Presumed Absent**: No suitable habitat, such as Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, or North coast coniferous forest, is present in the BSA.
Lasiurus xanthinus	Western yellow bat	Fed: CA:	None None	Desert wash	**Presumed Absent**: No suitable habitat, such as desert wash, is present within the BSA.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	Fed: CA:	None None	Coastal scrub	**Presumed Absent**: No suitable habitat is present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches, found on steep slopes, and is sub-optimal.
Myotis ciliolabrum	Western small-footed myotis	Fed: CA:	None None	Forests | Woodland	**Presumed Absent**: No suitable forest or woodland habitat is present in the BSA.
Myotis evotis	Long-eared myotis	Fed: CA:	None None	Forests | Woodland	**Presumed Absent**: No suitable forest or woodland habitat is present in the BSA.
Myotis yumanensis	Yuma myotis	Fed: CA:	None None	Lower montane coniferous forest | Riparian forest | Riparian woodland | Upper montane coniferous forest	**Presumed Absent**: No forest or riparian habitat are present within the BSA.
Neotoma lepida intermedia	San Diego desert woodrat	Fed: CA:	None None	Coastal scrub	**Presumed Absent**: No suitable habitat is present in the BSA. Diegan coastal sage scrub within the BSA consists of small patches, is found on steep slopes, and is sub-optimal.
Nyctinomops femorosaccus	Pocketed free-tailed bat	Fed: CA: :	None None	Joshua tree woodland | Pinyon and juniper woodlands | Riparian scrub | Sonoran desert scrub	**Presumed Absent**: No Joshua tree woodland, Pinyon and juniper woodlands, Riparian scrub, or Sonoran desert scrub are present within the BSA.
Nyctinomops macrotis	Big free-tailed bat	Fed: CA::	None None	Rocky terrain	**Presumed Absent:** No rocky terrain is present within the BSA. Land cover alongside the project footprint consists largely of disturbed areas and non-native ornamentals.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Perognathus longimembris pacificus	Pacific pocket mouse	Fed: CA::	None None	Chaparral | Coastal scrub	**Presumed Absent**: No suitable habitat is in the BSA. Land cover alongside the project footprint consists largely of disturbed areas, non-native grassland, and non-native ornamentals. Presumed absent because Diegan coastal sage scrub within the BSA consists of small patches, is found on steep slopes, and is sub-optimal.
Taxidea taxus	American badger	Fed: CA:	None None	Open areas | Cropland/hedgerow | Desert, Grassland/herbaceous | Savanna, Shrubland/chaparral	**Presumed Absent**: No suitable habitat occurs within the BSA.
Habitat					
Maritime Succulent Scrub	Maritime Succulent Scrub	Fed: CA:	None None	Succulent scrub	**Presumed Absent**: No suitable habitat occurs within the BSA.
San Diego Mesa Claypan Vernal Pool	San Diego Mesa Claypan Vernal Pool	Fed: CA:	None None	Vernal pool | Wetland	**Presumed Absent**: No suitable habitat occurs within the BSA. No wetlands are found within the BSA.
San Diego Mesa Hardpan Vernal Pool	San Diego Mesa Hardpan Vernal Pool	Fed: CA:	None None	Vernal pool | Wetland	**Presumed Absent**: No suitable habitat occurs within the BSA. No wetlands are found within the BSA.
Southern Coastal Salt Marsh	Southern Coastal Salt Marsh	Fed: CA:	None None	Salt marsh	**Presumed Absent**: Salt marsh is not present within the BSA.
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	Fed: CA:	None None	Riparian forest	**Presumed Absent**: Riparian forest is not present within the BSA.
Southern Interior Cypress Forest	Southern Interior Cypress Forest	Fed: CA:	None None	Cypress forest	**Presumed Absent**: Cypress forest is not present within the BSA.
Southern Riparian Scrub	Southern Riparian Scrub	Fed: CA:	None None	Riparian scrub	**Presumed Absent**: Riparian scrub is not present within the BSA.
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	Fed: CA:	None None	Riparian woodland	**Presumed Absent**: Riparian woodland is not present within the BSA.

Scientific Name	Common Name	Status		General Habitat Description	Potential for Occurrence and Rationale
Valley Needlegrass Grassland	Valley Needlegrass Grassland	Fed: CA:	None None	Grassland	**Presumed Absent**: Native grassland is not present within the BSA.

Federal Designations (Fed):	**State Designations (CA):**
(FESA, USFWS) **FE:** Federally listed, endangered **FT:** Federally listed, threatened	(CESA, CDFW) **SE:** State-listed, endangered **ST:** State-listed, threatened

California Native Plant Society (CNPS) Designations:

Note: according to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code. This interpretation is inconsistent with other definitions.

1A: Plants presumed extinct in California.
1B: Plants rare and endangered in California and throughout their range.
2: Plants rare, threatened, or endangered in California but more common elsewhere in their range.
3: Plants about which need more information; a review list.
4: Plants of limited distribution; a watch list.

Plants 1B, 2, and 4 extension meanings:
_.1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
_.2 Fairly endangered in California (20-80% occurrences threatened)
_.3 Not very endangered in California (<20% of occurrences threatened or no current threats known)

Potential for Occurrence Criteria:
Present: Species was observed on site during a site visit or focused survey.
High: Habitat (including soils and elevation factors) for the species occurs on site and a known occurrence has been recorded within 5 miles of the site.
Low-Moderate: Either low quality habitat (including soils and elevation factors) for the species occurs on site and a known occurrence occurs within 5 miles of the site; or suitable habitat strongly associated with the species occurs on site, but no records were found within the database search.
Presumed Absent: Focused surveys were conducted and the species was not found, or species was found within the database search but habitat (including soils and elevation factors) do not exist on site, or the known geographic range of the species does not include the survey area.

Source: United States Fish and Wildlife Service (2013), California Natural Diversity Data Base (2013), California Native Plant Society Electronic Inventory (CNPS 2013).