

2.6 Visual and Aesthetics

2.6.1 Regulatory Setting

The National Environmental Policy Act of 1969 as amended (NEPA) establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings (42 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 Section 21001[b])

2.6.2 Affected Environment

This section describes the aesthetic and visual resource conditions within the project limits. The section also discusses potential aesthetic impacts that could result from implementation of the proposed I-5 HOV Lane Extension Project. A program for minimization measures is also provided. This analysis is based on the Visual Impact Assessment (VIA) dated June 2010.

2.6.2.1 Visual Environment

The regional landscape establishes the general visual environment of the project. However, the specific visual environment is determined by defining landscape units and the proposed project viewshed.

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 in a sloping area of the County and is surrounded by a mix of uses including commercial, residential, recreational, institutional, and transportation uses.

Landscape Unit

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 will often

correspond to a place or district that is commonly known among local viewers. The proposed project can be separated into three distinct landscape units, based on the different views and character experienced within each. The three landscape units within the proposed project study area are identified below.

Landscape Unit 1: San Juan Creek

Landscape Unit 1 (LU1) is located in the northern portion of the proposed project area in the City of San Juan Capistrano within a stretch of land along I-5 from the northern boundary of the project limits (San Juan Creek Road) to approximately 0.3 mi north of Stonehill Drive. The topography of LU1 is gently sloping to the south and west, with elevations ranging from approximately 30 to 325 ft above mean sea level (amsl). LU1 consists of the I-5 corridor and surrounding areas and is located to the east of San Juan Creek and west of an undeveloped hillside area of San Juan Capistrano. General land uses within LU1 include roadway, commercial, residential, and recreational and urban-type land consisting of commercial and residential uses.

Land uses surrounding LU1 include San Juan Creek to the north and west; commercial, residential and undeveloped hillside uses to the east; and residential uses to the south. Although man-made features exist within LU1, San Juan Creek, valleys, and surrounding rolling hills are also prominent features in LU1. Other hardscape features are also present along the project area. Several mature trees and other streetscape are located within LU1 and along the I-5 corridor.

Landscape Unit 2: Coastal Bluffs

Landscape Unit 2 (LU2) is located within the northern portion of the proposed project in a sloping area and extends from the southern boundary of LU1 to the Via California overcrossing (OC) in the City of Dana Point. Elevations in LU2 range from approximately 25 to 400 ft amsl. LU2 includes commercial and residential uses to the north and east; residential and undeveloped land uses to the west; and residential uses to the south. The Pacific Ocean is also located to the west of LU2. The proposed project, within LU2, is surrounded by commercial, residential, and recreational uses. Other man-made features within LU2 include roadways, soundwalls, retaining walls, barriers, and commercial structures.

Landscape Unit 3: Boca de la Playa

Landscape Unit 3 (LU3) is located within the southern portion of the proposed project and extends from the Via California OC to the southern boundary of the proposed project (in the City of San Clemente). The landscape unit consists of residential uses

to the north and south of the I-5 corridor and commercial institutional and recreational uses in the eastern, southern, and western portions of LU3. The Pacific Ocean is also located to the west of LU3. Man-made features within LU3 include residential, commercial, and institutional structures, commercial signage, soundwalls, and retaining walls. Elevations in LU3 range from approximately 30 to 420 ft amsl.

Project Viewshed

A viewshed is a subset of a landscape unit 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 proposed project. The viewshed also includes the locations of viewers likely to be affected by visual changes caused by project features.

Based upon a site visit conducted for the VIA on October 15, 2009, scattered views are available for surrounding urban land uses within a 1 mi radius of the proposed project. Views of the proposed project are available for adjoining residential, commercial, and institutional uses. Views from the proposed project are available for motorists traveling along the northbound and southbound I-5 travel lanes.

Landscape Unit 1: San Juan Creek

Views of the proposed project area within LU1 are available to residents to the east and west located at a higher elevation along adjacent bluff tops. Views of the proposed project area are also available to surrounding commercial uses adjacent to the I-5, as they are located at an elevation similar to I-5. Views within LU1 consist of the I-5 northbound and southbound travel lanes, surrounding residential and commercial uses, valleys, and surrounding hillsides. Also, minimal views to San Juan Creek are afforded from the northern portion of LU1. However, the majority of these views are screened by commercial structures and mature trees.

Landscape Unit 2: Coastal Bluffs

Views of the proposed project area within LU2 are available from residential uses atop the bluff tops to the west of I-5 (in the vicinity of Del Obispo Street). Also, views from the proposed project area are available to travelers in the northbound and southbound lanes of I-5, the Camino Las Ramblas off-ramp, the Via California OC, and residential uses situated atop the hills above I-5 to east near Via California. As I-5 is located at a higher elevation than uses to the south, and soundwalls are situated along portions of I-5, views of the proposed project area from surrounding residential uses to the south are considerably limited. The majority of partial views afforded

from these locations include berms along the western side of I-5; freeway travel lanes are not visible due to topography. Views within LU2 generally consist of the I-5 northbound and southbound travel lanes, soundwalls, residential uses atop surrounding bluffs, surrounding hillsides, vegetation, and partial views to the Pacific Ocean.

Landscape Unit 3: Boca de la Playa

Views of the proposed project area within LU3 are available from adjoining commercial uses along I-5 and residential uses atop the hillsides to the east of I-5. Also, views from the proposed project area are available to travelers in the northbound and southbound lanes of I-5, the Via California OC, the Camino de Estrella OC, travelers along Avenida Pico, and all on- and off-ramps throughout LU3. Uses to the west of I-5 are generally lower in elevation than the proposed project; therefore, views of the proposed project area from these uses are generally screened by intervening structures, soundwalls, retaining walls, and hillsides. Partial views to the Pacific Ocean are afforded from I-5 travel lanes in few locations throughout LU3.

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.

2.6.2.2 Sensitive Viewers

Viewers of the proposed project include motorists traveling on I-5 and nearby local roads, surrounding residents, recreational users, and occupants of the commercial areas. These viewers are described in more detail below.

Traveling Public

I-5 serves as the primary regional transportation corridor in the project area. Motorists using I-5 experience direct views of the proposed project through all three landscape

units over a long duration. Existing daily traffic volumes on I-5 within the proposed project limits range from approximately 192,600 to 241,200 vehicles per day, with peak-hour volumes ranging from 5,820 to 8,870 vehicles.

Visible designated visual resources include distant ridgetops, hillsides, bluff tops, and San Juan Creek. Daily commuters along I-5 may have an increased awareness of the proposed project due to the daily exposure to the project area. These travelers would be moderately sensitive to project changes.

Local Arterial Streets

Landscape Unit 1: San Juan Creek

Camino Capistrano, located adjacent to the west of I-5 in LU1, is a heavily traveled roadway that provides access to the commercial uses adjacent to the freeway. Valle Road is located adjacent to the east side of I-5. Local street users along Camino Capistrano and Valle Road have direct, moderate duration views to the proposed project area. Streets within commercial use areas of LU1 that are perpendicular to I-5 would have short duration views to the proposed project area. Camino Capistrano, which parallels I-5 to the west, includes a Class II bike lane. Bicyclists utilizing Camino Capistrano would have direct views of the proposed project area. A Class II bike lane also exists along San Juan Creek; however, views to the proposed project area are limited from this bike lane due to intervening topography and commercial ridgetops. Local street users in LU1 would have a moderate awareness of the proposed project.

Landscape Unit 2: Coastal Bluffs

The northern portion of Camino Capistrano, a local arterial located parallel to the west of I-5, would experience direct, moderate duration views of the proposed project area within LU2. However, no views from the southern portion of Camino Capistrano in LU2 are afforded due to intervening topography and vegetation. Motorists along Camino Las Ramblas, which traverses I-5 in an east-west direction in LU2, would have direct, moderate duration views in the proposed project area. Pedestrians and motorists traveling along Via California (located atop the undeveloped hill to the east of I-15) and across the Via California OC would have direct, moderate duration views to the proposed project area. Camino Capistrano in the portion of LU2 located within the City of San Juan Capistrano includes a Class II bike lane. Bicyclists utilizing this portion of Camino Capistrano would have views of the proposed project area, while views from along the southern portion of Camino Capistrano would not be afforded due to topography. Visible designated visual resources in LU2 for local arterial streets

include surrounding bluff tops. Local street users in LU2 would have a moderate awareness of the proposed project.

Landscape Unit 3: Boca de la Playa

Local street users of Via California, Camino de Estrella, and Avenida Vista Hermosa OCs and the Avenida Vaquero and Avenida Pico UCs would also have direct, moderate duration views of the site. Existing views from other surrounding roadways in LU3 are obstructed by topography, soundwalls, vegetation, and structures. No bicycle lanes are located within LU3. However, a Class II bike lane is located to the east of LU3, and a Class III bike lane is located to the west of LU3, both along Avenida Pico. Views to the proposed project area from these adjacent bike lanes are limited due to topography, structures, and mature trees and vegetation. Visible designated visual resources within LU3 for local arterial streets include hillsides and ridgelines. Local street users in LU3 would have a moderate awareness of the proposed project.

Community Residents

Landscape Unit 1: San Juan Creek

Residents located in the vicinity of LU1 adjacent to the east of I-5 near San Juan Creek and along the hillsides to the west have short-duration or no views of the proposed project area. The majority of the views to I-5 from nearby residents are not available due to the obstruction from existing commercial structures, soundwalls, and mature trees. However, some residents located on hillsides to the east of I-5 have long-duration, partial views to the proposed project. Visible designated visual resources in LU1 for community residents include the Pacific Ocean, San Juan Creek, and ridgetops. Most residents in LU1 are likely to have a moderate concern for the proposed project and its effect on views from their homes and neighborhoods. However, those residents with ocean views from hillside developments would have a high concern for the proposed project.

Landscape Unit 2: Coastal Bluffs

All residents in LU2 to the west of I-5 and some residents in LU2 to the east of I-5 do not have views of the proposed project area due to visual obstructions such as topography, retaining walls, soundwalls, and mature vegetation. Residents within the Blue Harbor residential development, located east of I-5 on adjacent hillsides, have long-duration middleground views of I-5. Visible designated visual resources within LU2 for residential users include hillsides and ridgelines. These residents with views in LU2 are likely to have a high concern for the proposed project in their views.

Landscape Unit 3: Boca de la Playa

All residents to the west of I-5 in LU3 have obstructed views due to existing topography, retaining walls, soundwalls, and mature vegetation. However, some residents to the east have long duration views to the proposed project area, depending on their location and elevation. These include residents to the east along Via Manzana, within Sea Pointe Estates (located off of Camino de los Mares) within the Marblehead development, and the residents of multiple other developments to the east of I-5. Visible designated visual resources in LU3 for residential users include hillsides and ridgelines. These residents with views in LU3 are likely to have a high concern for the proposed project and its effect on their views.

Recreational Users

Landscape Unit 1: San Juan Creek

Four parks (Arce, Descanso Veterans, Bonita, and Mission Bell Parks) are located within LU1; however, views to the proposed project area are not available from these locations due to topography, structures, and vegetation. The San Juan Hills Country Club is also located within LU1 to the northeast of the proposed project. Recreational users of the Club's public golf course would not have views to the proposed project area due to topography and existing structures and mature vegetation. Visible designated visual resources in LU1 for recreational users include San Juan Creek and ridgetops.

Landscape Unit 2: Coastal Bluffs

Via Canon Park is located within the southern portion of LU2. Views to the proposed project area from the park are limited due to obstruction of intervening trees and vegetation. Visible designated visual resources in LU2 for recreational users include surrounding bluff tops.

Landscape Unit 3: Boca de la Playa

Five parks (Sunset, Mira Costa, San Gorgonio, Verde, and Bonita Canyon Parks) are located within LU3. Users of these recreational parks would not have a view of the proposed project area due to topography, soundwalls, retaining walls, structures, and mature trees and vegetation. Visible designated visual resources in LU3 for recreational users include hillsides and ridgelines.

Commercial Area Users

Landscape Unit 1: San Juan Creek

A variety of commercial uses, including commercial to neighborhood commercial uses, are located in the vicinity of LU1. Visible designated visual resources in LU1 for commercial area users include San Juan Creek and ridgetops. Commercial employees and clientele would likely have short to moderate duration views and moderate awareness of the proposed project, as views of the proposed project area are afforded from commercial uses to the east and west of I-5.

Landscape Unit 2: Coastal Bluffs

Visible designated visual resources in LU2 for commercial area users include surrounding bluff tops. Commercial employees and clientele in LU2 would likely have short to moderate duration views and moderate awareness of the proposed project, since some views are afforded to the proposed project area, while other views are obstructed by existing topography, retaining walls, and soundwalls.

Landscape Unit 3: Boca de la Playa

Commercial employees and clientele to the east of I-5 along Camino de los Mares would likely have short to moderate duration views and moderate awareness of the proposed project. Commercial employees and clientele to the west of I-5 along Camino de Estrella and Camino Mira Costa would not have views to the proposed project area, as they are blocked by topography and mature trees and vegetation. Visible designated visual resources in LU3 for commercial area users include hillsides and ridgelines.

2.6.2.3 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 landscape units 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 impacts of the proposed project. Figure 2.6-1 shows the locations of the key views. The existing key views are described in more detail below.

Key View 1

Key View 1 was taken from the east side of I-5 along Avenida Pico, looking west toward the I-5/Avenida Pico Interchange within LU3. As shown in Figure 2.6-2, the Avenida Pico roadway and visible landscaping are visible within the foreground. The

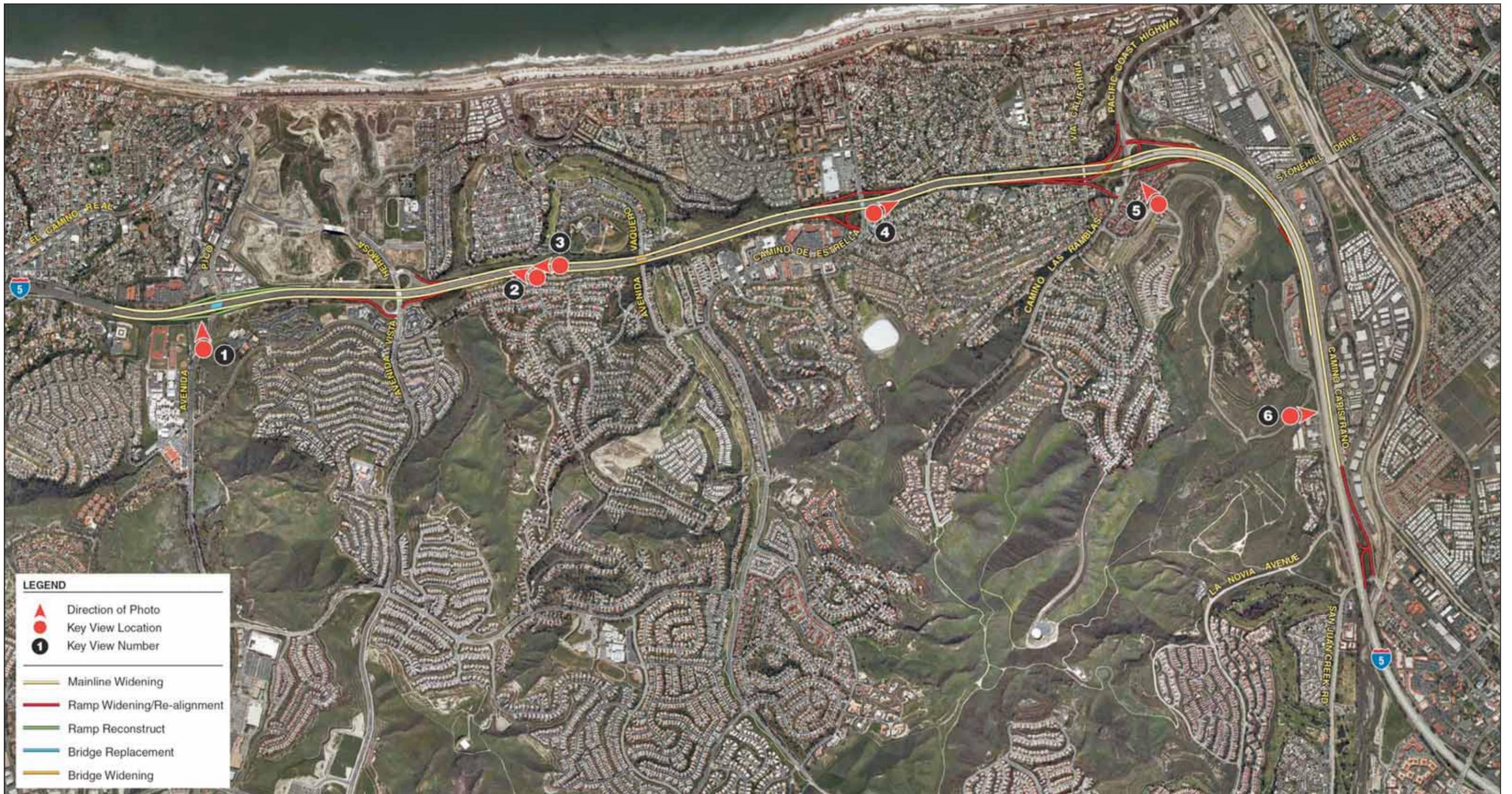
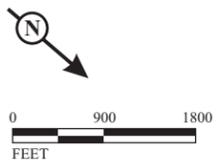


FIGURE 2.6-1



SOURCE: RBF

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I-5 HOV Lane Extension
Key View Locations
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FIGURE 2.6-2

I-5 HOV Lane Extension
Key View 1
Existing Condition
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existing ornamental landscaping screens views from a large retaining wall located to the north of Avenida Pico. Foreground and middleground views also include commercial uses, a landscaped median, mature trees, street lights, and minimal commercial and freeway signage. Middleground views are available from the Avenida Pico UC. However, no background views are afforded under this key view.

Key View 2

Key View 2 was taken from the east shoulder of I-5 near adjacent residential uses, looking to the southeast, toward I-5 travel lanes within LU3. As shown in Figure 2.6-3, one soundwall (ranging from eight to 16 ft in height) with ornamental landscaping is visible along the west side of I-5. No other structures are visible within this key view. Mature ornamental and ruderal vegetation are visible along the west side of I-5, and bare ground and ornamental vegetation are visible to the east of I-5. Development within this key view consists of roadway uses and a soundwall. One street sign is visible within foreground views. Middleground views include I-5 travel lanes, trees, and a soundwall. Background views are not afforded in this key view.

Key View 3

Key View 3 was taken from the southbound lane of I-5, looking south to the Avenida Vaquero OC within LU3. As shown in Figure 2.6-4, foreground and middleground views include the southbound I-5 travel lanes, a soundwall measuring 10 ft in height to the west of I-5, a concrete center divider rail, and one electronic freeway sign. Mature trees and vegetation varying in form, color, and texture are visible to the east of I-5, and the soundwall to the west of I-5 contains landscaped treatment. Background views include distant vegetated hillsides.

Key View 4

Key View 4 was taken from the Camino de Estrella northbound on-ramp, looking north along the on-ramp toward the proposed project within LU3. As shown in Figure 2.6-5, middleground views consist of mature trees, vegetation, and grasses that vary in color, texture, and height. The majority of the views to the soundwall located west of the on-ramp are screened by topography and vegetation. Background views include distant mature trees.

Key View 5

Key View 5 was taken from the corner of Avenida California and Via La Jolla, near the new residential development of Blue Harbor, looking west toward the proposed project within LU2. As shown in Figure 2.6-6, mature trees and residential structures

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FIGURE 2.6-3

I-5 HOV Lane Extension
Key View 2
Existing Condition
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FIGURE 2.6-4

I-5 HOV Lane Extension
Key View 3
Existing Condition
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FIGURE 2.6-5

I-5 HOV Lane Extension
Key View 4
Existing Condition
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FIGURE 2.6-6

I-5 HOV Lane Extension
Key View 5
Existing Condition
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are visible in the foreground and middleground. Middleground views also include limited views to I-5 travel lanes and the Via California OC. Mature trees and vegetation are visible throughout the view. Limited background views of the Pacific Ocean are afforded.

Key View 6

Key View 6 was taken from the east side of I-5, on Vista Marina near Valle Road from a new residential development identified as Blue Harbor. This key view is looking west toward the proposed project within LU1. As shown in Figure 2.6-7, brush and grasses are visible within the foreground. I-5 travel lanes, mature trees, grasses, commercial structures, and street lights are visible in the middleground views. Background views include distant hillsides residential development and mature trees.

2.6.2.4 Methodology

This section summarizes the methodology and terminology used to assess the visual effects of the proposed project. More details on the methodology are available in the VIA. The process for this VIA follows the guidelines in the publication *Visual Impact Assessment for Highway Projects* (FHWA, March 1981). The following six principal steps were carried out to assess the visual effects of the proposed project:

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

The visual effects of the proposed project were determined by assessing the existing visual resources, the visual resource change due to the proposed project, and predicting viewer response to that change. The degree of visual quality in a view was evaluated using the following FHWA descriptive terms:

- **Vividness:** Vividness is the visual power or memorability of landscape components as they combine in striking and distinctive visual patterns (e.g., Niagara Falls is a highly vivid landscape component).

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FIGURE 2.6-7

I-5 HOV Lane Extension
Key View 6
Existing Condition
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- **Intactness:** Intactness is the visual integrity of the natural and human-built landscape and its freedom from encroaching elements. This factor can be present in well-kept urban and rural landscapes and natural settings (e.g., a two-lane road that meanders through the countryside).
- **Unity:** Unity is the visual coherence and compositional harmony of the landscape considered as a whole; it frequently attests to the careful design of individual components in the landscape (e.g., an English or Japanese garden).

The levels of visual impact are described as follows:

- **Very Low:** Minor adverse visual change to the existing visual resource. There is very little or no response to the change in the visual environment. Mitigation is not a project requirement.
- **Low:** Minor adverse change to the existing visual resource. There is a low viewer response to change in the visual environment. Mitigation may or may not be a project development requirement.
- **Moderately Low:** Moderate adverse visual resource change with low viewer response.
- **Moderate:** Moderate adverse change to the visual resource with moderate viewer response. The achievement of visual impact mitigation within five years with conventional practice is possible.
- **Moderately High:** Moderate adverse visual resource change with high viewer response or high adverse visual resource change with moderate viewer response.
- **High:** A high level of negative change to the visual resource or a high level of viewer response to visual change. Architectural design and landscape treatments cannot mitigate the visual impacts of the proposed project. The viewer response level is high. An alternative project design may be necessary to avoid highly adverse impacts.
- **Very High:** There is a very high level of adverse change to the visual resource or a very high level of viewer response to visual change. Architectural design and landscape treatments cannot mitigate the visual impacts of the proposed project. The viewer response level is high. An alternative project design may be necessary to avoid highly adverse impacts.

These are the three criteria used in the objective rating system that have equal influence on the visual quality assessment of a landscape.

$$\text{Visual Quality} = \frac{\text{Vividness} + \text{Intactness} + \text{Unity}}{3}$$

The evaluations of vividness, intactness, and unity are independent. Each criterion has an assigned rating from 1 to 7. The following outlines the rating scale:

1. Very Low
2. Low
3. Moderately Low
4. Moderate
5. Moderately High
6. High
7. Very High

2.6.3 Environmental Consequences

2.6.3.1 Temporary Impacts

Build Alternative 4 with Design Option A (Preferred Alternative)

Impacts from construction-related vehicle access and construction materials staging would occur within Department ROW and in disturbed and developed areas along the length of the project limits. The proposed 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 for motorists traveling along the I-5 within the project limits as well as residents located in the project vicinity at elevations higher than I-5. However, these impacts are short-term and would cease upon project completion. Adhering to Department Standard Specifications for Construction would minimize indirect and direct visual impacts during project construction.

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, street lights, parking lot and exterior security lighting, interior building lighting, and illuminated signs. Nighttime construction activities in select portions of the project area may occur as part of the proposed project. Light and glare from nighttime construction lighting would potentially cause a nuisance to nearby residents and motorists traveling along the I-5 within the proposed project limits, and these activities may be required to take place over the course of several months.

As discussed in Minimization Measure VIS-4, construction lighting types, plans, and placement would be reviewed at the discretion of the District Landscape Architect. Implementation of VIS-4 would ensure that appropriate lighting controls would be applied to reduce temporary light and glare impacts caused by construction activities.

2.6.3.2 Permanent Impacts

Build Alternative 4 with Design Option A (Preferred Alternative)

Permanent indirect impacts that would occur as a result of the implementation of the proposed project include additional sources of light and glare associated with vehicle headlights. No additional traffic signals or street lighting would be installed. Light and glare impacts from new soundwalls and retaining walls would be introduced along I-5. However, these impacts would be reduced with the implementation of VIS-2. Residents in the vicinity of the proposed project would generally experience similar sources of light and glare, as compared to existing conditions. Commercial uses along I-5 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 conditions and no adverse indirect or direct impacts would occur.

Key View 1

The existing visual quality and character of this view is considered moderate due to views of commercial uses, a landscape median, mature trees, street lights, and minimal commercial and freeway signage. Design Option A proposes a modified tight diamond interchange. As shown in Figure 2.6-8, the existing retaining wall in Key View 1 along the northern side of Avenida Pico would be relocated (up to 30 ft in height), and Avenida Pico would be widened and restriped. The visual changes to quality and character would be low due to the similar appearance of hardscape features and minimal removal of landscaping. Unity in this view remains moderate, as the majority of the trees and landscaping would remain visible. Travelers and commercial users in Key View 1 would be moderately aware of the proposed project features, and their sensitivity to visual change would be moderate. Sensitive viewers would have a moderate viewer response to project changes, as the proposed condition increases the appearance of hardscape features. However, with the implementation of Measures VIS-1, which requires compatible landscaping, and VIS-2, which recommends aesthetic treatments for the retaining wall, impacts to Key View 1 under Alternative 4 with Design Option A would not be adverse.

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Option A (Preferred Option)

FIGURE 2.6-8

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 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.

I-5 HOV Lane Extension Project
Key View 1

Proposed Condition - Design Option A (Preferred Option)

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Key View 2

The existing visual quality and character of the site is high. Although hardscape features are visible in Key View 2, the dominant mature trees and vegetation elevate vividness, intactness, and unity to moderately high. As shown in Figure 2.6-9, Alternative [4](#) visible project features include one additional I-5 HOV travel lane and the replacement of the existing soundwall with a combination retaining wall/soundwall of up to 17 ft in height. Also visible in the southern portion of this key view is a relocated combination retaining wall/soundwall of up to 18 ft in height. The expanded freeway would have 12 ft wide travel lanes with a 10 ft shoulder. The retaining wall/soundwall would extend along the western shoulder of I-5 throughout the northern portion of this key view.

Project improvements under [Build](#) Alternative [4](#) would minimally affect existing views of the proposed project from Key View 2, and sensitive viewers would have a moderate viewer response to project changes. Implementation of the proposed project would minimally increase hardscape features within the area by adding the additional HOV lane and proposed retaining wall/soundwall. Hardscape features have increased; however, views of existing mature trees and vegetation remain.

Visual changes to the quality and character at this Key View would be low after implementation of the proposed project, as the proposed conditions appear similar to the existing condition. With the implementation of Minimization Measures VIS-1, which requires compatible landscaping, and VIS-2, which recommends aesthetic treatments for the retaining wall, impacts to Key View 2 under Build Alternative 4 would not be considered adverse.

Key View 3

The existing visual quality and character of this Key View is moderately high. Existing views include the SB I-5 travel lanes, a soundwall (10 ft in height) to the west of I-5, a concrete center divide rail, and one electronic freeway sign. Mature trees and vegetation varying in form, color, and texture are visible to the east of I-5. As shown in Figure 2.6-10, under [Build](#) Alternative [4](#), visible project features include a new soundwall and a retaining wall/soundwall that have replaced an existing soundwall of up to 17 feet in height, as well as an additional southbound HOV travel lane. The soundwall and retaining wall/soundwall are visible throughout Key View 3 along the western shoulder of I-5. Visual changes to the quality and character in Key View 3 would be very low, as features appear similar to the existing condition.

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Alternative 4 (Preferred Alternative)

FIGURE 2.6-9

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 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.

I-5 HOV Lane Extension Project

Key View 2

Proposed Condition - Alternative 4 (Preferred Alternative)

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Alternative 4 (Preferred Alternative)

FIGURE 2.6-10

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 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.

I-5 HOV Lane Extension Project

Key View 3

Proposed Condition - Alternative 4 (Preferred Alternative)

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Viewer sensitivity of residents to the east of the proposed project would be high under **Build** Alternative 4. Residents to the east of I-5 would have long duration views of the freeway, the new soundwall, and the retaining wall/soundwall, as they are at a higher elevation than I-5. However, the additional travel lanes would be minimally noticeable due to distance away from the proposed project. Project features would not be visible to residents to the west due to distance, intervening topography, and mature trees and vegetation.

Viewer sensitivity for freeway travelers would be moderate in Key View 3 under **Build** Alternative 4. Freeway travelers would have long duration views of the proposed southbound HOV lane. However, these views would appear similar to existing conditions. Travelers would also have short duration views of the new soundwall and retaining wall/soundwall. I-5 travelers would be moderately aware of project changes.

Project improvements under **Build** Alternative 4 would minimally alter the existing views of the proposed project from Key View 3. With the implementation of Minimization Measure VIS-2, impacts from the appearance of hardscape features and potential light reflectivity and glare resulting from the new soundwall and retaining wall/soundwall would not be considered adverse.

Key View 4

The existing visual quality and character of this Key View is considered moderately high due to views of mature trees and vegetation, and grasses that vary in color. As shown in Figure 2.6-11, visible project features in Key View 4 under **Build** Alternative 4, include the realigned freeway travel lanes, with **continuous access** between the HOV and general-purpose lanes. Vividness remains high in Key View 4, as the contrasting natural features remain visible. The expanded travel lanes of I-5 are visible to the west of the on-ramp. The proposed soundwall located to the east of the on-ramp is not visible due to intervening topography and landscaping. The residents located behind this soundwall do not currently have ocean views due to intervening trees, and the new soundwall would screen views to the freeway. Therefore, introduction of a soundwall could be a beneficial impact. Background views continue to consist of distant mature trees. Overall unity remains moderately high due to the presence of mature trees and landscaping.

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Alternative 4 (Preferred Alternative)

Alternative 4

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 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.

FIGURE 2.6-11

I-5 HOV Lane Extension Project
Key View 4
Proposed Condition - Alternative 4 (Preferred Alternative)
12-ORA-5 PM 3.0/8.7
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Under **Build** Alternative 4, viewer sensitivity of residents to the east would be moderately high due to long duration views of the expanded freeway and a new soundwall located east of the on-ramp, because of their higher elevation. However, the additional travel lanes would be minimally noticeable due to the distance, and the new soundwall would appear similar to adjacent existing walls and would block partial freeway views. Residents to the east would be moderately aware of project changes.

Views to project features from residents to the west in this key view would not be afforded due to distance, intervening topography, and mature trees and vegetation. These residents would be minimally aware of project changes. Viewer sensitivity for freeway travelers would be moderate in this key view. Freeway travelers would have long duration views of the proposed southbound HOV lane due to the length of the project limits, although these views would appear similar to existing conditions. Travelers would not have views to the new soundwall to the east of the on-ramp due to intervening topography and trees.

As implementation of **Build** Alternative 4 would not introduce considerable changes or change the number of visible hardscape features, no avoidance or minimization measures are necessary, as there would be no impact.

Key View 5

The existing visual quality and character of this Key View is considered high as mature trees and residential structures are visible, and limited views to I-5 travel lanes and the Via California OC are afforded. This Key View also contains limited background views to the Pacific Ocean. As shown in Figure 2.6-12, visible changes from proposed project features under **Build** Alternative 4 consist of the new northbound and southbound HOV lanes, the realigned Camino Las Ramblas on-ramp, and the widened I-5 OC over Camino Las Ramblas. **Build** Alternative 4 also proposes a wider freeway radius in the northern portion of LU2, which would require the existing combination retaining wall/soundwall to be relocated; however, these changes and other project features are not perceptible in Key View 5.

Under **Build** Alternative 4, the duration of views from residential locations toward the project area would be long. However, residents would be minimally aware of project changes due to distance and intervening topography and structures. Overall residential viewer response to change would be low. Motorists along I-5 would have moderate sensitivity to project changes within Key View 5 under **Build** Alternative 4.

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Alternative 4 (Preferred Alternative)

FIGURE 2.6-12

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 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.

I-5 HOV Lane Extension Project

Key View 5

Proposed Condition - Alternative 4 (Preferred Alternative)

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The view duration of the project area would be long, and travelers would be moderately aware of the proposed project changes. Overall viewer response to project changes from travelers would be moderate. Visual changes to the quality and character of this key view would be low after implementation of the proposed project, as the proposed conditions appear similar to the existing condition. Therefore, sensitive viewers would be minimally aware of project changes, and the resulting impacts would not require avoidance or minimization measures, as there would be no impact.

Key View 6

As shown in Figure 2.6-13, the project does not propose any changes in Key View 6 under Build Alternative 4. Views would remain the same as existing conditions. No visual changes to quality and character and viewer response would occur in Key View 6 under Build Alternative 4.

2.6.4 Avoidance, Minimization, and/or Mitigation Measures

The implementation of all design requirement measures requires concurrence and approval of the Department District Landscape Architect. Implementation of the following measures reduces and neutralizes the visual impact on the landscape units and their associated key views.

- VIS-1** To maintain the context of the project area (color, form, and texture), the project shall install landscaping that is compatible with the existing landscape along the portion of Interstate 5 (I-5) in the project vicinity and surrounding area. Landscaping shall include specimen-sized trees, and/or shrub/groundcover mass planting, as well as landscape treatment along walls to soften the hardscape features and glare and radiant heat 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. The planting plan shall be reviewed and approved by the California Department of Transportation (Department) Biologist to avoid the use of invasive plant species.

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Alternative 4 (Preferred Alternative)

FIGURE 2.6-13

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 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.

I-5 HOV Lane Extension Project

Key View 6

Proposed Condition - Alternative 4 (Preferred Alternative)

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Replacement planting implementation shall be under a separate contract within a 2-year period following the completion of construction in accordance with Department policies. Trees in the interchange, in conflict with the roadway improvement design, shall be transplanted in the project area in a location in conformance with the planting policy requirements of the Department. The District Landscape Architect shall make the determination and approval of the tree transplantation.

In areas where sound walls are visible from adjacent residential land use, vines and landscape shall be utilized to screen views to the wall. All vine and landscape proposed shall conform with the planting policy requirements of the Department.

VIS-2 To minimize visual quality loss and to minimize visual disruption from the elements of highway construction, architectural treatment shall 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 shall be approved by the District Landscape Architect.

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

VIS-4 Construction lighting types, plans, and placement shall be reviewed at the discretion of the District Landscape Architect in order to minimize light and glare impacts on surrounding sensitive uses.

VIS-5 Visually compatible groundcover in any basins or bioswales shall be implemented if they must occur within ornamental landscape areas and as long as the performance of the basins or bioswales are not compromised.

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