2.6 Visual and Aesthetics

2.6.1 Introduction

This section is based on the *I-5 Widening from SR-73 to El Toro Road PA/ED Visual Impact Assessment* (October 2012) and the *Visual Impact Assessment Addendum* (April 2014) and discusses the effects of the proposed project on visual resources and aesthetics within the project limits.

2.6.2 Regulatory Setting

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

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

2.6.3 Methodology

This visual analysis generally follows the guidance in the publication *Visual Impact Assessment for Highway Projects* published by the Federal Highway Administration (FHWA) in January 1988.

The following steps were followed to assess the potential visual effects of the proposed project:

a. Define the project location and setting
b. Identify visual assessment units and key views
c. Analyze existing visual resources, resource change, and viewer response
d. Depict the visual appearance of the project alternatives (prepare visual simulations of the proposed post project condition)
e. Assess the visual effects of the project alternatives
f. Propose measures to offset visual effects

For the purposes of this analysis, five Key Views were selected to represent public views from both public right of way and publicly accessible areas located within and adjacent to the project site. Key Views were selected after completion of the site reconnaissance on September 20, 2012. Consultant staff visited the site to take photographs and make observations from the selected Key View locations.

2.6.3.1 Visual Assessment Units

For purposes of this visual assessment, the Study Area was divided into a series of "outdoor rooms" or visual assessment units (VAUs). Figure 2.6-1, Key View Locations, provided later in Section 2.6.3.2, Key Views, delineates the four VAUs associated with the proposed project and their associated key views that would be used to assess visual effects that may be caused by the proposed project. Each VAU has its own visual character and visual quality. A VAU can be thought of as an outdoor room that exhibits a distinct visual character, is typically defined by the limits of a particular viewshed, and would often correspond to a place or district that is commonly known among local viewers. The proposed project can be separated into four distinct VAUs, based on the different views and character experienced within each. The four VAUs within the Study Area are identified below.

Visual Assessment Unit 1: North

VAU1 is located in the northern portion of the project area, from the El Toro Road interchange to the Los Alisos Boulevard bridge, in the Cities of Lake Forest and Laguna Hills. VAU1 is completely surrounded by development, and the terrain is generally flat with elevations ranging from 360 to 385 feet (ft) above mean sea level (msl). Uses within VAU1 include roadway, commercial, residential, and institutional land uses. Residential and commercial development dominates the views in VAU1, and the hills of the Santa Ana Mountains are prominent features visible in the distance to the east. Hardscape features present and visible in VAU1 include sound walls, retaining walls, barriers, fences, and overhead power lines. Several mature trees and other streetscape are located within VAU1 and along the I-5 corridor.

Visual Assessment Unit 2: North-Central

VAU2 is located within the north-central portion of the project site in the Cities of Lake Forest, Laguna Hills, and Mission Viejo, and extends from the Los Alisos Boulevard bridge to La Paz Road. The VAU2 terrain is gently sloping, and elevations range from approximately 330 to 470 ft above msl. Uses within VAU2 include roadway, commercial, residential, institutional, and recreational land uses. Views are dominated by commercial and residential development, and prominent features

include substantial landscaping and mature trees to the west. Other present and visible features include sound walls, retaining walls, barriers, fences, and overhead power lines.

Visual Assessment Unit 3: South-Central

VAU3 is located in the south-central portion of the project site in the Cities of Laguna Hills, Laguna Niguel, and Mission Viejo and extends along I-5 from La Paz Road to approximately 0.75 mile (mi) south of Oso Parkway. The VAU3 terrain is gently sloping, and elevations range from 360 to 570 ft above msl. Uses in VAU3 include commercial, residential, institutional, and recreational land uses. Views in the northern portion of VAU3 west of I-5 are dominated by commercial development. Prominent features include landscape slopes and several mature trees visible in the northern portion of VAU3 east of I-5 and both east and west of I-5 in the southern portion of VAU3. The hills associated with the Santa Ana Mountains are also prominent features visible in the distance to the east. Other present and visible features include sound walls, retaining walls, barriers, and overhead power lines.

Visual Assessment Unit 4: South

VAU4 is located in the southern portion of the project site in the Cities of Laguna Niguel, Mission Viejo, and San Juan Capistrano, and extends along I-5 from approximately 0.65 mi north of Crown Valley Parkway to the Junipero Serra Road interchange. The VAU4 terrain is gently sloping, and elevations range from 200 to 630 ft above msl. Uses in VAU4 include commercial, residential, institutional, and recreational land uses. Present and visible features include structures, fences, retaining walls, and overhead power lines.

2.6.3.2 Project Viewshed

A viewshed is a subset of a VAU and is comprised of all the surface areas visible from the observer’s viewpoint. The limits of this viewshed are defined as the visual limits of the views located from the Study Area. The viewshed also includes the locations of viewers likely to be affected by visual changes caused by project features.

Based upon a site visit, scattered views are available for surrounding urban land uses within a one mi radius of the Study Area. Views of the Study Area are available for adjoining residential, commercial, and institutional uses. Views from the Study Area are available for motorists traveling along the northbound and southbound I-5 travel lanes.

The following are the elements and composition of the viewshed in the foreground, middleground, and background:

- **Background (3–5 to infinite mi):** 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.
- **Middleground (0.25–0.5 to 3–5 mi):** Characteristics located within middleground views are distinguishable, yet not as sharp as those characteristics located within foreground views.
- **Foreground (0 to 0.25–0.5 mi):** 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.

2.6.3.3 Visual Resources and Resource Change

Resource change is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the Study Area before and after the construction of the proposed project. Resource change is one of the two major variables in the equation that determines visual effects (the other is viewer response, discussed below in Section 2.6.3.4, Viewers and Viewer Response).

Visual Resources

Visual Character

Resource change is assessed based on visual character and visual quality. 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.

Visual character includes attributes such as form, line, color, texture, and is used to describe, not evaluate; that is, these attributes are neither considered good nor bad. However, a change in visual character can be evaluated when it is compared with the viewer response to that change. Changes in visual character can be identified by how visually compatible a proposed project would be with the existing conditions by using visual character attributes as an indicator. For the proposed project, the following attributes were considered:

- **Form:** Visual mass or shape
- **Line:** Edges or linear definition
- **Color:** Reflective brightness (light, dark) and hue (red, green)
- **Texture:** Surface coarseness
- **Dominance:** Position, size, or contrast
- **Scale:** Apparent size as it relates to the surroundings
- **Diversity:** A variety of visual patterns
- **Continuity:** Uninterrupted flow of form, line, color, or textural pattern

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 avoiding and/or minimizing each adverse effect that may occur as a result of a project.

Visual quality is evaluated by identifying the vividness, intactness, and unity present in the project corridor. Public attitudes validate the assessed level of quality and predict how changes to the Study Area can affect these attitudes. This process helps identify specific methods for addressing each visual effect that may occur as a result of the project. The three criteria for evaluating visual quality are defined below:

- **Vividness** is the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements.
- **Intactness** is the integrity of visual features in the landscape and the extent to which the existing landscape is free from non-typical visual intrusions.
- **Unity** is the extent to which all visual elements combine to form a coherent, harmonious visual pattern.

2.6.3.4 Viewers and Viewer Response

The population affected by the project is known as *viewers*. Viewers are people whose views of the landscape may be altered by the proposed project—either because the landscape itself has changed or their perception of the landscape has changed. Viewers, or more specifically the response viewers who have changes in their visual environment, are one of two variables that determine the extent of visual effects that would result from implementation of the proposed project.

Types of Viewers

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

Highway Neighbors (Views to the Road)

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

- Nonresidential uses (i.e., commercial, institutional, and industrial uses)
- Residential uses
- Recreational uses

Highway Users (Views from the Road)

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

- Northbound and southbound I-5 travelers
- Local roadway travelers

Viewer Response

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

Viewer Exposure

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

Nonresidential Uses

Nonresidential uses (i.e., commercial, institutional, and industrial uses) are located throughout the VAUs within the Study Area. These uses are generally concentrated at each interchange and adjoin I-5 and the on- and off-ramps, but are also scattered along the entirety of the length of the Study Area. The majority of people that see the Study Area from nonresidential use areas are visitors walking from parking lots to adjacent buildings. Employees see the Study Area to a lesser extent due to the lack of windows with views to I-5 from nonresidential uses along the project corridor. Several areas of nonresidential uses along the project alignment are not shielded from views to the project site (e.g., near the El Toro Road, Crown Valley Parkway, and Avery Parkway interchanges); therefore, the duration of views from these uses are considered to be moderately long. However, other nonresidential areas along the Study Area are shielded from views to I-5 by berms and mature trees, or are located at a lower elevation than I-5 resulting in more limited duration views. Overall viewer exposure for nonresidential uses along the Study Area is considered to be moderate-low.

Residential Uses

Residential uses are located throughout the VAUs along the Study Area. These uses are generally located behind sound walls, atop berms, or behind areas of nonresidential uses. Some residential uses may have views to the Study Area from backyards or second stories; however, the majority of residences do not have direct views to I-5. The residences that are shielded from views by trees and sound walls have short duration views to the project site, while the residences with partial or direct views to the Study Area have moderate-long duration views. Overall viewer exposure for residential uses along the project site is considered to be moderate.

Recreational Uses

Recreational uses are located in VAU2 (Aliso Creek Bikeway and MacKenzie Park users), VAU3 (Mission Viejo Golf Course and Moulton Ranch Park users), and VAU4 (Cabot Park and recreational trail users). Aliso Creek Bikeway users have long duration views to the Study Area due to its proximity to I-5, while Moulton Ranch Park and VAU4 recreational trail users have long duration direct views to the Study Area as they are located at a higher elevation than I-5. MacKenzie Park, Mission Viejo Golf Course, and Cabot Park users have short duration views to the Study Area due to intervening trees and structures. Overall viewer exposure for recreational uses along the Study Area is considered to be moderate.

Northbound and Southbound I-5 Travelers

Approximately 182,500 to 364,600 vehicles per day travel along the portion of I-5 within the Study Area. Northbound and southbound motorists traveling along I-5 would have views of the Study Area for approximately 6.5 mi if the motorist did not exit the freeway within the Study Area. These northbound and southbound I-5 travelers are considered to have long duration views to the project site. However, if a motorist travels only a portion of the project site, they would have short to moderate duration views. Overall viewer exposure for northbound and southbound travelers along the Study Area is considered to be moderate-high.

Local Roadway Travelers

Local roadway travelers (motorists and bicyclists) throughout all VAUs would have views to the Study Area. Local roadways with the greatest amount of vehicles and exposure to the Study Area include El Toro Road, Avenida de la Carlota, Los Alisos Boulevard, Alicia Parkway, La Paz Road, Cabot Road, Oso Parkway, Crown Valley Parkway, Camino Capistrano, and Avery Parkway. Avenida de la Carlota, Cabot Road, and Camino Capistrano travelers would have moderately long duration views of the Study Area as they run parallel to I-5. The remainder of the local roadway travelers would have moderately short duration views as views of the Study Area would be limited to the time passing over or under I-5. Overall viewer exposure for local roadway travelers in the vicinity of the Study Area is considered to be moderate.

Viewer Sensitivity

High viewer sensitivity helps predict that viewers would have a high concern for any visual change. Viewer sensitivity is a measure of the viewer’s recognition of a

particular object and has three attributes: activity, awareness, and local values. *Activity* relates to the preoccupation of viewers—are they preoccupied, thinking of something else, or are they truly engaged in observing their surroundings. The more they are actually observing their surroundings, the more sensitivity viewers would have of changes to visual resources. *Awareness* relates to the focus of the view—either the focus is wide and the view general or the focus is narrow and the view specific. The more specific the awareness, the more sensitive a viewer is to change. *Local values* and attitudes also affect viewer sensitivity. If the viewer group values aesthetics in general or if a specific visual resource has been protected by local, State, or national designation, it is likely that viewers would be more sensitive to visible changes.

Visual Impact

Visual effects are determined by assessing changes to the visual resources and predicting viewer response to those changes (Resource Change + Viewer Response = Visual Impact). These effects can be beneficial or detrimental.

Table 2.6-1, Visual Impact Ratings Using Viewer Response and Resource Change, below provides a reference for determining levels of visual effect by combining resource change and viewer response.

Table 2.6-1 Visual Impact Ratings Using Viewer Response and Resource Change

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

2.6.4 Affected Environment

This section describes the aesthetic and visual resource conditions within the project limits. This analysis is based on the *Visual Impact Assessment* (VIA) dated October 2012 and the *Visual Impact Assessment Addendum* (April 2014).

2.6.4.1 Visual Environment

The regional landscape establishes the general visual environment of the project. However, the specific visual environment is determined by defining landscape units within the Study Area.

The regional landscape of the southern portion of the County is characterized by the coastal valley, Pacific Ocean coastline, coastal bluffs, rolling hills, and distant mountains. The proposed project is located along I-5 from SR-73 to El Toro Road in the southern portion of Orange County, approximately seven mi from the Pacific coastline. The landscape in the project area is also characterized by the coastal valley, Pacific Ocean coastline, coastal bluffs, rolling hills, and distant mountains. The land uses within the Study Area are primarily suburban, consisting mainly of residential, commercial, and institutional uses, but also include recreational uses (e.g., a golf course and pedestrian, bicycle, and equestrian trails).

As described in Section 2.15, Natural Communities, much of the subregion is intensively developed with urban, suburban and agricultural uses. The natural vegetation of the subregion consists primarily of chaparral, coastal sage scrub, annual grasslands, and some riparian scrub and woodland. Much of the natural vegetation occurs in scattered, fragmented patches on hillsides or in other undeveloped areas.

2.6.4.2 Key Views

A key view is a representative, typical, characteristic, and clear perception of project elements to the primary viewer groups. Key views also need to represent the VAUs and include all of the project elements. Additionally, key views are the seen areas to and from the roadway. They are viewpoints that clearly display the visual effects of the proposed project and represent the primary viewer groups affected by the visual effects of the proposed project. Figure 2.6-1 shows the VAUs and the locations of the key views. The existing key views are described in more detail below.

Since 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 associated with VAUs that would most clearly demonstrate the change in the project's visual resources. Key views also represent the viewer groups that have the highest potential to be affected by the project considering exposure and sensitivity. In addition, these key views would be analyzed for each proposed alternative. Figure 2.6-1, Key View Locations, depicts the five key view locations that have been selected to show the visual change

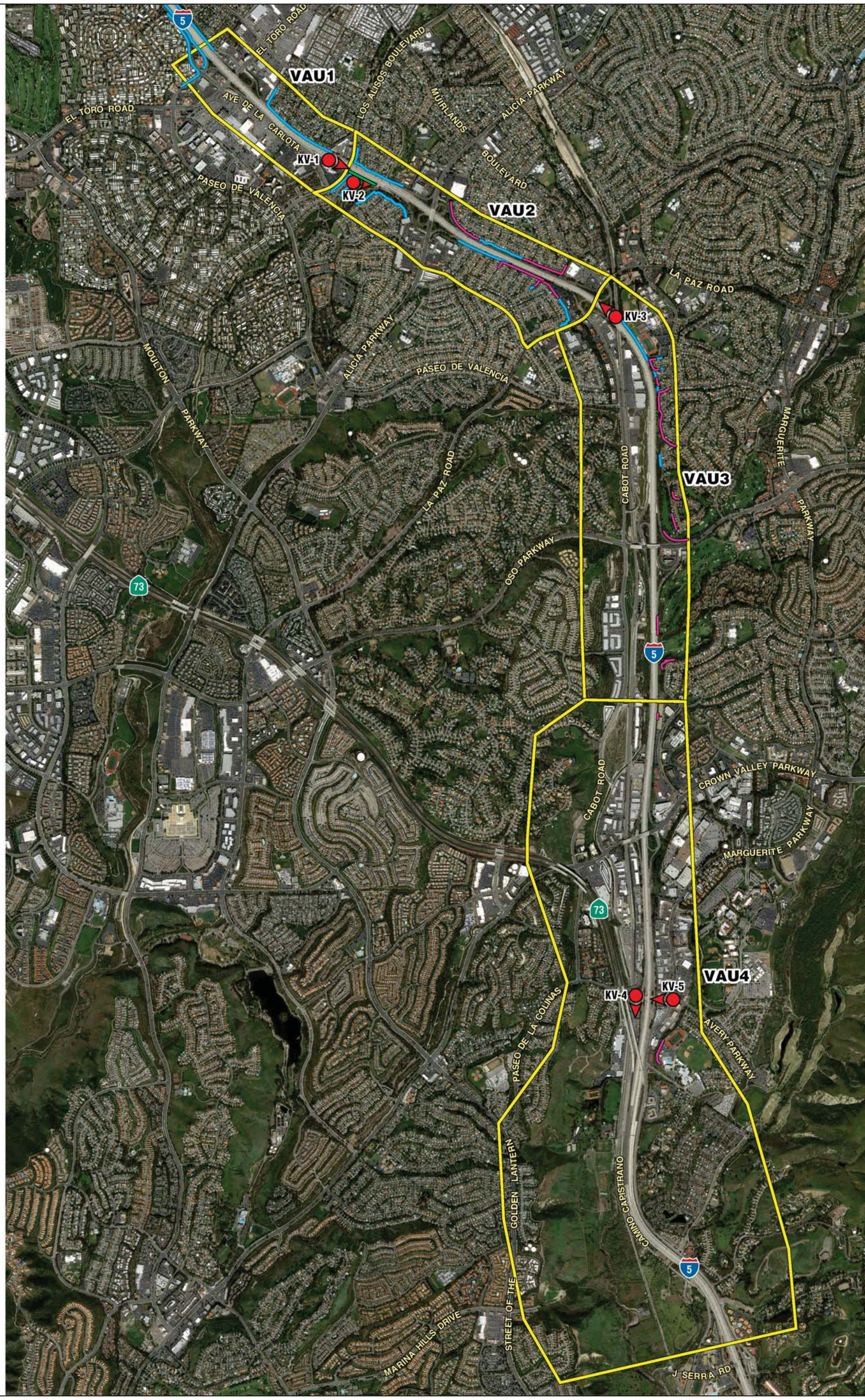

FIGURE 2.6-1

Direction of Photo
Key View Location
KV-# Key View Number
Visual Assessment Unit Boundary
Existing Soundwalls
Feasible Soundwalls
Community Enhancement Wall

N

NOT TO SCALE

SOURCE: I-5 Widening Project from SR-73 to El Toro Road VIA (RBF, October 2012)

I-5 Widening Project: SR-73 to El Toro Road

Key View Locations

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that would occur with project implementation. Figures for each Key View, both the existing conditions and the proposed post project conditions for each Build Alternative, are provided in Section 2.6.5, Environmental Consequences.

Key View 1

The viewpoint for Key View 1 is from the southbound I-5 travel lanes north of the Los Alisos Boulevard bridge looking south (refer to Figure 2.6-2 [Alternative 2] and Figure 2.6-3 [Alternative 3]). Key View 1 is located within VAU1.

Existing Condition

The visual form in Key View 1 appears to be consistent throughout the view. The freeway appears to be linear and continuous with edges defined by barrier and retaining walls. The colors throughout Key View 1 are predominantly shades of grey associated with the concrete and asphalt materials used for the freeway; however, the visible skyline is a light blue and surrounding trees and vegetation consist of a variety of greens. The texture of freeway and barrier walls appears to be granular throughout the view. The freeway hardscape dominates Key View 1, resulting in a lack of diversity. Vividness in Key View 1 is generally low, but is slightly increased by the presence of the middleground views to mature trees and vegetation that vary in color and height. Intactness within Key View 1 is compromised by the hardscape of the barrier walls, Los Alisos Boulevard bridge, an electrical substation, and overhead power lines. Key View 1 appears fairly unified as a result of the continuous linear pattern of the freeway and the mature trees to the east and west.

Viewer Response

Key View 1 represents a typical view from a southbound I-5 traveler. The southbound traveler in Key View 1 would be directly exposed to the changes along the freeway in VAU1. As previously discussed, thousands of vehicles travel this portion of I-5 each day. The viewer exposure duration is ultimately dependent on the distance of the project site the traveler drives and the density of traffic, especially during peak travel periods. Although southbound travelers may or may not be highly aware in Key View 1 depending on the speed of travel, these viewers would likely notice change in this portion of the project site. Overall viewer response in Key View 1 would be moderate.

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Key View 1: Existing Condition

Key View 1: Proposed Condition - Alternative 2 (Preferred Alternative)

FIGURE 2.6-2

I-5 Widening Project: SR-73 to El Toro Road

Key View 1 Existing and Proposed Conditions
Alternative 2 (Preferred Alternative)

SOURCE: I-5 Widening Project from SR-73 to El Toro Road VIA (RBF, October 2012)

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Key View 1: Existing Condition

Key View 1: Proposed Condition- Alternative 3

FIGURE 2.6-3

I-5 Widening Project: SR-73 to El Toro Road

Key View 1 Existing and Proposed Conditions
Alternative 3

SOURCE: I-5 Widening Project from SR-73 to El Toro Road VIA (RBF, October 2012)

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Key View 2

The viewpoints for Key View 2 are from the Aliso Creek Bikeway west of I-5 from VAU2 looking east (refer to Figures 2.6-4 [Alternative 2 – Preferred Alternative and Alternative 3] and from southbound I-5 (refer to Figure 2.6-5 [Alternative 2 – Preferred Alternative and Alternative 3]).

Existing Condition

The visual form in Key View 2 appears to be uniform throughout the view. The Aliso Creek Bikeway appears to be generally linear and continuous, trending parallel to the freeway. The colors throughout Key View 2 consist of browns, greys, blues, and greens. In foreground views, the texture of the bike trail appears to be smooth while the groundcover appears to be coarser. The riparian and coastal sage scrub communities along Aliso Creek to the west of I-5 dominate Key View 2. The abundant vegetation and trees along with the bike trail, freeway, and visible residential and commercial uses increase the diversity in Key View 2. Vividness in Key View 2 is enhanced by the presence of the middleground views to the colorful trees and vegetation that vary in height. Key View 2 is generally intact, with views being slightly encroached on by the hardscape of the freeway, sound walls, retaining walls, and overhead power lines. Key View 2 appears reasonably unified as a result of the linear pattern of the Aliso Creek Bikeway and freeway and the continuous presence of mature trees and vegetation throughout the view.

Viewer Response

Key View 2 represents a typical view from both a recreational user and a motorist in VAU2 along the Aliso Creek Bikeway and I-5 respectively. The recreational user in Key View 2 would be exposed to the changes along the freeway in VAU2 due to the proximity of the Aliso Creek Bikeway to the project site. The viewer exposure duration is considered to be fairly long, and recreational viewers are highly aware of the surrounding visual environment. The motorist in Key View 2 would also be exposed to changes along the freeway. However, the viewer exposure duration is considered short as they are passing through this area at a high rate of speed. Overall viewer response in Key View 2 would be moderate-high.

Key View 3

The viewpoint for Key View 3 is from the northbound I-5 travel lanes south of La Paz Road from VAU3 looking north (refer to Figures 2.6-6 [Alternative 2] and 2.6-7 [Alternative 3]).

Key View 2: Existing Condition

Key View 2: Proposed Condition - Alternative 2 (Preferred Alternative) and Alternative 3

FIGURE 2.6-4

I-5 Widening Project: SR-73 to El Toro Road

Key View 2 Existing and Proposed Conditions
Alternative 2 (Preferred Alternative) and Alternative 3

SOURCE: I-5 Widening Project from SR-73 to El Toro Road VIA (RBF, October 2012)

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Key View 2: Existing Condition

Key View 2: Proposed Condition – Alternative 2 (Preferred Alternative) and Alternative 3

FIGURE 2.6-5

I-5 Widening Project: SR-73 to El Toro Road

Key View 2 Existing and Proposed Conditions
Alternative 2 (Preferred Alternative) and Alternative 3

SOURCE: I-5 Widening Project from SR-73 to El Toro Road VIA (RBF, October 2012)

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Key View 3: Existing Condition

Key View 3: Proposed Condition - Alternative 2 (Preferred Alternative)

FIGURE 2.6-6

I-5 Widening Project: SR-73 to El Toro Road

Key View 3 Existing and Proposed Conditions
Alternative 2 (Preferred Alternative)

SOURCE: I-5 Widening Project from SR-73 to El Toro Road VIA (RBF, October 2012)

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Key View 3: Existing Condition

Key View 3: Proposed Condition - Alternative 3

FIGURE 2.6-7

I-5 Widening Project: SR-73 to El Toro Road

Key View 3 Existing and Proposed Conditions
Alternative 3

SOURCE: I-5 Widening Project from SR-73 to El Toro Road VIA (RBF, October 2012)

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Existing Condition

The visual form in Key View 3 appears to be consistent throughout the view. The freeway appears to be linear and continuous with edges defined by barriers and the freeway shoulder. The colors throughout Key View 3 are predominantly shades of grey associated with the freeway; however, the visible skyline consists of shades of blue and surrounding trees and vegetation consist of a variety of greens. The texture of freeway appears to be granular throughout the view. The freeway hardscape primarily dominates Key View 3. Diversity is increased due to existing mature trees and commercial development. Vividness in Key View 3 is increased by the presence of the middleground views to mature trees and vegetation that vary in color and height. Although the freeway barriers, commercial development, and street lighting slightly encroach on views within Key View 3, intactness remains moderate. Key View 3 appears fairly unified as a result of the continuous linear pattern of the freeway and the mature trees located throughout the view.

Viewer Response

Key View 3 represents a typical view from a northbound I-5 traveler. The northbound traveler in Key View 3 would be directly exposed to the changes along the freeway in VAU3. As previously discussed, thousands of vehicles travel this portion of I-5 per day. The viewer exposure duration is ultimately dependent on the distance of the project site the traveler drives and the density of traffic, especially during peak travel periods. Although southbound travelers may or may not be highly aware in Key View 3 depending on the speed of travel, these viewers would likely notice change in this portion of the project site. Overall viewer response in Key View 3 would be moderate.

Key View 4

The viewpoint of Key View 4 is from the northeastern corner of the Avery Parkway/ Camino Capistrano intersection from VAU4 looking south (refer to Figure 2.6-8 [Alternatives 2 and 3]).

Existing Condition

The visual form in Key View 4 appears to be varied due to the flat surface of the roadways and the elevated SR-73 flyover, interspersed by the vertical power poles and foreground structures. Camino Capistrano and the SR-73 flyover appear to follow the same linear pattern as the freeway, while Avery Parkway runs perpendicular. The colors throughout Key View 4 consist primarily of greys, browns, blues, whites, and

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Key View 4: Existing Condition

Key View 4: Proposed Condition (Preferred Alternative)

FIGURE 2.6-8

I-5 Widening Project: SR-73 to El Toro Road

Key View 4 Existing and Proposed Conditions
Alternatives 2 (Preferred Alternative) and Alternative 3

SOURCE: I-5 Widening Project from SR-73 to El Toro Road VIA (RBF, October 2012)

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greens. In foreground views, the texture of the roadway appears to be granular. The roofs of the structures in foreground and middleground views appear to be patterned. The dominating features of Key View 4 include Avery Parkway, Camino Capistrano, the SR-73 flyover, and the commercial development. The presence of ornamental trees and vegetation increase the diversity in Key View 4. Vividness in Key View 4 is enhanced by the existing mature trees and distant views to rolling hills to the west. Key View 4 is encroached upon by the commercial structures, the SR-73 flyover structure, traffic signals, and overhead power lines. Although mature trees and vegetation help to unify Key View 4, unity appears to be decreased by the hardscape features within the view.

Viewer Response

Key View 4 represents a typical view from a local roadway user in VAU4 at the corner of Avery Parkway and Camino Capistrano. The local roadway users in Key View 4 would be exposed to the changes at the Avery Parkway interchange in VAU4. The viewer exposure duration is considered to be moderate, as local roadway travelers would likely pass through the Avery Parkway interchange area fairly quickly. However, local roadway users would be aware of the surrounding visual environment and resulting change. Overall viewer response in Key View 4 would be moderate.

Key View 5

The viewpoint of Key View 5 is from the northeastern corner of the Avery Parkway/ Marguerite Parkway intersection from VAU4 looking west (refer to Figure 2.6-9 [Alternatives 2 and 3]).

Existing Condition

The visual form in Key View 5 appears to be slightly varied due to the flat roadways and the elevated SR-73 flyover and Avery Parkway overcrossing. Avery Parkway in this view follows a linear pattern and runs perpendicular to I-5. The colors in Key View 5 primarily consist of greys, browns, blues, whites, and greens. In foreground views, the texture of the roadway appears to be granular. The roofs of the commercial structures in the foreground and middleground views appear to be patterned. The dominating features of Key View 5 include Avery Parkway and commercial development. The presence of ornamental grasses, trees, and vegetation increase the diversity in Key View 5. Vividness in Key View 5 is increased by the existing mature trees varying in color and distant views to rolling hills. Although this view appears to be fairly intact, commercial structures, the SR-73 flyover, the Avery Parkway

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Key View 5: Existing Condition

Key View 5: Proposed Condition (Preferred Alternative)

FIGURE 2.6-9

I-5 Widening Project: SR-73 to El Toro Road

Key View 5 Existing and Proposed Conditions
Alternative 2 (Preferred Alternative) and Alternative 3

SOURCE: I-5 Widening Project from SR-73 to El Toro Road VIA (RBF, October 2012)

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undercrossing, traffic signals, and power lines encroach on Key View 5. Unity in Key View 5 is increased by the continuous presence of mature trees throughout the view.

Viewer Response

Key View 5 represents a typical view from a local roadway user in VAU4 at the corner of Avery Parkway and Marguerite Parkway. The local roadway users in Key View 5 would be exposed to the changes at the Avery Parkway interchange in VAU4. The viewer exposure duration is considered to be moderate, as local roadway travelers would likely pass through the Avery Parkway interchange area fairly quickly. However, local roadway users would be aware of the surrounding visual environment and resulting change. Overall viewer response in Key View 5 would be moderate.

2.6.5 Environmental Consequences

2.6.5.1 Temporary Impacts

No Build Alternative – Alternative 1

The No Build Alternative would not involve construction activities and, therefore, would not result in temporary visual effects to existing views to and from the adjacent areas.

Build Alternatives – Alternative 2 (Preferred Alternative) and Alternative 3

Implementation of the Build Alternatives would expose sensitive uses to views of the project site. Construction-related vehicle access and staging of construction materials would occur within Caltrans right of way and disturbed or developed areas along the length of the project site. The project area currently experiences lighting typical of urban areas and freeways. Primary sources of light and glare in the area include motor vehicle headlights, streetlights, parking lot and exterior security lighting, interior building lighting, and illuminated signs. Currently, light and glare exists throughout VAU1, VAU2, VAU3, and VAU4. Signage and security lighting during the evening/nighttime hours are present throughout all VAUs.

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 motorists traveling within the Study Area on I-5 as well as residents located in the project vicinity at elevations higher than I-5. These effects would be short term and would cease upon project completion.

Additionally, previously visible mature trees would be removed and would result in a temporary visual effect until the replacement trees mature.

2.6.5.2 Permanent Impacts

No Build Alternative – Alternative 1

The No Build Alternative would result in no change to the project corridor. Therefore, the visual character and quality of the project site and vicinity would remain similar to that described in Section 2.6.3.1, Visual Assessment Units. The No Build Alternative would allow for all of the existing mature trees and vegetation along the project site to remain. However, the No Build Alternative would also result in more traffic congestion as population growth and the associated amount of freeway travelers continue to increase over time, which reduces the visual character and quality of the area.

Build Alternatives – Alternative 2 (Preferred Alternative) and Alternative 3

For both Build Alternatives, long-term visual impacts would result from the permanent alteration of the visual environment through the widening of I-5, reconstruction of the Avery Parkway and La Paz Road interchanges, replacement of the Los Alisos Boulevard OC structure, and construction of retaining walls and sound walls. The visual simulations discussed in this section represent typical views and the potential changes that can be expected as a result of implementing the proposed project. The visual simulations are strictly for conceptual analysis and are not intended to provide a precise, scaled depiction of the project; rather, they illustrate the potential future post project visual character of the Study Area.

The following discussion describes these effects.

Key View 1

Proposed Condition – Alternative 2 (Preferred Alternative) and Alternative 3

Proposed changes under Alternatives 2 (Figure 2.6-2) and 3 (Figure 2.6-3) visible in Key View 1 include the extension of the second high-occupancy vehicle (HOV) lane from the El Toro Road undercrossing to the Alicia Parkway interchange, a new auxiliary lane, and the replacement of the Los Alisos Boulevard overcrossing structure. The following analyses apply to both Alternatives 2 and 3, as both alternatives would result in the same visual effects.

Resource Change

Under the Build Alternatives, although the visible form of the Study Area would be slightly affected by the widening of I-5, the proposed condition would appear generally similar to the existing condition with regard to colors, texture, scale, diversity, and continuity. Mature trees along I-5 to the east and in the background views would remain visible. However, previously visible mature trees to the west have been removed under the build condition. Vividness and unity in Key View 1 would remain similar to the existing condition. Intactness would be slightly decreased due to the additional hardscape and removal of trees in this view. Overall, the resource change in Key View 1 is considered to be low as the proposed condition appears similar to the existing condition.

Key View 2

Proposed Condition – Alternative 2 (Preferred Alternative) and Alternative 3

Proposed changes under both Alternatives 2 and 3 visible in Key View 2 include the extension of the second HOV lane, a new auxiliary lane, and a 14-foot high masonry block community enhancement wall atop a retaining wall to the west of southbound I-5 for 800 feet (refer to Figure 2.6-4, Key View 2 – Existing and Proposed Conditions – Alternative 2, and Figure 2.6-5, Key View 2 – Existing and Proposed Conditions – Alternative 3). The following analyses apply to both Alternatives 2 and 3, as both Build Alternatives would result in the same visual effects.

Resource Change

Under the Build Alternatives, the visual changes associated with the proposed masonry block wall would be noticeable to recreational users along the Aliso Creek Bikeway and travelers along I-5. For recreational users along the Aliso Creek Bikeway, the majority of views to the I-5 freeway would be replaced by a masonry block wall atop a retaining wall and a moderate-high visual impact would occur. For travelers along I-5, views to the west of Aliso Creek and associated open space (i.e., mature trees, riparian and coastal sage scrub, and landscaped slopes) would be permanently obstructed. It should be noted that I-5 is not designated as a State or locally designated scenic highway and motorists would experience these views while traveling at high speeds. However, as these views currently include those to open space in a developed portion of I-5, the new wall feature is anticipated to create a moderate-high visual impact for motorists at this location.

Implementation of the proposed masonry block wall would increase the hardscape in this Key View. Unity would not be substantially affected, as the overall appearance of the I-5 corridor would appear similar to existing conditions. However, the vividness of travelers along I-5 in this area would have a moderate-high impact due to the resultant view blockage of open space along Aliso Creek. The overall visual resource change for Key View 2 as a result of the masonry block wall is anticipated to be moderate-high.

Key View 3

Proposed Condition – Alternative 2 (Preferred Alternative) and Alternative 3

Proposed changes under Alternative 2 visible in Key View 3 include one additional general purpose lane, a wider inside shoulder in the northbound direction, and a new auxiliary lane (refer to Figure 2.6-6, Key View 3 – Existing and Proposed Conditions – Alternative 2). Additionally, the I-5 centerline would be shifted to the east. Alternative 3 proposes to add two general purpose lanes in each direction, and would shift the I-5 centerline east by an additional 12 ft than Alternative 2 to accommodate the additional lane. Other than the additional widening, Alternative 3 proposes the same hardscape features such as soundwalls and retaining walls, as Alternative 2 in this location. (refer to Figure 2.6-7, Key View 3 – Existing and Proposed Conditions – Alternative 3).

Resource Change

Under the Build Alternatives, the visible form and scale of the I-5 Study Area would be affected by the widening of I-5 and the centerline shift. The centerline shift would affect the view perception of the northbound freeway traveler. The build condition would appear similar to the existing condition with regard to colors, texture, diversity, and continuity. Mature trees and vegetation in the foreground to the west have been removed. However, middleground and background views to trees and vegetation throughout the view remain visible. Vividness and unity in Key View 3 would be somewhat reduced due to the tree and vegetation removal. Intactness would be decreased due to the additional hardscape in this view. Overall, the resource change in Key View 3 as a result of Alternatives 2 and 3 is considered to be moderate due to the increase in hardscape and centerline shift in the proposed condition.

Key View 4

Proposed Condition – Alternative 2 (Preferred Alternative) and Alternative 3

Proposed changes under Alternatives 2 and 3, visible in Key View 4 include the widened northbound on-ramp and the widened Avery Parkway (refer to Figure 2.6-8, Key View 4 – Existing and Proposed Conditions – Alternatives 2 and 3).

Resource Change

Under the Build Alternatives, visible surface hardscape has increased due to the widening of Avery Parkway and the removal of foreground structures. The modified southbound on-ramp does not substantially increase the hardscape appearance of this Key View. However, the build condition would appear similar to the existing condition with regard to colors, scale, and continuity. Diversity and texture has changed due to the elimination of the structures within foreground and middleground views. Vividness and unity in Key View 4 would be somewhat reduced as a result of the removal of ornamental palm trees in foreground views; however, palms trees in middleground views remain visible. Although there is additional surface hardscape introduced in this view, intactness would be somewhat increased due to the structure removal that opens up views to mature trees. Overall, the resource change in Key View 4 is considered to be moderate-high as a result of the additional surface hardscape and removal of structures and ornamental trees.

Key View 5

Proposed Condition – Alternative 2 (Preferred Alternative) and Alternative 3

Proposed changes under Alternatives 2 and 3, visible in Key View 5 include the replacement of the Avery Parkway undercrossing structure, the widened northbound on- and off-ramps, and the widened Avery Parkway and Marguerite Parkway (refer to Figure 2.6-9, Key View 5 – Existing and Proposed Conditions – Alternatives 2 and 3).

Resource Change

Under the Build Alternatives, hardscape in this view would increase due to the widening of Avery Parkway and Marguerite Parkway. The modified northbound on- and off-ramps are barely perceptible in this Key View and do not substantially increase the visible hardscape. However, the build condition would appear similar to the existing condition with regards to colors, scale, and continuity. Diversity

and texture has changed due to the elimination of structures within foreground and middleground views. The slight reduction in vividness and unity in Key View 5 as a result of the removal of ornamental grasses, trees, and shrubs in foreground and middleground views is offset by the remaining views to mature trees in the middleground and rolling hills in the background. Intactness would be decreased due to the additional hardscape associated with the widened Avery Parkway and Marguerite Parkway in this view. Overall, the resource change in Key View 5 is considered to be moderate-high as a result of the widened roadways and removal of structures and ornamental landscaping.

Key View Summary

Table 2.6-2, *Narrative Ratings for Each Key View*, below summarizes and compares the narrative ratings for visual resource change and viewer response between the Build Alternatives for each key view.

Summary of Visual Impacts by Visual Assessment Unit

A summary of visual effects has been prepared for the following VAUs:

Table 2.6-2 Narrative Ratings for Each Key View

Visual Assessment Unit	Key View	Alternative 2 (Preferred Alternative)		Alternative 3	
		Resource Change	Viewer Response	Resource Change	Viewer Response
VAU1 – North	1	L	M	L	M
VAU2 – North-Central	2	MH	MH	MH	MH
VAU3 – South-Central	3	M	M	M	M
VAU4 – South	4	MH	M	MH	M
	5	MH	M	MH	M

Source: *Visual Impact Assessment, Interstate 5 Widening Project from SR-73 to El Toro Road* (RBF, October 2012) and the *Visual Impact Assessment Addendum* (RBF, April 2014).
L = Low
M = Moderate
MH = Moderate-High
VAU = visual assessment unit

Visual Assessment Unit 1: North

Alternative 2 (Preferred Alternative) and Alternative 3

Although implementation of Alternatives 2 and 3 would result in additional hardscape surfaces within VAU1, the visual character and quality would appear similar to existing conditions. Several existing mature trees within VAU1, as well as distant views to the Santa Ana Mountains to the east, would remain visible. The proposed sound walls in VAU1 would replace existing sound walls, and would appear similar to the existing condition. The overall visual resource change in VAU1 as a result of Alternatives 2 and 3 is expected to be low. Viewers within

VAU1 include northbound and southbound I-5 travelers, nonresidential uses, residential uses, and local roadway travelers. Key View 1 depicts a typical view from a southbound I-5 traveler. Although change is noticeable to the traveler due to a replaced bridge structure and additional HOV and auxiliary lanes, the view appears similar to existing conditions. As previously discussed, the group viewer response is low for nonresidential uses, moderate-high for residential uses, moderate for northbound and southbound I-5 travelers, and moderate for local roadway viewers.

There are no recreational viewers within VAU1. Thus, when considering the resource change in VAU1 and the group viewer responses, the overall visual effect within VAU1 under Alternatives 2 and 3 is considered to be moderate-low.

Visual Assessment Unit 2: North-Central

Alternative 2 (Preferred Alternative)

Implementation of Alternative 2 would result in construction of additional hardscape (i.e., additional travel lanes, replaced bridge structure, new potential sound walls, and a new masonry block community enhancement wall) within VAU2. The visual character and quality would be reduced as compared to existing conditions. Several existing mature trees within VAU2 would be removed and a new community enhancement wall along southbound I-5 in the northern portion of VAU2 would limit views to Aliso Creek and associated trees and vegetation to the west. Additionally, the majority of proposed sound walls south of Alicia Parkway in VAU2 would involve removing and replacing existing walls, or raising existing walls. Although not currently proposed, two new potential sound wall segments located along the rear property lines of residential uses in the southern portion of VAU2 may be included upon refinement of engineering plans during final design. Distant views to the Santa Ana Mountains to the east would remain visible. The overall visual resource change in VAU2 as a result of Alternative 2 is expected to be moderate-high due to the reduction in trees and vegetation. Viewers within VAU2 include recreational uses, northbound and southbound I-5 travelers, nonresidential uses, residential uses, and local roadway travelers. Key View 2 depicts a typical view from a recreational viewer along Aliso Creek Bikeway. The existing view of the freeway is blocked by the new masonry block wall. As previously discussed, the viewer response is moderate-high for recreational viewers, low for nonresidential uses, moderate-high for residential uses, moderate-high for northbound and southbound I-5 travelers, and moderate for local roadway viewers. Thus, when considering the

resource change in VAU2 and the group viewer responses, the overall visual effect within VAU2 under Alternative 2 is considered to be moderate-high.

Alternative 3

Implementation of Alternative 3 would result in two additional general purpose lanes, resulting in slightly greater surface hardscape and tree and vegetation removal than Alternative 2. Although Alternative 3 would slightly increase hardscape and decrease softscape, it would result in similar effects as described above for Alternative 2.

Visual Assessment Unit 3: South-Central

Alternative 2 (Preferred Alternative)

Implementation of Alternative 2 would result in additional hardscape (i.e., additional travel lanes, replaced bridge for the La Paz Road undercrossing, and new potential sound walls) within VAU3. The visual character and quality would be reduced as compared to existing conditions. Several existing mature trees within VAU3 would be removed. The majority of proposed sound walls in the northern portion of VAU3 would involve removing and replacing existing walls, or raising existing walls. Although not currently proposed, five new potential sound wall segments along the rear property lines of residential uses to the east of I-5 throughout the central and southern portions of VAU3, and one new potential sound wall along the Oso Parkway northbound on-ramp may be included upon refinement of engineering plans during final design. A new potential sound wall is proposed along the Mission Viejo Golf Course in the southern portion of VAU3. However, distant views to the Santa Ana Mountains to the east would remain visible. The overall visual resource change in VAU3 as a result of Alternative 2 is expected to be moderate due to the reduction in trees and vegetation. Viewers within VAU3 include northbound and southbound I-5 travelers, recreational uses, nonresidential uses, residential uses, and local roadway travelers. Key View 3 depicts a typical view from a northbound I-5 traveler. Although change is noticeable to the traveler due to freeway widening, the view appears generally similar to existing conditions. As previously discussed, the group viewer response is moderate for northbound and southbound I-5 travelers, moderate-high for recreational viewers, low for nonresidential uses, moderate-high for residential uses, and moderate for local roadway viewers. Thus, when considering the resource change in VAU3 and the group viewer responses, the overall visual effect within VAU3 under Alternative 2 is considered to be moderate.

Alternative 3

Implementation of Alternative 3 would result in two additional general purpose lanes, resulting in slightly greater hardscape and tree and vegetation removal than Alternative 2. Although Alternative 3 would slightly increase hardscape and decrease softscape, it would result in similar effects as described above for Alternative 2.

Visual Assessment Unit 4: South

Alternative 2 (Preferred Alternative) and Alternative 3

Implementation of Alternatives 2 and 3 would result in additional hardscape (i.e., additional travel lanes, new potential sound walls, and an improved Avery Parkway interchange) within VAU4. The visual character and quality would be reduced as compared to existing conditions. Several existing mature trees within VAU4 would be removed and multiple structures would be demolished near the Avery Parkway interchange. However, distant views to the Santa Ana Mountains to the east would remain visible. Although not currently proposed, one new potential sound wall segment along Capistrano Valley High School in the southern portion of VAU4 may be included upon refinement of engineering plans during final design. A new potential sound wall is proposed along the eastern side of the freeway near commercial uses in the northern portion of VAU4. The overall visual resource change in VAU4 as a result of Alternatives 2 and 3 is expected to be moderate-high due to the reduction in trees and vegetation. Viewers within VAU2 include recreational uses, northbound and southbound I-5 travelers, nonresidential uses, residential uses, and local roadway travelers. Key Views 4 and 5 depict typical views from local roadway viewers at the Avery Parkway/Camino Capistrano and Avery Parkway/Marguerite Parkway intersections. The amount of hardscape features in this view has increased due to the Avery Parkway interchange improvements. As previously discussed, the group viewer response is moderate for local roadway viewers, moderate-high for recreational viewers, low for nonresidential uses, moderate-high for residential uses, and moderate for northbound and southbound I-5 travelers. Thus, when considering the resource change in VAU4 and the group viewer responses, the overall visual effect within VAU4 under Alternatives 2 and 3 is considered to be moderate-high.

Light and Glare

The No Build Alternative does not include construction of additional sources of light and glare and would not introduce new sources of light and glare in the Study Area.

Implementation of the Build Alternatives would introduce additional sources of light and glare associated with vehicle headlights. No additional traffic signals or street lighting would be installed. However, some street lighting and traffic signals would be relocated in the vicinity of the La Paz Road and Avery Parkway interchanges. Light and glare effects from new sound walls would be introduced along I-5. Viewer groups in the vicinity of the project site would likely experience a slight increase in sources of light and glare, as compared to existing conditions.

Overall Visual Effect of the Project

As previously discussed, project implementation would result in additional auxiliary and general purpose lanes along I-5, interchange improvements, bridge replacements, ramp reconfigurations, new/reconstructed sound walls, and a new community enhancement wall. The Build Alternatives would result in a 12 and 17 percent increase of pavement/hardscape within the ROW respectively. Although Alternative 3 would result in increased hardscape (approximately five percent) due to an additional travel lane as compared to Alternative 2, both alternatives would result in similar visual effects. Visual changes as a result of the Build Alternatives would occur only in the area between Crown Valley Parkway and Alicia Parkway (represented by Key View 3). Features of the Build Alternatives at Avery Parkway (represented by Key Views 4 and 5) as well as north of Alicia Parkway (represented by Key Views 1 and 2) are the same. As detailed in Chapter 1, Alternative 2 will include three new structures, four widened structures, 30 retaining walls (ranging from six ft to 44 ft high), 17 new sound walls, four sound walls to be replaced in-kind, and a new community enhancement wall. Alternative 3 will include three new structures, five widened structures, 38 retaining walls (ranging from six ft to 44 ft high), 17 new sound walls, four sound walls to be replaced in-kind, and a new community enhancement wall.

Viewer groups affected by the proposed project include I-5 travelers, local roadway users, residential uses, nonresidential uses, and recreational uses. Visual effects associated with a project are determined by a measurement of the resource change and viewer response. Although visual effects differ among viewer groups and VAUs, the overall visual effect of both Alternatives 2 and 3 is considered to be moderate, as the project would not substantially alter the visual character or quality of the project corridor.

2.6.6 Avoidance, Minimization, and/or Mitigation Measures

The implementation of all design requirement measures requires concurrence and approval of the Caltrans District Landscape Architect. Final recommendations will be made during final design within the context of Director's Policy (DP #22) on Context Sensitive Solutions (CSS). With the concurrence of the Caltrans District Landscape Architect, the following measures to avoid or minimize visual and light and glare effects would be incorporated into the project:

VIS-1 **Landscaping.** To maintain the context of the project area (color, form, and texture), landscaping will be installed that is compatible with the existing landscape along the portion of I-5 in the project vicinity and surrounding area. Landscaping will include specimen sized trees and/or shrub/groundcover mass planting, and landscape treatment along walls to soften the hardscape features and glare and radiant heat from the walls. The landscape concept, plan, and plant palette will be determined in consultation with, and approved by, the California Department of Transportation (Caltrans) District Landscape Architect during the Plans, Specifications, and Estimate (PS&E) phase. The planting plan will be reviewed and approved by the Caltrans Biologist to avoid the use of invasive plant species as outlined in Measure BIO-16.

Replacement planting implementation will be under a separate contract within a three-year period following the completion of construction in accordance with Caltrans policies. Trees in the interchanges, in conflict with the roadway improvement design, will be transplanted in the project area in a location in conformance with the Caltrans planting policy requirements. Specimen trees will be transplanted or replaced with a specimen box tree as approved by the Caltrans District Landscape Architect.

Erosion control seed species will be determined by the Caltrans District Landscape Architect to ensure that the mix and application strategy is appropriate for the specific soil composition of the area.

In areas where sound walls are visible from adjacent residential land uses, vines and landscape will be utilized to screen views to the wall.

All vines and landscape proposed will conform with Caltrans planting policy requirements.

VIS-2 **Architectural Treatments.** To minimize visual quality loss and to minimize the visual disruption from the elements of the highway construction, architectural treatments will be provided to the walls in accordance with the *Master Plan of Freeway and Transit Corridor Enhancements: Creating a Quality Environment Along Orange County's Transportation Network*. All wall aesthetics will be approved by the California Department of Transportation (Caltrans) District Landscape Architect.

VIS-3 **Aesthetic Design Review.** The California Department of Transportation District 12 Landscape Architecture Branch will administer and chair an Aesthetic Design Review Team (ADRT) that includes local agency representatives to ensure the project landscape and structural elements are in compliance with the aesthetic requirements of the *Master Plan of Freeway and Transit Corridor Enhancements: Creating a Quality Environment Along Orange County's Transportation Network*.

VIS-4 **Construction Lighting.** Construction lighting types, plans, and placement will be shielded from sensitive areas in order to minimize light and glare effects on surrounding areas.