VISUAL IMPACT ASSESSMENT

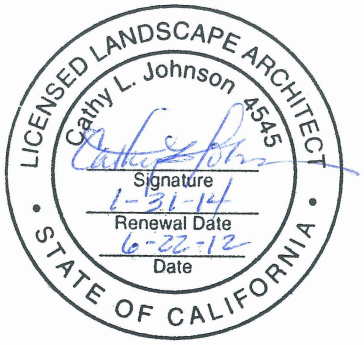
State Route 57/State Route 60 Confluence at Grand Avenue Project

June 2012
(Revisal of May 2012)

District 07-LA-60
PM 24.5/R 30.4
EA: 279100; RTP ID: LA0D450

Caltrans District 07

100 South Main Street
Los Angeles, CA 90012



Prepared Under the Direction of:

Cathy Johnson, PLA, CPESC
License #4545
Landscape Architect
RBF Consulting

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
CADD	Computer Aided Design and Drafting
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
EB	eastbound
FHWA	Federal Highway Administration
GPS	Global Positioning System
HOV	High-Occupancy Vehicle
I	Interstate
IS/EA	Initial Study/Environmental Assessment
LU	Landscape Unit
MM	Mitigation Measure
msl	mean sea level
NB	northbound
NFL	National Football League
OC	Overcrossing
PM	Post Mile
PS&E	Plans, Specifications, and Estimates
ROW	right-of-way
SB	southbound
SR	State Route
UC	Undercrossing
VIA	Visual Impact Assessment
WB	westbound

I. PURPOSE OF THE STUDY

The purpose of this study is to assess the potential visual impacts of the proposed State Route 57/State Route 60 Confluence at Grand Avenue Project (herein referenced as the "project"). The study contains proposed measures to minimize any adverse visual impacts on the surrounding visual environment associated with the construction of the project.

II. PROJECT LOCATION

The study area lies within the cities of Industry and Diamond Bar, Los Angeles County (County), State of California; refer to Figure 1 (Regional Vicinity) and Figure 2 (Local Vicinity). The project proposes improvements to the State Route 57 (SR-57)/State Route 60 (SR-60) confluence at the Grand Avenue interchange.

III. PROJECT DESCRIPTION

The City of Industry, in cooperation with the California Department of Transportation (Caltrans), is proposing freeway improvements to the SR-57/SR-60 confluence at the Grand Avenue interchange. The proposed project would be subject to both the California Environmental Quality Act (CEQA) and the federal National Environmental Policy Act (NEPA). Caltrans would be the lead agency under both CEQA and NEPA.

SR-57 is a major north-south freeway, serving the cities and communities of the Greater Los Angeles area, and part of the National Highway System and the State Freeway and Expressway System. This freeway's north terminus is at its junction with Interstate 210 (I-210), in the City of Glendora, and its south terminus is located at the junction with Interstate 5 (I-5), and State Route 22 (SR-22), in the City of Orange. The portion of SR-57 that is located in the project area is located in the Pomona Valley.

SR-60 is a major east-west freeway that also serves the cities and communities of the Greater Los Angeles Area. The freeway is also part of the National Highway System and the State Freeway and Expressway System. SR-60 begins near the Los Angeles River in the City of Los Angeles and continues eastward to Riverside County, serving the cities and communities on the east side of the Los Angeles metropolitan area and on the south side of the San Gabriel Valley. The west terminus of the freeway is at the East Los Angeles Interchange with I-10, I-5, and U.S. 101; the eastern terminus is at its junction with I-10 in the City of Beaumont.

There is a gap in SR-57 at its junction with SR-60. SR-57 terminates at the west end of the confluence with SR-60. SR-60, which carries traffic from both freeways, maintains six lanes in each direction under Grand Avenue. SR-57 resumes at the split with SR-60 at the east end of the confluence near Diamond Bar Boulevard.

The primary purpose of the proposed project is to improve traffic operations and safety on SR-57 and SR-60 at the Grand Avenue interchange.

The proposed project would reconfigure the approximately two-mile confluence of SR-57 and SR-60, which would entail the addition of auxiliary lanes and associated on-ramp/off-ramp reconfigurations. SR-57 and SR-60 are major inter-regional freeways that link cities in the San Gabriel Valley and the Inland Empire with Los Angeles and Orange counties.

The project's build alternatives are being analyzed as part of this Visual Impact Assessment, and will be analyzed as part of the Draft Initial Study/Environmental Assessment (EIR/EA). The project alternatives are described below.

Alternative 1 (No-Build)

The No-Build (or No-Action) Alternative would result in no structural or physical changes to SR-57, SR-60, or the Grand Avenue interchange. Existing deficient capacity and congestion conditions due to short weave sections on SR-57, SR-60, and Grand Avenue would not change under this Alternative.

Build Alternatives

The two build alternatives being considered (i.e., Alternative 2: Combination Cloverleaf/ Diamond Interchange Configuration and Alternative 3: Partial Cloverleaf Interchange Configuration) are described below and shown in Figures 3a and 3b (Site Plan), respectively. Under both alternatives, a new bypass off-ramp is proposed for EB SR-60 west of the southern/western SR-57/SR-60 junction. The bypass off-ramp would be barrier-separated from SR-57/SR-60 traffic until passing the SR-57 diverge to the Grand Avenue off-ramp. The NB SR-57 traffic would exit to Grand Avenue by using an optional exit from the third SR-57 lane.. The off-ramp lane would add to the one-lane EB SR-60 bypass off-ramp. The off-ramp would widen to three lanes at the final approach to the intersection at Grand Avenue.

Currently the third lane on SR-57 ends at the Grand Avenue off-ramp, and begins again 4,200 feet to the east. The build alternatives would both add this seventh lane between the Grand Avenue off-ramp and the additional lane near the SR-57 diverge at the east end. An auxiliary lane would be added adjacent to the added through lane to serve traffic entering from Grand Avenue.

At the east end of the confluence, a bypass connector would be built to connect the Grand Avenue eastbound on-ramp auxiliary lane with eastbound SR-60. This connector would require new overcrossing structures at Prospector Road and Diamond Bar Boulevard as well as realignment of the Diamond Bar Boulevard on-ramp.

In the WB direction, the dropped SB SR-57 lane would be extended 2,500 feet to the realigned WB SR-60 off-ramp to Grand Avenue, creating a two-lane exit ramp. The exit ramp would expand to five lanes at the intersection.

Operational improvements along Grand Avenue include widening the roadway to four through lanes in each direction under both build alternatives. Grand Avenue would be widened easterly, encroaching on the existing WB loop on-ramp. Grand Avenue would be realigned approximately 50 feet east of the existing centerline to avoid a right-of-way (ROW) acquisition from a vacant automobile dealership on Grand Avenue north of SR-60. The centerline shift of Grand Avenue would require the WB off-ramp to be relocated approximately 100 feet north of the existing intersection on Grand Avenue. The intersection relocation would also require realignment of the two-lane WB loop on-ramp and Old Brea Canyon Road (to be renamed Grand Crossing Parkway).

The existing Grand Avenue overcrossing does not have sufficient length to accommodate an added NB SR-57 through lane or sufficient vertical clearance over SR-60 to allow for widening.

Therefore, it would be replaced. The replacement bridge would be longer and deeper, resulting in a raised profile along Grand Avenue.

The widening of Grand Avenue would continue south to Golden Springs Drive. Golden Springs Drive would be widened to allow additional through lanes, double left-turn lanes, and one right-turn lane on three legs of the intersection of Grand Avenue and Golden Springs. One right-turn lane would be provided on Grand Avenue at the NB approach to Golden Springs Drive. Street widening would occur on the north, east, and west legs of the intersection. Approximately 600 feet of NB Grand Avenue south of the intersection at Golden Springs would be restriped to three lanes.

A continuous pedestrian walkway is currently provided on the west side of Grand Avenue between Golden Springs and Old Brea Canyon Road. However, on the east side of Grand Avenue, no pedestrian walkway is provided north of the overcrossing. Under both alternatives, eight-foot-wide walkways on both sides of Grand Avenue would be constructed from Golden Springs to Old Brea Canyon Road. Construction of build alternatives would not affect pedestrian walkways on other local roads.

New ROW and easements would be required to accommodate the improvements proposed under both build alternatives. It is anticipated that all ROW acquisitions would be partial acquisitions. Both alternatives would require property from Diamond Bar Golf Course.

Reconstruction of the NB SR-57 connector to EB SR-60 would require partial acquisition of undevelopable slopes on three parcels. Construction of the new EB bypass connector would require aerial easements from three commercial parcels with a hotel and restaurants. Within two of the easements, the potential exists for a few parking stalls to be eliminated to accommodate bridge columns and foundations. The eliminated parking would not be replaced. In addition, a sliver of landscaping area would need to be acquired from a local shopping mall on Grand Avenue near the intersection with Golden Springs Drive. On the north side of the project area, undeveloped land in the City of Industry would need to be acquired to reconstruct the westbound SR-60 off-ramp to Grand Avenue.

Alternative 2 would require 7.1 acres of property from Diamond Bar Golf Course. This would require realigning four fairways within the remaining property. Alternative 3 would require 10.1 acres from the golf course. This would require relocating six fairways within the remaining property and minor improvements to 12 fairways. Both alternatives would also require reconfiguration of a secondary clubhouse driveway to Grand Avenue, with no change to the parking configuration.

With respect to ROW acquisitions, retaining walls are proposed in lieu of slopes to limit the amount of land acquired from businesses as well as the golf course. Temporary construction easements (TCEs), ranging from 10 to 15 feet, would be needed along the proposed right-of-way to construct the retaining walls. In addition, permanent maintenance or footing easements would be needed.

The existing sound wall that extends from the westbound SR-60 confluence with southbound SR-57 to Station 1330+60 on SR-60 will be maintained. For the two build alternatives, the project proposes to construct a 12-foot-high noise barrier on eastbound SR-60 (along the golf course property). The proposed noise barrier would be approximately 3,000 feet long (Station 1295+00 to Station 1326+01). The entire noise barrier would be constructed within the proposed state ROW. Refer to page 5 of the VIA, below, for further discussion of the soundwalls considered as part of this analysis.

Under both alternatives, two utility easements would need to be relocated. A Los Angeles County Sanitation District easement in the slope of the Ayres Hotel would require relocation, and a Southern California Edison distribution line that runs parallel to eastbound SR-60, north of Grand Avenue, would be relocated southward (within the golf course and four commercial parcels).

Alternative 2 would require 173,702 square feet (3.99 acres) of TCEs, and Alternative 3 would require 192,447 square feet (4.42 acres) of TCEs.

Alternative 2 (Combination Cloverleaf/Diamond Configuration Interchange)

Alternative 2 would maintain the existing interchange configuration (compact-diamond) for the EB SR-60 on- and off-ramps. The interchange configuration at Grand Avenue for Alternative 2 would remain a combination partial cloverleaf for the WB SR-60 on- and off-ramps. An auxiliary lane would be added, connecting the new three lane on-ramp at Grand Avenue to the new connector that bypasses the north/east SR-57/SR-60 interchange.

The existing Grand Avenue overcrossing does not have sufficient length to accommodate the added NB SR-57 through lane or sufficient vertical clearance over SR-60 to allow for widening. Therefore, it would be replaced. Under Alternative 2, the existing Grand Avenue overcrossing would be replaced by a 10-lane, 148-foot-wide structure over SR-60. The longer span would require a deeper structure, raising the Grand Avenue profile by about four feet. The bridge would contain eight through lanes and two 450-foot-long double left-turn lanes from SB Grand Avenue to the EB on-ramp.

Alternative 3 (Partial Cloverleaf Interchange Configuration)

The main difference between Alternative 2 and Alternative 3 is the configuration of the EB SR-60 interchange at Grand Avenue. Under Alternative 3, the existing EB on- and off-ramps at Grand Avenue, which form a compact diamond interchange, would be reconfigured to form a partial cloverleaf interchange. The new intersection of Grand Avenue and the new EB on- and off- ramps would be located approximately 500 feet south of the existing intersection (i.e., mid-way between the freeway and Golden Springs Drive). The new EB on-ramp would be a loop on-ramp that would join SR-60 as a new EB auxiliary lane. The existing EB on-ramp would be realigned to accommodate the widened Grand Avenue and merge into the EB auxiliary lane created by a new SB Grand Avenue to EB SR-60. The auxiliary lane would connect to the new connector that bypasses the north/east SR-57/SR-60 interchange.

The existing Grand Avenue overcrossing would be replaced by a new structure over SR-60. However, unlike Alternative 2, a double left-turn lane from SB Grand Avenue to the EB on-ramp would not be required, as vehicles traveling on SB Grand Avenue would access NB SR-57 and EB SR-60 by way of the new loop on-ramp on the west side of Grand Avenue. The new Grand Avenue overcrossing would be widened to accommodate the eight through lanes and a center divider/median (a total width of 136 feet). A longer span would be required to accommodate the third SR-57 through lane and the loop on-ramp auxiliary lane. The longer span would require a deeper structure, raising the Grand Avenue profile by about four feet.

Construction Activities and Staging

The construction scenarios would be similar for both Alternative 2 and Alternative 3. The construction phase of the proposed project is anticipated to begin in the fall of 2014 and end by

the fall of 2017. The proposed project would involve clearing, excavation, grading, and other site preparation activities prior to structural work and paving. On-site construction staging would occur just north of the WB SR-60/SB SR-57 Grand Avenue on- and off-ramps. This area, which is east of Grand Avenue, is owned by the City of Industry.

Soundwalls

According to the project's *Noise Study Report* (NSR) (prepared by Caltrans, dated May 2012), the project has the potential to construct five soundwalls as part of the mitigation for noise impacts. Therefore, this Visual Impact Assessment (VIA) assumes that these five soundwalls would be constructed, as a worst case scenario, under both build alternatives and are included in this analysis. Refer to Table 1 (NSR Soundwall Information) for the locations and dimensions of the recommended soundwalls.

Table 1
NSR Soundwall Information

Soundwall	Location	Maximum Height (feet)	Length (feet)
1	Along the residential property lines along Decorah Road atop the bluff overlooking SR-60/SR-57 in the northern portion of the project site.	16	3,330
2	Along the residential property lines along Rock River Road, adjacent to the SB SR-57 travel lanes near the northern portion of the project site.	16	1,280
3	Along the residential property lines along Rock River Road, adjacent to the SB SR-57/WB SR-60 travel lanes near the central portion of the project site.	16	2,300
4	Along the Diamond Bar Golf Course, north/east of Grand Avenue, adjacent to the NB SR-57/EB SR-60 travel lanes.	16	2,970
5	Along the Diamond Bar Golf Course, south/east of Grand Avenue, adjacent to the NB SR-57/EB SR-60 travel lanes.	16	2,220

Source: Caltrans, *State Route 57/State Route 60 Confluence Project Noise Study Report*, May 2012.

The Final NADR will determine which walls are feasible and reasonable to construct. According to the project's *Draft Noise Abatement Decision Report* (NADR) (prepared by Caltrans, dated May 2012), the project is anticipated to only construct one of the five NSR soundwalls (which has been proposed as part of the project even though the Draft NADR determined that this wall is not reasonable). Therefore, the conclusions analysis, presented at the end of this VIA, also considers implementation of the NADR project-proposed soundwall only (rather than all of the NSR soundwalls) for both build alternatives. Refer to Table 2 (NADR Soundwall Information) for the location and dimensions of the proposed NADR soundwall.

Table 2
NADR Soundwall Information

Soundwall	Location	Maximum Height (feet)	Length (feet)
4	Along the Diamond Bar Golf Course, north/east of Grand Avenue, adjacent to the NB SR-57/EB SR-60 travel lanes.	12	2,970

Source: Caltrans, *State Route 57/State Route 60 Confluence Project Noise Abatement Decision Report*, May 2012.

A. Purpose and Need

Project Purpose

Improvements to the SR-57/SR-60 confluence are needed to correct safety and operational deficiencies at the Grand Avenue interchange. The five primary objectives are presented below.

- Reduce congestion and delays on Grand Avenue from Golden Springs Drive to the interchange at SR-60.
- Reduce congestion and delays at the Grand Avenue interchange.
- Reduce congestion and delays on the SR-57/SR-60 freeway mainline.
- Reduce weaving within the SR-57/SR-60 confluence.
- Improve safety by reducing weaving movements and increasing weaving distances along the SR-57/SR-60 confluence.

These primary objectives address the need to improve the operational deficiencies of the freeways at the Grand Avenue interchange.

Project Need

Forecast regional population and employment growth between 2008 and 2035[1] is expected to result in more traffic, with volumes 10 to 25 percent higher than existing volumes along the SR-60 mainline and in the recently constructed HOV lanes, according to the traffic forecast from the SCAG model.

Traffic conditions on most roadway facilities are analyzed by using the principles or the specific analysis methods contained in the *Highway Capacity Manual, 2000 Edition* (HCM), a publication of the Transportation Research Board, an agency that is associated with the federal government. Level of service (LOS) is the report-card scale used in the HCM. LOS, which ranges from A to F, describes the varying conditions on a roadway during a specific time interval. Brief definitions of LOS are found in Table 3 (Level of Service Descriptions).

Table 3
Level of Service Descriptions

Level of Service	Traffic Description
A	Excellent, Light Traffic
B	Good, Light to Moderate Traffic
C	Moderate Traffic, with Insignificant Delay
D	Heavy Traffic, with Significant Delay
E	Severe Congestion and Delay
F	Failed; Indicated Levels Cannot Be Handled
Source: Transportation Research Board, 2000.	

[1] Note that 2035 is the horizon year of the most recently adopted regional plan (2008 RTP). The proposed project is included in the list of projects that make up the 2008 RTP.

Forecast traffic in 2035 would result in further deterioration of freeway operations and an estimated LOS of F on the mainline of the SR-57/SR-60 confluence in both the westbound and eastbound direction. Therefore, improvements are proposed at the SR-57/SR-60 confluence to accommodate expected traffic volumes.

IV. ASSESSMENT METHOD

The assessment method used in this visual impact study generally follows the guidelines outlined in the Federal Highway Administration (FHWA) publication, *Visual Impact Assessment for Highway Projects*, dated January 1988.

Six steps required to assess visual impacts were performed, as follows:

A. Define the project setting and viewshed.

B. Identify key views for visual assessment.

C. Analyze existing visual resources and viewer response.

D. Depict the visual appearance of project alternatives.

E. Assess the visual impacts of project alternatives.

F. Propose methods to mitigate adverse visual impacts.

V. VISUAL ENVIRONMENT OF THE PROJECT

A. Project Setting

The regional landscape establishes the general visual environment of the project; however, the specific visual environment upon which this assessment focuses is determined by defining landscape units and the project viewshed.

The regional landscape of the southeastern portion of the County is characterized by rolling hills and distant mountains. Ridgetops associated with the Angeles National Forest (Sunset Peak, 5,796 feet above mean sea level [msl]; Stoddard Peak, 4,624 feet above msl) are visible to the north of the project area. The San Jose Hills are located to the north of the project area (Buzzard Peak, 1,375 feet above msl). The Chino Hills and Puente Hills are located to the south of the project area (ranging in elevation from approximately 700 to 1,300 feet above msl). Of these ridgelines, mostly hilltops associated with the San Jose Hills, Chino Hills, and Puente Hills are afforded from the project site, as the project site is located within a shallow valley area of the County (approximately 600 to 770 feet above msl). However, more distant views to the Angeles National forest are also afforded. The project site is also surrounded by a mix of developed uses including commercial, residential, recreational, institutional, and transportation uses.

B. Landscape Units

A landscape unit is a portion of the regional landscape and can be thought of as an outdoor room that exhibits a distinct visual character. A landscape unit often corresponds

to a place or district that is commonly known among local viewers. The project site can be separated into three distinct landscape units, based on the different views and character experienced within each; refer to Figure 4 (Landscape Units).

Landscape Unit 1: Southern SR-57/SR-60 Connector

Landscape Unit 1 (LU1) is located in the southern portion of the project area in the cities of Industry and Diamond Bar. LU1 lies within a stretch of land along SR-57/SR-60 from the southern boundary of the project site (between Brea Canyon Road and the SR-57/SR-60 connector) to approximately 1,500 feet north of the SR-57/SR-60 connector. LU1 is located within a valley and gently slopes to the southeast. Therefore, the elevations of the freeway mainline range from approximately 600 to 660 feet above msl, while elevations of the terrain to the east and west of the freeway are approximately 700 feet above msl.

LU1 consists of the SR-57/SR-60 connector and surrounding areas, Diamond Bar Creek, undeveloped land in the City of Industry, commercial uses within the City of Diamond Bar, and some residential uses. The commercial uses within the eastern portion of LU1 account for the majority of land uses within LU1. Although man-made features (e.g., residential and commercial development) exist within LU1, the surrounding rolling hills to the west are also prominent features in LU1. Other hardscape features (e.g., overcrossings, barriers) are also present within LU1. Several mature trees and other ornamental landscaping are located within LU1 and along the SR-57/SR-60 corridor.

Landscape Unit 2: SR-57/SR-60 and Grand Avenue Interchange

Landscape Unit 2 (LU2) is located within the central portion of the project site, and extends from the southern boundary of LU1 to the SR-57 off-ramp in the City of Diamond Bar. LU2 is located within a valley and gently slops to the southeast. Therefore, the elevations of the freeway mainline range from approximately 640 to 700 feet above msl, while the terrain to the east and west of the freeway have elevations of approximately 700 to 800 feet above msl. LU2 includes commercial, residential, and undeveloped hillside uses to the west; and recreational (golf course), commercial, and some residential uses to the east. The Diamond Bar Golf Course contains a substantial amount of trees and vegetation, and is the dominant land use in LU2. The project site, within LU2, is surrounded by commercial, residential, and recreational uses. Other man-made features within LU2 include roadways, soundwalls, retaining walls, and barriers.

Landscape Unit 3: Northern SR-57/SR-60 Split

Landscape Unit 3 (LU3) is located within the northern portion of the project site, and extends from the boundary of LU2 to approximately 1,700 feet north of the SR-57/SR-60 split in the City of Diamond Bar. This LU consists of residential and institutional uses to the north, east, and west; and commercial, recreational, and institutional uses to the east. LU3 is built out and mainly consists of residential and commercial development. Man-made features within LU3 include residential, commercial, and institutional structures, soundwalls, retaining walls, and barriers. LU3 is located in a sloping area, with elevations ranging from approximately 700 to 800 feet above msl.

C. Project Viewshed

A viewshed is a subset of a landscape unit and is comprised of all the surface areas visible from an observer's viewpoint. The viewshed extents are defined as the furthest points of the project's visibility. The viewshed also includes the locations of viewers likely to be affected by visual changes brought about by project features.

Based upon a site visit conducted on July 13, 2010, scattered views are afforded from surrounding urban land uses within a one-mile radius of the project site. Views of the project site are also afforded by adjoining residential, commercial, and institutional uses. Views from the project site are afforded by motorists traveling along the SR-57/SR-60 travel lanes; refer to Figure 5a (Viewshed Map – Alternative 2) and Figure 5b (Viewshed Map – Alternative 3).

Landscape Unit 1: Southern SR-57/SR-60 Connector

Views of the project site within LU1 are afforded by some residents to the east, south, and west located at higher elevations. Views of the project site are also afforded from surrounding commercial uses adjacent to the east, as they are located at higher elevations than the freeway mainline. Views of the project site are afforded by travelers along SR-57/SR-60 lanes. Views within LU1 consist of the SR-57/SR-60 travel lanes, surrounding residential and commercial uses, valleys, and surrounding hillsides. The ridgetops of the Angeles National Forest are visible from NB/EB travel lanes, and distant views to the Puente Hills and Chino Hills are afforded from SB/WB travel lanes.

Landscape Unit 2: SR-57/SR-60 and Grand Avenue Interchange

Within LU2, the project site is visible to residential, commercial, and recreational (golf course) uses to the east of SR-57/SR-60. Views from the project site are afforded from travelers along SR-57/SR-60 and the Grand Avenue overcrossing. Views within LU2 generally consist of the SR-57/SR-60 travel lanes, soundwalls, retaining walls, barriers, surrounding undeveloped hillsides, and surrounding recreational and residential uses. The ridgetops of the Angeles National Forest are also visible from NB/EB travel lanes, and distant views to the Puente Hills and Chino Hills are afforded from SB/WB travel lanes.

Landscape Unit 3: Northern SR-57/SR-60 Split

Within LU3, the project site is visible to the adjacent residential, commercial, institutional, and recreational (golf course) uses. Views from the project site are afforded by travelers along SR-57/SR-60. Views within LU3 generally consist of SR-57/SR-60 travel lanes, surrounding residential, commercial, and institutional structures, soundwalls, retaining walls, and hillsides. The ridgetops of the Angeles National Forest are visible from the NB/EB travel lanes. Distant views to the Puente Hills and Chino Hills are afforded from SB/WB travel lanes.

VI. EXISTING VISUAL RESOURCES AND VIEWER RESPONSE

A. FHWA Method of Visual Resource Analysis

Identify Visual Character – Visual character is descriptive and non-evaluative, which means it is based on defined attributes that are neither good nor bad. A change in visual character cannot be described as having good or bad attributes until it is compared with the viewer response to that change. If there is public preference for the established visual character of a regional landscape and resistance to a project that would contrast that character, then changes in the visual character can be evaluated.

Assess Visual Quality – Visual quality is evaluated by identifying the vividness, intactness, and unity present in the viewshed. FHWA states that this method should correlate with public judgments of visual quality well enough to predict those judgments. This approach is particularly useful in highway planning because it does not presume that a highway project is necessarily an eyesore. This approach to evaluating visual quality can also help identify specific methods for mitigating each adverse impact that may occur as a result of a project. The three criteria for evaluating visual quality can be defined as follows:

Vividness is the visual power or memorability of landscape components as they combine in distinctive visual patterns.

Intactness is the visual integrity of the natural and man-built landscape and its freedom from encroaching elements. It can be present in well-kept urban and rural landscapes, as well as in natural settings.

Unity is the visual coherence and compositional harmony of the landscape considered as a whole. It frequently attests to the careful design of individual man-made components in the landscape.

B. Existing Visual Resources

Existing Visual Character

Existing visual resources within the project area include the surrounding hillsides and valleys. Vegetation in the project area consists of ornamental trees and landscaping along the freeway, local roadways, as well as within surrounding commercial areas. The Diamond Bar Golf Course is located to the east of the project site, and contains mature trees and vegetation. The visible form and line of the valley and distant ridgelines (associated with the Angeles National Forest) to the north of the project site and the Chino Hills and Puente Hills to the south, as well as the color and texture of the vegetated hillsides adjacent to the east, enhance the visual character in the area. Man-made features consist of urban development. Signage associated with the freeway and the various commercial uses are also visible.

Landscape Unit 1: Southern SR-57/SR-60 Connector

Existing visual resources within LU1 include Diamond Bar Creek as well as the surrounding hillsides and valleys. Vegetation within LU1 consists of ornamental trees

and landscaping along the eastern and western sides of SR-57/SR-60, as well as along local roadways and within surrounding commercial and residential uses. Mature vegetation located along Diamond Bar Creek to the west of the project site is partially visible.

The visible form and line of the valley and distant ridgelines (associated with the Angeles National Forest and the Puente Hills and Chino Hills) to the north and south of LU1, and the color and texture of the surrounding hillsides adjacent to the east and west, enhance the visual character of LU1. Man-made features within LU1 consist of urban development to the east and south of the project site. Freeway signage is also visible within LU1.

Landscape Unit 2: SR-57/SR-60 and Grand Avenue Interchange

Visual resources within LU2 include the surrounding hillsides and Diamond Bar Creek. Mature ornamental landscaping is present along SR-57/SR-60 and within residential and recreational (golf course) land uses in LU2. Hillsides and mature trees are present along the west side of SR-57/SR-60 in LU2 and increase the vividness within this view. Hillside residential development to the east of the project site creates an increased sense of vividness and unity between the natural and urban landscape. Views of ornamental landscaping along local roadways are also afforded in LU2.

Landscape Unit 3: Northern SR-57/SR-60 Split

Existing visual resources within LU3 include the surrounding hillsides to the east. Mature trees and ornamental vegetation are also located along the SR-57/SR-60 mainline. The presence of mature vegetation increases intactness in the project area. Residential uses atop hillsides to the east and commercial structures to the east are visible from several locations throughout LU3. The varying line, form, and texture of the hillsides and mature vegetation along SR-57/SR-60 create an increased sense of intactness and unity throughout LU3.

Existing Visual Quality

The visual quality within the project area is considered to be moderately high. Distant background views are afforded to the ridgetops associated with the Angeles National Forest located north of the project site, which create a distinctive visual pattern to those traveling in the NB direction. Stoddard Peak (elevation 4,624 feet), Sunset Peak (elevation 5,796 feet), and Frankish Peak (elevation 4,198 feet) are among the ridgetops visible to the north of the project site. The Puente Hills and Chino Hills are visible to the south of the project site, providing SB travelers with distant views to ridgetops and hillsides.

Commercial uses to the east and freeway signage appear to encroach on views from travelers along SR-57/SR-60. Visual unity is increased by the presence of mature trees and landscaping along the SR-57/SR-60 corridor and the hillsides to the east and west.

Landscape Unit 1: Southern SR-57/SR-60 Connector

The average visual quality within LU1 is considered to be moderate to moderately high. Drivers utilizing SR-57/SR-60 generally have views of roadway uses, adjacent commercial development, surrounding hillsides, valleys, and distant mountains. The commercial uses are located in an area with varied topography and substantial ornamental landscaping. The existing commercial signage throughout LU1 detracts from the project area's intactness. Distant background views are afforded to vivid ridgetops associated with the Angeles National Forest located north of the project site, which create a distinctive visual pattern to those traveling in the NB/EB direction. Puente Hills and Chino Hills ridgetops are visible from SB/WB travel lanes within LU1.

Diamond Bar Creek is located within the western portion of LU1; however, it is not visible from travel lanes within LU1. Motorists traveling along SR-57/SR-60 have views to hillsides and ornamental landscaping to the east and west of SR-57/SR-60. Commercial uses to the east and the hardscape of the various SR-57/SR-60 ramps encroach on views from travelers along SR-57/SR-60. Visual unity is inhibited by the varying character of development to the east (commercial uses) and west (undeveloped hillsides) of SR-57/SR-60 within LU1.

Landscape Unit 2: SR-57/SR-60 and Grand Avenue Interchange

The average existing visual quality within LU2 is considered to be high. LU2 consists of recreational (golf course) and residential uses, as well as undeveloped hillsides. Visual quality is increased in LU2 due to the trees and vegetation within the golf course as well as the landscaped medians within local roadways. The NB/EB travelers along SR-57/SR-60 have background views to vivid ridgetops associated with the Angeles National Forest located north of the project site. Puente Hills and Chino Hills ridgetops are also visible from SB/WB travel lanes within LU2. Diamond Bar Creek is located to the west of LU2; however, it is not visible from the project site due to intervening topography. Mature trees and ornamental landscaping are visible along the east and west sides of SR-57/SR-60, which increases unity throughout LU2. The Grand Avenue overcrossing and large freeway signage within LU2 encroaches on views from SR-57/SR-60 motorists.

Landscape Unit 3: Northern SR-57/SR-60 Split

The average existing visual quality within LU3 is considered to be moderately high. LU3 is characterized by residential, commercial, recreational, and institutional uses. The residential uses are located in an area with varying topography and mature trees. Commercial uses within LU3 are located in a flat area with some ornamental landscaping. Views from motorists traveling along SR-57/SR-60 include surrounding mature trees and ornamental landscaping, as well as vivid ridgetops of the Angeles National Forest to the north of LU3, the Puente Hills and Chino Hills to the south, and rolling hillsides to the east. Soundwalls are visible along the west side of SR-57/SR-60 throughout LU3 which encroach on views in the project area.

C. Methods of Predicting Viewer Response

Viewer response is composed of two elements: viewer sensitivity and viewer exposure. These elements combine to form a method of predicting how the public might react to visual changes brought about by a highway project.

Viewer sensitivity is defined both as the viewers' concern for scenic quality and the viewers' response to changes in the visual resources that make up the view. Local values and objectives may confer visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis. Even when the existing appearance of a project site is uninspiring, a community may still object to projects that fall short of its visual goals. Analysts can learn about these special resources and community aspirations for visual quality through citizen participation procedures, as well as from local publications and planning documents.

Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of their view, speed at which the viewer moves, and position of the viewer. High viewer exposure heightens the importance of early consideration of design, art, and architecture, along with their roles in managing the visual resource effects of a project.

D. Existing Viewer Sensitivity

Multiple sensitive viewers adjoin the project site, the majority of which consist of residential, commercial, and recreational uses. Although portions of the southern and eastern areas of the project site are located within the City of Industry, the City's General Plan does not identify any visual resources, or policies protecting visual resources. The City of Diamond Bar has developed policies and objectives pertaining to scenic resources within the *City of Diamond Bar General Plan.* Views to designated visual resources within the City of Diamond Bar are protected through a combination of development review, zoning, design programs, design review, and proper management of hillside and open space areas. According to the *City of Diamond Bar General Plan,* designated visual resources within the City of Diamond Bar include natural slopes and ridgelines. The *City of Diamond Bar General Plan* includes the following goals, objectives, and strategies within the Resources Management Element regarding visual resources:

Goal 1: ". . . create and maintain an open space system which will preserve scenic beauty, protect important biological resources, provide open space for outdoor recreation and the enjoyment of nature, conserve natural resources, and protect public health and safety."

Objective 1.1: Preserve significant visual features which are within, or are visible from the City of Diamond Bar, with an emphasis on the preservation of remaining natural hillside areas.

Strategy 1.1.1: Develop regulations for the protection of ridgelines, slope areas, canyons, and hilltops. Require contour or landform grading, clustering of development, or other means to minimize visual and environmental impacts to ridgelines or prominent slopes.

Strategy 1.1.4: Preserve to the maximum extent feasible existing vegetation within undeveloped hillside areas.

Strategy 1.1.6: Pursue the preservation of areas within Diamond Bar and its Sphere of Influence, of outstanding scenic, historic, and cultural value.

The City of Diamond Bar also includes hillside development standards and guidelines within Section 22.22.050 of the City's *Municipal Code*. The hillside development standards and guidelines are intended to ensure the appropriate management of hillside areas within the City of Diamond Bar. These standards are requirements for the use, development, or alteration of land in hillside areas.

The following is a discussion of designated visual resources that are located within each landscape unit for the project site.

State Designated Scenic Highways

California's Scenic Highway Program was created by the Legislature in 1963, and serves the purpose of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors through special conservation treatments. According to the California Department of Transportation, a State Route must be included on the list of highways eligible for the California Scenic Highway Program, which is found in Streets and Highways Code Section 263. The status of a proposed State scenic highway changes from eligible to officially designated when the local governing body applies for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated as a Scenic Highway. The project site does not include any eligible or officially designated State scenic highways.[2]

Landscape Unit 1: Southern SR-57/SR-60 Connector

The southern portion of the project site (LU1) is located in the cities of Diamond Bar and Industry. The City of Diamond Bar values natural slopes and ridgelines as their most prominent visual resources. There are no visual resources identified within the City of Industry. Views to slopes and ridgelines are afforded to the east and west of SR-57/SR-60 in LU1. Views of the project site within LU1 are afforded by travelers along SR-57/SR-60 and Golden Springs Drive, and commercial users. Views from adjacent residential uses to the south of the project site in LU1 are limited due to intervening structures, soundwalls, and mature trees. Viewer sensitivity of these viewer groups is considered to be moderate.

Landscape Unit 2: SR-57/SR-60 and Grand Avenue Interchange

The central portion of the project site (LU2) is located within the cities of Diamond Bar and Industry. Natural slopes and ridgelines are visible to the east and west of SR-57/SR-60 from several locations within LU2. Views to the project site within LU2 are afforded by freeway travelers, recreational users, and residents atop the hillsides to the east of the project site. Viewer sensitivity of freeway travelers is considered to be moderate, while viewer sensitivity of recreational users and residents is considered to be high.

[2] California Department of Transportation, *California Scenic Highway Mapping System*, http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm, accessed on August 2, 2010.

Landscape Unit 3: Northern SR-57/SR-60 Split

The northern portion of the project site (LU3) is located in the City of Diamond Bar. Hills and ridgelines are visible to the east and west of SR-57/SR-60 within LU3. Views to the project site within LU3 are afforded by freeway travelers, recreational users, and residents. Viewer sensitivity of freeway travelers is considered to be moderate, while viewer sensitivity of recreational users and residents is considered high.

E. Existing Viewer Groups, Viewer Exposure, and Viewer Awareness

Freeway Travelers

Freeway travelers view the project site through all three landscape units. Drivers utilizing SR-57/SR-60 in the project area have moderate duration, direct views of the project site. Existing daily traffic volumes along Grand Avenue (west of the SR-60 WB ramps) are approximately 26,450 vehicles, with peak hour volumes ranging from 2,342 to 2,645 vehicles. Existing daily traffic volumes on SR-57 within the project site range from approximately 99,000 to 131,000 vehicles per day, with peak hour volumes ranging from 7,300 to 9,600 vehicles. Existing daily traffic volumes on SR-60 within the project site range from approximately 339,000 to 352,000 vehicles per day, with peak hour volumes ranging from 22,400 to 23,800 vehicles.[3]

SR-57/SR-60 serves as the primary regional transportation corridor in the project area. Motorists using SR-57/SR-60 experience direct views to the project site. Visible designated visual resources include natural slopes and ridgelines. Daily commuters along SR-57/SR-60 may have an increased awareness of the project due to the daily exposure to the project area. These travelers would be moderately sensitive to project changes.

Community Residents

Landscape Unit 1: Southern SR-57/SR-60 Connector

Residents located in the vicinity of LU1 adjacent to the south of SR-57/SR-60 have long-duration or no views of the project area. The majority of views to SR-57/SR-60 from nearby residents are not afforded due to view blockage from existing structures and mature trees. However, those residents who have partial views to the project site would have long-duration views. As viewer exposure would be minimal, most residents in LU1 are likely to have a low concern for the project and its effect on views from their homes and neighborhoods.

Landscape Unit 2: SR-57/SR-60 and Grand Avenue Interchange

There are some residents located within the northern portion of LU2 to the east (along Golden Prados Drive) and west (along Rock River Road) of SR-57/SR-60. However, residents would have limited views to the project site due to obstruction by topography, intervening structures, and mature vegetation. As viewer exposure would be minimal, these residents are likely to have a moderately low concern for the project and its effect on views from their location.

[3] California Department of Transportation, *Traffic and Vehicle Data Systems Unit*s, *2009 All Traffic Volumes*, http://traffic-counts.dot.ca.gov/2009all/2009TrafficVolumes.htm, accessed on November 3, 2010.

Landscape Unit 3: Northern SR-57/SR-60 Split

There are numerous residents located in the vicinity of LU3 adjacent to the east (along Golden Prados Drive and Palomino Drive) and west (along Rock River Road and Rock River Drive) of SR-57/SR-60, as well as to the north of the SR-57/SR-60 split (along Decorah Road). Residents within LU3 have limited views to SR-57/SR-60 due to intervening topography, structures, soundwalls, and mature vegetation. These residents with views are likely to have a moderately low concern for the project and its effect on their views, as viewer exposure would be minimal.

Commercial Area Employees and Customers

Landscape Unit 1: Southern SR-57/SR-60 Connector

A variety of commercial uses, ranging from highway service commercial to neighborhood commercial uses, are located in the vicinity of LU1. Commercial employees and clientele would likely have short to moderate duration views and moderate awareness of the project, as views are afforded to the project site from commercial uses to the east of SR-57/SR-60.

Landscape Unit 2: SR-57/SR-60 and Grand Avenue Interchange

Highway service commercial uses are located within LU2 to the west of SR-57/SR-60. Commercial employees and clientele in LU2 would likely have short to moderate duration views and moderate awareness of the project, as some views are afforded to the project site.

Landscape Unit 3: Northern SR-57/SR-60 Split

Commercial uses (i.e., Vons shopping center and fast food restaurants) are located within LU3 to the east of SR-57/SR-60. Commercial employees and clientele to the east of SR-57/SR-60 would likely have short to moderate duration views and moderate awareness of the project.

Local Street Users

Landscape Unit 1: Southern SR-57/SR-60 Connector

Golden Springs Drive and Gateway Center Drive are located adjacent to the west of SR-57/SR-60 in LU1. Golden Springs Drive and Gateway Center Drive are heavily traveled roadways that provide access to the commercial uses adjacent to the freeway. Local street users along Golden Springs Drive and Gateway Center Drive have direct, short to moderate duration views to the project site. Golden Springs Drive within LU2 contains a Class II bike lane. Bikers along Golden Springs Drive would have views to the project site. Local street users in LU1 would have a moderately high awareness of the project.

Landscape Unit 2: SR-57/SR-60 and Grand Avenue Interchange

Direct, moderate duration views from the project site within LU2 are afforded from Golden Springs Drive. Also, direct, moderately long duration views are afforded to the project site from those traveling along Grand Avenue within LU2. Golden Springs Drive

within LU2 contains the Class II bike lane. Bikers along Golden Springs Drive would have direct views to the project site. Local street users along Grand Avenue in LU2 would have a moderately high awareness of the project, while bikers would have a low awareness.

Landscape Unit 3: Northern SR-57/SR-60 Split

Local street users along South Prospectors Road, South Diamond Bar Boulevard, South Gentle Springs Lane, and Palomino Drive would also have direct, moderate duration views to the site. Views from other surrounding roadways in LU3 are limited due to intervening structures and mature trees and vegetation. A Class II bike lane exists along South Diamond Bar Boulevard, which passes under the SR-57/SR-60 split. Views to the project site from the bike lanes are limited due to intervening topography, structures, and mature trees and vegetation. Visible designated visual resources include hillsides and ridgelines. Local street users in LU3 would have a moderate awareness of the project.

Recreational Uses

Recreational users within the project vicinity are those utilizing the Diamond Bar Golf Course to the east of SR-57/SR-60. The golf course is located within LU2 and LU3. Recreational users within LU2 and LU3 are afforded moderate to long duration views to the project site. Recreational users would have a high awareness of the project. There are no recreational uses within LU1.

VII. VISUAL IMPACT ASSESSMENT

A. Method of Assessing Project Impacts

The visual impacts of project alternatives are determined by assessing the visual resource change due to the project and predicting viewer response to that change.

Visual resource change is the sum of the change in visual character and change in visual quality. The first step in determining visual resource change is to assess the compatibility of the proposed project with the visual character of the existing landscape. The second step is to compare the visual quality of the existing resources with projected visual quality after the project is constructed.

The viewer response to project changes is the sum of viewer exposure and viewer sensitivity to the project as determined in the preceding section.

The resulting level of visual impact is determined by combining the severity of resource change with the degree to which people are likely to be adversely affected by the change.

B. Definition of Visual Impact Levels

For the purpose of this assessment, project impacts were assessed for each Key View selected. Visual resource change was measured using the Visual Quality Evaluation Form, administered by the FHWA; refer to Appendix B (Visual Quality Evaluation Forms). The Visual Quality Evaluation Form allows the analyst to assign a numerical value to existing visual conditions, as well as assess the resulting visual quality upon

project implementation. A scaled rating system of 1 through 7 was used to designate a numerical value. The numerical value of 1 represents a very low unit of measurement, and 7 represents a very high unit of measurement. A numerical value for vividness, intactness, and unity was given for existing and proposed conditions within each Key View selected.

The potential for an adverse impact depends upon the severity of resource change and the degree to which people are likely to be adversely affected by the change. Therefore, the following criteria is utilized for determining the resulting visual impacts at each Key View, based on comparing the difference in visual quality to the predicted viewer response, which is as follows:

Low – Minor adverse change to the existing visual resource, with low viewer response to change in the visual environment. May or may not require avoidance or minimization measures.

Moderate – Moderate adverse change to the visual resource with moderate viewer response. Impact can be mitigated within five years using conventional practices (i.e., landscaping, architectural treatments, use of a variety of building materials, directional lighting techniques, etc.).

Moderately High – Moderate adverse visual resource change with high viewer response or high adverse visual resource change with moderate viewer response. Extraordinary avoidance or minimization practices may be required. Landscape treatment required will generally take longer than five years to mitigate.

High – A high level of adverse change to the resource or a high level of viewer response to visual change such that architectural design and landscape treatment cannot mitigate the impacts. Viewer response level is high. An alternative project design may be required to avoid highly adverse impacts.

C. Analysis of Key Views

Because it is not feasible to analyze all the views in which the proposed project would be seen, it is necessary to select a number of Key Views that would most clearly display the visual effects of the project. Key Views represent the primary viewer groups that would potentially be affected by the project, and are generally situated within the viewshed of major project features (e.g., proposed wall features, ramp re-configuration, areas of roadway widening, etc.). Key View locations were selected after completion of site reconnaissance on July 13, 2010. Refer to Figure 6 (Key View Locations Map) for a visual representation of the selected Key View locations and their orientation.

Photographic simulations have been utilized to analyze views at a conceptual level of detail of "Existing" and "Proposed" conditions for the proposed project. Key Views represent public views from both public ROW and publicly accessible areas located next to the project site. According to the Federal Highway Administration, *Visual Impact Assessment for Highway Projects*, characteristics within each Key View are defined within foreground, middleground, and background views.

- **Foreground (0 to ¼-½ mile)**: Characteristics located within foreground views are located at close range and tend to dominate the view. These characteristics can be designated with clarity and simplicity.

- **Middleground (¼-½ to 3-5 miles):** Characteristics located within middleground views are distinguishable, yet not as sharp as those characteristics located within foreground views.

- **Background (3-5 to infinite miles):** Features located within background views have few details and distinctions in landform and surface features. The emphasis of background views is an outline or edge. Objects in the background eventually fade to obscurity with increasing distance.

Key View #1 (Viewers of the Road)

Orientation

Key View 1 was taken from the SB lanes of Golden Springs Drive, to the west of SR-57/SR-60. This view is looking south along Golden Springs Drive toward the SR-57/SR-60 connector within LU1; refer to Figure 7a (Key View 1 Existing Condition).

Existing Visual Character

Based on the Visual Quality Evaluation conducted at this Key View, vividness was rated at 5, intactness was rated at 5, and unity was rated at 4, resulting in an overall quality rating of 4.7; refer to Appendix B. The existing visual quality and character of this view is considered moderately high (generally rated at 5).

Golden Springs Drive and ornamental landscaping are visible within the foreground of this Key View. Middleground views include ornamental landscaping, as well as a hotel use (Holiday Inn) atop a hillside to the east, mature trees, street lights, and SR-57/SR-60. Topography in middleground varies, and consists of grassy hillsides along the western side of Golden Springs Drive and a gently sloping valley trending along SR-57/SR-60. Background views in this Key View are afforded to the Chino Hills and Puente Hills.

Ornamental vegetation varies in color, texture, and height throughout this Key View. The hotel structure consists of concrete and stucco materials and varies in color, texture, and material. Street lights along Golden Springs Drive minimally encroach on views. The hardscape features of the hotel structure and SR-57/SR-60 encroach in the middleground views. However, the varying topography, grassy hillsides, and ornamental landscaping minimize these features. The travel lanes of SR-57/SR-60 interrupt the unity of this view; however, the varying topography, ornamental landscaping, mature trees, and distant ridgetops in background views reduce the appearance of hardscape features and increase the unity of this view.
Proposed Project Features

Alternatives 2 and 3

Alternatives 2 and 3 propose to realign the NB SR-57 lanes and construct a new EB bypass ramp.

Changes to Visual Quality/Character

Alternatives 2 and 3

Visual changes to quality and character at Key View 1 under Alternatives 2 and 3 would be considered moderate due to the similarity of the hardscape features (resulting in an overall quality rating of 4 after implementation of the proposed project); refer to Figure 7b (Key View 1 Proposed Condition).

Vividness in this Key View is moderate. Ornamental grasses and shrubs along the western side of Golden Springs Road have been removed to accommodate the new EB bypass. Views to the hotel structure, mature trees, ornamental landscaping, street lights, and varying topography in the middleground remain. Background views to the Puente Hills and Chino Hills remain similar to existing conditions. Intactness in this view is considered to be moderate due to the increased perception of encroaching features. The new EB bypass structure and removal of ornamental landscaping increase the appearance of hardscape features in the foreground and middleground views, as the new bypass structure would bring hardscape and vehicles closer to the viewers at Key View 1. Unity in this view remains moderate due to the lack of distribution of trees and vegetation throughout the view.

Viewer Response

Alternatives 2 and 3

Sensitivity to visual change would be moderate for Golden Springs Drive and SR-57/SR-60 travelers and hotel users. Under Alternatives 2 and 3, travelers along Golden Springs Drive and SR-57/SR-60 would have short duration views of the project features, while hotel users would have moderate to long duration views of the proposed project features (i.e., the new bypass structure). Viewers would be moderately aware of the proposed project features. The resultant viewer response for motorists traveling along Golden Springs Drive and SR-57/SR-60 as well as commercial users would be moderate under Alternatives 2 and 3.

Resulting Visual Impact

Alternatives 2 and 3

Project improvements would result in a moderate change in the landscape from this Key View under Alternatives 2 and 3 (rated difference of -0.7). However, this moderate change would not be considered adverse, as the proposed freeway improvements would generally appear similar in character to the existing freeway uses within this view. Sensitive viewers would have a moderate viewer response to project changes, as the proposed condition increases the appearance of hardscape features. Thus, as the project would result in minor adverse impacts and a moderate viewer response, impacts would be less than significant.

Key View #2 (Viewers from the Road)

Orientation

Key View 2 was taken from the NB travel lanes of Grand Avenue, adjacent to the Diamond Bar Golf Course. This view looks to the north, toward the Grand Avenue/SR-57/SR-60 interchange within LU2; refer to Figure 8a (Key View 2 Existing Condition).

Existing Visual Quality/Character

Based on the Visual Quality Evaluation conducted at this Key View, vividness was rated at 6, intactness was rated at 6, and unity was rated at 6, resulting in an overall quality rating of 6; refer to Appendix B. The existing visual quality and character of the site is moderately high (generally rated at 6).

Vividness in this view is considered to be moderately high. Foreground views in this Key View include the Grand Avenue travel lanes, a landscaped median, a sidewalk and small retaining wall along the north side of the roadway, and mature trees. Middleground views are afforded to mature trees, ornamental landscaping, a landscaped median, street lights, and rolling hills. Landscape features visible in foreground and middleground views vary in height, color, and texture. Intactness is considered to be moderately high. Development within this Key View consists of the Grand Avenue roadway, sidewalk, and one small retaining wall. Street lights and one freeway on-ramp sign are visible in middleground views, which minimally encroach on views. Encroaching features are minimized by the presence of streetscape (including planted medians) and mature trees throughout this Key View. This Key View is dominated by the ornamental landscape and rolling hills which unify this Key View.

Proposed Project Features

Alternative 2

Under Alternative 2, visible project features include the widened Grand Avenue as well as partial views to the proposed combination cloverleaf/diamond configuration interchange improvements.

Alternative 3

Visible project features would be similar to those in Alternative 2, above, and also include traffic signals and street lights. Alternative 3 proposes a partial cloverleaf interchange configuration.

Changes to Visual Quality/Character

Alternative 2

Visual changes to the quality and character at this Key View would be moderate (resulting in an overall quality rating of 4 after implementation of the proposed project); refer to Figure 8b (Key View 2 Proposed Condition – Alternative 2).

Vividness in this view is moderate. Hardscape features in this Key View have increased as a result of the widened roadway and the removal of mature trees. Foreground and middleground views include the widened Grand Avenue, a partially landscaped median, and new guard rails along the eastern and western sides of Grand Avenue. A substantial amount of mature trees and ornamental landscaping has been removed in foreground and middleground views. Therefore, intactness has decreased due to the increase in visible hardscape features. Overall, unity in this Key View is moderate, as views to rolling hills are unobstructed.

Alternative 3

Visual changes to the quality and character at this Key View would be moderate (resulting in an overall quality rating of 4 after implementation of the proposed project); refer to Figure 8c (Key View 2 Proposed Condition – Alternative 3).

Vividness and unity in this Key View for Alternative 3 would be similar to that described under Alternative 2. Under Alternative 3, the new intersection of Grand Avenue, the new EB off-ramp and EB loop on-ramp, and the new traffic signal are visible in middleground views.

Viewer Response

Alternative 2

Under Alternative 2, sensitivity to visual change for travelers along Grand Avenue would be moderate. Those traveling along Grand Avenue would have short to moderate duration views of the widened roadway, median, and guard rails. Overall, motorists would be moderately aware of project changes. The resulting viewer response for those traveling along Grand Avenue would be moderately high.

Alternative 3

Sensitivity to visual change for travelers along Grand Avenue under Alternative 3 would be similar to that described for Alternative 2, above.

Resulting Visual Impact

Alternative 2

Project improvements would affect existing views of the project from this Key View (rated difference of -2), and sensitive viewers would have a moderate viewer response to project changes. Implementation of the proposed project would remove existing mature trees and ornamental landscaping and increase hardscape features within the area. Grand Avenue would be widened, and new guard rails, fencing, and a partially landscaped median would be installed. As mature trees and landscaping visible along Grand Avenue (within the Diamond Bar Golf Course) would be removed to widen the roadway, implementation of replacement landscaping within the golf course that is compatible with the existing landscaping would reduce the hardscape appearance of the widened roadway (MM-1). However, this vegetation would take longer than five years to minimize the effects of the surrounding hardscape. Implementation of landscaping within the Grand Avenue median and along sidewalks would further reduce the hardscape appearance of

the widened roadway (MM-2). As the viewer response to these changes would be moderate, with implementation of MM-1 and MM-2, impacts would be less than significant.

Alternative 3

The resulting visual impact of Alternative 3 is generally consistent with that described in Alternative 2. However, project improvements under Alternative 3 would further affect existing views of the project from this Key View (rated difference of -1.3). Sensitive viewers would have a moderate viewer response to project changes. Implementation of Alternative 3 would introduce a new intersection and associated traffic signaling in middleground views. As mature trees and landscaping along Grand Avenue (within the Diamond Bar Golf Course) would be removed to widen the roadway, implementation of replacement landscaping within the golf course would reduce the hardscape appearance of the widened roadway (MM-1). However, this vegetation would take longer than five years to reduce surrounding hardscape. Also, implementation of landscaping within the Grand Avenue median and along sidewalks would further reduce the hardscape appearance of the widened roadway (MM-2). As the viewer response to these changes would be moderate, with implementation of MM-1 and MM-2, impacts would be less than significant.

Key View #3 (Viewers of the Road)

Orientation

Key View 3 was taken from the Diamond Bar Golf Course, to the east of SR-57/SR-60 within LU2. This Key View looks along the cart path in the vicinity of the golf course clubhouse to the west toward the proposed project; refer to Figure 9a (Key View 3 Existing Condition).

Existing Visual Character

Based on the Visual Quality Evaluation conducted at this Key View, vividness was rated at 6, intactness was rated at 6, and unity was rated at 6, resulting in an overall quality rating of 6; refer to Appendix B. The existing visual quality and character of the views are high (generally rated at 6).

Overall vividness in this Key View appears to be moderately high. Foreground views include grasses, trees, and a lake feature, all of which are associated with the Diamond Bar Golf Course. Middleground views consist of ornamental landscaping and mature trees, the Grand Avenue overcrossing, rolling hills, and freeway commercial uses. Existing mature trees and vegetation vary in form, color, and texture, and provide high visual contrast within this view. Background views are afforded to ridgetops associated with the Angeles National Forest. Intactness within this Key View is considered to be moderately high. The freeway commercial uses and Grand Avenue overcrossing in middleground views encroach on views from the Diamond Bar Golf Course. However, the existing ornamental landscaping, grasses, mature trees, and rolling hills minimize these encroaching features. Unity in this Key View is high, as varying landscape features dominate this view. Although unity is slightly reduced by the hardscape features of the overcrossing and commercial uses, the presence of mature ornamental trees and vegetation allow unity within this Key View to remain high.

Proposed Project Features

Alternative 2

Under Alternative 2, visible project features include the northern side of the widened Grand Avenue, the realigned EB on-ramp, and the modified Grand Avenue overcrossing structure.

Alternative 3

Visible project features under Alternative 3 are similar to those proposed under Alternative 2 in this Key View. Also visible in Alternative 3 is the intersection of the proposed EB loop on-ramp and Grand Avenue.

Changes to Visual Quality/Character

Alternative 2

The project changes in Alternative 2 consist of the widening of Grand Avenue, the realigned EB on-ramp, and the modified Grand Avenue overcrossing; refer to Figure 9b (Key View 3 Proposed Condition – Alternative 2). Visual changes to the quality and character in this Key View would be moderate due to the increase in hardscape features (resulting in an overall quality rating of 4.7 after implementation of the proposed project).

The widened Grand Avenue, new on-ramp, and modified overcrossing increase the dominance of hardscape features in this Key View. Although mature trees and ornamental landscaping remain visible in the foreground and middleground views, a substantial amount has been removed in order to accommodate project improvements. Therefore, vividness in this Key View has decreased. Intactness is considered moderate. Encroaching features have increased due to the widened Grand Avenue, new on-ramp, and new overcrossing, and removal of trees and vegetation. Middleground views to hillsides and background views to ridgetops remain. Unity has decreased due to the removal of trees and vegetation.

Alternative 3

The visible project changes are consistent with those described in Alternative 2, above; refer to Figure 9c (Key View 3 Proposed Condition – Alternative 3) and the discussion above.

Viewer Response

Alternative 2

Viewer sensitivity of recreational users of Diamond Bar Golf Course would be high. Under Alternative 2, recreational users would have moderate duration views to the widened Grand Avenue, the new on-ramp, and the modified overcrossing. Recreational users of the Diamond Bar Golf Course would be mostly aware of the widened Grand Avenue roadway and new on-ramp, and the removal of mature trees and landscaping. Due to distance and the intervening trees, the new Grand Avenue overcrossing is

minimally perceptible from this Key View location. Overall viewer response of recreational users would be high.

Alternative 3

Viewer response to project changes in Alternative 3 is consistent with those described in Alternative 2; refer to the discussion above.

Resulting Visual Impact

Alternative 2

Project improvements would alter the existing views of the project site from this Key View (rated difference of -1.3). Recreational users of Diamond Bar Golf Course would have a high sensitivity to the proposed changes. The widened Grand Avenue roadway, realigned on-ramp, and Grand Avenue overcrossing would increase visible hardscape from the Diamond Bar Golf Course. Views from recreational users to the project features would be moderate in duration. However, implementation of MM-1 would reduce the hardscape appearance of project features (i.e., widened Grand Avenue and realigned on-ramp). MM-1 would include the installation of replacement landscaping (which would appear similar to the existing golf course landscaping) along the new hardscape features (MM-1). Impacts in this regard would be less than significant.

Alternative 3

The resulting visual impact of Alternative 3 is consistent with that described in Alternative 2; refer to the discussion above.

Key View #4 (Viewers from the Road)

Orientation

Key View 4 was taken from the SR-57/SR-60 SB/WB lanes. This view is looking south along the SB/WB lanes along the proposed project within LU3; refer to Figure 10a (Key View 4 – Existing Condition).

Existing Visual Character

Based on the Visual Quality Evaluation conducted at this Key View, vividness was rated at 4, intactness was rated at 5, and unity was rated at 4, resulting in an overall quality rating of 4.3; refer to Appendix B. The existing visual quality and character of the views is considered moderately high (generally rated at 4).

Vividness in this Key View would be considered moderate. Foreground views include the SR-57/SR-60 SB/WB travel lanes and ornamental landscaping along the western shoulder of the freeway. Middleground views consist of travel lanes, mature trees, vegetation, street lights, and signage. Vegetation varies in form, color, texture, and height, increasing vividness within this view. Background views are afforded to distant hillsides of the Puente Hills and Chino Hills. Overall intactness within this Key View is considered to be moderately high. Encroaching features within this Key View consist of SR-57/SR-60 travel lanes, residential structures, freeway signage, and a retaining wall/soundwall to the west. The existing mature trees and vegetation reduce

encroachment. Overall unity is moderate. Although vegetative features are present (reducing encroachment) within this Key View, the presence of freeway signage, Diamond Bar Golf Course netting, and other hardscape features minimize the appearance of unity.

Proposed Project Features

Alternatives 2 and 3

Under Alternatives 2 and 3, visible project features in this Key View include a soundwall (up to 16 feet in height) to the west (which replaces the existing wall) along the property lines of the residential uses along Rock River Road, adjacent to the freeway, and a soundwall (up to 16 feet in height) to the east along the Diamond Bar Golf Course.

Changes to Visual Quality/Character

Alternatives 2 and 3

Visual changes to quality and character within Key View 4, Alternatives 2 and 3, would be considered minimal (resulting in an overall quality rating of 4 after implementation of the proposed project); refer to Figure 10b (Key View 4 Proposed Condition – Alternatives 2 and 3).

Vividness remains moderate in this Key View, as the majority of mature trees and ornamental landscaping remain visible. Middleground and background views to rolling hills of the Chino Hills and Puente Hills remain similar to existing conditions. Overall intactness within this Key View is considered to be moderate, as the introduction of a larger soundwall to the west and a soundwall along the Diamond Bar Golf Course to the east have increased hardscape features in this Key View. Overall unity is moderate due to the removal of some ornamental landscaping to the west (groundcover and shrubbery).

Viewer Response

Alternatives 2 and 3

Viewer sensitivity of freeway travelers would be moderate. Under Alternatives 2 and 3, freeway travelers would have short duration views to the new soundwall. Views to the Chino Hills and Puente Hills would not be obstructed by the proposed soundwall. Freeway travelers would be minimally aware of project changes. Overall, viewer response to change from travelers would be moderately low.

Resulting Visual Impact

Project improvements would moderately alter the existing views of the project site from this Key View (rated difference of -0.7). Freeway travelers would have a moderate sensitivity to project changes in this Key View. The hardscape appearance of the new soundwall to the west would appear similar to the existing condition, although the proposed wall would be higher. Implementation of the soundwalls to the east and west would slightly increase the hardscape in this Key View; however, the majority of mature trees and vegetation along the Diamond Bar Golf Course and along the freeway to the

west remains visible. Therefore, freeway travelers would be minimally impacted by the proposed soundwalls, and impacts would be less than significant from Key View 4.

Key View #5 (Viewers of the Road)

Orientation

Key View 5 was taken from South Diamond Bar Boulevard, near commercial uses within LU3. This view looks west toward the proposed project; refer to Figure 11a (Key View 5 Existing Condition).

Existing Visual Character

Based on the Visual Quality Evaluation conducted at this Key View, vividness was rated at 4, intactness was rated at 3, and unity was rated at 4, resulting in an overall quality rating of 3.7; refer to Appendix B. The existing visual quality and character of the views is considered moderate (generally rated at 4).

This Key View is considered to have moderate vividness. Foreground and middleground views consist of commercial uses (i.e., fast food and gas station), Diamond Bar Boulevard, a landscaped median, trees, ornamental landscaping, and street lights. The trees and vegetation visible throughout the view vary in color, height, and texture, thereby increasing vividness. The SR-57/SR-60 overcrossing structure is also visible in middleground views. Limited background views are afforded to ridgetops associated with the Angeles National Forest. Intactness in this Key View is considered to be moderately low. Encroaching features within this view include strip mall commercial buildings and parking lots along Diamond Bar Boulevard. However, the continuous presence of ornamental trees and landscaping throughout the view reduce the visual intrusion. Unity is moderate in this Key View due to the amount of visible hardscape features, as well as the appearance of streetscape in the foreground and middleground and mature trees in the background.

Proposed Project Features

Alternatives 2 and 3

Visible changes from proposed project features under Alternatives 2 and 3 consist of the new EB bypass structure in middleground views.

Changes to Visual Quality/Character

Alternatives 2 and 3

Under Alternatives 2 and 3, visible project changes are minimal in this Key View. Vividness and unity in this Key View would remain similar to existing conditions; refer to Figure 11b (Key View 4 Proposed Condition – Alternatives 2 and 3). The new bypass structure appears similar to the existing SR-57/SR-60 overcrossing structure in middleground views.

Viewer Response

Alternatives 2 and 3

Under Alternatives 2 and 3, Diamond Bar Boulevard travelers and commercial users in this Key View would have a low sensitivity to project changes. The duration of views toward the project site from these viewers would be short to moderate depending on the traffic signalization, and short to moderate for commercial users. However, travelers along Diamond Bar Avenue and commercial users would be minimally aware of project changes due to the similarity of the existing and proposed conditions. Overall viewer response to change would be low.

Resulting Visual Impact

Project improvements would minimally affect existing views of the project site from this Key View under Alternatives 2 and 3 (rated difference of 0). Sensitive viewers would be minimally aware of project changes, and the resultant impacts would not require avoidance or minimization measures. Impacts would be less than significant.

Key View #6 (Viewers of the Road)

Orientation

Key View 6 was taken from Palomino Road near La Bonita Road, to the west of SR-57/SR-60 within residential uses in LU3. This view is looking west toward the proposed project; refer to Figure 12a (Key View 6 Existing Condition).

Existing Visual Character

Based on the Visual Quality Evaluation conducted at this Key View, vividness was rated at 5, intactness was rated at 5, and unity was rated at 5, resulting in an overall quality rating of 5; refer to Appendix B. The existing visual quality and character of the views is considered moderate (generally rated at 5).

Vividness in this Key View is considered to be moderate. Palomino Drive, residential uses, overhead power lines, and street lights are visible within the foreground and middleground of this Key View. The dominance of existing mature trees and the amount of ornamental landscaping contribute to the vividness. No background views are afforded in this Key View. The visible residential structures consist of varying colors and textures. Overall intactness within this Key View is moderate. Overhead power lines and street lights slightly encroach on this view. However, the abundance of mature trees and vegetation minimize these visual intrusions. The varied coloring and dominance of mature trees and ornamental landscaping unify this view and substantially reduce the appearance of hardscape features. Overall unity is moderate.

Proposed Project Features

Alternatives 2 and 3

Project features under Alternatives 2 and 3 are not visible in this Key View. However, a change in topography as a result of proposed grading activities would be visible.

Changes to Visual Quality/Character

Alternatives 2 and 3

Visual changes to quality and character in Key View 6 under Alternatives 2 and 3 would be considered moderately low, as changes are minimally perceptible at this Key View location (resulting in an overall quality rating of 4 after implementation of the proposed project); refer to Figure 12b (Key View 6 Proposed Condition – Alternatives 2 and 3). The new EB bypass on-ramp to the north of this Key View location is not visible due to intervening mature trees. However, some mature trees have been removed to accommodate the new bypass on-ramp which slightly reduces vividness in this view. There are no new encroaching features in the Key View. Although the vegetated slopes have been reduced, unity remains moderate.

Viewer Response

Alternatives 2 and 3

Residential uses to the east of SR-57/SR-60 would have a moderate sensitivity to project changes in this Key View. Middleground views to mature trees would be slightly reduced, although much of existing landscaping remains visible. Although the new bypass on-ramp is not visible, these residential uses located in the vicinity of Palomino Drive would experience long duration views of the mature trees that have been removed, as well as the altered topography. These residents would be moderately aware of project changes. Overall viewer response to change from these residential uses would be considered moderately low, as the amount of trees and vegetation removed is minimal.

Resulting Visual Impact

Alternatives 2 and 3

Project improvements under Alternatives 2 and 3 would minimally affect existing views from this Key View (rated difference of -0.7). The removal of some mature trees and altered topography slightly reduce vividness in this view; however, mature trees and vegetation remain the dominant features of this Key View. Sensitive viewers would have a moderately low viewer response to project changes. Project changes would generally appear similar to existing conditions, and no avoidance or minimization measures are required. Impacts would be less than significant.

Key View #7 (Viewers from the Road)

Orientation

Key View 7 was taken from the SB/WB travel lanes of SR-57/SR-60, north of the Grand Avenue interchange. This view is looking south along the proposed project; refer to Figure 13a (Key View 7 Existing Condition).

Existing Visual Character

Based on the Visual Quality Evaluation conducted at this Key View, vividness was rated at 5, intactness was rated at 4, and unity was rated at 5, resulting in an overall quality

rating of 4.7; refer to Appendix B. The existing visual quality and character of the views is considered moderately high (generally rated at 5).

Vividness in this Key View is considered to be moderately high. Freeway travel lanes, mature trees, and vegetation are visible within the foreground of this Key View. Middleground views consist of SB lanes, trees and vegetation, and freeway signage. The vividness of this view is enhanced by the continuous presence of mature trees and vegetation along the eastern and western sides of the freeway. Background views are afforded to vegetated hillsides. Overall intactness within this Key View is moderate as a result of the large freeway signage and amount of visible hardscape. The varied coloring and continuous presence of mature trees and ornamental landscaping increase unity in this view by detracting from the appearance of hardscape features. Overall unity is moderate.

Proposed Project Features

Alternative 2

Alternative 2 proposes a combination cloverleaf/diamond interchange. Visible features include the widened Grand Avenue overcrossing, realigned SB off-ramp, realigned EB on-ramp, and the new soundwall (up to 16 feet in height) along the Diamond Bar Golf Course. The proposed soundwall along the residential property lines to the west of the freeway is not visible in this Key View, as Key View 7 is located just south of this proposed soundwall.

Alternative 3

Alternative 3 proposes a partial cloverleaf interchange configuration. Visible project features under Alternative 3 within this Key View are similar to those discussed under Alternative 2; refer to the discussion above.

Changes to Visual Quality/Character

Alternative 2

Visual changes to quality and character in Key View 7 under Alternative 2 would be considered moderate, as hardscape features have increased in this Key View (resulting in an overall quality rating of 3.7 after implementation of the proposed project); refer to Figure 13b (Key View 7 Proposed Condition – Alternative 2). Vividness in this Key View is slightly reduced due to the obstruction of views to mature trees. Foreground views to ornamental landscaping along the western side of the freeway remain similar to existing conditions. However, mature trees have been removed to accommodate the realigned SB off-ramp, and mature trees and landscaping within the Diamond Bar Golf Course to the east are partially blocked by the proposed soundwall. The proposed soundwall would encroach on freeway travelers. Intactness has decreased in this view due to the hardscape features of the new Grand Avenue overcrossing and the new EB on-ramp to the east of the overcrossing. Unity is slightly decreased, as some views to mature trees and landscaping are obstructed by the proposed soundwall.

Alternative 3

Visible changes to visual quality and character in Key View 7 under Alternative 3 are similar to those discussed above under Alternative 2; refer to Figure 13c (Key View 7 Proposed Condition – Alternative 3).

Viewer Response

Alternative 2

Viewer sensitivity of SB/WB freeway travelers would be moderate. Under Alternative 2, freeway travelers would have short duration views to the realigned SB off-ramp and EB on-ramp, and the new overcrossing and soundwall. Freeway travelers would be moderately aware of the removed trees and new soundwall to the west, and partially blocked views to trees and landscaping within the Diamond Bar Golf Course to the east. Views to the Chino Hills and Puente Hills would not be obstructed by the project features. Freeway travelers would be moderately aware of project changes. Overall, viewer response to change from travelers would be moderate.

Alternative 3

Viewer response to project changes in Alternative 3 would be consistent with those described in Alternative 2; refer to the discussion above.

Resulting Visual Impact

Alternative 2

Project improvements would minimally alter the existing views of the project site from this Key View (rated difference of -1). Freeway travelers would have a moderate viewer response to project changes in this Key View. Some views to trees and landscaping remain in the foreground and middleground. Travelers would be less sensitive to the realigned SB off-ramp, EB on-ramp, and modified overcrossing, as these features currently exist. However, freeway travelers would be aware of increased hardscape features due to the new soundwall along the golf course to the east, as there is currently no soundwall at this location and the new wall would obstruct views to trees and landscaping. MM-3 would install compatible landscaping along the disturbed areas of the freeway. Also, in order to decrease the appearance of hardscape freeway features and enhance the driver's experience along the project site, implementation of MM-4 would require landscape and/or architectural treatments (i.e., color, texture, etc.) of the proposed soundwall (freeway facing side only). Therefore, with implementation of MM-3 and MM-4, impacts would be less than significant.

Alternative 3

The resulting visual impact of Alternative 3 would be consistent with that described in Alternative 2; refer to the discussion above.

D. Summary of Project Impacts

Short-Term Construction Impacts

Implementation of the proposed project would expose sensitive uses to views of the project site. Construction-related vehicle access and staging of construction materials would occur within Caltrans ROW and disturbed or developed areas along the length of the project site. The project construction would expose surfaces, construction debris, equipment, and truck traffic to nearby sensitive viewers. Construction vehicle access and staging of construction materials would be visible from recreational users, motorists traveling along the project site, as well as residents located in the project vicinity at elevations higher than SR-57/SR-60.

Construction activities would occur at the golf course to accommodate construction of the on- and off-ramps for the SR-57/SR-60 confluence, widen the Grand Avenue overcrossing, and make street improvements along the north side of Golden Springs Drive, west of Grand Avenue. Construction work would last approximately 36 months, during which time vegetation clearing, excavation, and grading would take place on those portions of the golf course that would be permanently acquired or temporarily acquired under construction easements.

To accommodate construction activities and minimize any potential effects that construction may have on golf course users, a screened construction zone with restricted access would be established (as required per the *Programmatic Section 4(f) Evaluation*, dated April 2012). If construction at the golf course were to occur in two phases, with only half of the course closed at any one time, a total of 16 months would be required for construction (8 months to reconfigure holes 1, 2, 3, 4, 5, and 9). If the golf course construction were to occur at the same time, the closure would last 10 months.

These construction-related impacts are short-term and would cease upon project completion. Adhering to Caltrans Standard Specifications for Construction as well as the measures required per the *Programmatic Section 4(f) Evaluation*, dated April 2012, would minimize visual impacts through the use of opaque temporary construction fencing that would be situated around staging and construction areas.

Long-Term Operational Impacts

Table 4 (Key View Impact Summary) presents a summary of the resulting long-term operational impacts for each Key View analyzed.

Table 4
Key View Impact Summary

Key View	Existing Visual Quality Rating	Proposed Visual Quality Rating	Impact (difference from existing)	Viewer Group/Sensitivity	Viewer Response	Resultant Impact
Key View 1 (LU1)						
Alternatives 2 and 3	4.7	4	-0.7	Motorists/Moderate Commercial Users/Moderate	Moderate	Less Than Significant
Key View 2 (LU2)						
Alternative 2	6	4	-2	Motorists/Moderate	Moderately High	Less Than Significant With Minimization Measures
Alternative 3	6	4	-2	Motorists/Moderate	Moderately High	Less Than Significant With Minimization Measures
Key View 3 (LU2)						
Alternative 2	6	4.7	-1.3	Recreational Users/High	High	Less Than Significant With Minimization Measures
Alternative 3	6	4.7	-1.3	Recreational Users/High	High	Less Than Significant With Minimization Measures
Key View 4 (LU3)						
Alternatives 2 and 3	4.3	4	-0.3	Motorists/Moderate	Moderate	Less Than Significant
Key View 5 (LU3)						
Alternatives 2 and 3	3.7	3.7	0	Motorists/Moderate Commercial Users/Moderate	Low Low	Less Than Significant
Key View 6 (LU3)						
Alternatives 2 and 3	5	4.3	-0.7	Motorists/ Moderate Residents/High	Moderate Moderate	Less Than Significant
Key View 7 (LU2)						
Alternative 2	4.7	3.7	-1	Motorists/ Moderate	Moderate	Less Than Significant With Minimization Measures
Alternative 3	4	3.3	-1	Motorists/ Moderate	Moderate	Less Than Significant With Minimization Measures

Long-term impacts from the project would be experienced differently in each LU. LU1 includes motorists and commercial users that would have low to moderate viewer sensitivity to project changes. Commercial users, recreational users (Diamond Bar Golf Course), motorists, and some residents located within LU2 would range from moderate to high viewer response to project changes. LU3 includes commercial users, residents,

motorists, and some recreational users (Diamond Bar Golf Course) that would have moderate to high viewer response to project changes.

Landscape Unit 1

Changes in LU1 are represented in Key View 1.

Alternatives 2 and 3

Alternatives 2 and 3 propose to realign NB SR-57 (shifting the freeway to the east) as well as construct a new SR-60 EB bypass ramp throughout LU1. New retaining walls would be added along portions of the relocated mainline and new bypass.

Visual Change Experienced by Residential Uses

The majority of residential uses within LU1 to the south of the project site would not have views to changes in LU1 due to intervening wall structures and difference in topography. Those residents with partial views to the project site would not be adversely affected by the proposed project, as the proposed condition would appear similar to existing conditions. Therefore, impacts to residents in LU1 would be less than significant and no avoidance, minimization, or mitigation measures are required.

Visual Change Experienced by Commercial Uses

Views from commercial uses located to the east of the project site would be moderately impacted by the proposed realignment and new bypass ramp. The realigned NB SR-57 mainline and new SR-60 EB bypass ramp would be located closer to the commercial uses to the east. Although these structures would appear similar to the existing freeway structures, locating the SR-60 EB bypass ramp near commercial uses would increase encroachment and require the removal of existing freeway landscaping. However, these impacts would be minor and viewer response would be moderate. Therefore, this moderate change would not be considered adverse, as the proposed freeway improvements would generally appear similar in character to the existing freeway uses within LU1. No avoidance, minimization, or mitigation measures are required.

Visual Change Experienced by Freeway Travelers

Freeway travelers in LU1 would have short to moderate duration views to project changes. Those traveling along SB SR-57, the new connector, and EB and WB SR-60 would have short to moderate duration views to the realigned NB SR-57 and EB bypass ramp. These travelers would be moderately aware of the proposed project. Freeway travelers would also be aware of landscaping that has been removed to accommodate the proposed project features. Travelers would be moderately aware of project changes. However, as the proposed freeway improvements would generally appear similar in character to the existing freeway uses within LU1, no avoidance, minimization, or mitigation measures are required.

Landscape Unit 2

Changes in LU2 are represented in Key Views 2, 3, and 7.

Alternative 2

Alternative 2 in LU2 proposes the construction of a new EB bypass off-ramp at the SR-57/SR-60 confluence, the construction of a seventh lane between the Grand Avenue off-ramp and the added lane near the eastern SR-57 diverge, the construction of an auxiliary lane connecting the new three-lane on-ramp at Grand Avenue to the new connector, the replacement of the Grand Avenue overcrossing, the widening and restriping of Grand Avenue and Golden Springs Drive, the realignment and widening of the SR-60 WB off-ramp, and construction of two new soundwalls along the Diamond Bar Golf Course and a soundwall along the property lines of the residential uses along Rock River Road adjacent to the freeway. Alternative 2 would also require retaining walls along the freeway mainline widening, auxiliary lanes, and the on- and off-ramps.

Visual Change Experienced by Residential Uses

Views from residential uses within the northern portion of LU2 to the west of the freeway would be impacted by the proposed project features due to the introduction of a new soundwall. Several residents along Rock River Road have constructed private decks from the rear yards which overlook the freeway toward surrounding hills. Those residents with private views from backyard areas would be aware of the new soundwall, which is proposed along the rear property lines of these residences. No feasible mitigation measures are available to reduce, minimize, or avoid these impacts. Thus, these residents would be significantly impacted by the new soundwall.

Based on the project's *Draft Noise Abatement Decision Report* (NADR) (prepared by Caltrans, dated May 2012), the project would not be required to construct the new soundwall along the residents (at Rock River Road), as this soundwall was determined to not be reasonable. As determined by the Draft NADR, neither build alternative would result in the construction of this soundwall considered as part of the NSR.

Figure 14 (Key View 4 Proposed NADR Condition - Alternative 2 and 3) illustrates the proposed project condition (for both Build Alternatives) with implementation of the NADR. As shown in Figure 14, the existing hardscape condition along the residents to the west would not substantially change as a result of project implementation. Thus, with implementation of the NADR recommendation for soundwalls, project implementation would not result in significant impacts to these residents and no avoidance, minimization, or mitigation measures are required.

Residents to the east of the freeway in the northern portion of LU2 would have partial views to proposed changes. These residents would be moderately aware of changes due to distance and intervening trees, vegetation, and structures. Therefore, MM-1 is required to plant compatible landscaping in disturbed areas to reduce the appearance of new hardscape features. MM-2 would replace removed trees and landscaping within the golf course in order to decrease the appearance of the proposed hardscape features (i.e., widened Grand Avenue, soundwall, and realigned on-ramp). With implementation of MM-1 and MM-2, impacts to residential uses to the east would be be less than significant.

Visual Change Experienced by Recreational Uses

Recreational users of the Diamond Bar Golf Course to the east of the freeway would have direct views to project improvements and would be highly aware of the project. The portions of the golf course adjoining Grand Avenue would experience the most visual change as a result of the project. Substantial amounts of mature trees and landscaping would be removed to accommodate the widened Grand Avenue, modified Grand Avenue overcrossing, and the realigned EB on- and off-ramps. Tree and landscaping removal would increase views to hardscape features proposed by the project and would degrade the quality of views from the Diamond Bar Golf Course. The proposed soundwalls along the Diamond Bar Golf Course (to the north and south of Grand Avenue) would also require the removal of mature trees and landscaping along the western boundary of the golf course, north of Grand Avenue. Therefore, recreational users of the Diamond Bar Golf Course would have views to the hardscape appearance of the proposed soundwalls.

The viewer response of recreational users to proposed changes would be high. Therefore, MM-2 is required to replace removed trees and landscaping within the golf course (including along the proposed soundwall and widened Grand Avenue) with landscaping similar to existing conditions. Installation of replacement trees and landscaping would block views from the Diamond Bar Golf Course to the proposed soundwall. With implementation of MM-2, impacts would be considered less than significant.

Based on the project's Draft NADR, the project (for both build alternatives) would only construct a 12-foot soundwall along the Diamond Bar Golf Course (to the north of Grand Avenue). As determined by the Draft NADR, neither build alternative would result in the construction of the new soundwall along the Diamond Bar Golf Course (to the south of Grand Avenue).

Figures 15a (Key View 7 Proposed NADR Condition - Alternative 2) and 15b (Key View 7 Proposed NADR Condition - Alternative 3) illustrates the proposed project condition with implementation of the NADR. As shown in Figures 15a and 15b, project impacts would be reduced with implementation of the NADR project-proposed soundwall, compared to that analyzed for the NSR (refer to Figures 13b and 13c). Construction of the NADR project-proposed soundwall would result in reduced visible hardscape, as the northern wall would be reduced by four feet in height, and the southern wall would not be constructed, compared to that analyzed for the NSR. The project would be required to comply with MM-2 regarding replacement landscaping. With implementation of MM-2, resultant impacts from implementation of the NADR would be considered less than significant.

Visual Change Experienced by Freeway Travelers

Proposed changes in LU2 would be visible by freeway travelers along SR-57/SR-60. Changes along the freeway within LU2 visible by motorists would include the NB and SB lane restriping and realignment, the additional auxiliary lane, the realigned EB on- and off-ramps, realigned WB on- and off-ramps, two new soundwalls proposed along Diamond Bar Golf Course to the east of the freeway, and a new soundwall proposed along the residential uses along Rock River Road and the freeway. Freeway travelers would have short to moderate durations of project changes. In general, the realigned on- and off-ramps, freeway mainline, and overcrossing would appear similar to the existing conditions, as these facilities currently exist. However, freeway travelers would notice an

increase in hardscape features due to the installation of the soundwalls along the Diamond Bar Golf Course, a soundwall along the residential uses along Rock River Road to the west of the freeway, and the removal of some ornamental landscaping. Therefore, in order to decrease the appearance of hardscape freeway features and enhance the driver's experience along the project site, MM-3 would require the installation of compatible landscaping along the disturbed areas of the freeway. Further, implementation of MM-4 would require landscape and/or architectural treatments (e.g., color, texture, etc.) of the proposed soundwalls (freeway facing side only). With implementation of MM-3 and MM-4, impacts to freeway travelers would be less than significant.

Visual Change Experienced by Local Street Users

Alternative 2 proposes improvements along Golden Springs Drive and Grand Avenue in LU2. These improvements would require the removal of mature trees and ornamental landscaping within the Diamond Bar Golf Course that is visible to local street users along Golden Springs Drive and Grand Avenue. The landscaped median within Grand Avenue would be reduced in size due to the proposed street widening. The viewer response of local street users to proposed changes would be moderate. However, implementation of MM-2 would replace removed trees and landscaping within the golf course (including those visible from Golden Springs Drive and Grand Avenue) with landscaping similar to existing conditions. With implementation of MM-2, impacts would be considered less than significant.

Alternative 3

Alternative 3 in LU2 proposes a partial cloverleaf interchange configuration at the Grand Avenue interchange, the reconfiguration of the EB SR-60 on- and off-ramps at Grand Avenue, a new SR-60 EB bypass ramp, the realignment of the existing NB SR-57/EB SR-60 connector, the construction of a seventh lane between the Grand Avenue off-ramp and the added lane near the eastern SR-57 diverge, the construction of an auxiliary lane connecting the new three-lane on-ramp at Grand Avenue to the new connector, a new intersection of Grand Avenue and the EB on- and off-ramps, a new EB loop on-ramp, realignment of the existing EB on-ramp, the widening of Grand Avenue, reconstruction of the Grand Avenue overcrossing, the widening of Golden Springs Drive, two soundwalls along the Diamond Bar Golf Course (north and south of Grand Avenue), and a soundwall along the residential uses along Rock River Road to the west of the freeway.

Although more change would occur under Alternative 3, visual impacts to residents, commercial users, freeway travelers, and local street users in Alternative 3 would be similar to those discussed under Alternative 2, above. However, under Alternative 3, the proposed partial cloverleaf interchange at Grand Avenue would require a larger take from the Diamond Bar Golf Course, requiring more tree and vegetation removal. Therefore, recreational users would experience more visual change (increase in hardscape and removed trees and vegetation) under Alternative 3. However, MM-2 is required to replace removed trees and landscaping within the golf course (including along the proposed soundwall and widened Grand Avenue) with landscaping similar to existing conditions. Installation of replacement trees and landscaping would block views from the Diamond Bar Golf Course to the proposed partial cloverleaf interchange. With implementation of MM-2, impacts to recreational users would be considered less than significant.

Landscape Unit 3

Changes in LU3 are represented in Key Views 4, 5, and 6.

Alternatives 2 and 3

Alternatives 2 and 3 in LU3 propose the realigned NB SR-57 mainline, the new EB bypass ramp in the central portion of LU3, the realigned SR-60 EB on-ramp from South Diamond Bar Boulevard, a soundwall along the property lines of the residential uses along Rock River Road adjacent to the freeway (in the southern portion of LU3), and a soundwall along the property lines of the residential uses atop the bluff along Decorah Road in the northern portion of LU3.

Visual Change Experienced by Residential Uses

Views from residential uses within LU3 (i.e., those along Rock River Road in the southern portion of LU3 and those along Decorah Road atop the bluff in the northern portion of LU3) would be similar to those described above under "Landscape Unit 2, Alternative 2, Visual Change Experienced by Residential Uses". Thus, no feasible mitigation measures are available to reduce, minimize, or avoid the impacts from the introduction of the new soundwalls. Therefore, these residents would be significantly impacted by the new soundwalls.

Based on the project's Draft NADR, the project would not be required to construct the new soundwalls along the residents (at Rock River Road or Decorah Road), as these soundwalls were determined to not be reasonable. As determined by the Draft NADR, neither build alternative would result in the construction of these soundwalls considered as part of the NSR. With implementation of the NADR recommendation for soundwalls, project implementation would not result in significant impacts to these residents and no avoidance, minimization, or mitigation measures are required.

Limited views of the proposed realignments and bypass ramp would be afforded from the residential uses within the eastern (i.e., those off of Golden Springs Drive) and northeastern (i.e., those along Palomino Drive) portions of LU3 which are higher in elevation than the project site. The majority of views from these residents would be obstructed by intervening structures and trees. Overall, residents within the eastern and northeastern portions of LU3 would moderately respond to the proposed project features. As the freeway would appear similar to existing conditions with project implementation, residents that are higher in elevation than the project site would not experience adverse visual change and impacts would not be significant. As views to the project site would be limited and views would remain to mature trees, impacts to the residents within the eastern and northeastern portions of LU3 would not be significant. No avoidance, minimization, or mitigation measures are required.

Visual Change Experienced by Recreational Uses

Recreational users of the northern portion of the Diamond Bar Golf Course located to the east of the freeway would have limited views to project improvements due to intervening structures (U-Store-It Self-Storage). These recreational viewers would be minimally aware of the project. Some mature trees and landscaping between the freeway and the storage structures would be removed to accommodate the realigned NB SR-57 off-ramp.

Viewer response by recreational users to proposed changes would be high. However, due to the minimal amount of visible change experienced by recreational users in LU3, impacts would not be significant.

Visual Change Experienced by Commercial Uses

Views from commercial uses located to the east of the project site would be minimally impacted by the proposed realignment and new bypass. The realigned NB SR-57 off-ramp and new EB bypass ramp would be visible from commercial uses to the east. Although these structures would appear similar to existing freeway structures, construction would require the removal of existing mature trees and ornamental landscaping along the eastern side of the freeway. Therefore, MM-1 would require typical freeway landscaping (e.g., shrubs and groundcover) along the freeway in disturbed areas, and would reduce visual impacts to nearby commercial users.

Visual Change Experienced by Freeway Travelers

Proposed changes in LU3 would be visible by freeway travelers along SR-57/SR-60 travel lanes. Changes along the freeway within LU3 visible by motorists would include the new EB bypass, the mainline lane restriping and realignment, and the new soundwall along the western side of the freeway. Freeway travelers would have short to moderate durations of project changes. In general, the realigned freeway mainline, NB SR-57 off-ramp, and the EB SR-60 on-ramp would appear similar to the existing conditions. Freeway travelers would notice an increase in hardscape due to the new EB bypass structure and the soundwall along the west side of the freeway. However, as these changes would appear similar to the existing freeway structures and existing soundwalls, visual changes would not be significant. Further, implementation of MM-4 would require landscape and/or architectural treatments (i.e., color, texture, etc.) of the proposed soundwall (freeway facing side only). Thus, impacts in this regard would be reduced to less than significant levels.

Further, with implementation of NADR, the project would not be required to construct the new soundwall along the residential area (at Decorah Road), as this soundwall was determined to not be reasonable. As determined by the Draft NADR, neither build alternative would result in the construction of this soundwall considered as part of the NSR. Thus, project implementation would not result in significant impacts to these residents and no avoidance, minimization, or mitigation measures are required.

Resultant Impact Summary

Based on the conclusions presented above, Table 5 (Resultant Project Impact Summary) describes the resultant visual impacts from the proposed project. As depicted in Table 5, implementation of the proposed project and the soundwalls recommended in the NSR, significant impacts would result to the residential uses to the west of the freeway as a result of new soundwalls. However, based on the project's Draft NADR, these soundwalls are not considered reasonable and therefore would not be constructed as part of the project. Thus, implementation of the proposed project, the recommendations of the NADR, and the recommended avoidance, minimization, and/or mitigation measures, no significant visual impacts would result.

Table 5
Resultant Project Impact Summary

Sensitive Viewer Group	Build Alternative	Landscape Unit	Visual Impact	Avoidance, Minimization, and/or Mitigation Measures	Resultant Impact	Implementation of the NADR	Mitigation Measures	Resultant Impact
Residential Uses to the West of the Freeway	2 and 3	1	Less Than Significant	None Required	Less Than Significant	Less Than Significant	None Required	Less Than Significant
	2 and 3	2	Significant	None Feasible	**Significant**	Less Than Significant	None Required	Less Than Significant
	2 and 3	3	Significant	None Feasible	**Significant**	Less Than Significant	None Required	Less Than Significant
Residential Uses to the East of the Freeway	2 and 3	1	Less Than Significant	None Required	Less Than Significant	Less Than Significant	None Required	Less Than Significant
	2 and 3	2	Significant	MM-1 and MM-2	Less Than Significant	Significant	MM-1 and MM-2	Less Than Significant
	2 and 3	3	Less Than Significant	None Required	Less Than Significant	Less Than Significant	None Required	Less Than Significant
Freeway Travelers	2 and 3	1	Less Than Significant	None Required	Less Than Significant	Less Than Significant	None Required	Less Than Significant
	2 and 3	2	Significant	MM-3 and MM-4	Less Than Significant	Significant	MM-3 and MM-4	Less Than Significant
	2 and 3	3	Significant	MM-4	Less Than Significant	Less Than Significant	None Required	Less Than Significant
Recreational Users	2 and 3	1	--	--	--	--	--	--
	2	2	Significant	MM-2	Less Than Significant	Significant	MM-2	Less Than Significant
	3	2	Significant	MM-2	Less Than Significant	Significant	MM-2	Less Than Significant
	2 and 3	3	Less Than Significant	None Required	Less Than Significant	Less Than Significant	None Required	Less Than Significant
Local Street Users	2 and 3	1	--	--	--	--	--	--
	2 and 3	2	Significant	MM-2	Less Than Significant	Significant	MM-2	Less Than Significant
		3	--	--	--	--	--	--
Commercial Users	2 and 3	1	Less Than Significant	None Required	Less Than Significant	Less Than Significant	None Required	Less Than Significant
	2 and 3	2	--	--	--	--	--	--
	2 and 3	3	Significant	MM-1	Less Than Significant	Significant	MM-1	Less Than Significant

Light and Glare

Short-Term Construction Impacts

The proposed project may require nighttime construction activities in select portions of the project area. Light and glare from nighttime construction lighting would potentially cause a nuisance to nearby residents and motorists traveling along the project site. These activities may be required to take place for several months. However, the project area contains existing sources of light (i.e., vehicle headlights, street lights, commercial and residential lights, etc.).

Night closures would be required throughout the duration of the project, and all work intervals would be defined by the District Traffic Operations Manager. Any work requiring a temporary lane, ramp, or freeway closure would only be allowed during nighttime hours. One to two travel lanes may need to be closed during nighttime construction to protect the safety of the construction workers and to expedite the project. Nighttime construction would be conducted in accordance with Caltrans regulations. Necessary lighting for safety and construction purposes would be directed away from land uses outside the project area, and contained and directed toward the specific area of construction. With implementation of MM-5, construction lighting types, plans, and placement would be reviewed at the discretion of the District Landscape Architect. Implementation of MM-5 would ensure that appropriate lighting controls would be applied to reduce light and glare impacts.

Long-Term Operational Impacts

Implementation of the proposed project would introduce additional sources of light and glare associated with vehicle headlights. No additional traffic signals or street lighting would be installed. Glare impacts from new soundwalls and retaining walls would be introduced along portions of SR-57/SR-60. With implementation of MM-2, walls would be required to apply a treatment (which may include vine treatment) that would reduce or eliminate reflective light and glare impacts. Residents in the vicinity of the project site would generally experience similar sources of light and glare, as compared to existing conditions. Thus, impacts in this regard would be less than significant.

Commercial uses along SR-57/SR-60 would not experience a considerable increase in light and glare. Upon project completion, light and glare in this area would appear similar to the existing condition. Impacts would not be significant in this regard.

E. Cumulative Impacts

The project area is highly developed. Due to the developed nature of the project site and surrounding area, cumulative projects in the vicinity would not be directly visible from the project site. There is one identified project listed in the Southern California Association of Governments (SCAG) Regional Transportation Plan (RTIP) in the City of Diamond Bar:

- **Sycamore Canyon Park Trail Phase IV –** Recommended for funding under the non-motorized element of the Recreational Trails Program. Decomposed granite 2/3 mile.

The Sycamore Canyon Park Trail Phase IV project would be located approximately 0.25-miles east of the project site. This project would not be visible from any portion of the project site due to distance, topography, and intervening trees and structures. Therefore, as a viewer travels along SR-57/SR-60 and local streets in the project vicinity through the project site, the RTIP project would not be readily visible.

Other cumulative projects in the project area include the following:

- **Roadway Resurfacing Project** – Resurfacing throughout the City of Industry on Amar Road, Azusa Way, El Encanto Road, Chestnut Street, Giano Avenue, Grand Avenue, Stafford Street, Stimson Avenue, and Temple Avenue.

- **Grand Avenue Widening** – Widen Grand Avenue from Baker Parkway to the intersection with Old Brea Canyon Road/SR-60 west on- and off-ramps.
- **Improvements at Stardust Park, Silvertip Park, and Longview Park South** – ADA retrofits.
- **Jewel Ridge Estates** – Proposed 22-lot residential subdivision allowing for the development of 16 single-family detached homes, located approximately two blocks east of SR-57 and Brea Canyon Road, and east of the Brea Canyon Flood Control Channel.
- **SR-60 Cold Plane and RAC Overlay** – Rehabilitate SR-60 pavement within the project limits by cold planing 60 millimeters of existing asphalt concrete pavement and placing 60 millimeters of rubberized asphalt concrete type G on mainline, all ramps, and shoulders.
- **Pomona Freeway (SR-60) HOV Lane Project** – Construct HOV lanes, retaining walls, and improvements to ramps in both directions along SR-60 between SR-57 and Interstate 605.
- **Los Angeles NFL Stadium** – Construct a new National Football League (NFL) stadium in the northwest quadrant of the SR-57/SR-60 and Grand Avenue interchange in the City of Industry.[4]

These cumulative projects may be encountered on a singular basis. Thus, cumulative projects would not be experienced in one encounter, but rather as a series of experiences. With the exception of the Los Angeles NFL Stadium project, the cumulative projects are predominately located in developed areas, do not significantly change the capacity of the transportation system, and are not anticipated to result in adverse environmental impacts in the project area. Additionally, these projects would be evaluated on a project-by-project basis, and would be subject to similar stipulations as those analyzed in this VIA.

The Los Angeles NFL Stadium would result in visual changes in the project area due to the size and scale of the project and the amount of light and glare that would be introduced into the area. Governor Schwarzengger signed Assembly Bill (AB) X3 81 in 2009, which exempts the stadium from further environmental review under the California Environmental Quality Act (CEQA). Therefore, no further environmental studies would be conducted for this project. Although the Los Angeles NFL Stadium project, if constructed, would change the character and quality of the area, the proposed project would not cumulatively contribute to these impacts, as the incremental changes as a result of the project would be generally similar in character to the existing built environment upon implementation of MM-1 through MM-3. Selected landscape palettes for the proposed project would be consistent with the nature of the project area. With implementation of recommended minimization measures (MM-1 through MM-3), impacts from the proposed project's contribution to cumulative project impacts would be reduced. Therefore, the extent of the project's cumulatively considerable impacts is considered to be minimal. Also, the project would not cumulatively contribute to light and glare impacts in the area.

[4] It should be noted that the Los Angeles NFL Stadium project would not be constructed until a team is signed. To date, a team has not yet been signed. However, the project is conservatively included within the cumulative project analysis.

VIII. AVOIDANCE AND MINIMIZATION MEASURES

Caltrans and the FHWA mandate that a qualitative/aesthetic approach be taken to avoid and minimize for visual quality loss in the project area. This approach fulfills the letter and the spirit of FHWA requirements because it addresses the actual cumulative loss of visual quality that would occur in the project viewshed when the project is implemented. It also constitutes avoidance and minimization that can more readily generate public acceptance of the project.

Avoidance and minimization measures for adverse project impacts addressed in the key view assessments and summarized in the previous section would consist of adhering to the following design requirements in cooperation with the District Landscape Architect. The requirements are arranged by project feature and include design options in order of effectiveness. All visual avoidance and minimization would be designed and implemented with the concurrence of the District Landscape Architect.

MM-1 Removed trees and vegetation within the Diamond Bar Golf Course shall be replaced with landscaping that is compatible to the surrounding area and similar to the existing landscaping. Landscaping shall also be installed along the golf course face of the proposed soundwall and along the Diamond Bar Golf Course edges of the freeway and Grand Avenue interchange in order to buffer views. The City of Diamond Bar, County of Los Angeles Department of Parks and Recreation, and the Caltrans District Landscape Architect shall cooperatively determine the landscape reconfiguration of the Diamond Bar Golf Course in this area.

MM-2 Landscaping shall be installed within the Grand Avenue median and along the disturbed portions of Grand Avenue and Golden Springs Road, where feasible. Landscaping shall be compatible with that of the surrounding area and selected in consultation with the City of Diamond Bar and the Caltrans District Landscape Architect.

MM-3 To maintain the context of the project area (e.g., color, form, and texture), the project shall install landscaping that is compatible with the existing landscape along disturbed portions of SR-57/SR-60 along the project site. Landscaping shall include shrub/groundcover mass planting (where feasible) and landscape treatment along walls (where feasible) to soften the hardscape features from the walls. The landscape concept, plan, and plant palette shall be determined in consultation with, and approved by, the District Landscape Architect during the Plans, Specifications, and Estimate (PS&E) phase, and shall be consistent with all water quality treatment requirements for the project. The Caltrans District Landscape Architect shall review and approve the planting plan in order to avoid the use of invasive plant species. Erosion control plant species utilized shall be determined in consultation with, and approved by, the District Landscape Architect to ensure that the mix and application strategy is appropriate for the specific soil composition of the area.

MM-4 To increase the unity of the freeway corridor, landscape and/or architectural treatments (e.g., color, texture, etc.) for the freeway-facing side of the proposed soundwall along the Diamond Bar Golf Course shall be applied and determined in consultation with the District Landscape Architect during the Plans, Specifications, and Estimate (PS&E) phase.

MM-5 Construction lighting types, plans, and placement shall be reviewed at the discretion of the Caltrans District Landscape Architect in order to minimize light and glare impacts on surrounding sensitive uses.

IX. REFERENCES

LIST OF PREPARERS

RBF CONSULTING
14725 Alton Parkway
Irvine, California 95618
949/472-3505

Cathy Johnson, RLA, CPESC, Senior Associate/Landscape Architect, RBF Consulting. B.S. Ornamental Horticulture, Washington State University, Pullman. M.S. Mechanical Engineering, University of Southern California. 19 years experience.
Contribution: Oversight of the Visual Impact Assessment.

Eddie Torres, REA, Senior Associate/Director of Technical Studies, RBF Consulting. B.A. Environmental Analysis and Design, B.S. Mechanical Engineering, University of California, Irvine. M.S. Mechanical Engineering, University of Southern California. 11 years experience.
Contribution: Oversight and Preparation of the Visual Impact Assessment.

Kristen Bogue, REA, Associate/Visual Resource Analyst, RBF Consulting, B.A. Environmental Analysis and Design, University of California, Irvine. 7 years experience.
Contribution: Preparation of the Visual Impact Assessment.

Kelly Chiene, Environmental Analyst, RBF Consulting, B.S. City and Regional Planning, California Polytechnic State University, San Luis Obispo. 4 years experience.
Contribution: Preparation of the Visual Impact Assessment.

David Jacobus, GISP, GIS Analyst, RBF Consulting, B.A. California State University, Long Beach. 9 years experience.
Contribution: Preparation of the Viewshed Maps.

Gary Gick, Technical Editor, RBF Consulting, B.A. English, University of California, Los Angeles. 26 years experience.
Contribution: Technical Editing and Word Processing for the Visual Impact Assessment.

Debby Hutchinson, Graphic Artist, RBF Consulting, A.A., Commercial Art, Orange Coast College. B.F.A. Illustration, California State University, Long Beach. 38 years experience.
Contribution: Preparation of the Graphics for the Visual Impact Assessment.

Subconsultant

Richard Johnston, Photosimulation Specialist

DOCUMENTS

California Department of Transportation, *Standard Environmental Reference, Chapter 27: Visual & Aesthetics Review*.

City of Diamond Bar, *City of Diamond Bar General Plan*, adopted July 25, 1995.
City of Diamond Bar, *City of Diamond Bar Municipal Code*, codified through Ord. No. 03(2010), enacted May 18, 2010.

City of Industry, *City of Industry General Plan*, adopted 1971.

Google Earth, 2010.

ICF International, *State Route 57/State Route 60 Confluence Project Programmatic Section 4(f) Evaluation*, dated April 2012.

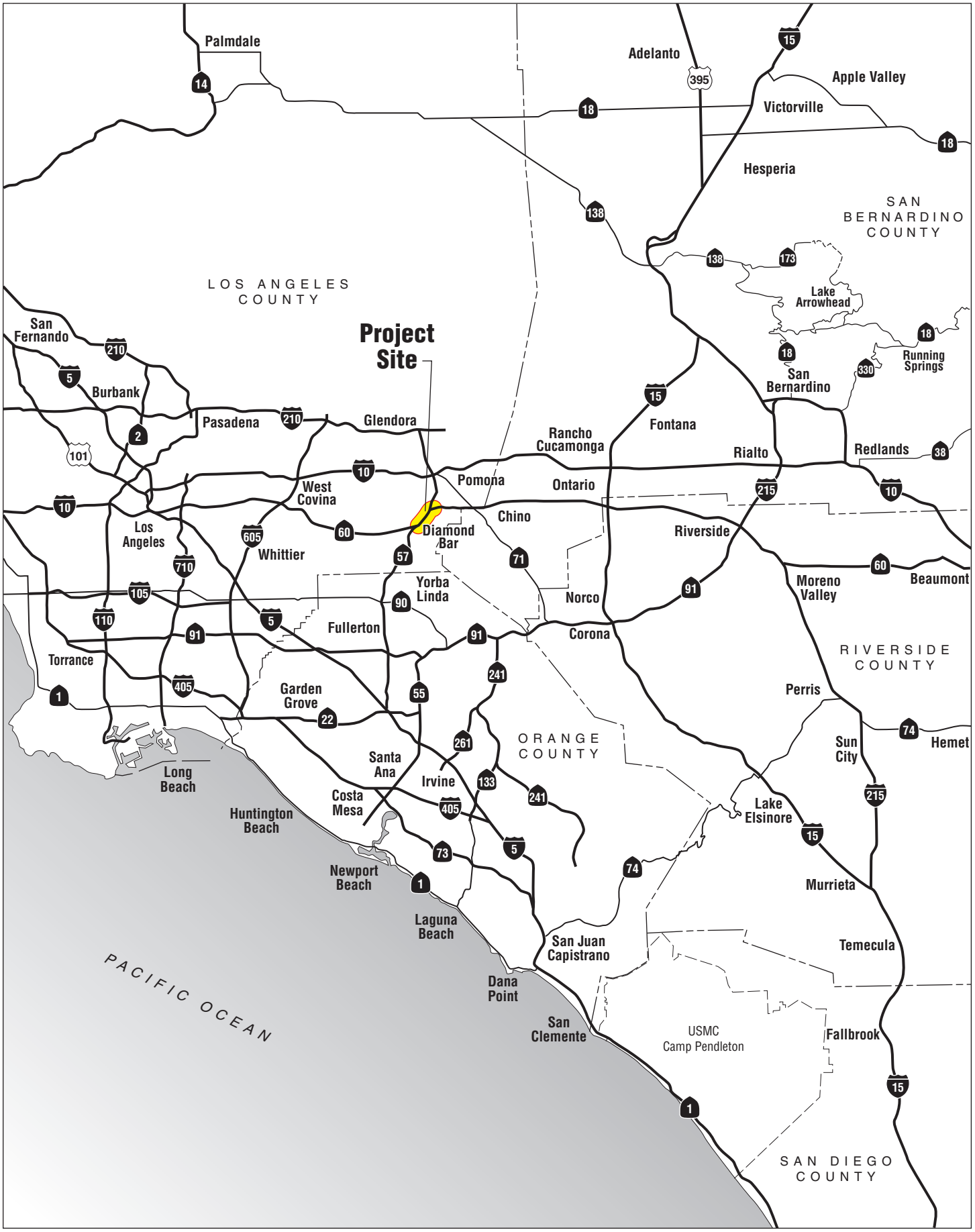
LSA Associates, Inc., *Noise Study Report*, dated May 2012.

LSA Associates, Inc., *Draft Noise Abatement Decision Report*, dated May 2012.

U.S.D.O.T., Federal Highway Administration, Office of Environmental Policy, *Visual Impact Assessment for Highway Projects*, March 1988.

USGS Topographic Quadrangle, *San Dimas, Yorba Linda, California* Quadrangles, 1981.

FIGURES



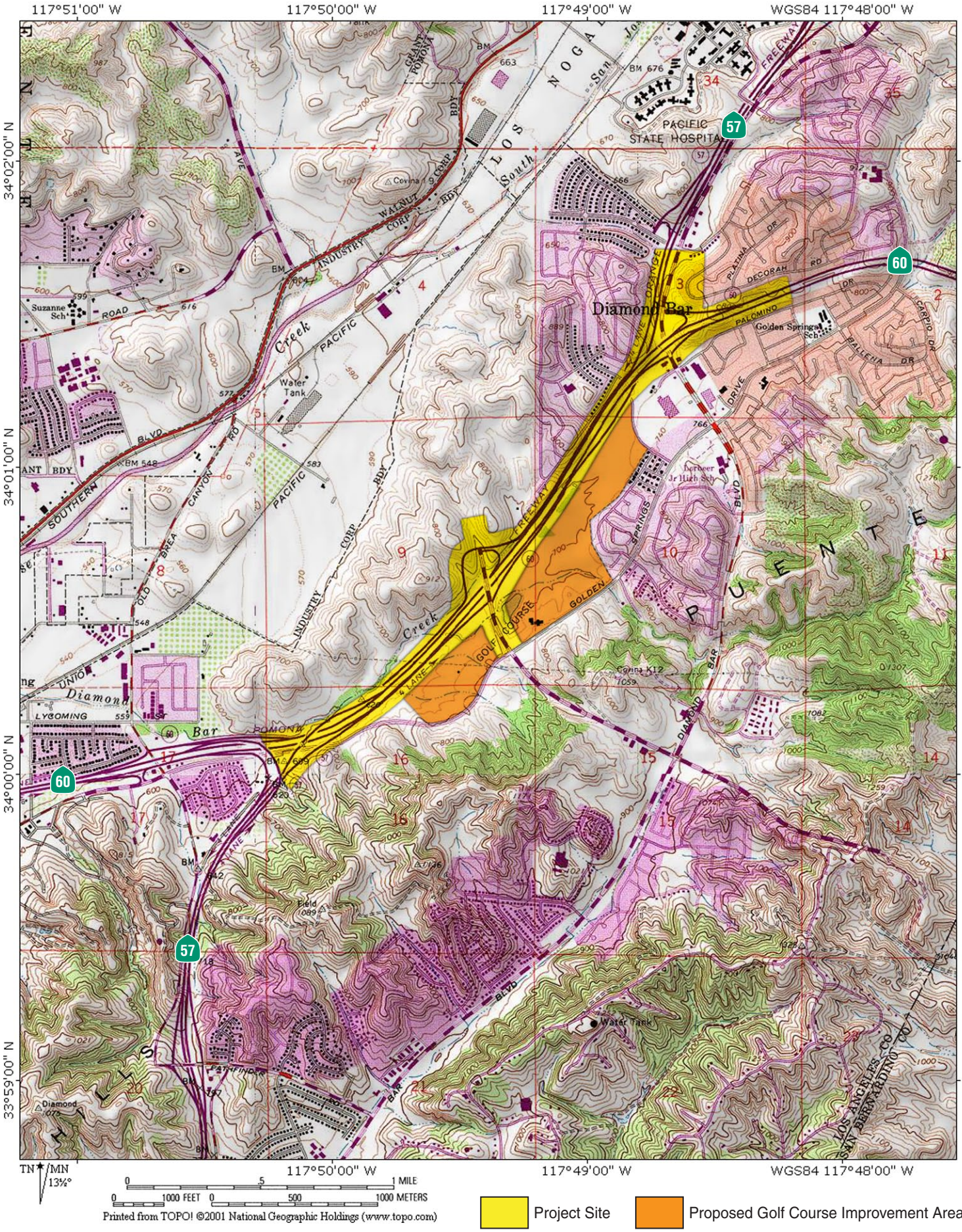
0 5 11 miles
APPROXIMATE

10/7/10 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Regional Vicinity

Figure 1

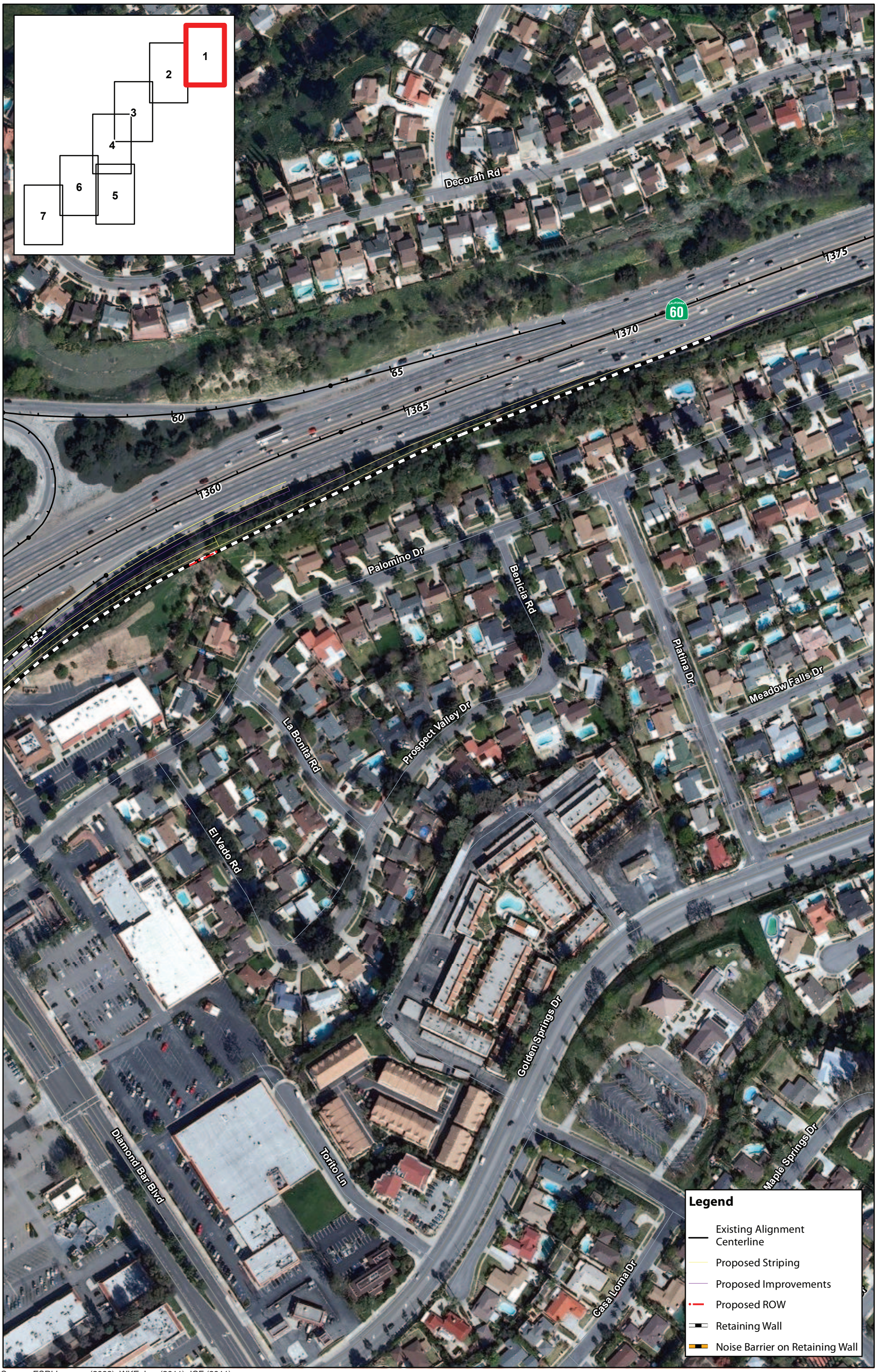


SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Local Vicinity

2/8/12 JN 10-104260-16989 MAS

Figure 2



Source: ESRI Imagery (2008), WKE, Inc. (2011), ICF (2011).

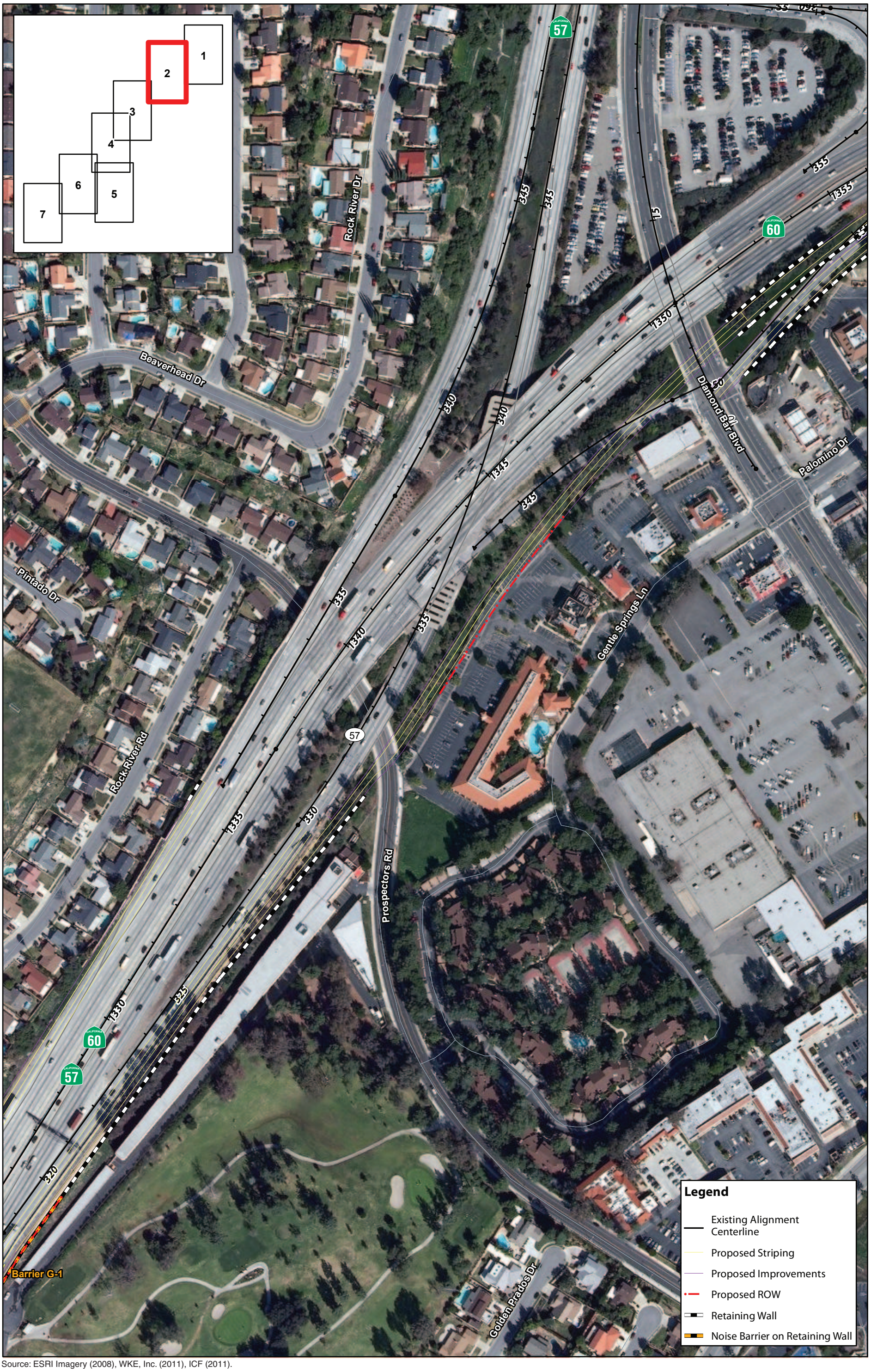
0 200'
APPROXIMATE

4/16/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Site Plan • Alternative 2

Figure 3a-1



Source: ESRI Imagery (2008), WKE, Inc. (2011), ICF (2011).

0 200'
APPROXIMATE

4/16/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Site Plan • Alternative 2

Figure 3a-2

Source: ESRI Imagery (2008), WKE, Inc. (2011), ICF (2011).

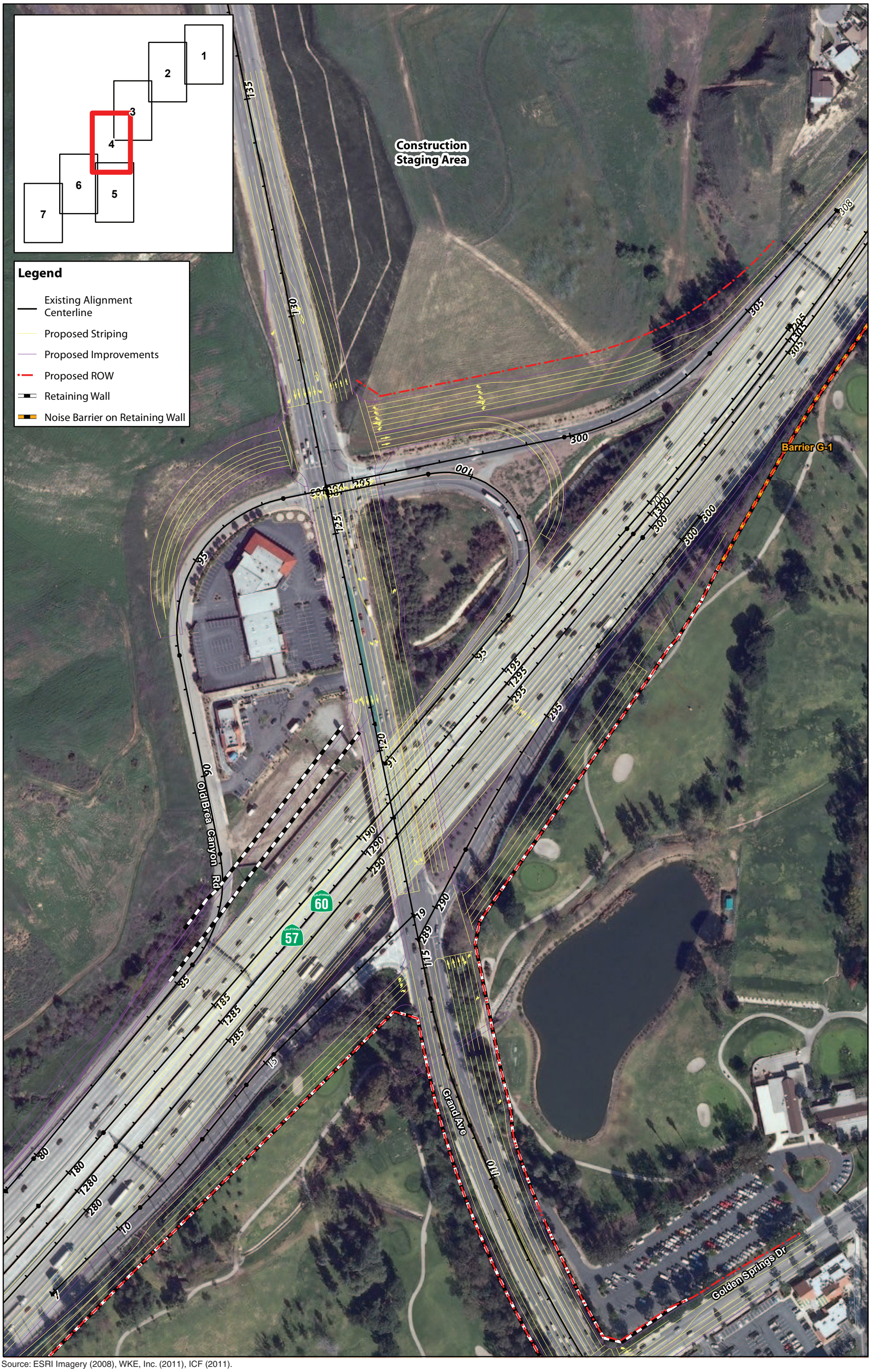
0 200'
APPROXIMATE

4/16/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Site Plan • Alternative 2

Figure 3a-3



Source: ESRI Imagery (2008), WKE, Inc. (2011), ICF (2011).

0 200'
APPROXIMATE

4/16/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Site Plan • Alternative 2

Figure 3a-4

Golden Springs Dr
Lakeway Dr
Grand Ave
Golden Springs Dr
Grand Ave
Valley Blvd
Grand Ave
Golden Springs Dr
Diamond Bar Blvd
Grand Ave
1
2
3
4
6
7

Legend

- Existing Alignment Centerline
- Proposed ROW
- Proposed Striping
- Proposed Improvements
- Proposed Alignment Centerline
- Retaining Wall
- Soundwall

Source: ESRI Imagery (2008), WKE, Inc. (2010).

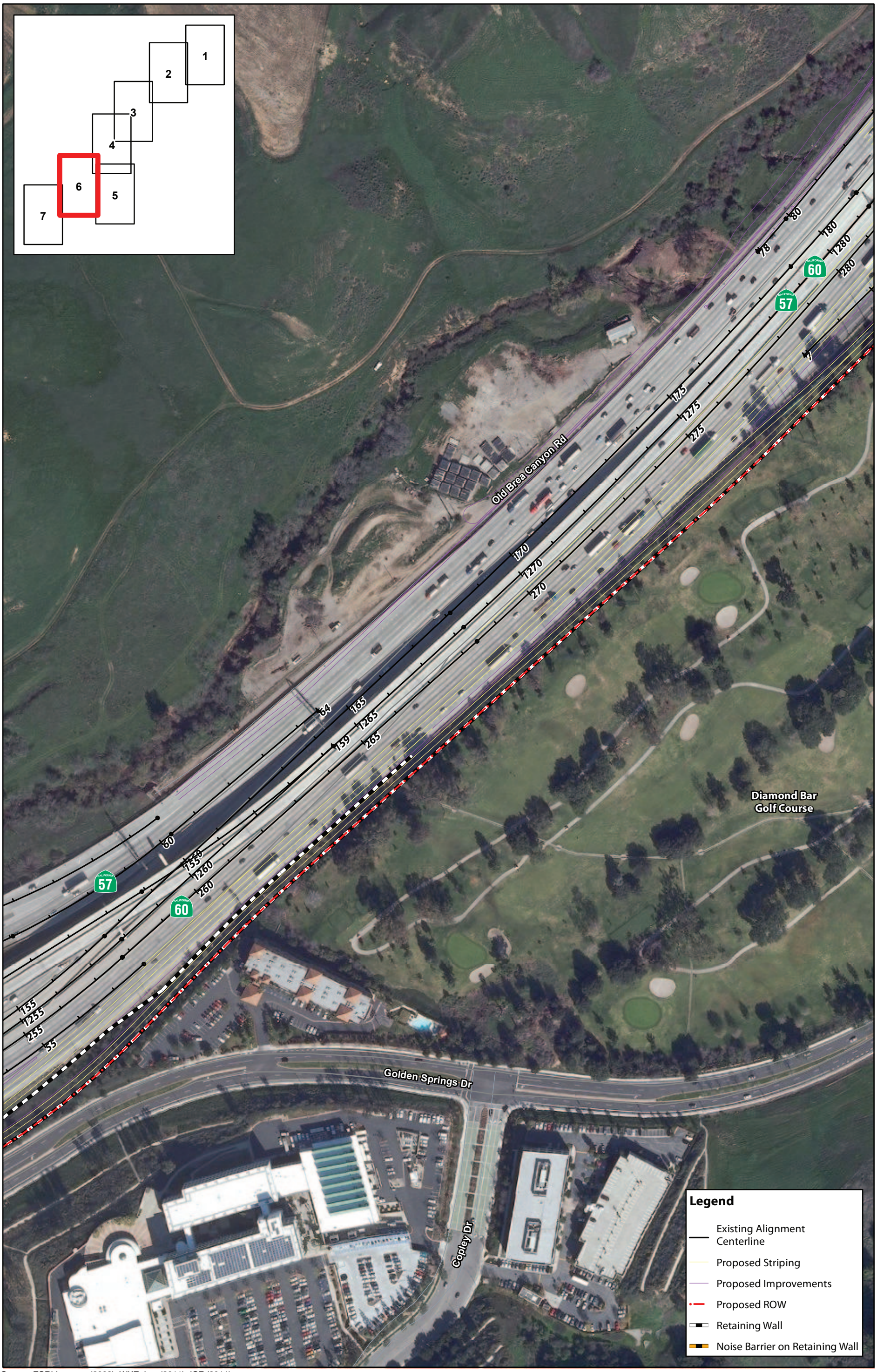
0 200'
APPROXIMATE

12/13/11 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Site Plan • Alternative 2

Figure 3a-5



Source: ESRI Imagery (2008), WKE, Inc. (2011), ICF (2011).

0 200'
APPROXIMATE

4/16/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Site Plan • Alternative 2

Figure 3a-6

Source: ESRI Imagery (2008), WKE, Inc. (2011), ICF (2011).

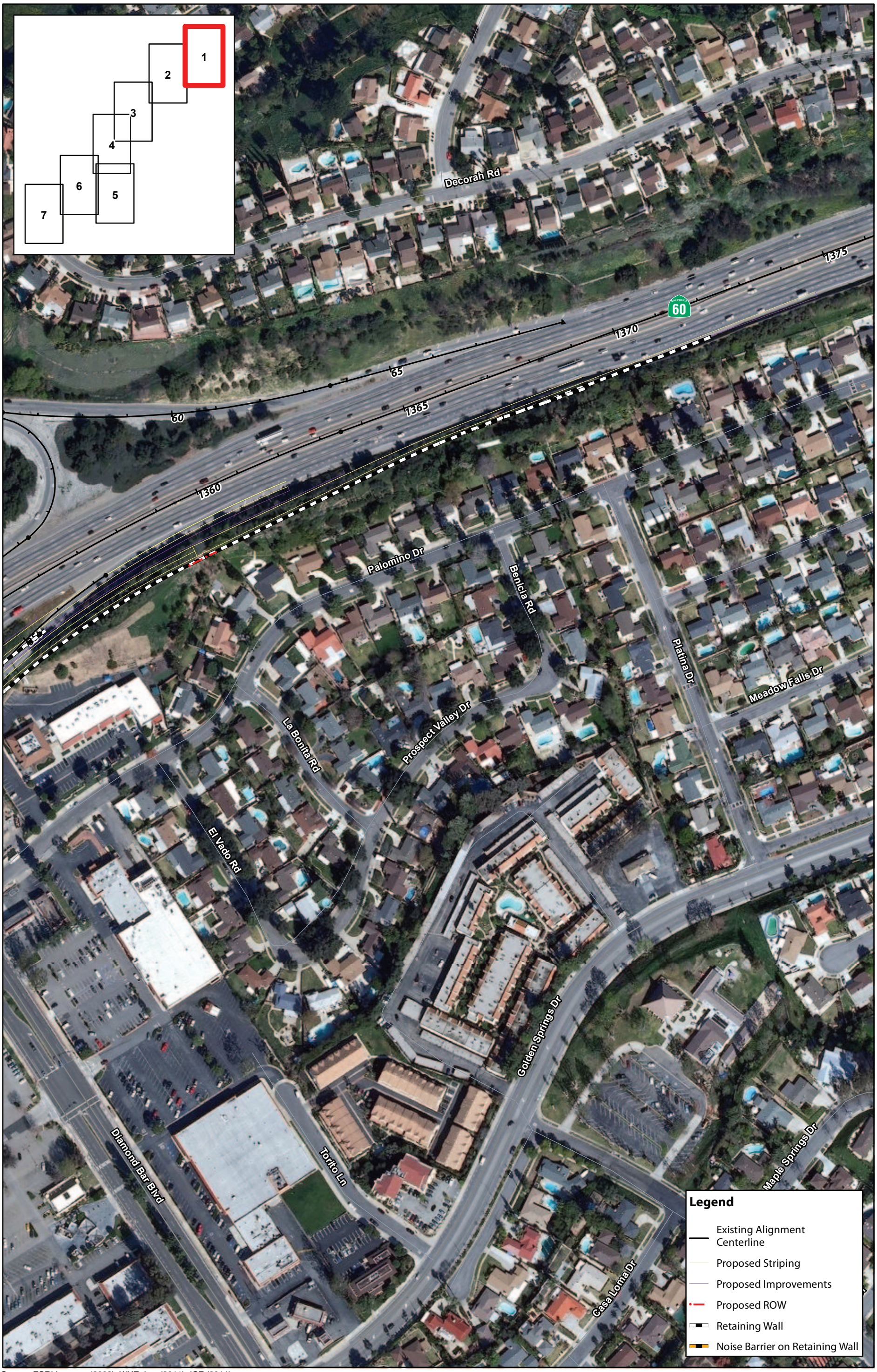
0 200'
APPROXIMATE

4/16/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Site Plan • Alternative 2

Figure 3a-7



Source: ESRI Imagery (2008), WKE, Inc. (2011), ICF (2011).

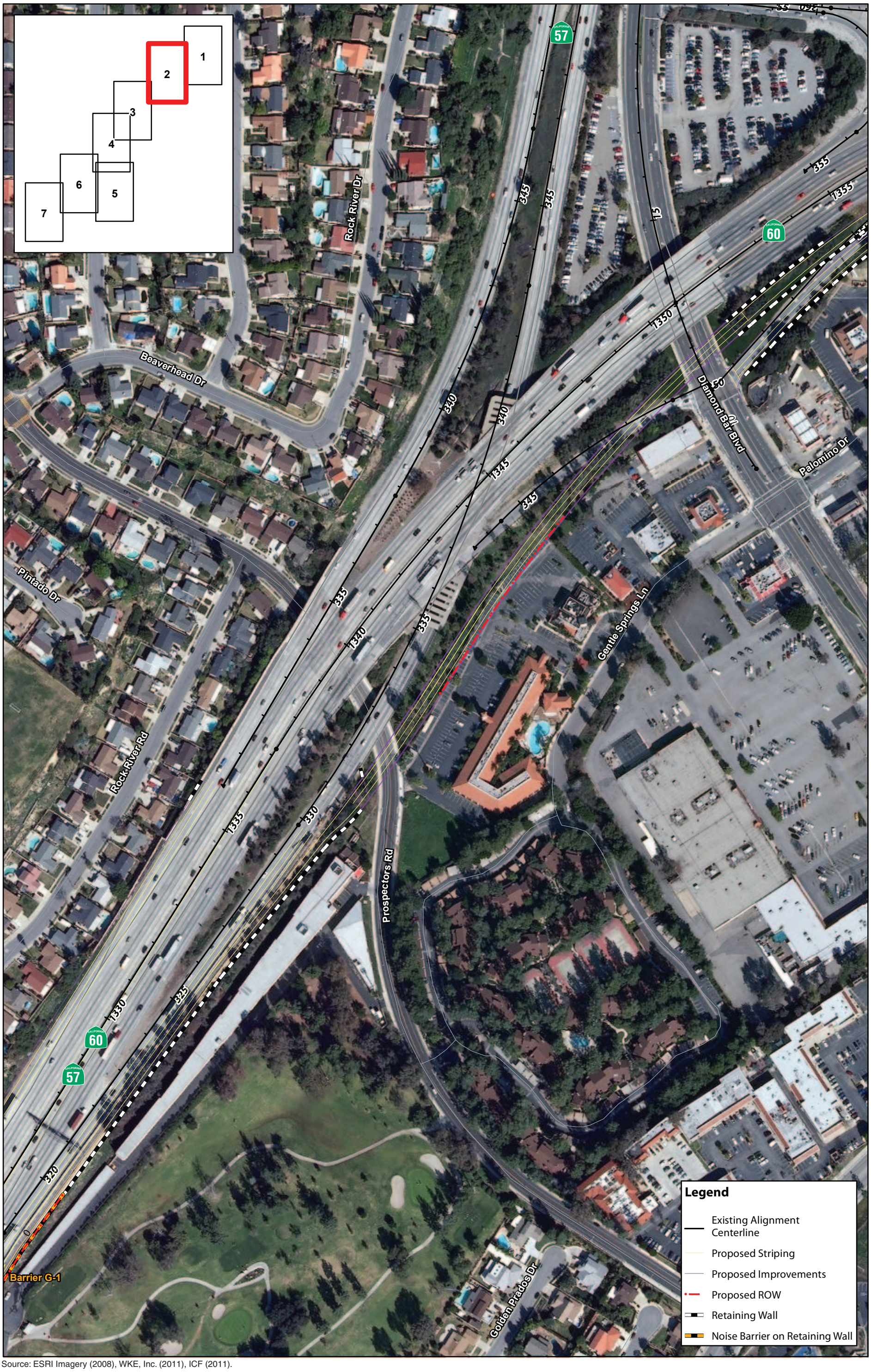
0 200'
APPROXIMATE

4/16/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Site Plan • Alternative 3

Figure 3b-1



Source: ESRI Imagery (2008), WKE, Inc. (2011), ICF (2011).

0 200'
APPROXIMATE

4/16/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Site Plan • Alternative 3

Figure 3b-2

Source: ESRI Imagery (2008), WKE, Inc. (2011), ICF (2011).

0 200'
APPROXIMATE

4/16/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Site Plan • Alternative 3

Figure 3b-3

Source: ESRI Imagery (2008), WKE, Inc. (2011), ICF (2011).

0 200'

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Site Plan • Alternative 3

4/16/12 JN 10-104260-16989 MAS

Figure 3b-4

Source: ESRI Imagery (2008), WKE, Inc. (2011), ICF (2011).

0 200'
APPROXIMATE

4/16/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Site Plan • Alternative 3

Figure 3b-5

Source: ESRI Imagery (2008), WKE, Inc. (2011), ICF (2011).

0 200'
APPROXIMATE

4/16/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Site Plan • Alternative 3

Figure 3b-6

Source: ESRI Imagery (2008), WKE, Inc. (2011), ICF (2011).

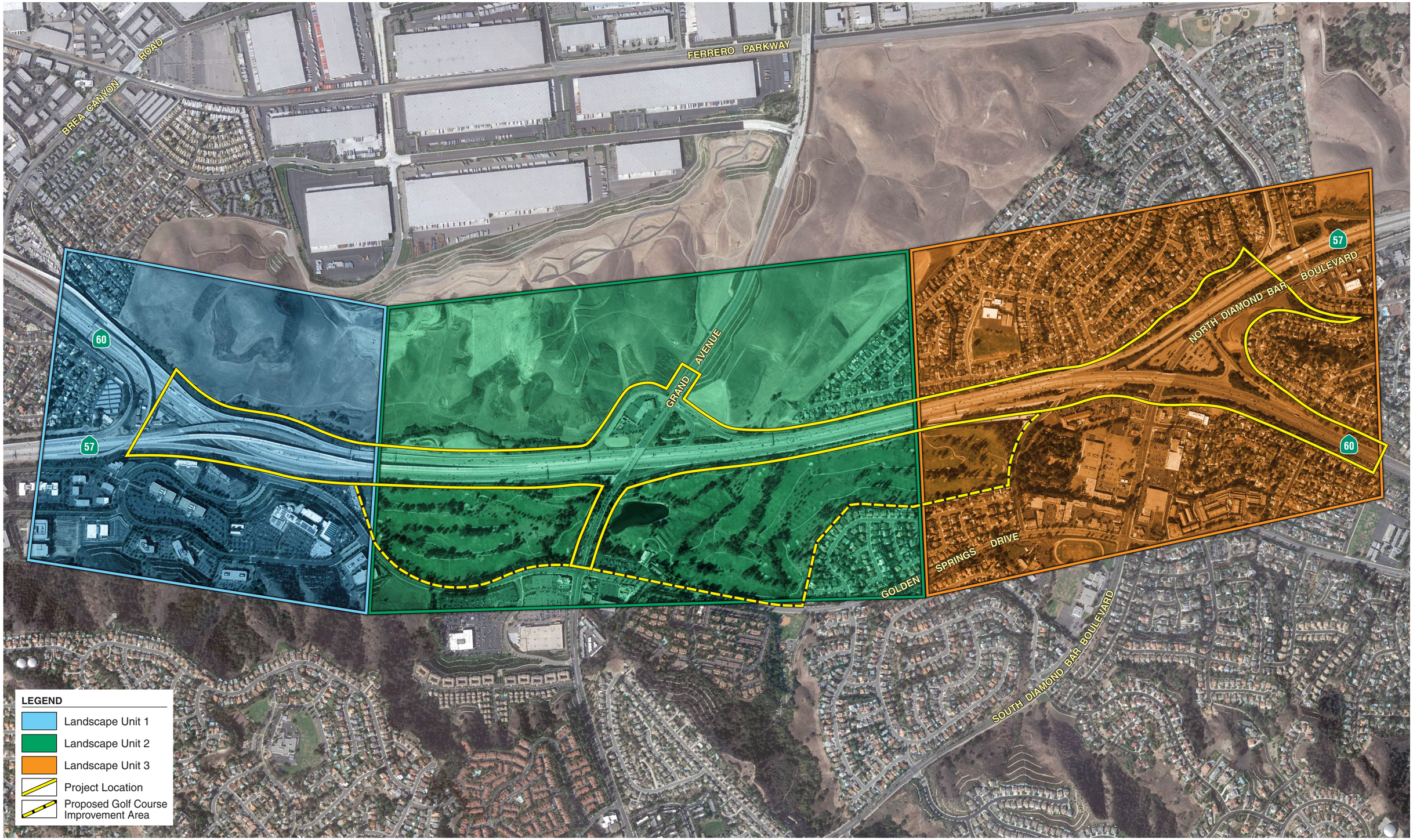
0 200'
APPROXIMATE

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Site Plan • Alternative 3

4/16/12 JN 10-104260-16989 MAS

Figure 3b-7



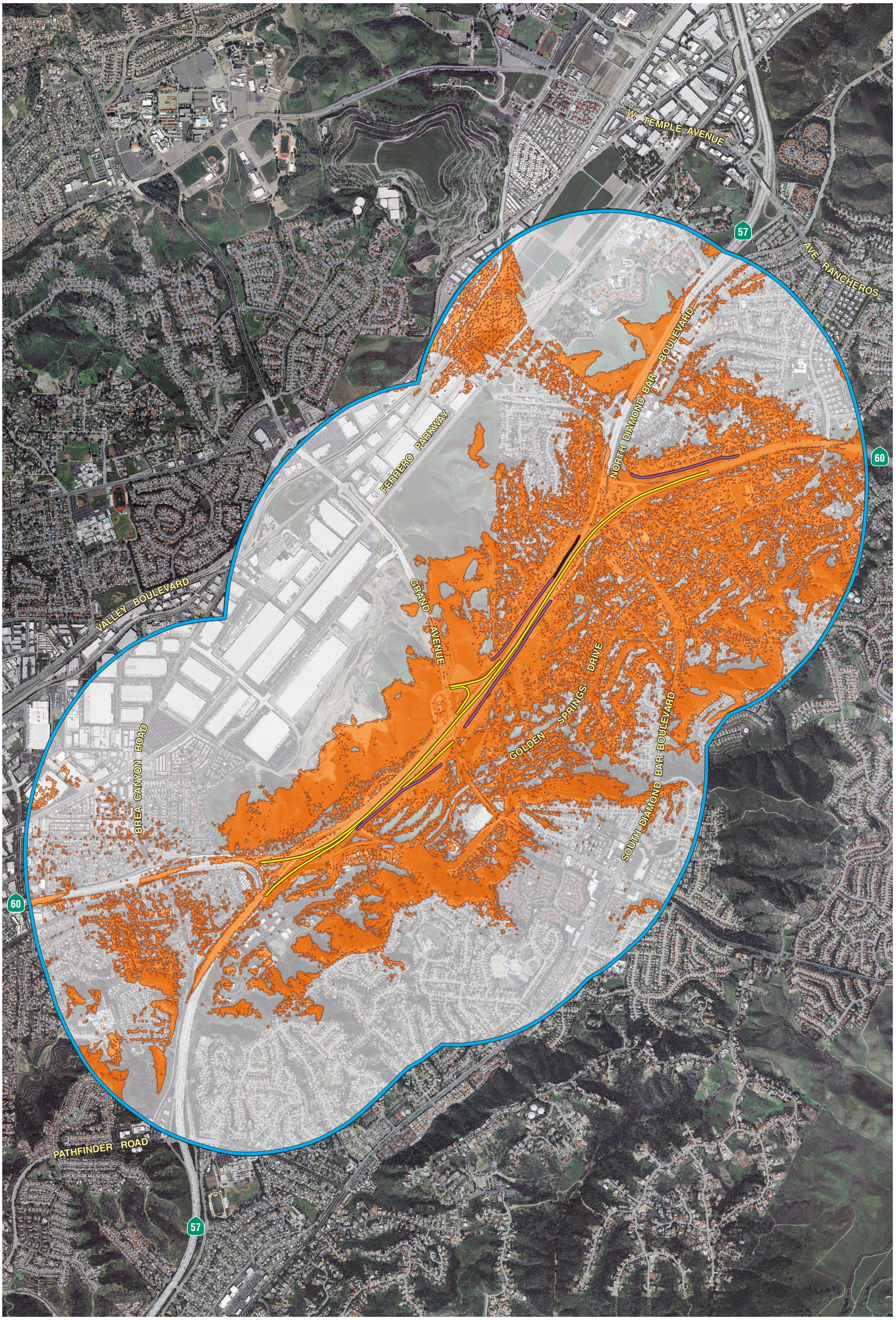
not to scale

2/8/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Landscape Units

Figure 4



Alternative 2 Centerline
Existing Soundwall
Proposed Soundwall
One Mile Radius Zone
Alternative is Not Visible
Alternative is Visible

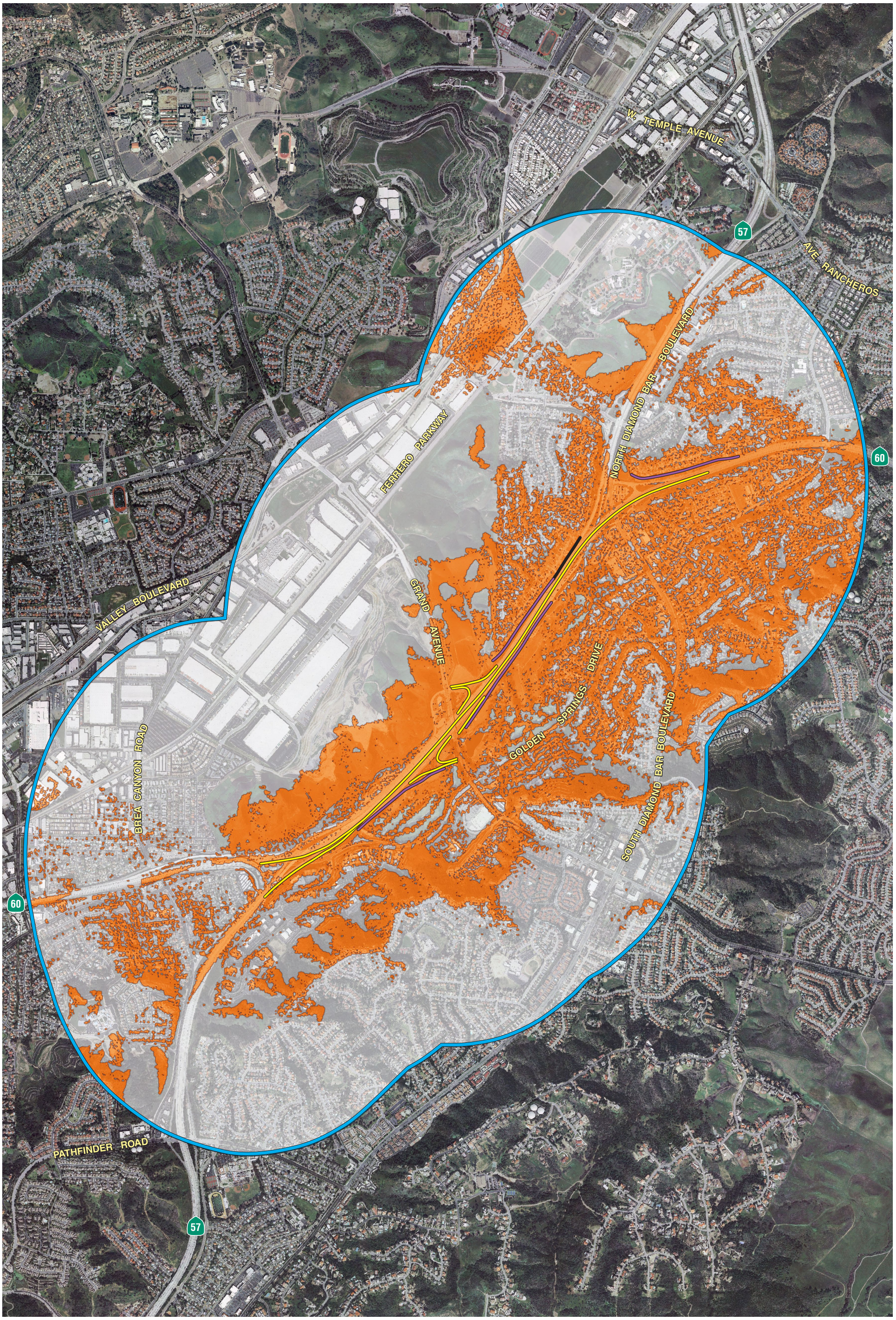
0 2000'
APPROXIMATE

4/4/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Viewshed Map • Alternative 2

Figure 5a



Alternative 3 Centerline
Existing Soundwall
Proposed Soundwall
One Mile Radius Zone
Alternative is Not Visible
Alternative is Visible

0 2000'
APPROXIMATE

4/4/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Viewshed Map • Alternative 3

Figure 5b

not to scale

Direction of Photo
Key View Location
1 Key View Number

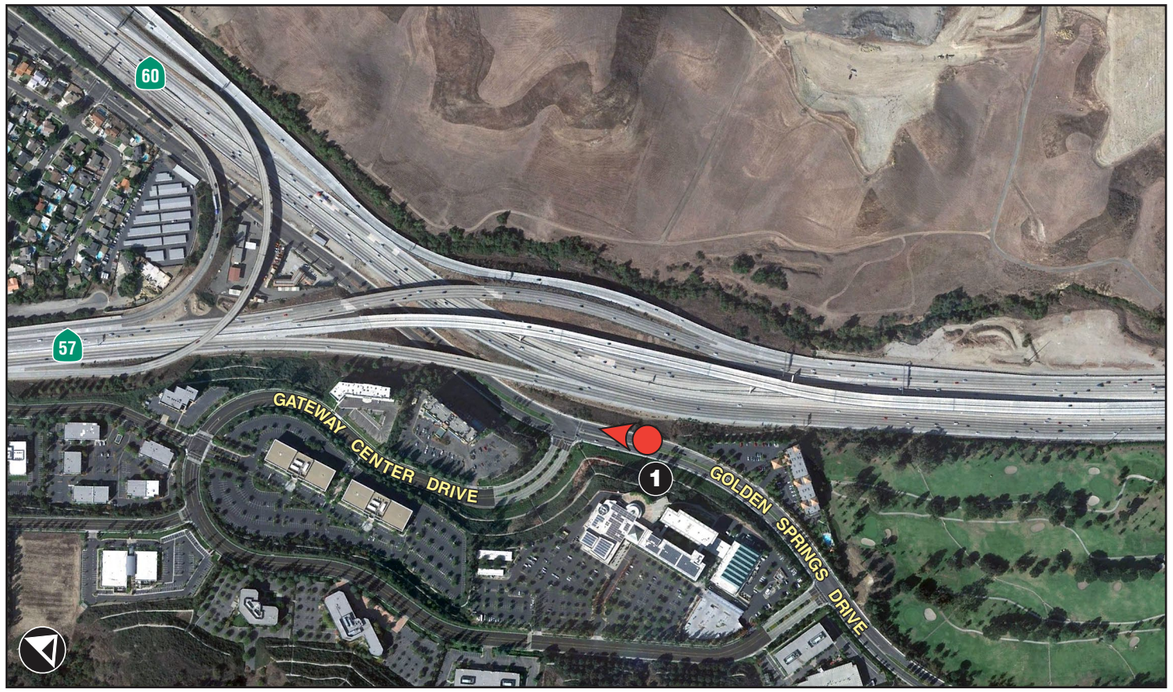
Project Site Boundary
Proposed Golf Course Improvement Area

2/8/12 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View Locations Map

Figure 6



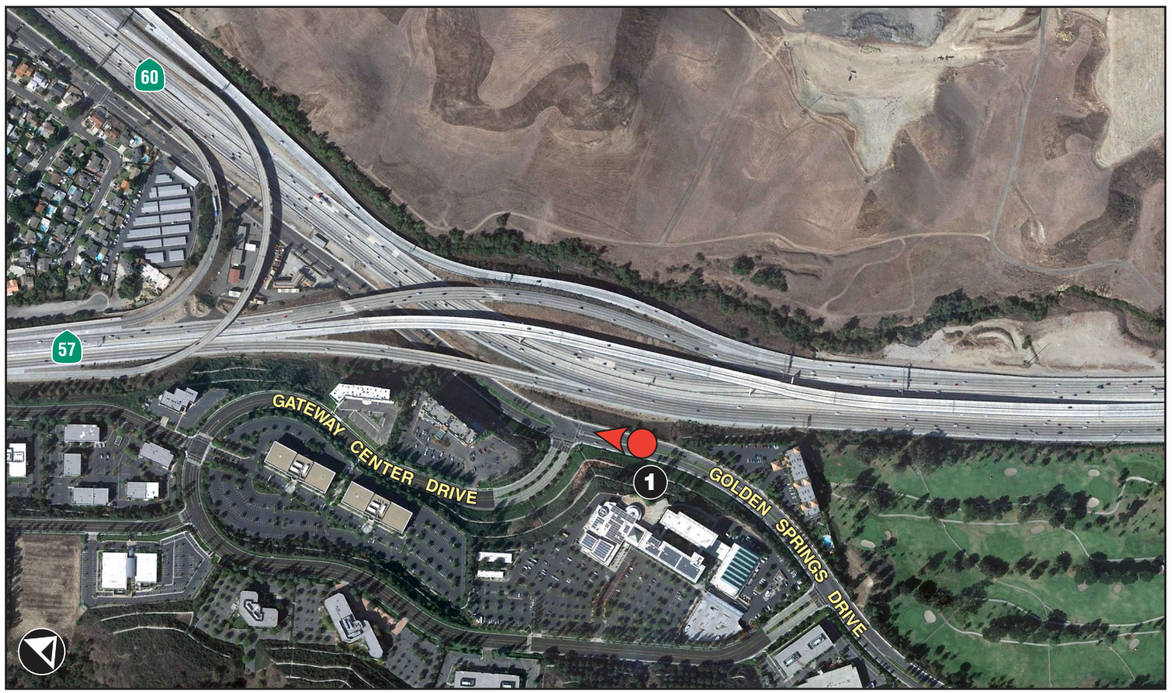
Direction of Photo
Key View Location
1 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 1 Existing Condition

Figure 7a

10/7/10 JN 10-104260-16989 MAS



Direction of Photo

Key View Location

1 Key View Number

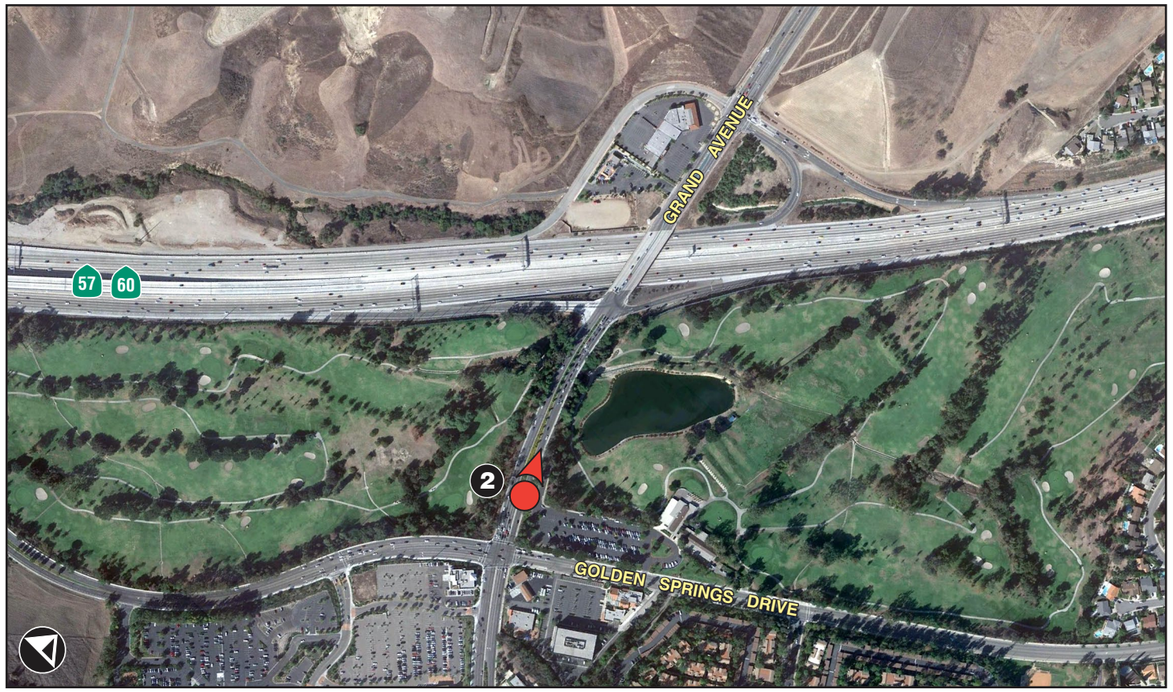
"For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area. Specific project design features are subject to change during the plans, specifications, and estimates (PS&E) phase for the project."

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 1 Proposed Condition - Alternatives 2 and 3

10/22/10 JN 10-104260-16989 MAS

Figure 7b



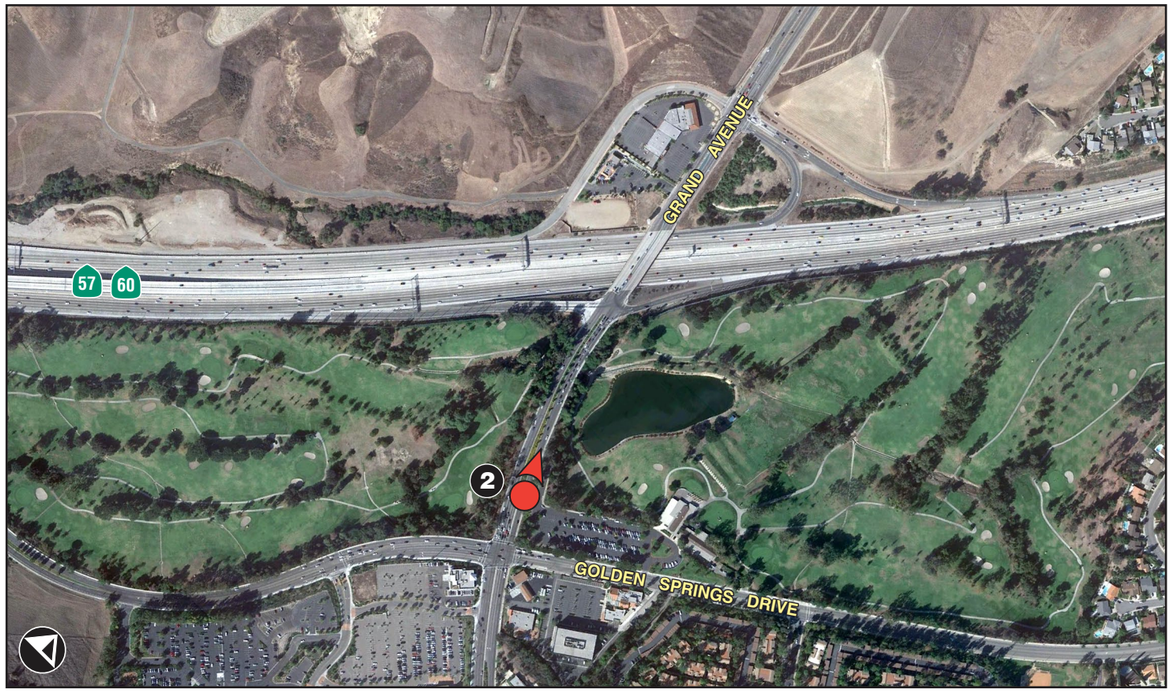
Direction of Photo
Key View Location
2 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 2 Existing Condition

10/7/10 JN 10-104260-16989 MAS

Figure 8a



Direction of Photo
Key View Location
2 Key View Number

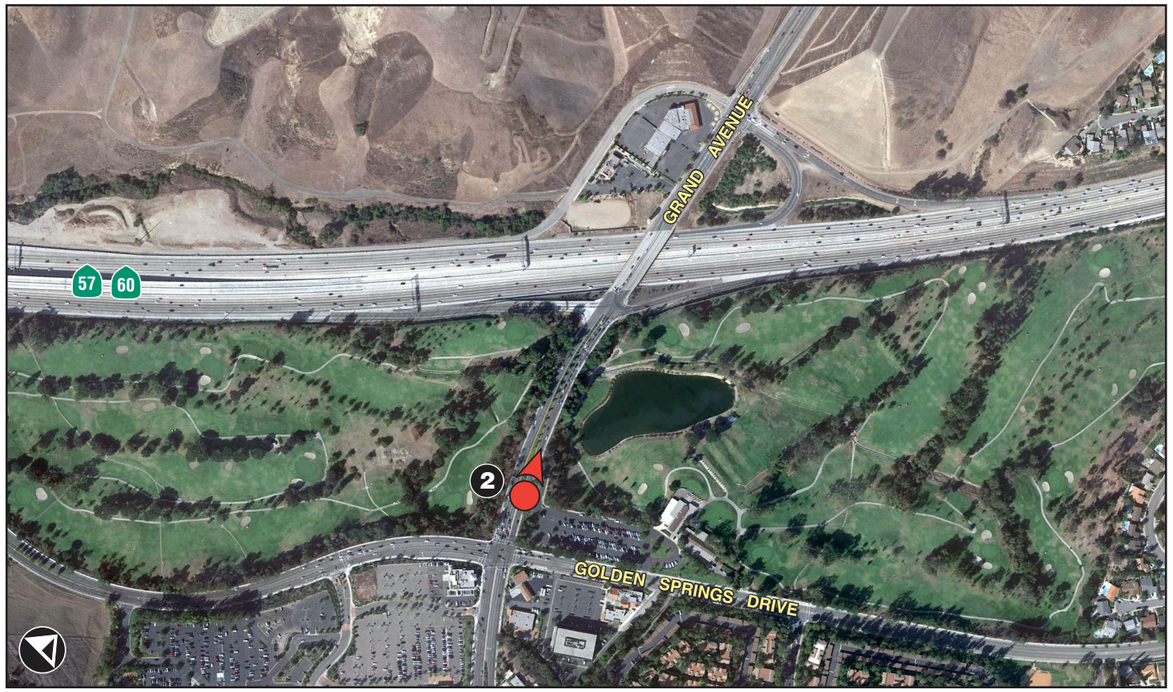
"For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area. Specific project design features are subject to change during the plans, specifications, and estimates (PS&E) phase for the project."

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 2 Proposed Condition - Alternative 2

Figure 8b

5/7/12 JN 10-104260-16989 MAS



Direction of Photo
Key View Location
2 Key View Number

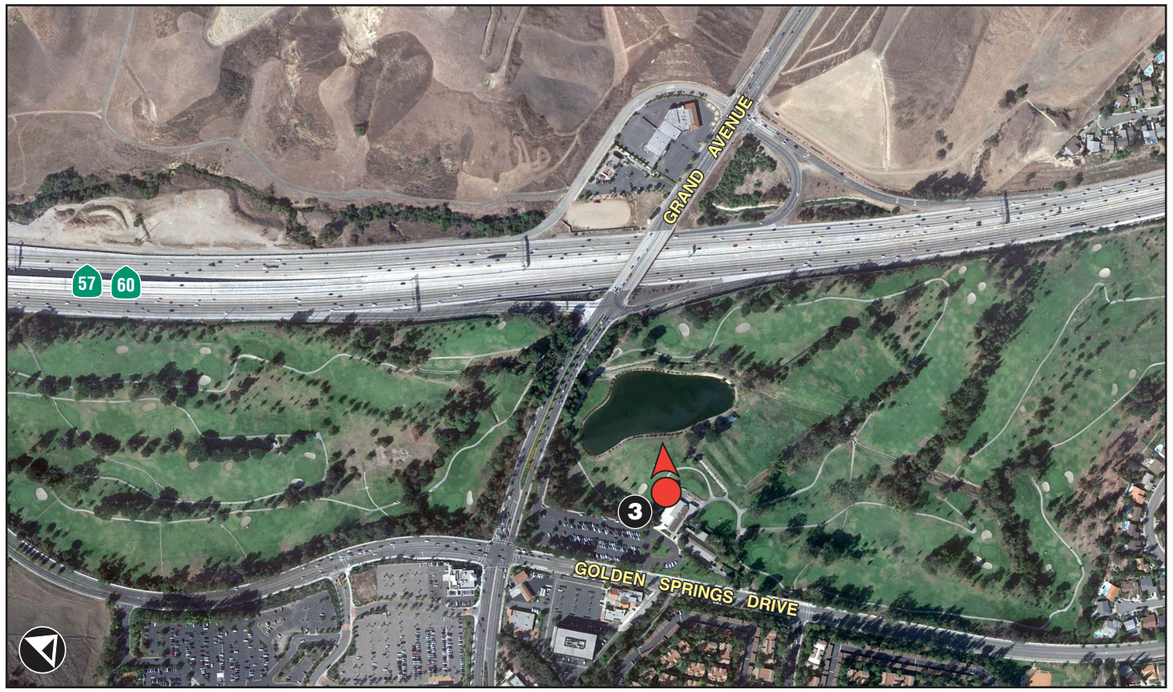
"For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area. Specific project design features are subject to change during the plans, specifications, and estimates (PS&E) phase for the project."

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 2 Proposed Condition - Alternative 3

Figure 8c

5/7/12 JN 10-104260-16989 MAS



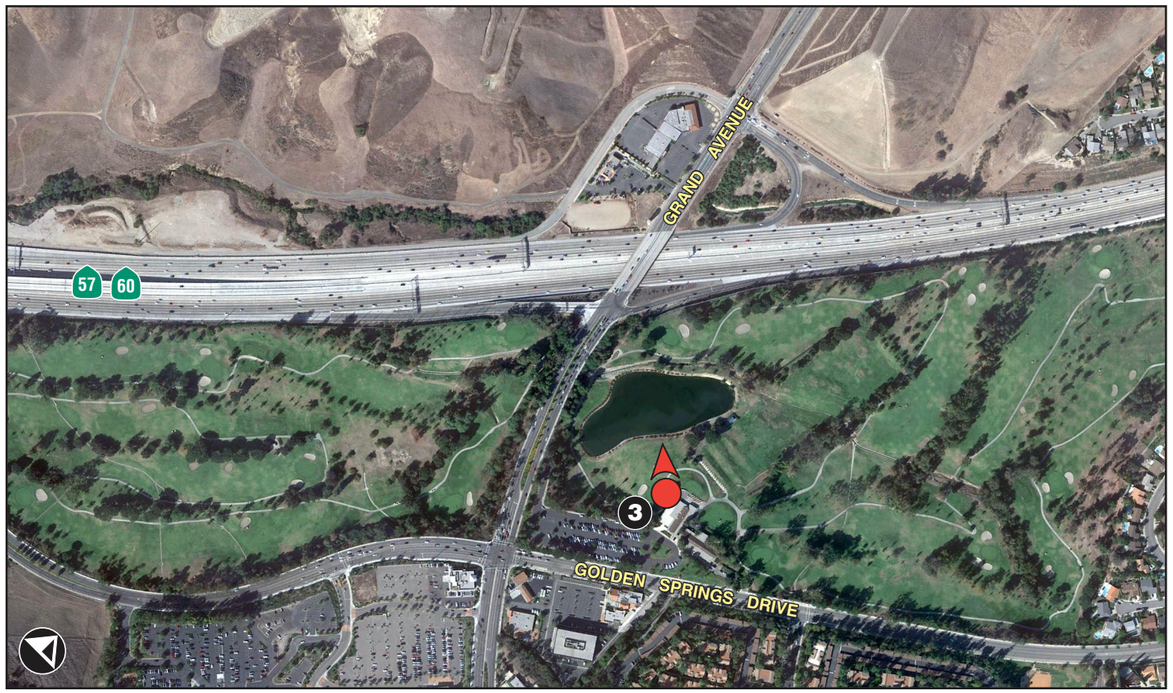
Direction of Photo
Key View Location
3 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 3 Existing Condition

10/7/10 JN 10-104260-16989 MAS

Figure 9a



"For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area. Specific project design features are subject to change during the plans, specifications, and estimates (PS&E) phase for the project."

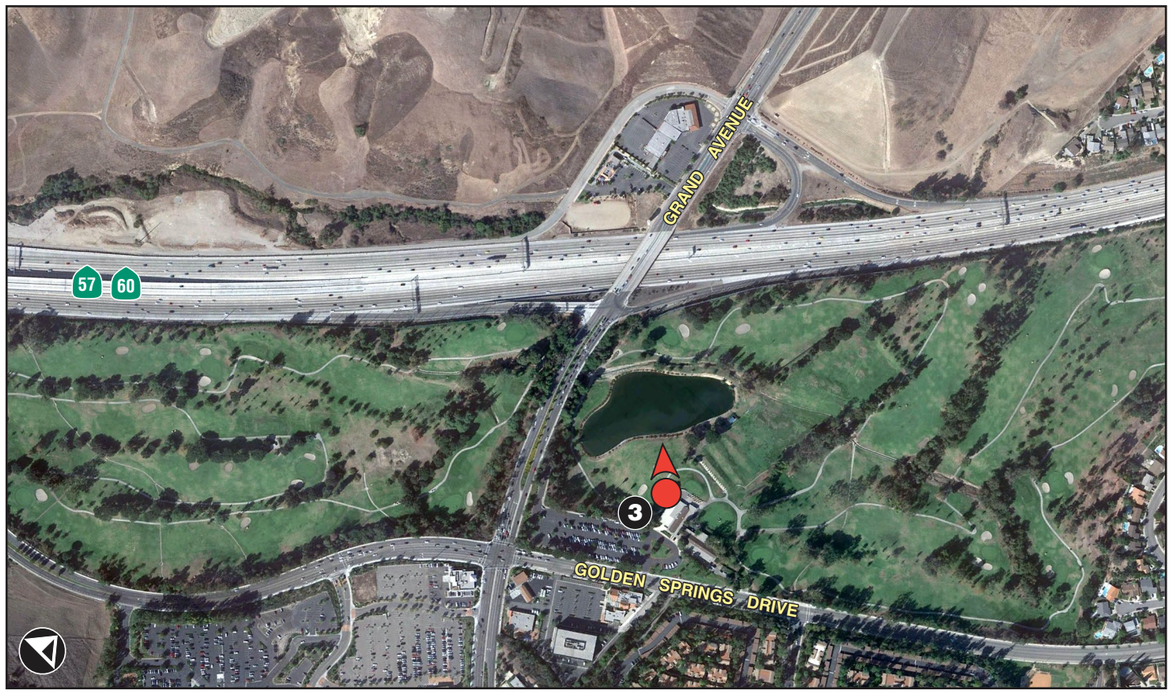
Direction of Photo
Key View Location
3 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 3 Proposed Condition - Alternative 2

5/11/12 JN 10-104260-16989 MAS

Figure 9b



"For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area. Specific project design features are subject to change during the plans, specifications, and estimates (PS&E) phase for the project."

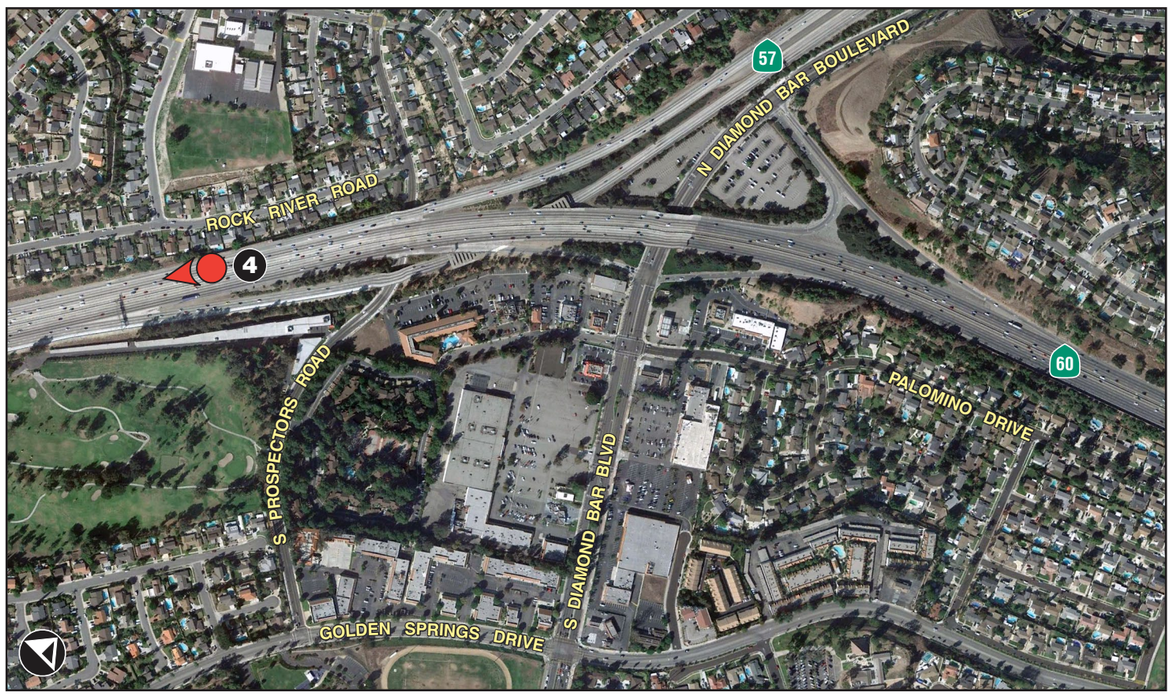
Direction of Photo
Key View Location
3 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 3 Proposed Condition - Alternative 3

5/4/11 JN 10-104260-16989 MAS

Figure 9c



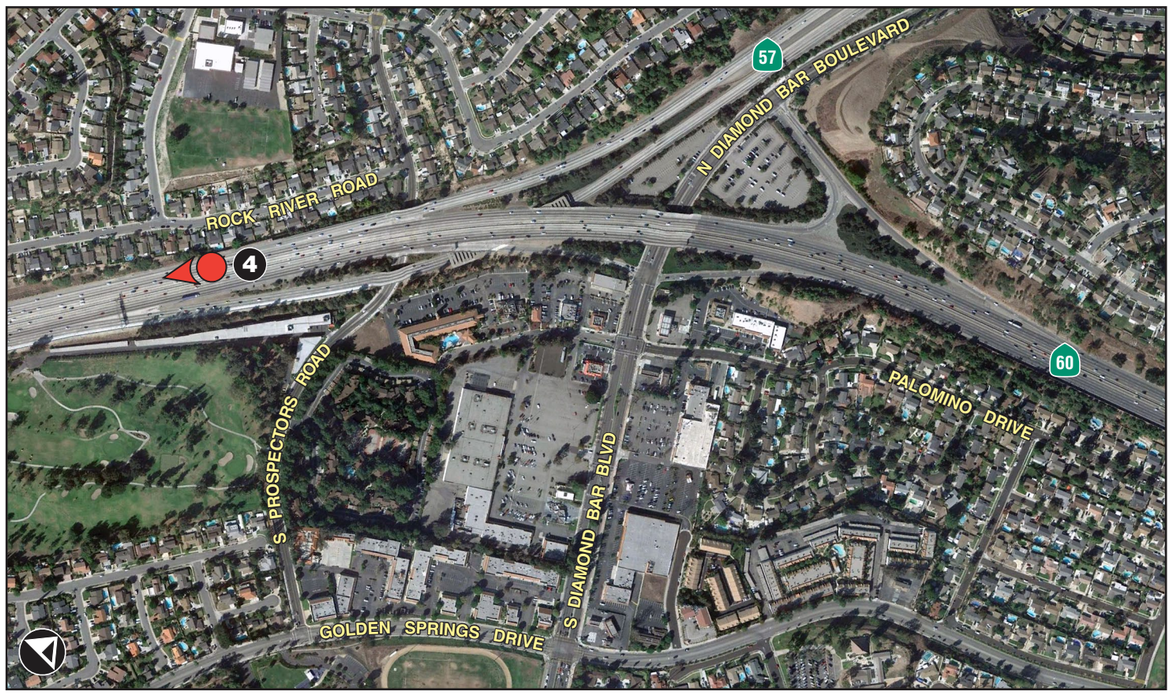
Direction of Photo
Key View Location
4 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 4 Existing Condition

10/7/10 JN 10-104260-16989 MAS

Figure 10a



"For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area. Specific project design features are subject to change during the plans, specifications, and estimates (PS&E) phase for the project."

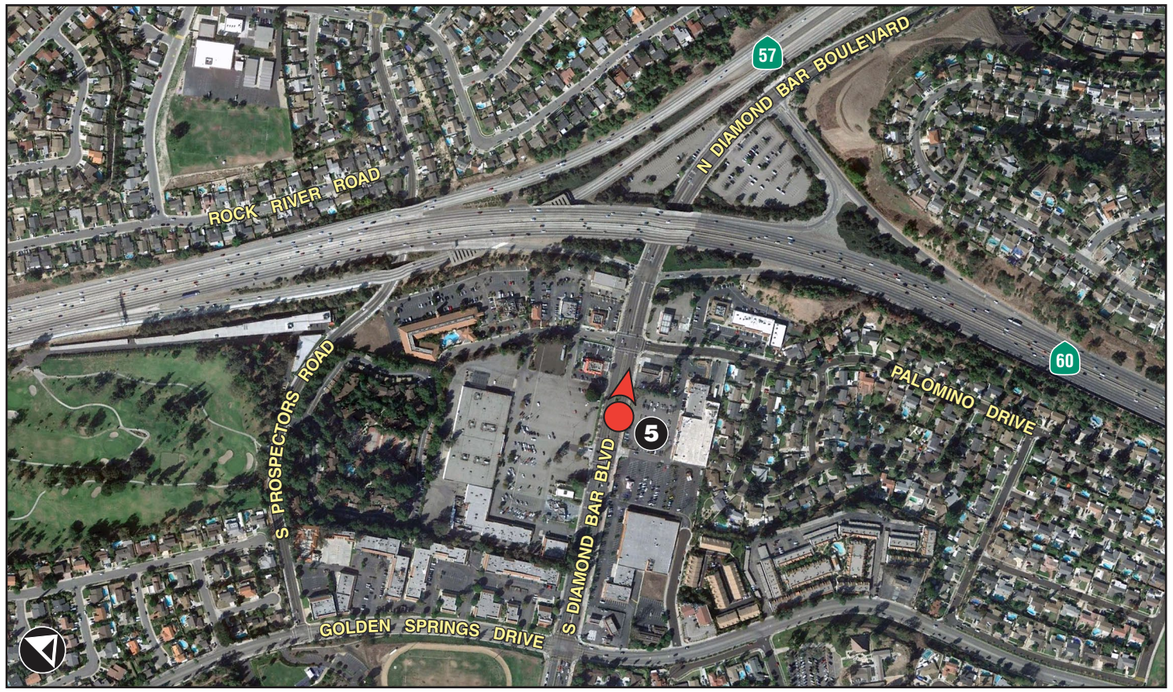
Direction of Photo
Key View Location
4 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 4 Proposed Condition - Alternative 2 and 3

4/4/12 JN 10-104260-16989 MAS

Figure 10b



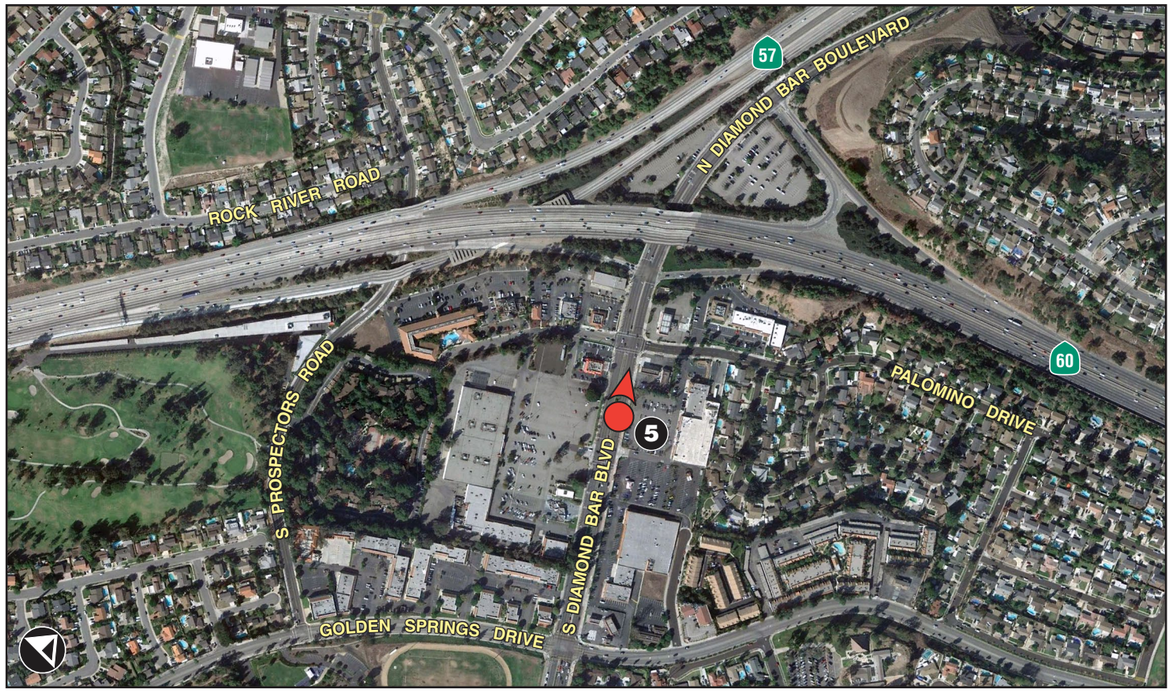
Direction of Photo
Key View Location
5 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 5 Existing Condition

Figure 11a

10/7/10 JN 10-104260-16989 MAS



"For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area. Specific project design features are subject to change during the plans, specifications, and estimates (PS&E) phase for the project."

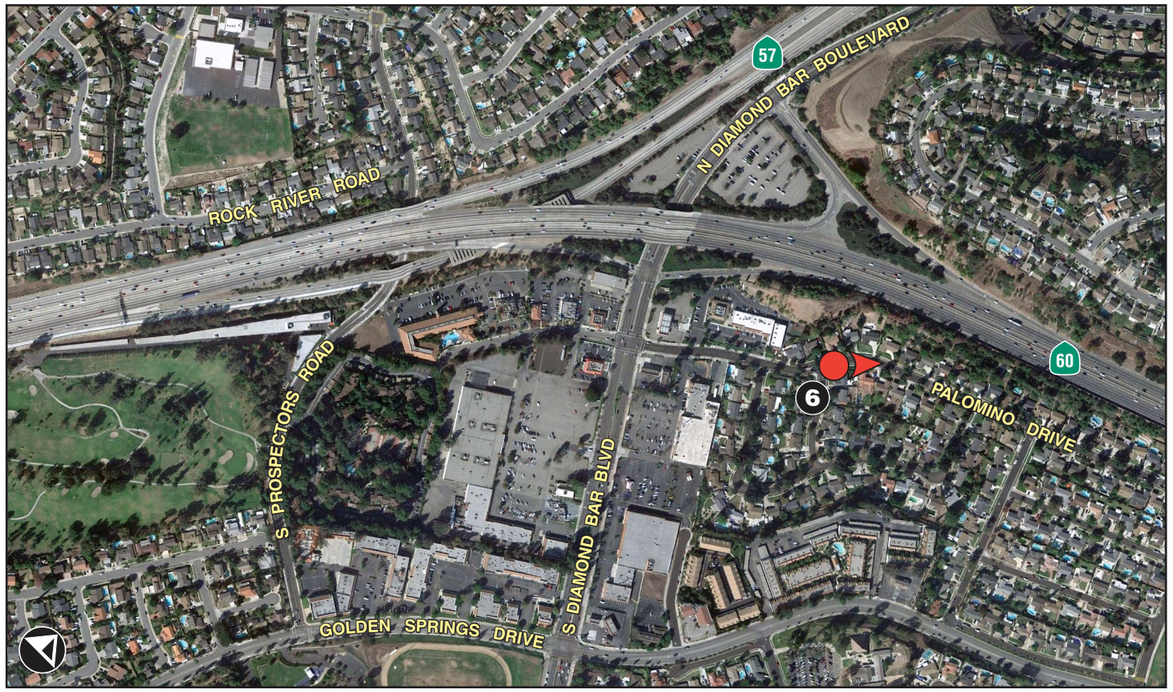
Direction of Photo
Key View Location
5 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 5 Proposed Condition - Alternative 2 and 3

10/22/10 JN 10-104260-16989 MAS

Figure 11b



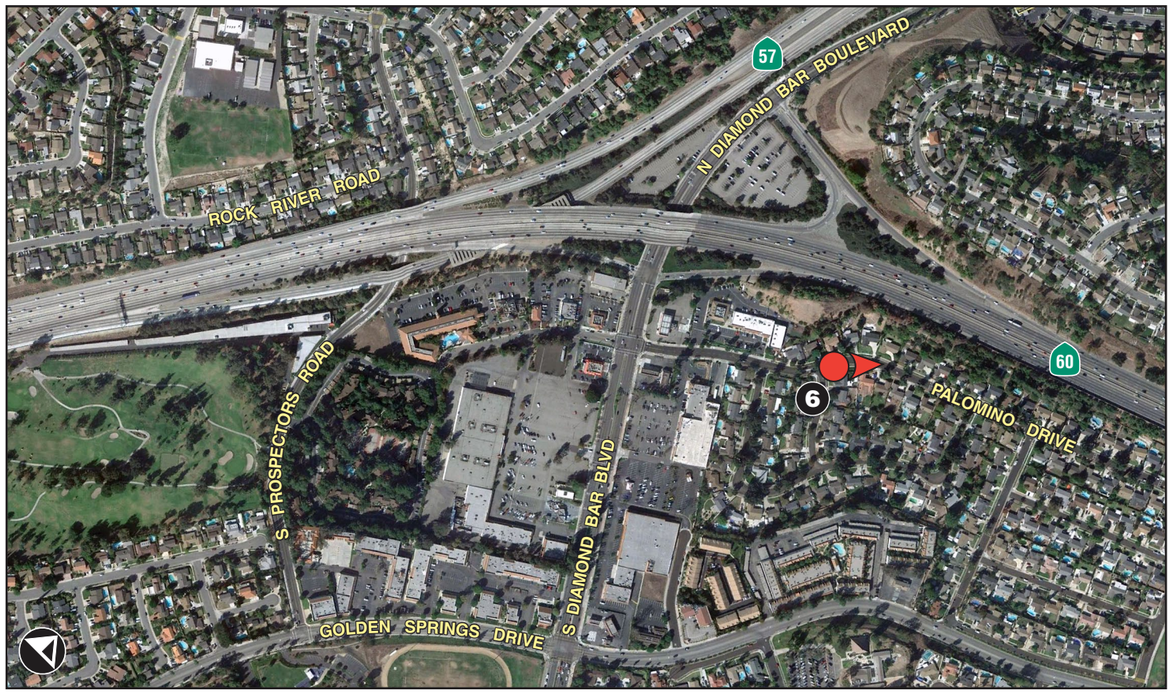
Direction of Photo
Key View Location
6 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 6 Existing Condition

Figure 12a

10/7/10 JN 10-104260-16989 MAS



"For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area. Specific project design features are subject to change during the plans, specifications, and estimates (PS&E) phase for the project."

Direction of Photo
Key View Location
6 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 6 Proposed Condition - Alternative 2 and 3

10/22/10 JN 10-104260-16989 MAS

Figure 12b

▲ Direction of Photo
● Key View Location
7 Key View Number

10/7/10 JN 10-104260-16989 MAS

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 7 Existing Condition

Figure 13a

"For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area. Specific project design features are subject to change during the plans, specifications, and estimates (PS&E) phase for the project."

Direction of Photo
Key View Location
7 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 7 Proposed Condition - Alternative 2

Figure 13b

4/4/12 JN 10-104260-16989 MAS

"For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area. Specific project design features are subject to change during the plans, specifications, and estimates (PS&E) phase for the project."

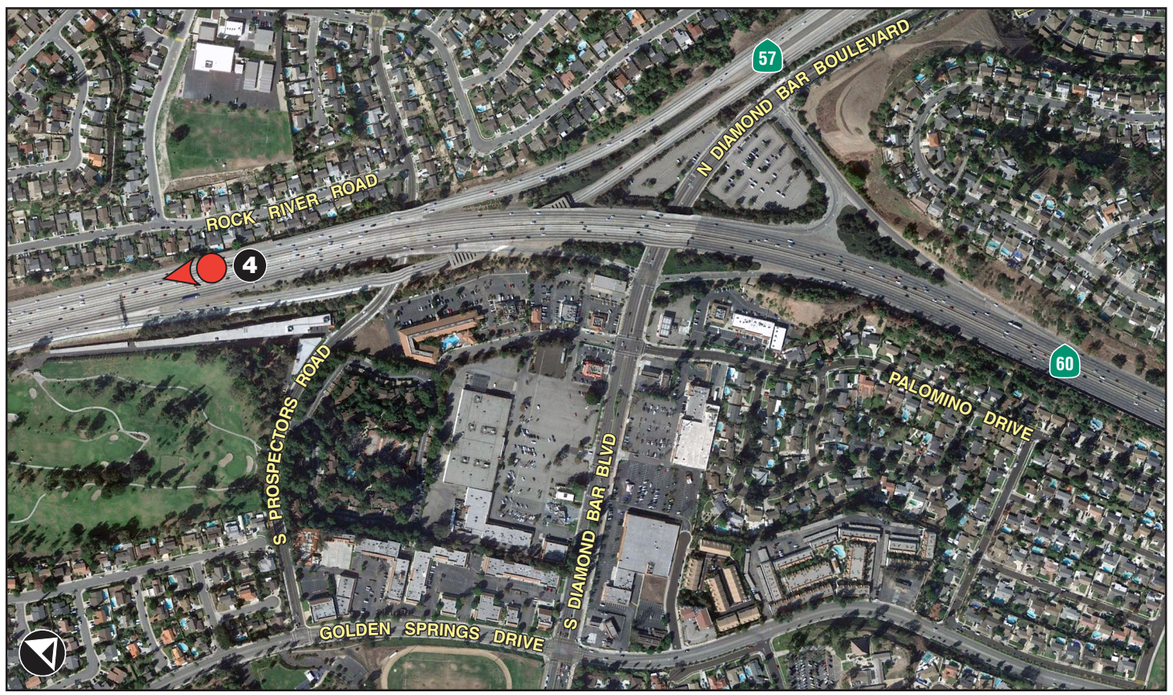
Direction of Photo
Key View Location
7 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 7 Proposed Condition - Alternative 3

Figure 13c

1/30/12 JN 10-104260-16989 MAS



"For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area. Specific project design features are subject to change during the plans, specifications, and estimates (PS&E) phase for the project."

Direction of Photo
Key View Location
4 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 4 Proposed NADR Condition - Alternative 2 and 3

4/4/12 JN 10-104260-16989 MAS

Figure 14

"For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area. Specific project design features are subject to change during the plans, specifications, and estimates (PS&E) phase for the project."

Direction of Photo
Key View Location
7 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 7 Proposed NADR Condition - Alternative 2

Figure 15a

4/5/12 JN 10-104260-16989 MAS

"For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area. Specific project design features are subject to change during the plans, specifications, and estimates (PS&E) phase for the project."

Direction of Photo
Key View Location
7 Key View Number

SR-57/SR-60 CONFLUENCE AT GRAND AVENUE OVERCROSSING PROJECT • VIA

Key View 7 Proposed NADR Condition - Alternative 3

Figure 15b

4/5/12 JN 10-104260-16989 MAS

APPENDIX

A) Visual Quality Evaluation Forms

Visual Quality Evaluation – View Of The Road

Project Name: State Route 57/State Route 60 Confluence at Grand Avenue Project	Evaluator: Kristen Bogue	Evaluation Scale: 1 – 7
Assessment Unit: Along SR-57/SR-60 within developed areas of Diamond Bar and Industry	Date: 07/17/10 Weather: Sunny	1 = Very Low 4 = Medium 7 = Very High

View		Visual Quality								Impact		
			Vividness		Intactness		Unity					
Key View	Proposed / Existing	General Visual Quality	Overall Vividness	Features	General Intactness	Encroachment	Overall Unity	Elements	(V+I+U) / 3 = Q	Visual Quality Difference	Positive Impact	Negative Impact
1	E	5	5	▪ Moderately high vividness ▪ Foreground views to the roadway and some ornamental landscaping ▪ Middleground views to hotel uses, ornamental landscaping, mature trees, street lights, and SR-57 and SR-60 ▪ Varying topography in middleground views ▪ Background views afforded to the Chino and Puente Hills ▪ Ornamental vegetation varies in color, texture, and height ▪ Building materials of hotel structure varies in texture and color	5	▪ Moderately high intactness ▪ Development consists of the Golden Springs Drive roadway in the foreground and middleground, and one hotel structure and SR-57 and SR-60 in the middleground ▪ Hardscape features of the hotel structure and SR-57 and SR-60 increase encroachment ▪ Street lights minimally encroach upon views from roadway travelers ▪ The varying topography and ornamental landscaping along the eastern side of Golden Springs Drive detracts from encroaching features	4	▪ Moderate unity ▪ The hotel structure and the travel lanes of SR-57 and SR-60 in the middleground interrupt the unity of this view ▪ The varying topography, mature trees, and ornamental landscaping in middleground views, and distant ridgetops in background views reduce the appearance of hardscape features and increase unity	**4.7**			
	Alts. 2 and 3	4	4	▪ Moderate vividness ▪ Ornamental landscaping in foreground views has been	4	▪ Moderate intactness ▪ The hardscape appearance of the new eastbound bypass	4	▪ Moderate unity ▪ The removal of and ornamental landscaping to the west of Golden	**4**	**-0.7**	**0**	**-2**

View		Visual Quality								Impact		
			Vividness		Intactness		Unity					
Key View	Proposed / Existing	General Visual Quality	Overall Vividness	Features	General Intactness	Encroachment	Overall Unity	Elements	(V+I+U) / 3 = Q	Visual Quality Difference	Positive Impact	Negative Impact
				removed ▪ Middleground views to hotel uses, ornamental landscaping, mature trees, street lights, varying topography, and SR-57 and SR-60 remain ▪ The new eastbound bypass ramp is visible in foreground and middleground views ▪ Background views afforded to the Chino and Puente Hills remain unchanged		ramp increases encroachment ▪ All other encroaching features remain (i.e, street lights, SR-57/SR-60, hotel)		Springs Road to accommodate the new bypass reduces the unity of this view and increase views to hardscape features				
3	E	6	6	▪ Moderately high vividness ▪ Foreground views include grasses, trees, and a pond feature ▪ Middleground views include ornamental landscaping and mature trees varying in color, the Grand Avenue overcrossing, rolling hills, and freeway commercial uses ▪ Background views are afforded to ridgetops of the Angeles National Forest ▪ Varying heights and colors of vegetation provide high visual contrast	6	▪ Moderately high intactness ▪ The freeway commercial uses and overcrossing in middleground views encroach on views from the Diamond Bar Golf Course ▪ Abundant ornamental landscaping, grasses, trees, and rolling hills detract from the encroaching features	6	▪ Moderately high unity ▪ Varying landscape features dominate this view ▪ Visual intrusion from the Grand Avenue overcrossing is significantly minimized by the abundance of mature trees and vegetation	**6**			
	Alt. 2	5	5	▪ Moderately high vividness ▪ Foreground views remain similar to existing conditions ▪ Middleground views include	4	▪ Moderate intactness ▪ Intactness within this Key View is reduced by the increase in hardscape from	5	▪ Moderately high unity ▪ Unity is reduced by the removal of mature trees and landscaping within the golf course	**4.7**	**-1.3**	**0**	**-4**

View		Visual Quality								Impact		
			Vividness		Intactness		Unity					
Key View	Proposed / Existing	General Visual Quality	Overall Vividness	Features	General Intactness	Encroachment	Overall Unity	Elements	(V+I+U) / 3 = Q	Visual Quality Difference	Positive Impact	Negative Impact
				reduced ornamental landscaping and mature trees, the widened Grand Avenue, the realigned northbound on-ramp, rolling hills, and freeway commercial uses ▪ Background views remain similar to existing conditions		the widened roadway and realigned northbound on-ramp						
	Alt. 3	5	5	Refer to Alt. 2	4	Refer to Alt. 2	5	Refer to Alt. 2	**4.7**	**-1**	**0**	**-1**
5	E	4	4	▪ Moderate vividness ▪ Commercial uses, the Diamond Bar Boulevard roadway, a landscaped median, trees, ornamental landscaping, and street lights are visible in foreground and middleground views ▪ The SR-57/SR-60 overcrossing is visible in middleground views ▪ Limited background views to the ridgetops of the Angeles National Forest are afforded	3	▪ Moderately low intactness ▪ Development consists of commercial uses, Diamond Bar Boulevard, and the SR-57/SR-60 overcrossing ▪ The presence of mature trees and ornamental landscaping slightly minimizes the visual intrusion of hardscape features	4	▪ Moderate unity ▪ The mature trees visible in this view reduce the appearance of the SR-57/SR-60 overcrossing; however the commercial structures and Diamond Bar Boulevard still dominate the view	**3.7**			
	Alts. 2 & 3	4	4	▪ Moderate vividness ▪ Commercial uses, the Diamond Bar Boulevard roadway, a landscaped median, trees, ornamental landscaping, street lights, and the he SR-57/SR-60 overcrossing remain visible in foreground and middleground views	3	▪ Moderately low intactness ▪ Hardscape features in this view are minimally increased with the new eastbound bypass	4	▪ Moderate unity ▪ Existing mature trees reduce the appearance of hardscape features (i.e., roadway, SR-57/SR-60 overcrossing, the new bypass, and commercial uses)	**3.7**	**0**	**0**	**0**

View		Visual Quality								Impact		
			Vividness		Intactness		Unity					
Key View	Proposed / Existing	General Visual Quality	Overall Vividness	Features	General Intactness	Encroachment	Overall Unity	Elements	(V+I+U) / 3 = Q	Visual Quality Difference	Positive Impact	Negative Impact
				▪ The new eastbound bypass is also visible in middleground views ▪ Limited background views remain to the ridgetops of the Angeles National Forest								
6	E	6	5	▪ Moderate vividness ▪ Foreground and middleground views include Palomino Drive, residential uses, overhead power lines, street lights, mature trees, and ornamental landscaping ▪ No background views are afforded ▪ Visible residential structures consist of whites and beiges and building materials vary in texture ▪ Mature trees and vegetation are visible throughout the view and vary in color and texture	5	▪ Moderate intactness ▪ Development consists of residential uses ▪ Overhead power lines and street lights encroach on this view ▪ The mature trees, grasses, ornamental landscaping, and structures appear to be intact ▪ Visual intrusions within this view are not significant	5	▪ Moderate unity ▪ The mature trees and ornamental landscaping throughout the Key View reduce the appearance of hardscape features of residential structures and Palomino Drive ▪ The abundance of varying vegetation unifies this Key View	**5**			
	Alts. 2 and 3	5	4	▪ Moderate vividness ▪ Foreground and middleground views to the roadway, residential structures, overhead power lines, street lights, mature trees, and ornamental landscaping remain ▪ Some mature trees in middleground views have been	4	▪ Moderate intactness ▪ Overhead power lines and street lights remain visible and encroach on this view ▪ Reduced mature trees in middleground views minimally increase encroachment from overhead power lines and street lights	5	▪ Moderate unity ▪ The mature trees and ornamental landscaping throughout the Key View unify this view	**4.3**	**-0.7**	**0**	**-2**

View		Visual Quality								Impact		
			Vividness		Intactness		Unity					
Key View	Proposed / Existing	General Visual Quality	Overall Vividness	Features	General Intactness	Encroachment	Overall Unity	Elements	(V+I+U) / 3 = Q	Visual Quality Difference	Positive Impact	Negative Impact
				removed to accommodate the new eastbound bypass on-ramp ▪ No background views are afforded								

Visual Quality Evaluation – View From The Road

Project Name: State Route 57/State Route 60 Confluence at Grand Avenue Project	Evaluator: Kristen Bogue	Evaluation Scale: 1 – 7
Assessment Unit: Along SR-57/SR-60 within developed areas of Diamond Bar and Industry	Date: 07/13/10 Weather: Sunny	1 = Very Low 4 = Medium 7 = Very High

View		Visual Quality								Impact		
			Vividness		Intactness		Unity					
Key View	Proposed / Existing	General Visual Quality	Overall Vividness	Features	General Intactness	Encroachment	Overall Unity	Elements	(V+I+U) / 3 = Q	Visual Quality Difference	Positive Impact	Negative Impact
2	E	6	6	▪ Moderately high vividness ▪ Foreground and middleground views include the Grand Avenue roadway, a landscaped median, mature trees, ornamental landscaping, minimal signage, street lights, and rolling hills ▪ Background views include distant ridgetops of the Angeles National Forest	6	▪ Moderately high intactness ▪ Development within the Key View consists of the Grand Avenue roadway ▪ The freeway on-ramp sign and street lights minimally encroach upon this view ▪ Encroaching features are minimized by abundant ornamental landscaping and mature trees	6	▪ Moderately high unity ▪ Mature trees and ornamental landscaping along Grand Avenue and within the median unify this Key View ▪ Distant views to ridgetops also distract travelers from visual intrusions of the street lights and signage	**6**			
	Alt. 2	4	4	▪ Moderate vividness ▪ Foreground views include a widened roadway (Grand Avenue) ▪ Middleground views include a smaller landscaped median, less trees and ornamental landscaping, and the widened roadway ▪ Background views to ridgetops of the Angeles National Forest have increased	4	▪ Moderate intactness ▪ Hardscape features have increased due to the widened Grand Avenue, k-rail, fencing, and unlandscaped median (in the foreground) ▪ Encroachment has increased from the increased hardscape	4	▪ Moderate unity ▪ Unity is decreased due to the removal of mature trees and ornamental landscaping ▪ Background views remain	**4**	**-2**	**0**	**-6**

View		Visual Quality								Impact		
			Vividness		Intactness		Unity					
Key View	Proposed / Existing	General Visual Quality	Overall Vividness	Features	General Intactness	Encroachment	Overall Unity	Elements	(V+I+U) / 3 = Q	Visual Quality Difference	Positive Impact	Negative Impact
	Alt. 3	4	4	▪ Moderate vividness ▪ Foreground views include a widened roadway (Grand Avenue) ▪ Middleground views include a smaller landscaped median, less trees and ornamental landscaping, the widened Grand Avenue, a new traffic signal, and partial views to the new northbound off-ramp ▪ Background views to ridgetops of the Angeles National Forest have increased	4	▪ Moderate intactness ▪ Hardscape features have increased due to the widened Grand Avenue, k-rail, fencing, unlandscaped median (in the foreground), and new northbound off-ramp ▪ Encroachment has increased from the increased hardscape and the new traffic signal	4	▪ Moderately high unity ▪ Unity is decreased due to the removal of mature trees and ornamental landscaping ▪ Background views remain	**4**	**-2**	**0**	**-6**
4	E	4	4	▪ Moderate vividness ▪ Foreground views include the SR-57/SR-60 southbound travel lanes, a retaining wall/soundwall, and ornamental landscaping along the western shoulder ▪ Middleground views include SR-57/SR-60 southbound travel lanes, mature trees and vegetation, street lights, and signage ▪ Background views include distant hillsides ▪ Vegetation varies in color, texture, and height ▪ The natural landscape and the roadway are harmonious in line	5	▪ Moderate intactness ▪ Development consists of the SR-57/SR-60 southbound travel lanes, residential uses, and a retaining wall/soundwall to the west ▪ Freeway signage minimally encroaches upon views from freeway travelers ▪ The abundance of mature trees and vegetation throughout this Key View detracts from encroaching features	4	▪ Moderate unity ▪ The mature trees and vegetation throughout the view reduce the appearance of hardscape features and increase unity	**4.3**			

View		Visual Quality								Impact		
			Vividness		Intactness		Unity					
Key View	Proposed / Existing	General Visual Quality	Overall Vividness	Features	General Intactness	Encroachment	Overall Unity	Elements	(V+I+U) / 3 = Q	Visual Quality Difference	Positive Impact	Negative Impact
				▪ Varying form of the trees and vegetation increase vividness								
	Alts. 2 and 3	4	4	▪ Moderate vividness ▪ Foreground views include a larger retaining wall ▪ Middleground views remain similar to those in the existing condition ▪ Background views remain similar to existing conditions	4	▪ Moderate intactness ▪ Intactness is reduced by the hardscape appearance of the new retaining wall	4	▪ Moderate unity ▪ The removal of some ornamental landscaping and trees to the west of the freeway reduce unity in this view	**4**	**-0.3**	**0**	**-1**
7	E	5	5	▪ Moderately high vividness ▪ Foreground views include the SR-57/SR-60 southbound travel lanes and ornamental trees and landscaping along the eastern and western shoulders ▪ Middleground views include SR-57/SR-60 southbound travel lanes, mature trees and vegetation, and freeway signage ▪ Background views include distant vegetated hillsides ▪ Vegetation varies in color, texture, and height ▪ Existing mature trees and vegetation increase vividness	4	▪ Moderate intactness ▪ Development consists of the SR-57/SR-60 southbound travel lanes and a concrete guard rail to the east ▪ Freeway signage encroaches upon views from freeway travelers ▪ The presence of mature trees and vegetation throughout this Key View detracts from encroaching features	5	▪ Moderately high unity ▪ Hardscape features dominate this view, although the mature trees and vegetation reduce the appearance of these features and increase unity	**4.7**			
	Alt. 2	4	4	▪ Moderate vividness ▪ Foreground views remain similar to existing conditions	3	▪ Moderately low intactness ▪ Intactness has decreased due to the increase in	4	▪ Moderate unity ▪ Unity remains similar to existing conditions, as mature trees remain	**3.7**	**-1**	**0**	**-3**

View		Visual Quality								Impact		
			Vividness		Intactness		Unity					
Key View	Proposed / Existing	General Visual Quality	Overall Vividness	Features	General Intactness	Encroachment	Overall Unity	Elements	(V+I+U) / 3 = Q	Visual Quality Difference	Positive Impact	Negative Impact
				▪ Mature trees have been removed in middleground views ▪ The new Grand Avenue overcrossing is visible in middleground views ▪ The realigned southbound off-ramp and northbound on-ramp are visible to the east and west of the freeway ▪ A new soundwall is located along the golf course and blocks views to vegetation ▪ Background views remain similar to existing conditions		hardscape features (i.e., soundwall, new overcrossing, realigned on- and off-ramps		visible in the foreground, and background views remain				
	Alt. 3	4	4	▪ Moderate vividness ▪ Foreground views remain similar to existing conditions ▪ Mature trees have been removed in middleground views ▪ The new Grand Avenue overcrossing is visible in middleground views ▪ The realigned southbound off-ramp and northbound on-ramp are visible to the east and west of the freeway ▪ A new soundwall is located along the golf course and blocks views to vegetation ▪ Background views remain similar to existing conditions	3	▪ Moderately low intactness ▪ Intactness has decreased due to the increase in hardscape features (i.e., soundwall, new overcrossing, realigned on- and off-ramps ▪ The soundwall appears to be higher than that in Alt. 2	4	▪ Moderate unity ▪ Unity remains similar to existing conditions, as mature trees remain visible in the foreground, and background views remain	**3.7**	**-1**	**0**	**-3**