VISUAL IMPACT ASSESSMENT
INTERSTATE 710 CORRIDOR PROJECT
OCEAN BOULEVARD TO
STATE ROUTE 60
07-LA-710-PM 4.9/24.9 EA 249900
WBS ID: 165.10.20-010

Prepared for

Metro

Los Angeles County
Metropolitan Transportation Authority

December 2011

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VISUAL IMPACT ASSESSMENT

FOR

INTERSTATE 710 CORRIDOR PROJECT

OCEAN BOULEVARD TO STATE ROUTE 60

COUNTY OF LOS ANGELES, CALIFORNIA

07-LA-710- PM 4.9/24.9 EA 249900

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This visual impact assessment has been prepared under the direction of the above listed licensed landscape architects. The landscape architects attest to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based.

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Department of Transportation, Attn: Jennifer Taira, Landscape Architecture, 100 S. Main Street, Los Angeles, California, 90012; (213) 897-0975; jennifer.taira@dot.ca.gov, or use the California Relay Service TTY number, 711 or 1-800-735-2922.

December 2011

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LIST OF ACRONYMS AND ABBREVIATIONS

6A/B/C	(Alternatives) 6A, 6B, and 6C
ADA	Americans With Disabilities Act
AV	Avenue
BLVD/Blvd	Boulevard
BNSF	Burlington Northern Santa Fe Railway
CA	California
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CNG	Compressed Natural Gas
CSWG	Community Design and Local Economy Subject Working Group
CT	Court
DR	Drive
DWP	Department of Water and Power
E	East
EB	Eastbound
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EV	Electric Vehicle
FC	Freight Corridor
FHWA	Federal Highway Administration
FoLAR	Friends of the Los Angeles River
GCCOG	Gateway Cities Council of Governments
GP	General Purpose
GPS	Global Positioning System
H2 ICE	Hydrogen Fuel Cell Vehicle
HWY	Highway
I-5	Interstate 5
I-105	Interstate 105
I-405	Interstate 405
I-710	Interstate 710
ITS	Intelligent Transportation Systems
JPA	Joint Powers Authority
JR	Junior
LADWP	Los Angeles Department of Water and Power
LN	Lane
LOS	Level of Service
LPS	Locally Preferred Strategy
km^2	square kilometers
MCS	Major Corridor Study
Metro	Los Angeles County Metropolitan Transportation Authority
mi^2	square miles
N	North
NB	Northbound
ND	Negative Declaration
NE	Northeast
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
NOx	Nitrogen Oxides
NPS	National Park Service
NW	Northwest
pces/ln/hr	Passenger Car Equivalents Per Lane Per Hour
PL	Place

POLA	Port of Los Angeles
POLB	Port of Long Beach
RD	Road
RNG	Renewable Natural Gas
ROW	Right of Way
RTIP	Regional Transportation Improvement Program
S	South
SAFETEA-LU	Safe, Accountable, Flexible and Efficient Transportation Equality Act: A Legacy for Users
SB	Southbound
SCAG	Southern California Association of Governments
SCE	Southern California Edison
SE	Southeast
SR-60	State Route 60
SR-91	State Route 91
ST	Street
SW	Southwest
TCE	Temporary Construction Easement
TDM	Transportation Demand Management
TSM	Transportation Systems Management
UP	Union Pacific
U.S.	United States
USGS	United States Geological Survey
W	West
WB	Westbound
WK	Walk
WY	Way
ZEV	Zero Emissions Vehicle

I. EXECUTIVE SUMMARY

VISUAL IMPACT ASSESSMENT DESCRIPTION SUMMARY

The purpose of this study is to assess the visual impacts of the Interstate 710 Corridor Project (I-710 Corridor Project) and to propose measures to avoid, minimize, and/or mitigate any adverse visual impacts associated with the construction of the I-710 Corridor Project on the surrounding visual environment. It includes evaluations on the reduction or avoidance of possible adverse visual impacts and proposes possible levels of mitigation measures to alleviate those adverse impacts.

The process for assessing possible visual impacts used in this visual impact assessment generally follows the guidelines outlined in the Federal Highway Administration's (FHWA) March 1981 publication *Visual Impact Assessment for Highway Projects.* In this methodology, 3 main criteria were used: visual vividness, intactness and unity. All visual impact assessment work has been performed under the direction of a California-licensed landscape architect.

PROJECT DESCRIPTION SUMMARY

Interstate 710 (I-710, also known as the Long Beach Freeway) is a major north-south freeway connecting the City of Long Beach to central Los Angeles. Within the I-710 Corridor Project study area, the freeway serves as the principal transportation connection for goods movement between the Ports of Los Angeles (POLA)/Long Beach (POLB), located at the southern terminus of the freeway, and the BNSF/UP railroad rail yards in the cities of Commerce and Vernon. Alternative 5A for the I-710 Corridor Project consists of ten general purpose (GP) lanes. The mainline would follow the existing I-710 with a few exceptions. Alternative 6A consists of all the components of Alternative 5A, but also includes a separated four-lane freight movement corridor to be used by conventional trucks. This freight corridor (FC) would be elevated in many portions of the project study area. In some areas, the elevated FC would be directly over the mainline while in other areas, it would be elevated adjacent to the mainline. Alternative 6B, while identical to Alternative 6A, would require the use of zero-emission vehicles for freight movement. Alternative 6C is also identical to Alternative 6B, but would make the FC into a toll road for trucks using the FC.

PROJECT VISUAL IMPACT SUMMARY

The summary of I-710 Corridor Project impacts is a synthesis of the visual impacts of both Alternative 5A and Alternatives 6A/B/C. There will be short-term as well as long-term negative impacts with the construction of all build alternatives that would contribute adverse visual impacts to the existing views for viewers and/or user groups within the I-710 Corridor. Alternatives 6A/B/C will create the most significant impacts due to its elevated freight corridor which can be seen throughout the I-710 Corridor. Portions of the I-710 Corridor Project with the elevated FC in sections of the cities of Long Beach and South Gate have the most substantial negative visual impacts due to the proximity of the elevated FC to residential housing units. These moderately high impacts will require a substantial amount of mitigation measures that will need more than five years to take effect, based on the visual impact levels defined in the publication "Visual Impact Assessment for Highway Projects", Federal Highway Administration (FHWA), March 1981. Other areas exhibit lesser levels of negative impacts ranging from moderate to neutral/low with very few high negative impact areas.

Of the resulting need for visual mitigation measures, the following is a summary by Alternatives:

	Alternative 5A					Alternatives 6A/B/C				
	No	Low	Moderate	Moderately High	High	No	Low	Moderate	Moderately High	High
Totals:	25	2	2	0	2	18	5	4	2	2

In addition, viewers within the study area will experience increased night lighting due to the widening of the mainline. Glare from all lanes is expected to be minimized by the construction of soundwalls, and in some cases screen walls, and by distance of the viewer from safety lighting and lights from vehicles. During hours where the sun is low to the horizon and during the winter solar declination seasons, the elevated FC would create some shade and/or shadows along the neighborhoods west of the I-710 Corridor Project from Pacific Coast Highway to SR-91. In the most substantial case, the first row of mobile homes in the Thunderbird Villa Mobile Home Park, immediately west and adjacent to Frontage Road in the City of South Gate, can expect deep morning shadows between September and March.

VISUAL AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Caltrans and the FHWA mandate that a qualitative/aesthetic approach should be taken to avoid, minimize, and/or mitigate for visual quality loss in the I-710 Corridor Project study area. These measures constitute techniques that would most readily generate public acceptance of the visual components of the I-710 Corridor Project. All visual mitigation would be designed and implemented with the concurrence of the Caltrans District Landscape Architect. These measures are expected to be incorporated into the final design of the I-710 Corridor Project.

Soundwalls and Screen Walls with Aesthetic Treatment

Soundwalls are made of concrete block and are built to attenuate noise levels in neighborhoods adjacent to a freeway. Screen walls are not intended for noise abatement and would be provided to protect the viewer from experiencing full views of the I-710 Corridor Project. Placement of the soundwalls and screen walls has not yet been determined as the noise studies still need to be finalized. Aesthetic enhancements for soundwalls and screen walls would be incorporated into the final design of the I-710 Corridor Project. Using graphic patterns or vines and shrubs on or in front of a soundwall that highlight the individual city's character and landscaping would minimize the disturbing tone of the wall.

Emphasis of Landscapes and Hardscapes in Design Concepts

In addition to soundwall and screen wall treatments, the landscape design would reflect the desires of the I-710 Corridor communities that participated in the development of preferred landscape improvements. The landscape/urban design concepts of the I-710 Corridor Project plan may include landscaping on excess parcels and hardscapes along the I-710 mainline and FC.

The proposed landscape design may include, but would not be limited to, the following design concepts:

- **Conventional Treatments with Los Angeles River Theme:**
  Landscaping could be used on easements and also a portion of excess parcel and interchanges. Concrete walls mitigated with vines and artwork that reflect the history, spirit and legacy of the Los Angeles River. Planting trees and shrubs of native species along the I-710 Corridor Project could enhance the planting character while minimizing the use of water. Plants should be resilient against smog and other urban pollutants. Diverse evergreen and deciduous plants including trees, shrubs and herbaceous

perennials could add visual character and distinguish seasonal change. Motorists on I-710 and viewers from surrounding areas could see the difference in visual characteristics as seasons change.

- **Eco/High Technology Concept:**
  The eco-friendly design concepts include “green” bridges and soundwalls for artwork with sustainable and/or recycled materials to portray goods movement and migration, a combination of vines and solar panels on top of concrete block walls, and water retention/green roof on selected locations of the corridor. All of these features could emphasize distinctiveness of each community.

- **Contemporary Art Concept Capitalizing on the Industrial Nature of the Area:**
  This concept emphasizes the use of dramatic lighting and walls in a modern style. The elements could include transparent and concrete walls, vines on walls, recreation parks spanning over the freeway and artistic vertical elements representing the industrial character found in some landscape units.

II. PURPOSE OF STUDY

The purpose of this study is to assess the visual impacts of the proposed Interstate 710 Corridor Project (I-710 Corridor Project) and to propose measures to mitigate any adverse visual impacts associated with the construction of the I-710 Corridor Project on the surrounding visual environment. It includes evaluations on the reduction or avoidance of possible adverse environmental impacts and proposes possible mitigation measures to alleviate those adverse impacts. The study area takes into consideration the project area and adjacent areas where viewers can observe the visual changes resulting from the project.

Information from this VIA is being included in the visual/aesthetics section of the Environment Impact Report/Environmental Impact Statement (EIR/EIS). Positive and/or negative impacts have been synthesized visually. This report was prepared under the guidance of a California registered landscape architect experienced in preparation of Visual Impact Assessments and is written from a landscape architectural point of view. The term “landscape” refers to appearance of a parcel of land, which includes visual factors such as the shapes, textures, and colors that may be distinguishable from another location. Landscape impacts occur when there is change in the character or qualities of the landscape that contributes to a permanent result of a development. Change can have a direct visual impact upon specific landscape elements and on how people perceive the view of the landscape through either intrusion or obstruction of the landscape elements.

The purpose of this VIA is to describe the appearance of the visible components of the proposed project, to define the visual characteristics of the project study area, identify and evaluate existing visual settings, resources, and viewer groups, to evaluate potential project visibility within the project study area, to identify and evaluate all key views selected for this VIA, and to identify and discuss any measures that would be implemented to minimize any potential visual impact based on the overall impact level.

III. PROJECT DESCRIPTION

Introduction

The Interstate 710 (I-710) Corridor Project study area includes the portion of I-710 (6 or 8 lanes) from Ocean Blvd. in Long Beach to State Route 60 (SR-60), a distance of approximately 18 miles (see Figure 3.1). At the freeway-to-freeway interchanges, the study area extends one mile east and west of I-710 for the Interstate 405 (I-405), State Route 91 (SR-91), Interstate 105 (I-105), and Interstate 5 (I-5) interchanges. The I-710 Corridor Project traverses portions of the cities of Bell, Bell Gardens, Carson, Commerce, Compton, Cudahy, Downey, Huntington Park, Lakewood, Long Beach, Los Angeles, Lynwood, Maywood, Paramount, Signal Hill, South Gate, and Vernon, and portions of unincorporated Los Angeles County, all within Los Angeles County, California.

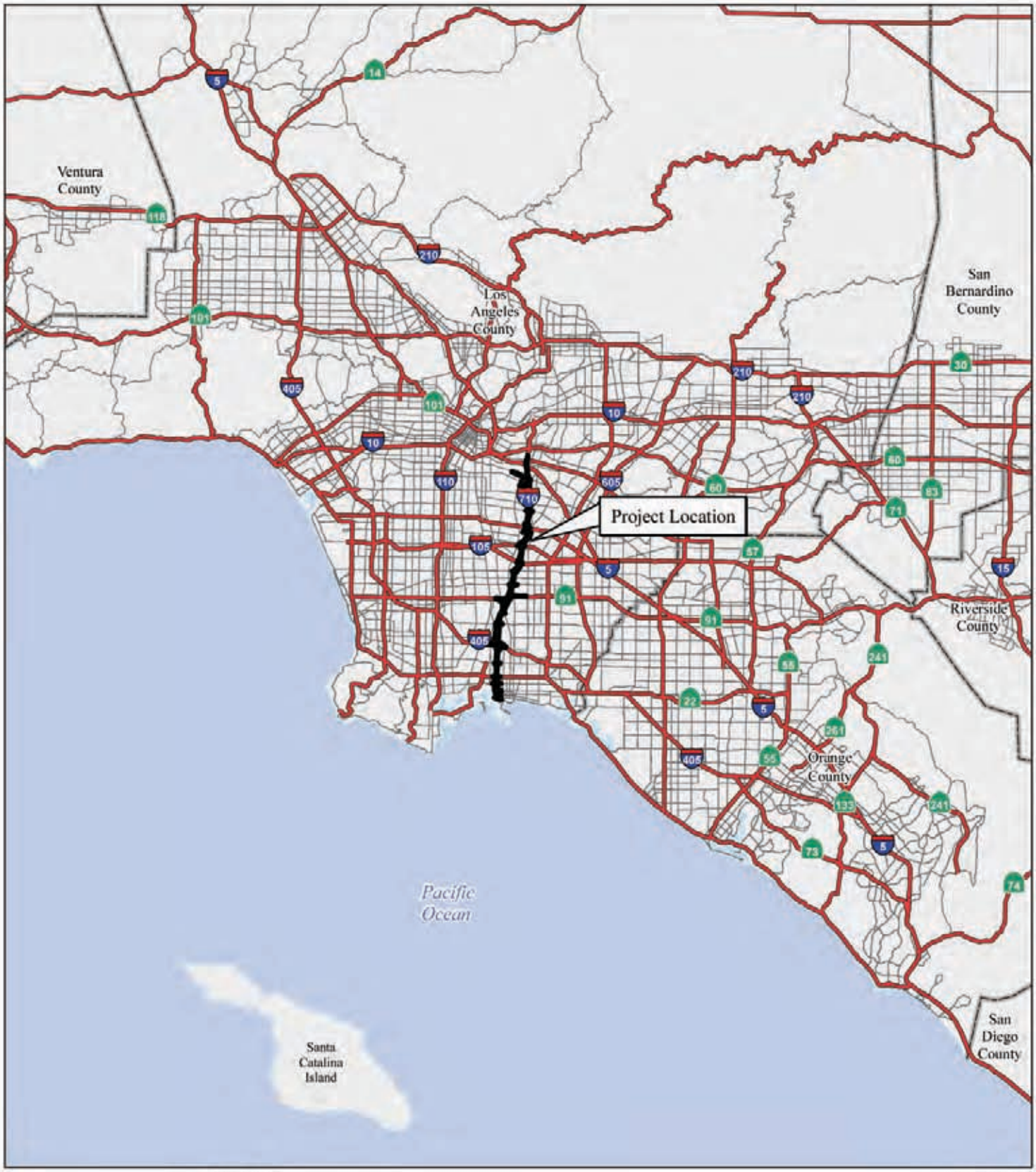
I-710 (also known as the Long Beach Freeway) is a major north/south interstate freeway connecting the City of Long Beach to central Los Angeles. Within the I-710 Corridor Project study area, the freeway serves as the principal transportation connection for goods movement between the Port of Los Angeles (POLA)/Port of Long Beach (POLB) shipping terminals and the Burlington Northern Santa Fe (BNSF)/Union Pacific (UP) Railroad rail yards in the cities of Commerce and Vernon and destinations along I-710 as well as destinations north and east of I-710.

The I-710 Major Corridor Study (MCS), undertaken to address the mobility and safety needs of the I-710 Corridor and to explore possible solutions for transportation improvements, was completed in March 2005 and identified a community-based Locally Preferred Strategy (LPS) consisting of 10 general purpose (GP) lanes next to four separated freight movement lanes. The Los Angeles County Metropolitan Transportation Authority (Metro), the California Department of Transportation (Caltrans), the Gateway Cities Council of Governments (GCCOG), the Southern California Association of Governments (SCAG), POLA, POLB, and the Interstate 5 Joint Powers Authority (I-5 JPA) are collectively known as the I-710 Funding Partners. Through a cooperative agreement, these agencies are funding the preparation of preliminary engineering and environmental documentation for the I-710 Corridor Project to evaluate improvements identified in the Major Corridor Study along the I-710 Corridor from Ocean Blvd. in the City of Long Beach to SR-60. The I-710 Funding Partners have continued this engineering and environmental study effort within the same broad, continuous community participation framework that was used for the MCS.

The environmental impacts of the I-710 Corridor Project will be assessed and disclosed in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Caltrans is the Lead Agency for CEQA compliance and the lead agency for NEPA compliance pursuant to Section 6005 of the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (23 United States Code [USC] 327).

The need for the I-710 Corridor Project is as follows:

- I-710 experiences high heavy-duty truck volumes, resulting in high concentrations of diesel particulate emissions within the I-710 Corridor.
- I-710 experiences accident rates, especially truck-related, that are well above the statewide average for freeways of this type.
- At many locations along I-710, the on- and off-ramps do not meet current design standards and weaving sections within and between interchanges are of insufficient length.



LEGEND

Project Location

FIGURE 3.1

N

0 5 10

Miles

SOURCE: TBM (2008)

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Regional Location

- High volumes of both trucks and cars have led to severe traffic congestion throughout most of the day (6:00 a.m. to 7:00 p.m.) on I-710 as well as on the connecting freeways. This is projected to worsen over the next 25 years.
- Increases in population, employment, and goods movement between now and 2035 will lead to more traffic demand on I-710 and on the streets and roadways within the I-710 Corridor as a whole.

Project Purpose

The purpose of the I-710 Corridor Project is to achieve the following within the I-710 Corridor (2035 time frame):

- Improve air quality and public health,
- Improve traffic safety,
- Provide modern design for the I-710 mainline,
- Address projected traffic volumes, and
- Address projected growth in population, employment, and activities related to goods movement (based on SCAG population projections and projected container volume increases at the two ports).

Alternatives Description

This section describes the alternatives based on the Major Corridor Study that were developed by a multidisciplinary technical team to achieve the I-710 Corridor Project purpose and subsequently were reviewed and concurred upon by the various committees involved in the I-710 Corridor Project community participation framework. Alternatives 2, 3, and 4 were considered but withdrawn from further environmental study as stand-alone alternatives but elements of these alternatives have been included in Build Alternatives 5A, 6A, 6B, and 6C. The alternatives are Alternative 1 (No Build Alternative), Alternative 5A (I-710 Widening up to 10 General Purpose [GP] Lanes), Alternative 6A (10 GP Lanes plus a Four-Lane Freight Corridor), Alternative 6B (10 GP Lanes plus a Zero-Emissions Four-Lane Freight Corridor), and Alternative 6C (10 GP Lanes plus a Four-Lane Freight Corridor Tolled).

Alternative 1 – No Build Alternative

The No Build Alternative does not include any improvements within the I-710 Corridor other than those projects that are already planned and committed to be constructed by or before 2035. The projects included in this alternative are based on SCAG's 2008 Regional Transportation Improvement Program (RTIP) project list, including freeway, arterial, and transit improvements within the SCAG region. This alternative also assumes that goods movement to and from the ports make maximum utilization of existing railroad capacity within the I-710 Corridor. Alternative 1 is the baseline against which the Build Alternatives proposed for the I-710 Corridor Project will be assessed. The existing I-710 mainline generally consists of eight GP lanes north of I-405 and six GP lanes south of I-405.

Alternative 5A – Freeway Widening up to 10 GP Lanes

Alternative 5A proposes to widen the I-710 mainline to up to ten GP lanes (northbound [NB] I-710 and southbound [SB] I-710). This alternative will:

- Provide an updated design at the I-405 and State Route 91 (SR-91) interchanges (no improvements to the I-710/Interstate 5 [I-5] interchange are proposed under Alternative 5A)
- Reconfigure all local arterial interchanges within the project limits that may include realignment of on- and off-ramps, widening of on- and off-ramps, and reconfiguration of interchange geometry
- Eliminate local ramp connections over I-710 (9th to 6th St. and 7th to 10th St.) in the City of Long Beach
- Eliminate a local interchange at Wardlow Ave. in the City of Long Beach
- Add a local street connection under I-710 to Thunderbird Villas at Miller Way in the City of South Gate
- Add a local connection (bridge) over I-710 at Southern Ave. in the City of South Gate
- Add a local arterial interchange at NB and SB I-710/Slauson Ave. in the City of Maywood
- Shift the I-710 centerline at several locations to reduce right-of-way requirements.

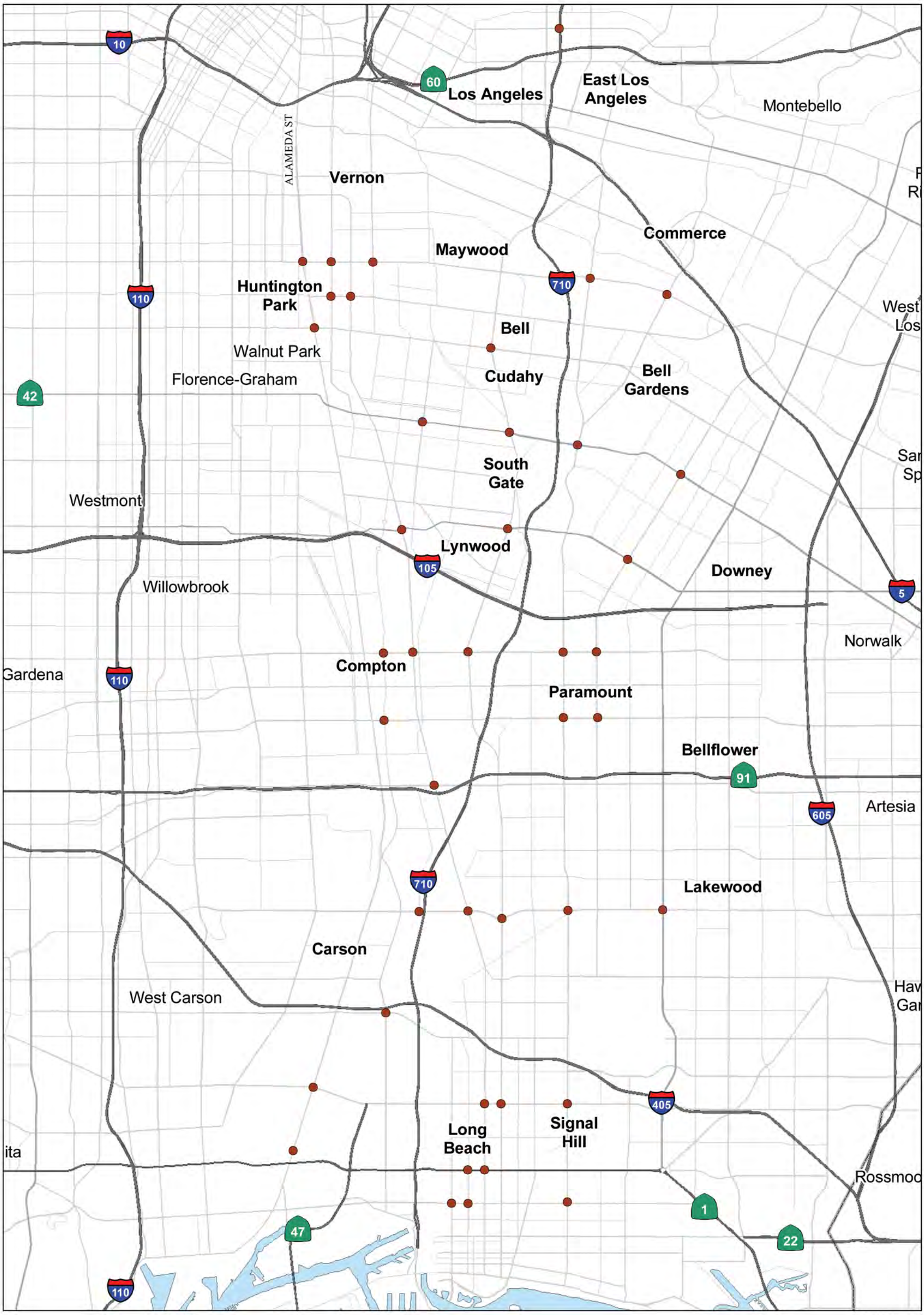
Additionally, various structures such as freeway connectors, ramps, and local arterial overcrossings, structures over the Los Angeles River and structures over the two rail yards throughout the project limits will be replaced, widened, or added as part of Alternative 5A.

In addition to improvements to the I-710 mainline and the interchanges, Alternative 5A also includes Transportation Systems/Transportation Demand Management (TSM/TDM), Transit, and Intelligent Transportation Systems (ITS) improvements. TSM improvements include provision of or future provision of ramp metering at all locations and the addition of improved arterial signage for access to I-710. Parking restrictions during peak periods (7:00 a.m.–9:00 a.m.; 4:00 p.m.–7:00 p.m.) will be implemented on four arterial roadways: Atlantic Blvd. between Pacific Coast Hwy. and SR-60; Cherry Ave./Garfield Ave. between Pacific Coast Hwy. and SR-60; Eastern Ave. between Cherry Ave. and Atlantic Blvd.; and Long Beach Blvd. between San Antonio Dr. and Firestone Blvd. Transit improvements that will be provided as part of the I-710 Corridor Project include increased service on all Metro Rapid routes and local bus routes in the study area. ITS improvements include updated fiber-optic communications to interconnect traffic signals along major arterial streets to provide for continuous, real-time adjustment of signal timing to improve traffic flow as well as other technology improvements.

Alternative 5A also includes improvements to 35 local arterial intersections within the I-710 Corridor Project study area (see Figure 3.2). These improvements generally consist of lane restriping or minimal widening to provide additional intersection turn lanes that will reduce traffic delay and improve intersection operations for those intersections with projected Level of Service (LOS) F.

In addition to the transportation system improvements described above, Alternative 5A also includes:

- Aesthetic Enhancements: Landscaping and irrigation systems would be provided within the corridor where feasible. Urban design and aesthetic treatment concepts for community enhancement will be integrated into the design of the I-710 Corridor Project. These concepts will highlight unique community identities within a unified overall corridor theme; strengthen physical connections and access/mobility within and between communities; and implement new technologies and best practices to ensure maximum respect for the environment and natural resources. They will continue to evolve and be refined through future phases of project development.



LEGEND

- Arterial Intersection Improvements

FIGURE 3.2

N

0 3600 7200

Feet

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 3.2-STUDY AREA

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Project Location

- Drainage/Water Quality Features: Alternative 5A includes modifications to the Los Angeles River levee; new, extended, replacement, and additional bents and pier walls in the Los Angeles River; additional and extended bents and pier walls in the Compton Channel; modifications to existing pump stations or provision of additional pump stations; and detention basins and bioswales that will provide for treatment of surface water runoff prior to discharge into the storm drain system.

Alternative 6A – 10 GP Lanes Plus a Four-Lane Freight Corridor

Alternative 6A includes all the components of Alternatives 1 and 5A described above. (The alignment of the GP lanes in Alternative 6A will be slightly different than Alternative 5A in a few locations.) In addition, this alternative includes a separated four-lane FC from Ocean Blvd. northerly to its terminus near the UP and BNSF rail yards in the City of Commerce. The FC would be built to Caltrans highway design standards and would be restricted to the exclusive use of heavy-duty trucks (5+ axles). In Alternative 6A these trucks are assumed to be "conventional" trucks (conventional trucks are defined to be newer [post-2007] diesel/fossil-fueled trucks [new or retrofitted engines required per new regulations and standards]).

The FC would be both at-grade and on elevated structure with two lanes in each direction. There are exclusive, truck only ingress and egress ramps to and/or from the FC at the following locations:

- Harbor Scenic Dr. (NB ingress only)
- Ocean Blvd. (NB ingress only)
- Pico Ave. (NB ingress and SB egress only)
- Anaheim St. (NB ingress and SB egress only)
- SB I-710 GP lanes just south of Pacific Coast Hwy (SB egress only)
- NB I-710 GP lanes north of I-405 at 208th St. (NB ingress only)
- SB I-710 GP lanes north of I-405 at 208th St. (SB egress only)
- Eastbound (EB) SR-91 (NB egress only)
- Westbound (WB) SR-91 (SB ingress only)
- Patata St (NB egress and SB ingress only)
- SB I-710 GP lanes at Bandini Blvd. (SB ingress only)
- NB I-710 GP lanes at Bandini Blvd. (NB egress only)
- Washington Blvd. – (NB egress and SB ingress only) (Design Options 1 and 2)
- Washington Blvd. (NB egress and SB ingress via Indiana Ave) (Design Option 3)
- Sheila St – (NB egress only) (Design Option 3)

In addition to the FC feature, Alternative 6A includes:

- Partial modification to the I-5 interchange, notably the replacement of the NB I-710 to NB I-5 connector (right-side ramp replacement of left-side ramp) and a realigned SB I-5 to SB I-710 connector and 5 SB GP lanes from SR-60 to Washington Blvd.
- 3 NB GP lanes from I-5 to SR-60
- Retention of and modification to the I-710 SB on- and off-ramps at Eastern Ave. to slightly realign them.
- A local connection over I-710 at Patata St. in the cities of South Gate and Bell Gardens.

As with Alternative 5A, Alternative 6A will include additional aesthetic enhancements, and drainage/water quality features as follows:

- Aesthetic Enhancements: In addition to the aesthetic enhancements described above for Alternative 5A, specific aesthetic treatments will be developed for the FC, including use of screen walls and masonry treatments on the FC structures (including soundwalls).
- Drainage/water quality features: Alternative 6A includes features to capture and treat the additional surface water runoff from the FC, as well as some modifications to the Los Angeles River levees in order to accommodate electrical transmission line relocations.

Alternative 6B– 10 GP Lanes Plus a Zero-Emissions Four-Lane Freight Corridor

Alternative 6B includes all the components of Alternative 6A as described above, but would restrict the use of the FC to zero-emission trucks rather than conventional trucks. This proposed zero emission truck technology is assumed to consist of trucks powered by electric motors in lieu of internal combustion engines and producing zero tailpipe emissions while traveling on the FC. The specific type of electric motor is not defined, but feasible options include linear induction motors, linear synchronous motors or battery technology. The power systems for these electric propulsion trucks could include, but is not limited to, hybrid with dual-mode operation (ZEV Mode), Range Extender EV (Fuel Cell or Turbine with ZEV mode), Full EV (with fast charging or infrastructure power), road-connected power (e.g., overhead catenary electric power distribution system), alternative fuel hybrids, zero NOx dedicated fuel engines (CNG, RNG, H2 ICE), and range extender EV (turbine). For purposes of the I-710 environmental studies, the zero-emission electric trucks are assumed to receive electric power while traveling along the FC via an overhead catenary electric power distribution system (road-connected power).

Alternative 6B also includes the assumption that all trucks using the FC will have an automated control system that will steer, brake, and accelerate the trucks under computer control while traveling on the FC. This will safely allow for trucks to travel in “platoons” (e.g., groups of 6–8 trucks) and increase the capacity of the FC from a nominal 2,350 passenger car equivalents per lane per hour (pces/ln/hr) (as defined in Alternative 6A) to 3,000 pces/ln/hr in Alternative 6B.

The design of the FC will also allow for possible future conversion, or be initially constructed, as feasible (which may require additional environmental analysis and approval), of a fixed-track guideway family of alternative freight transport technologies (e.g., Maglev). However, this fixed-track family of technologies has been screened out of this analysis for now, as they have been determined to be inferior to electric trucks in terms of cost and ability to readily serve the multitude of freight origins and destinations served by trucks using the I-710 corridor.

Alternative 6C – 10 GP Lanes Plus a Four-Lane Freight Corridor with Tolls

Alternative 6C includes all the components of Alternative 6B as described above, but would toll trucks using the FC. Although tolling trucks in the FC could be done under either Alternative 6A or 6B; for analytical purposes, tolling has only been evaluated for Alternative 6B as this alternative provides for higher FC capacity than Alternative 6A due to the automated guidance feature of Alternative 6B.

Tolls would be collected using electronic transponders which would require overhead sign bridges and transponder readers like the SR-91 toll lanes currently operating in Orange County, where no cash toll lanes are provided. The toll pricing structure would provide for collection of higher tolls during peak travel periods.

Design Options

For Alternatives 6A, 6B, and 6C (6A/B/C), three design options for the portion of I-710 between the I-710/Slauson Ave interchange to just south of the I-710/I-5 interchange are under consideration. These configurations will be fully analyzed so that they can be considered in the future selection of a Preferred Alternative for the project. These options are as follows:

Design Option 1

Design Option 1 applies to Alternatives 6A/B/C and provides access to Washington Blvd using three ramp intersections at Washington Blvd.

Design Option 2

Design Option 2 applies to Alternatives 6A/B/C and provides access to Washington Blvd. using two ramp intersections at Washington Blvd.

Design Option 3

Design Option 3 applies only to Alternative 6B[1] and removes access to Washington Blvd. at its current location. The ramps at the I-710/Washington Blvd. interchange would be removed to accommodate the proposed FC ramps in and out of the rail yards. The SB off-ramp and NB-on-ramp access would be accommodated by Alternative 6B in the vicinity of the existing interchange by the proposed new SB off-ramp and NB on-ramp at Oak St. and Indiana St. These two ramps are proposed as mixed-flow ramps (freight connector ramps that would also allow automobile traffic). However, the SB on-ramp and NB off-ramp traffic that previously used the Washington Blvd. interchange would be required to access the Atlantic Blvd./Bandini Blvd. interchange located south of the existing Washington Blvd. interchange to ultimately reach I-710.

[1] Design Option 3 only applies to Alternative 6B because it was not included in the travel demand modeling for either Alternative 6A or 6C.

IV. VISUAL ASSESSMENT METHODOLOGY

The process used in this visual impact assessment generally follows the guidelines outlined in the Federal Highway Administration's (FHWA) March 1981 publication *Visual Impact Assessment for Highway Projects.* As required by the California State Department of Transportation, all visual impact assessment work has been performed under the direction of a California-licensed landscape architect.

Six steps required to assess visual impacts were performed. They are as follows:

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

Identify Key Views for Visual Impact Assessment

Definition of Key Views

Key views form the foundation for the Visual Impact Analysis. All visual impacts are relative to these Key Views. Understanding that the I-710 Corridor Project study area is approximately 18 miles in length and goes through a densely urban area composed of many land uses, these Key Views represent the typical visual impacts of the study area. It would not be feasible to analyze all views from which the study area can be seen. For example, a Key View may be selected based on the land use, population density and view duration of the study area from that point.

Preliminary Selection of Key Views

The preliminary selection of Key Views was conducted by an in-house analysis of mapping data. This data illustrated the various land uses and topography within the study area. All points deemed to have a possible representative view of the study area was selected.

Field Studies

The next step was to conduct a series of field studies for each preliminary Key View location. A team of Tatsumi and Partners analysts, as well as a photographer, conducted these studies over a period of time from August 2009 to December 2009. Each of these field studies involved visiting the preliminary Key Views, confirming the land uses of the area and determining the representative nature of the views to the study area. Many preliminary locations were deleted from further consideration due to large obstructions of the views such as hills and other topographic features. Those deemed reasonable were included in the preliminary group of 42 Key View locations.

A photographic inventory was taken from each Key View location. All photographs were taken using a digital camera with a 35-millimeter focal length. This specific focal length best simulates the view perspective of the human eye. These inventories were used for in-house analysis as well as the basis for the simulations of the I-710 Corridor Project.

Review and Selection of Key Views

42 preliminary Key Views were assessed by Tatsumi and Partners staff and ranked relative to appropriateness and anticipated viewer response. Twenty of the top ranked Key Views were recommended for further study. These 20 Key Views as well as the remaining 22 Key Views were reviewed by the I-710 environmental team. Based on this review, minor changes were made in the selection of the final 20 Key Views.

On November 5, 2009, the final 20 Key Views were presented to the Community Design and Local Economy Subject Working Group (CSWG) for their review and comment. Based on their knowledge of the area and the potential viewers, the CSWG suggested further minor changes to the final 20 Key Views. These final 20 Key Views are represented within this Visual Impact Assessment.

In both reviews, there was no concern expressed for having Key Views that represented each of the Landscape Units within the project study area. Attention was focused on selecting Key Views that represented higher numbers of viewers over selecting Key Views that represented a Landscape Unit with low viewership numbers and low viewer sensitivity.

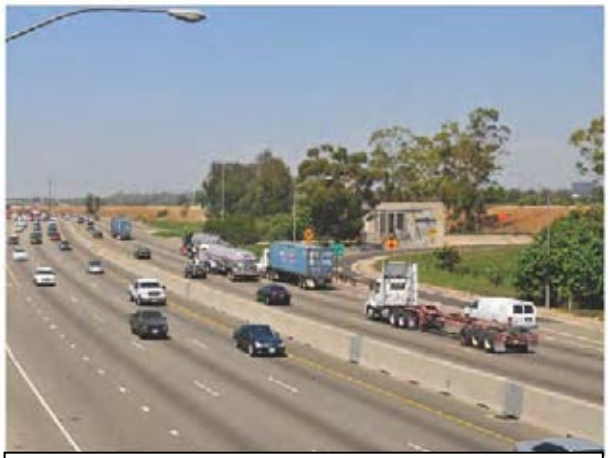
In June of 2011, a total of eleven additional Key Views were added to the Visual Impact Assessment per the requests of the I-710 Corridor Project cities.

Preparation of the Visual Simulations

Visual simulations form the foundation for the assessment of visual impacts between the existing conditions and the proposed construction. Considering the importance of this function, a brief description of the process of developing these simulations is warranted.

Existing Photograph

First, a photograph of the existing view was taken from each approved Key View location. Digital photography was used utilitizing a Nikon D70 digital camera with a lens with the focal length of 30mm. This focal length is calculated from the dimensions of the Nikon's imaging sensor and mimics the perspective of the human eye. The precise location and direction of the view were recorded utilizing latitude, longitude and heading. Each Key View photograph serves as the baseline from which all other images of the view are compared.



Example: Existing Condition

Digital Modeling

Concurrent to the field photography, digital models of the scene depicted in the Key View are created from engineering data of the proposed project. This modeling is accomplished by obtaining the horizontal and vertical data of the project construction, coupled with distance and topographic information obtained by available topographic mapping and other aerial mapping sources such as Google Earth. The engineering data is then verified in concert with the project engineers. The specific view point for each digital model uses the architectural standard eye height of 5'-7" for reference. The resulting image is a "wireframe" view of the completed project construction from the standpoint of the Key View location.

Example: Aerial Analysis

Example: 3-D Digital Modeling

Simulation Rendering ("Proposed Base Condition")

Upon the completion of the digital modeling, the "wireframe" is "painted" to simulate solid objects. Using materials, textures and colors obtained from the project engineers, the model is given solid surfaces which simulate the completed construction. Shadows and other visual elements are introduced to create a realistic simulation. For the purposes of the visual impact assessment, these simulations of the proposed base conditions depict views of the project as it would be after the installation of standard Caltrans landscaping. There is no attempt to enhance the resulting visual impacts in any way.

Example: "Visual Simulation: Proposed Base Condition"

Enhanced Aesthetic Treatments

Aesthetic Design and Enhancement was identified as a community priority of the I-710 Major Corridor Study (MCS). To respond to this priority, a goal of the I-710 Corridor Project is to develop urban design and aesthetic treatment concepts for community enhancement for the I-710 Corridor. Over the last two years, the urban design team and the outreach team have worked with the Community Design and Local Economy Subject Working Group (CSWG) analyzing the design aesthetics of the existing freeway, providing examples of local, national, and international best practices, developing aesthetic toolbox concepts, and coordinating with Caltrans and other stakeholders. These concepts will be used as a toolbox to assist the team in determining elements that should be addressed. The design elements provide a wide range of innovative ideas that could be applied within the overall footprint of the proposed I-710 Corridor improvements, which includes not only the freeway right-of-way, but also adjacent communities and cities, and the Los Angeles River. The urban design community enhancements are conceptual in nature, but are being provided to inform the public of the proposed design enhancements being considered for the I-710 Corridor Project. All renderings provided in this report for aesthetic enhancements are the artist's point of view. Further details will be defined in later phases of the project.

The second visual simulation (developed for most of the Key Views), titled "Enhanced Condition", illustrates possible aesthetic treatments to the initial construction to improve the visual impacts. These treatments may include textures to structures or landscaping to screen the new construction. These enhanced views show only possible treatments and are open to discussion and final selection at a future time.

Example: "Enhanced Condition" Visual Simulation

V. ENVIRONMENTAL LAWS AND POLICIES

The following laws and regulations pertain to the protection of visual resources. The guidelines under these laws were used in this analysis to determine potential effects of the I-710 Corridor Project on the visual aesthetic environment.

A. Federal Visual Policies

Section 4(f) of the Department of Transportation Act, 1966, including the amendment of 1968, recodification of 1983, and the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). This act is intended to protect and preserve the natural beauty of public parks and recreational land uses, wildlife and waterfowl refuges, and historic sites. The act encourages planning to maintain, protect, and minimize harm to any of these natural and recreational areas.

Historic Preservation Act of 1969. This act and the subsequent (up through 2004) regulations implementing it define "criteria of adverse effect" in Section 800.5 as including the "introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features."

National Environmental Policy Act of 1969 (NEPA). As amended in 1982, NEPA requires that proposed Federal projects consider potential effects that the project will likely have on the environment. Visual resources are an integral part of the environment and, therefore, the topic is included under NEPA.

NEPA is concerned with the protection of the existing visual appearance of:

- Scenic highways,
- Section 4(f) lands,
- Lands managed by the United States Forest Service,
- Lands managed by the Bureau of Land Management,
- Significant cultural and historic resources, and
- Lands associated with the National Wild and Scenic Rivers system.

B. State, Regional and Local Visual Policies

California Environmental Quality Act, 1970. The California Environmental Quality Act (CEQA) was adopted in 1970 and incorporated in the Public Resources Code §§21000-21177. Its basic purposes are to: inform about the potential significant environmental effects of proposed activities; identify ways that environmental damage can be avoided or significantly reduced; require changes in projects through the use of alternatives or mitigation measures when feasible; and publicly disclose the reasons why a project was approved if significant environmental effects are involved. CEQA applies to projects undertaken, funded or requiring an issuance of a permit by a public agency. The analysis of a project required by CEQA usually takes the form of an Environmental Impact Report (EIR), Environmental Impact Statement (EIS), Negative Declaration (ND), or Environmental Assessment (EA).

California Department of Transportation (Caltrans) – State Scenic Highway. State Scenic Highway is any freeway, highway, road, or other public right-of-way designated by Caltrans that traverses an area of exceptional scenic quality. Suitability for designation as a State Scenic Highway is based on the visual concepts of vividness, intactness, and unity. None of the roads in the I-710 Corridor Project viewshed are designated as a State Scenic Highway.

County of Los Angeles – General Plan 2008 Draft. While the County of Los Angeles has three State designated Scenic Highways and eight County designated Scenic Highways, none are within the I-710 Corridor Project's viewshed. Los Angeles County recognizes the need to preserve and protect its visual and scenic resources and has adopted the following policies:

- Identify and protect scenic resources,
- Identify and protect the County's scenic highways, corridors, and routes,
- Manage development in hillside areas to protect their natural and scenic character, and
- Reduce light trespass and light pollution.

City of Long Beach – General Plan, adopted October 2002. The southern portion of the I-710 Corridor Project runs through the City of Long Beach. The Open Space and Recreation Element of the City's General Plan states that the City's policy is to "protect and improve the community's natural resources, amenities and scenic values." There are no state or locally designated scenic roads within the I-710 Corridor Project's viewshed; however, the City is working with the California Coastal Conservancy and others to rehabilitate wetland acreage in areas along the Los Angeles River which parallels the I-710 Corridor.

City of Carson – General Plan, updated October 2004. While there are no state or locally designated scenic vistas or roads within the I-710 Corridor Project's viewshed, the City has adopted the beautification of views along its roads as one of its objectives. Carson has identified policies in order to improve the visual quality of the city from its roads. Some of the policies include the following:

- Develop incentive programs for the improved appearance of residential, commercial and industrial areas,
- Continue to promote and expand programs such as the Carson Beautiful Program,
- Develop design standards to address permanent and effective screening of areas in transition, and heavy industrial uses,
- Adopt a "Carson Green" program (encourage public/private partnerships in the community landscaping,
- Review landscape plans for new development to ensure that landscaping relates well to the structures and the land uses it serves, and the surrounding area.
- Improve City appearance by requiring landscaping to screen, buffer and unify new and existing development,
- Continue requiring landscaping treatment along any part of a building site which is visible from city streets,

- Work with Caltrans to provide and maintain an attractive freeway environment, including access ramps, and

- Require new commercial or industrial development adjacent to and visible from freeway and their ramps to incorporate full architectural and landscape treatment of the building on the freeway side.

City of Compton – Policies For a Thriving Compton, adopted June 2007. There are no state or locally designated scenic vistas or roads within the I-710 Corridor Project's viewshed. The City has adopted the recommendation to consider incorporating "Context Sensitive Design" throughout Compton. "Context Sensitive Design" implies paying attention to the streetscape realm – making the areas friendly to the users and at a scale with the users where the streetscape of an area matches and enhances the character and personality of the community through the application of various visual elements (such as lighting, public art, and landscaping). The design process is aimed at enriching the natural environment.

City of Paramount – General Plan, adopted 2007. There are no state or locally designated scenic vistas or roads within the I-710 Corridor Project's viewshed. The City's General Plan states their vision with respect to resources as one that "contributes to the City's desirability as a place to live and work." The policies adopted to achieve this vision include:

- The continuation of past efforts in the City's beautification by promoting the "greening" of Paramount through abundant landscaping,

- The maintenance and preservation of important natural resources,

- Pursuing a landscape program to improve the open space areas located next to the Los Angeles River, and

- Requiring special design and landscaping treatments along major roadways and other scenic corridors.

City of Lynwood – General Plan, adopted 2003. There are no state or locally designated scenic vistas or roads within the I-710 Corridor Project's viewshed. The City has identified a goal to "provide a unique visual character for Lynwood to distinguish it from its neighboring cities." To achieve this goal, the City has adopted policies requiring that "new construction and renovations of existing structures achieve a high level of architectural and site design quality" and street median landscape standards be developed to enhance the streetscape.

City of South Gate – General Plan, adopted 1986 and General Plan 2035, May 2009 Public Review Draft. There are no state or locally designated scenic vistas or roads within the I-710 Corridor Project's viewshed. The City is fully urbanized and does not contain significant amounts of natural resources to protect. The City of South Gate has not yet adopted the recently released "South Gate General Plan 2035," so the General Plan adopted in 1986 is still in effect. Within the 1986 General Plan, the City states its goals for resource management as:

- "Conserve and protect the remaining natural resources in South Gate," and

- "Encourage the preservation of the existing plant resources of the City."

Among the policies adopted to achieve these goals are:

- Utilize landscaping and tree plantings to enhance the appearance of the roadways, and

- Require that property owners maintain the landscaping on their property.

However, in the "General Plan 2035," the City states its desires to capitalize on the Los Angeles River as a community asset and to increase the amount of landscaping throughout the city. Proposed policies include:

- Requiring project developers to plant new street trees and improve the streetscape as a condition of approval,
- Capitalize on the Los Angeles River as a public amenity,
- Support that new development along the Los Angeles River should encourage access to and utilization of the Los Angeles River, and
- Support that new development, redevelopment, landscaping, and infrastructure along the Los Angeles River should utilize xeriscaping and native plants and enhance riparian habitat, wherever feasible.

City of Cudahy – General Plan, adopted May 1992**.** There are no state or locally designated scenic vistas or roads within the I-710 Corridor Project's viewshed. The City of Cudahy cooperates with Los Angeles County departments on the implementation of programs and states in its General Plan that it will "continue to evaluate the environmental impacts of new development and provide mitigation measures prior to development approval as required by the California Environmental Quality Act (CEQA)." The General Plan also states that the City will "keep abreast of all (Federal, State and County) regulations and standards and shall cooperate with other agencies in the enforcement of these laws."

City of Bell **–** There are no state or locally designated scenic vistas or roads within the I-710 Corridor Project's viewshed. The City's General Plan states a policy to encourage "techniques that will improve the visual continuity and efficiency" along arterial roadways. Their "Open Space/Conservation/Recreation Plan call for maximum protection of the natural environment and available resources. To achieve a "sense of natural openness," the City of Bell has implemented street tree and landscaping programs and has published the City's landscaping guidelines in their "Commercial Design Guidelines Manual."

City of Bell Gardens **–** There are no state or locally designated scenic vistas or roads within the I-710 Corridor Project's viewshed. The City's General Plan 2010 includes policies that have been developed to comply with California state requirements. Policies regarding visual aesthetics within the City of Bell Garden state that the City shall:

- …to the extent possible, protect remaining ecological resources and enhance those resources through programs, and
- …promote the use of drought-tolerant and/or xeriscape landscaping.

The City of Bell also promotes their visual policies through the parkway landscaping program run through their Public Works Department.

City of Commerce – 2020 General Plan, adopted January 2008. The City of Commerce is largely industrial and has no state or locally designated scenic vistas or roads within the I-710 Corridor Project's viewshed. The City's General Plan states that Commerce "will continue to ensure that its local resources, both man-made and natural, are not adversely impacted by development."

City of Maywood – General Plan, adopted February 1990. There are no state or locally designated scenic vistas or roads within the I-710 Corridor Project's viewshed. Maywood is

completely urbanized (mostly zoned for multiple-family detached units) with scattered vacant lots. A goal of the city is to provide a sensitive integration of natural and urban environments. The City's adopted policy to accomplish this goal is to "require landscaping and vegetative cover for its own value and for its value as wildlife habitat."

City of Vernon – General Plan, amended February 2009. There are no state or locally designated scenic vistas or roads within the I-710 Corridor Project's viewshed. The city is primarily developed for industrial uses, major open spaces are limited to utility easements and the Los Angeles River and smaller spaces at private industrial properties have limited area for on-site landscaping. The City has adopted policies to help achieve their goal of preserving established open spaces and looking for opportunities to create new open spaces. These policies include:

- Continue to maintain landscaped areas at City facilities,
- Cooperate with the regional efforts to upgrade the scenic appearance and space value of the Los Angeles River (in accordance to the Los Angeles River Master Plan adopted by the Los Angeles County Board of Supervisors in 1996),
- Encourage private property owners to establish and maintain private landscaped areas, and
- Continue the City's street tree planting and maintenance programs.

East Los Angeles – County of Los Angeles' General Plan 2008 Draft. East Los Angeles is an unincorporated area of Los Angeles County and therefore does not have its own General Plan. This area is governed by the laws and policies stated above in the discussion of the County of Los Angeles.

VI. VISUAL ENVIRONMENT OF THE PROJECT

A. Project Setting

The regional landscape establishes the general visual environment of the project. The specific visual environment upon which this assessment will focus is determined by defining landscape units and the project viewshed. The I-710 Corridor Project is approximately 18-miles long and is located in southern California, from Ocean Boulevard in Long Beach to the SR-60 in Los Angeles. It connects the Port of Long Beach and the Port of Los Angeles with the junctions of the I-405, SR-91, I-105, I-5 and SR-60.

A large portion of the I-710 Corridor Project (approximately 8 miles of the 18-mile long project) is located within the City of Long Beach, which includes a large amount of industrial assets. POLA and POLB are active environments where many large container ships arrive and depart and thousands of shipping containers are loaded and unloaded at terminals with gigantic cranes. From the terminals, trucks and trains transport the shipping containers to points across California and beyond.

Both POLA and POLB are highly industrialized and are characterized by Port-related industrial uses. The Ports of Long Beach and Los Angeles combine to be the sixth largest container ports in the world with 11.8 million 20-foot-equivalent units. The ports and the industrial developments that comprise most of the I-710 project study area are characterized by the large open areas of the port container handling and bulk handling infrastructure.

The remaining approximately 10 miles of the I_710 Corridor Project transverses Los Angeles County through the cities of Carson, Lakewood, Compton, Paramount, Lynwood, Downey, South Gate, Cudahy, Bell, Bell Gardens, Huntington Park, Maywood, Commerce, Los Angeles, and Vernon with predominately industrial and residential uses located adjacent to the project. Other uses located along the I-710 Corridor Project include recreational, educational and commercial.

B. Regional Setting

I-710 is commonly referred to as the “Long Beach Freeway”. It is a major north-south freeway in southern California that extends from Long Beach to Alhambra. Most of the I-710 mainline is located parallel to the course of the Los Angeles River and is usually within a few hundred feet from the riverbed.

The southern terminus of I-710 is located at Ocean Boulevard in Long Beach. The I-710 mainline continues north through or adjacent to the cities of Long Beach, Carson, Lakewood, Compton, Paramount, Lynwood, Downey, South Gate, Cudahy, Bell, Bell Gardens, Huntington Park, Maywood, Commerce, Los Angeles, and Vernon. The northern terminus is located at Valley Boulevard in Alhambra, just north of I-10. At the southern terminus, the I-710 mainline divides into three ramps that connect to local arterials. One of the ramps connects to Ocean Boulevard. Another ramp connects Downtown Long Beach and becomes Shoreline Drive. The remaining ramp connects I-710 with the Queen Mary area and POLB.

High cargo volumes from POLA and POLB add major truck traffic to the I-710 Corridor. The I-710 is under continuous maintenance because of general wear-and-tear including the higher than average amount of heavy truck traffic serving the ports, rail yards, warehouses, and industrial uses. Also, general commuter/passenger traffic combines with the truck traffic to produce heavy congestion at peak travel times. Vehicular emissions from the I-710 present potential air quality issues to the surrounding communities.

Los Angeles River

The Los Angeles River begins in the San Fernando Valley, flows through a concrete channel through Los Angeles County, and continues through Long Beach where it empties into the Pacific Ocean. The Los Angeles River drains the vast watershed of the San Fernando Valley and surrounding mountains, finally emptying into the Pacific Ocean in Long Beach. In years of heavy rainfall, rains have caused the Los Angeles River to flood adjacent farms and homes. Consequently, the U.S. Army Corps of Engineers channelized the Los Angeles River and built the Sepulveda Basin to capture and hold floodwaters for later gradual release down the Los Angeles River. The Sepulveda Basin includes diverse uses such as athletic fields, agriculture, golf courses, a fishing lake, parklands, a sewage treatment facility, and a wildlife reserve.

Throughout the years, various environmental groups have supported the removal of the concrete lining within the Los Angeles River and proposed natural vegetation and wildlife restoration. The Los Angeles River currently suffers serious pollution from agricultural and urban use runoff. Other organizations such as Friends of the Los Angeles River (FoLAR) working with local groups are to revitalize the landscapes with new parklands that combine natural beauty and artistic creativity.

According to the final report of the Technical Memorandum-Multimodal Review prepared by URS (March 4, 2009), the Los Angeles River Trail has one of the longest bicycle trails within the region – paralleling the Los Angeles River for approximately 49 miles with a total of 25 access points along the route. The Los Angeles River trail travels through various aspects of Los Angeles County (including residential, commercial, industrial and natural landscape areas) and is a Class I bicycle path. It is isolated from roadways by either distance or barriers and cross traffic by automobiles is minimized.

While the bike trail currently consists of two separate sections that do not connect to each other, except by use of city streets, the hope is to eventually have the trail completely connected sometime in the future. The trail originates from north of SR-134 at Riverside Drive near Griffith Park and follows the bank of Los Angeles River south, ending at Egret Park near the I-5/SR-110. The bike trail picks up again within the I-710 study area at Atlantic Boulevard and continues the southbound journey to the mouth of the Los Angeles River in Long Beach.

The Los Angeles River trail runs mostly parallel to the Los Angeles River within a few hundred feet of the riverbed and travels through various aspects of Los Angeles County including its residential, commercial, industrial and natural landscapes. It connects with the Rio Hondo River Trail, the Compton Creek Bike Trail and the Long Beach Bike Trail.

C. Landscape Units

A landscape unit is a portion of the regional landscape and can be thought of as an outdoor room that exhibits a distinct visual character. A landscape unit will often correspond to a place or district that is commonly known among local viewers.

Residential

The residential landscape unit applies solely to residential households. This unit includes views of the I-710 Corridor Project from all residences, from Ocean Boulevard in Long Beach to SR-60. It is represented by Key Views 2, 5, 6, 9, 10, 11, 12, 13, 14, 16, 19, 22, 24, 27, 28, 29, 30, and 31. This unit includes areas zoned for residential land use, rather than industrial or commercial areas and includes single-family homes, multiple family housing (such as apartments, townhouses, and condominiums), and mobile homes. Housing styles and residential landscaping may vary substantially between residential areas.

Residents along the I-710 corridor do not see much of the existing freeway due to shielding soundwalls that minimize noise from the freeway.

Ports of Los Angeles and Long Beach

The landscape unit in the Port of Los Angeles includes 7,500 acres of land, with 25 terminals and 270 berths. POLA facilities include 75 cranes, 25 cargo terminals and 5 intermodal rail yards. POLA adjoins POLB's facilities at the city border of Long Beach and Los Angeles and continues westward into Wilmington and San Pedro. While landscaping is minimal, future projects will include components for sustainable beautification.

This landscape unit in the Port of Long Beach starts from south of Ocean Boulevard and extends to Anaheim Street in Long Beach. The Port of Long Beach is located at the southern terminus of the I-710 Corridor. There are 12 piers: Pier A to H, J, and R to T. Although landscaping is minimal at this site, according to the Port of Long Beach's website, landscape projects will emphasize the use of sustainable native and drought-tolerant species.

Recreation

The recreation landscape unit applies to parks, bicycle trails, golf courses and other recreational/leisure-time facilities. Trees such as Eucalyptus and Liquidambar are prevalent in this unit. This landscape unit is represented by Key Views 1, 3, 8, 15, 17, 20, 21, and 25. Key Views 1, 8, 15, 21, and 25 are parks for recreational and leisure enjoyment. Key Views 3 and 20 are located on a bicycle trail for exclusive use by cyclists and pedestrians; motorized traffic is generally prohibited. Key View 11 is located on a golf course.

Education

The education landscape unit is characterized by Key Views 8 and 23, which are located adjacent to elementary schools. Numerous trees, shrubs, and groundcovers are planted within the facilities.

There are 13 educational institutions (including Bell Gardens Elementary School in Key View 23 and Los Cerritos Elementary School in Key View 8) that have proximity to I-710. Although most of them are located within 0.1 miles of the freeway, soundwalls and surrounding buildings contribute to obstruction of the views to the freeway. These schools include:

- Birney Elementary School, Long Beach
- Los Cerritos Elementary School, Long Beach
- Perry Lindsey Middle School, Long Beach
- Colin Powell Elementary School, Long Beach
- David Starr Jordan High School, Long Beach
- Clinton Elementary School, Compton
- Marco Antonio Firebaugh High School, Lynwood
- Santino Bros Wrestling Academy, Norwalk
- Park Avenue Elementary School, Cudahy

- Codela Preschool, Bell Gardens
- Bell Gardens Elementary School, Bell Gardens
- Ford Boulevard Elementary School, Los Angeles
- Humphreys Avenue Elementary School, Los Angeles

Industrial

The industrial landscape unit includes manufacturing and storage facilities. Various trees, shrubs, and groundcovers are planted within the area and differ by owners. The majority of the I-710 Corridor Project study area falls within the industrial landscape unit.

Commercial

The commercial landscape unit applies to business parks with small office areas and larger back warehouses. Various trees, shrubs, and groundcovers are planted within the area and differ by owners. This landscape unit is represented by Key Views 7 and 26.

Cemetery

There are several cemeteries located within the proximity of the I-710 Corridor. “Home of the Peace Memorial Park”, and “Calvary Cemetery and Mausoleum” are just two of the larger cemeteries located within proximity to I-710. A large amount of trees, shrubs, and grasses are typically planted within these facilities.

Freeway

I-710 within the study area represents the Freeway Landscape Unit because the motorists travelling on it have a view of the freeway from the travel lanes. It is a major north-south freeway in California that extends from Long Beach to Alhambra. Most of the highway’s route is located parallel to the course of the Los Angeles River and is within several hundred feet from the riverbed. The highway is located just south of the Verdugo Mountains, west of the Los Angeles Basin, east of the San Gabriel Mountains and southeast of the Santa Ana Mountains. Guardrails, advertisement signs, light poles, and utility poles, towers and overhead power lines can be seen within the I-710 right-of-way. The freeway landscape unit also contains various types of landscapes. This landscape unit is represented by Key Views 4 and 18.

Utilities

Power transmission towers, power poles, and overhead power lines are located throughout the I-710 Corridor Project study area. “Utility corridors” with the large towers and multiple overhead power lines parallel and cross the I-710 in many areas. Specific locations where these utility corridors parallel the existing I-710, in relation to the selected Key Views included in this report are Key Views 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 21, 23, 24, and 25. Specific locations where utility lines cross over the existing I-710, in relation to the selected Key Views included in this report are Key Views 2, 3, and 29.

D. Project Viewshed

A viewshed is a subset of a landscape unit and is comprised of all the surface areas visible from an observer’s viewpoint. The limits of a viewshed are defined as the visual limits of the views from the I-710 Corridor Project. The viewshed also includes the locations of viewers likely to be affected by visual changes brought about by the I-710 Corridor Project features.

I-710 is located south of the Verdugo Mountains, west of the Los Angeles Basin, east of the San Gabriel Mountains, and southeast of the Santa Ana Mountains.

The Verdugo Mountains are a small mountain range located south of San Gabriel Mountains in Los Angeles County. The Verdugo Mountains are within the cities of Glendale, Burbank and Los Angeles. These mountains are a 4,000-acre block of open space, owned by the City of Glendale, City of Burbank, City of Los Angeles, California Department of Parks and Recreation, and Santa Monica Mountains Conservancy.

The Los Angeles Basin is a sediment-filled plain located within the city of Los Angeles and continues on through the suburbs of Los Angeles and Orange Counties. The basin is up to six miles deep. According to the U.S. Geological Survey (USGS) website, there are more than ten million people in the Greater Los Angeles area who depend on ground water from the Los Angeles Basin.

The San Gabriel Mountains are located in both Los Angeles and San Bernardino Counties. The mountain range forms a barrier between the Greater Los Angeles area and the Mojave Desert. The foothills are grassy and the mountain terrain is forested with oak, pine, and cedar at higher elevations. There are substantial snowfalls on the mountains in winter with average yearly depths of ten feet or more.

The Santa Ana Mountains are located along the coast of southern California between Orange and Riverside Counties. These mountains are located less than 20 miles from the Pacific Ocean.

VII. EXISTING VISUAL RESOURCES AND VIEWER RESPONSE

A. FHWA Method of Visual Resource Analysis

Identify Visual Character – Visual character is descriptive and non-evaluative, which means it is based on defined attributes that are neither good nor bad in themselves. 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 would be evaluated.

Assess Visual Quality – Visual quality is evaluated by identifying the vividness, intactness and unity present in the viewshed. The FHWA states that this method should correlate with the publics' opinions 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 aesthetically displeasing. This approach to evaluating visual quality would also help identify specific methods for mitigating each adverse impact that may occur as a result of a project. The three criteria for evaluating visual quality would be defined as follows:

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

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

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

B. Existing Visual Resources

1. Existing Visual Character

Residential Landscape Unit: The Residential Landscape Unit consists of multiple communities in cities that are composed of long-term housing units. The form, line, color, techniques, and materials depend on each household's preferences of design features. While most residents do not see much of the existing I-710, local residents play an important role in this visual impact assessment. This user group is expected to have the most substantial amount of viewer sensitivity regarding the I-710 Corridor Project.

Ports of Los Angeles and Long Beach Landscape Unit: This landscape unit consists of shipping terminals, large warehouses, equipment and machinery for the shipping trade. These elements are physically and visually large; however, this landscape unit also represents a much lower viewer density.

Recreation Landscape Unit: Depending on the type of recreational properties, visual features such as topography, water elements, vegetation, land area, geology, and structures characterize this landscape unit. It hosts leisure and relaxation activities.

Education Landscape Unit: This landscape unit is represented by institutional facilities exhibited by the use of unified materials and amenities such as walkways, lighting,

buildings, and site furniture. Open spaces and landscaping are incorporated in this landscape unit.

Industrial Unit: Industrial buildings are relatively larger in size and low-lying where there are few viewers or views that would be affected. Industrial and warehouse workers are considered the group that would be least impacted by visual changes to the I-710 Corridor project. The lack of windows in these buildings obstructs the viewers from seeing the landscape unit outside of their buildings.

Commercial Landscape Unit: Commercial buildings are generally located in business parks with small office areas and larger back warehouses and the buildings are typically taller where viewers would view the I-710 Corridor Project through windows and doors.

Cemetery Landscape Unit: This landscape unit typically features open-space views which are an important component of the unit's visual character. The lack of large buildings allows unobstructed views for a greater distance. Headstones and other monuments vary in style and materials. Viewers in this unit typically make periodic visits of varying lengths.

Freeway Landscape Unit: According to *The I-710 Major Corridor Study Report to the Public* (December 2003, Community Participation Team Gateway Cities Council of Governments), The I-710 Corridor has a high volume of automobiles and trucks which defines its visual character. Landscaping, structures, signage, and vehicles compose this unit.

Utilities Landscape Unit: This landscape unit contains the power towers, poles and overhead lines that are commonly seen features within the I-710 Corridor Project. However, as SCE's and LADWP's policies and security features prevent general public access into the power towers' area and few utilities workers need to do maintenance in the area, there is very little and very infrequent viewership from this landscape unit.

2. Levels of Visual Impact

The visual impacts of a project are determined by assessing the existing visual resources, the visual resource change due to the project, and predicting viewer response to that change. Visual resource change is the sum of the change in visual character and change in visual quality. Determining visual resource change involves assessing the visual compatibility of the I-710 Corridor Project with existing resources.

The viewer response to a project is the sum of viewer exposure and viewer sensitivity to the project. The resulting level of visual impact is determined by combining the severity of resource change with the degree to which people are likely to be affected by the change.

The levels of visual impact are described as follows:

- **Low:** Minor adverse change to the existing visual resource with low viewer response to change in the visual environment. May or may not require mitigation.
- **Moderate:** Moderate adverse change to the existing visual resource with moderate viewer response. Impact can be mitigated within five years using conventional practices.
- **Moderately High:** Moderate adverse change to the existing resource with a higher viewer response. Extraordinary mitigation practices may be

required. Required landscape treatment will generally take longer than five years to mitigate.

- **High:** Excessive adverse change to the existing resource with a higher level of viewer response to visual changes such that architectural design and landscape treatment cannot mitigate the impacts. Viewer response level is high. An alternative project design may be required to avoid highly adverse impacts.

3. Existing Visual Quality

For the purposes of this assessment, the distance limit to assess visual quality has been set at 0.2 miles within the I-710 Project study area. This distance is within a reasonable range for viewers to experience visibility to the freeway.

Residential Landscape Unit: The overall visual quality is moderately low. Rolling hills and blue skies (weather permitting) dominate the background. Many houses that are within proximity to I-710 GP lanes may have a high concern about the I-710 Corridor Project. The vividness is low because the landscape components are low. The intactness is low because above-ground utility and power lines occupy the foreground and contribute to a low visual integrity. The visual coherence and compositional unity of the natural and built landscape as a whole is considered moderate.

Ports of Los Angeles and Long Beach Landscape Unit: The overall visual quality is low. The vividness is low due to minimal landscaping. Large containers and large equipment reduces the intactness. The unity is moderate because industrial tools and ships are the major components within this unit.

Recreation Landscape Unit: The overall visual quality is moderate. The vividness consists of the overall harmony between the natural landscape and the skyline on the horizon. The intactness has minimal encroachments within the unit as there are only a few utility power lines. The overall unity contributes to a moderately high unity.

Education Landscape Unit: The overall visual quality is low. Vividness is low due to the limited landscaping. Intactness is low due to the encroachment of walls, light poles, fences and utility power lines from the background. Unity is low as there are several elements of fences, walls, playgrounds, buildings, and other facilities.

Industrial/Commercial Landscape Unit: The overall visual quality is low. There are no memorable landscape components that would contribute to the visual quality of the vividness. Above-ground utility and power lines, lightings, and other signage result in low intactness. The unity of the urban landscape is moderately low due to buildings, warehouses, cargos, vehicles, parking lots, and other facilities.

Cemetery Landscape Unit: The overall visual quality is moderate. The vividness of the natural landscape with the skyline on the horizon creates a positive visual quality. There are minimal encroachments within this landscape unit, except for minimal signage which makes for a moderate intactness**.** The overall harmony contributes to a moderately high unity.

Freeway Landscape Unit: Whether above or below the surrounding area, the I-710 is visible above/beyond the soundwalls. The overall visual quality is moderately low. The vividness is low because there is minimal visual power of the landscape components. Intactness is low because highway posts, advertisement signs, light poles, and also utility

lines are major encroachments. The unity is moderate as the highway is the main component.

C. Methods of Predicting Viewer Response

Viewer response is composed of two elements: viewer sensitivity and viewer exposure. These elements combine to form a method of predicting how the public might react to visual changes brought about by a highway similar to the I-710 Corridor Project.

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

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

D. Existing Viewer Sensitivity

Viewer sensitivity refers to the degree to which people respond to what they see. Viewer sensitivity does not imply one's positive or negative reaction to the proposed change.

Project features such as the addition of GP lanes at the same grade would result in low visual viewer sensitivity, due to the inclusive visual character. However, some of the I-710 Corridor Project elements such as the elevated FC at some locations (Alternatives 6A/B/C only) and soundwalls (all build alternatives) have extensive project elements that result in high sensitivity due to the distinctive visual character. Many residents and businesses along the I-710 corridor have expressed their desires of adding more soundwalls, especially when the FC is adjacent to their communities.

The I-710 Corridor Project will permanently affect visual character for freeway travelers (i.e. commuters, passengers, and tourists) and viewers with a view to the freeway such as residents, pedestrians, and commuters on local streets and arterials, recreation users, and commercial building users.

Freeway Travelers

This viewer group is likely to be freeway users such as commuters, passengers, school bus drivers, truck drivers, motorcyclists, and tourists. Among these sub-groups, passengers have high viewer sensitivity since they are not required to focus their views on the traffic ahead of them. All individual views on the freeway typically have shorter durations due to the constant movement of the viewers. View duration would be different based on the time, weather, season, and traffic conditions.

Freeway Neighbors

This viewer group involves a larger variety of viewers. They vary from residents, travelers on local streets, users on bicycle trails and other recreational facilities, and employees and visitors in commercial, industrial and transportation businesses. Most of the freeway is depressed from

surrounding areas, therefore, with a wider panorama, viewers see the freeway as one of the elements of the larger landscape. Additionally, people do not prefer the view of freeways in general; they are generally perceived as large in comparison to other surroundings elements and not visually appealing. All individual views of the freeway in this viewer group are typically longer in duration due to the slower speeds while driving on local streets and the longer length of activities in which people engage. View duration would be different based on the time, weather, season, and traffic conditions.

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

Viewer Groups

Any person with a view to the I-710 Corridor Project would be considered a viewer. Because it is not feasible to analyze each of these viewers, it is necessary to define viewers in selective groups in a representative manner. These viewer groups with visual access to the I-710 Corridor Project are motorists, pedestrians, cyclists, residents, park and recreational facility users, employees and users of commercial and industrial facilities.

Viewer Exposure

Viewer exposure is determined by the number of viewers who are exposed to the I-710 Corridor Project features, with a combination of factors such as viewers' activity, distance from the view, and duration of the view. Longer duration, closer distance, or less movement by the viewers would result in higher viewer exposure. Higher viewer exposure would heighten the importance of visual mitigation or enhancement of the I-710 Corridor Project.

Viewer Awareness

Viewer awareness is determined by the viewer's activity, response to the change within the environment, and visual preference (such as local values and cultural importance). A higher visual quality of the view would tend to catch the viewer's attention and make the viewer look at the view more closely and at greater length. High viewer awareness is a critical factor to project design and the resulting mitigation and enhancement measures for negative visual changes.

VIII. VISUAL IMPACT ASSESSMENT

A. Method of Assessing Project Impacts

The visual impacts of project build alternatives are determined by assessing the visual resource change due to the I-710 Corridor Project and predicting viewer response to that change.

Visual resource change is the sum of the change in visual character and change in visual quality. The first step in determining visual resource change is to assess the compatibility of the I-710 Corridor Project with the visual character of the existing landscape. The second step is to compare the visual quality of the existing resources with projected visual quality after the project is constructed.

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

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

B. Analysis of Key Views

Visual Quality Evaluation

Table 8.1, Existing and Proposed Visual Quality, provides the visual quality ratings of the Key Views, including points of view from I-710 and of those people with a view of I-710 Corridor. The overall visual quality rating from 1.0 to 7.0 (or very low with poor experience to very high with good experience) is an average of the three criteria ratings: vividness, intactness, and unity. The use of these evaluative criteria helps to establish an existing baseline to evaluate effects on visual quality. In addition to the visual quality analyses, viewer groups are identified, and viewer exposure, viewer sensitivity, and visual character are analyzed for each Key View.

The proposed visual quality ratings are based on the changes from the existing conditions to the project's build conceptual ideas of what the views would look like with the proposed I-710 Corridor Project (based upon Caltrans' design standards). The change in overall visual character at project build out is the difference between the "Existing Visual Quality" rating and the "Proposed Visual Quality" rating. A positive number represents a potential improvement in the visual setting with the implementation of the particular I-710 Corridor Project alternative.

Since Alternative 5A would widen the existing freeway at grade and not present as substantial a change from the existing conditions; the visual simulations in this study apply conceptual designs of the I-710 Corridor Project's Alternatives 6A/B/C to the 31 Key Views to show the anticipated post-project features, visual characteristics, and surrounding conditions. However, since Alternatives 6A/B/C contain elements of Alternative 5A, these elements are distinguished in some of the visual simulations. Alternatives 6A/B/C with their freight movement corridor were visually simulated since these alternatives represent the worst-case scenario for visual impacts. This worst case scenario represents the post-project scenario without the aesthetic enhancements shown in the second visual simulation for some of the Key Views. As Alternatives 6A/B/C all generally have the same visual characteristics, the visual simulations are representative of all three of these Alternatives. Where Alternatives 5A and 6A/B/C could be shown in the same simulation, Alternative 5A has been distinguished from 6A/B/C by use of hatch patterns.

An overall map of the Key View locations are shown in Figure 8.1.

Figure 8.2 illustrates the locations of the various landscape units along the I-710.

Table 8.1: Existing and Proposed Visual Quality

Key View	Existing Visual Quality				Proposed Visual Quality for Alternative 5A				Proposed Visual Quality for Alternatives 6A/B/C				Difference From Existing Visual Quality for Alternative 5A	Difference From Existing Visual Quality for Alternatives 6A/B/C
	Vividness (V)	Intactness (I)	Unity (U)	Existing Visual Quality [VQ=(*V+I+U)/3]*	Vividness (V)	Intactness (I)	Unity (U)	Proposed Visual Quality [PVQ1=(*V+I+U)/3]*	Vividness (V)	Intactness (I)	Unity (U)	Proposed Visual Quality [PVQ2=(*V=I+U)/3]*		
1	4.0	3.5	5.0	4.2	4.5	4.0	5.0	4.5	4.5	4.0	5.0	4.5	+0.3	+0.3
2	2.5	2.0	3.0	2.5	2.0	0.5	2.0	1.5	2.0	0.5	2.0	1.5	-1.0	-1.0
3	4.0	3.5	5.0	4.2	4.0	3.5	5.0	4.2	3.5	3.5	5.0	4.0	0.0	-0.2
4	3.5	2.0	4.0	3.2	3.0	1.5	4.0	2.8	3.0	0.5	4.0	2.5	-0.4	-0.7
5	4.0	3.5	4.0	3.8	3.5	3.0	4.0	3.5	3.5	2.0	4.0	3.2	-0.3	-0.6
6	4.0	4.5	4.5	4.3	3.0	5.0	5.0	4.3	3.0	5.0	5.0	4.3	0.0	0.0
7	4.5	5.0	5.0	4.8	3.5	3.0	4.0	3.5	3.5	3.0	4.0	3.5	-1.3	-1.3
8	5.0	6.0	4.0	5.0	5.0	6.5	4.0	5.2	5.0	6.5	4.0	5.2	+0.2	+0.2
9	3.0	4.0	4.0	3.7	3.0	4.0	4.0	3.7	3.0	4.0	4.0	3.7	0.0	0.0
10	2.5	3.5	2.0	2.7	2.5	3.5	2.5	2.8	2.5	3.5	2.5	2.8	+0.1	+0.1
11	4.0	5.0	3.5	4.2	4.0	5.0	4.0	4.3	4.0	3.0	4.5	3.8	+0.1	-0.4
12	2.0	2.0	3.0	2.3	2.0	2.0	3.0	2.3	2.0	1.5	2.5	2.0	0.0	-0.3
13	2.0	2.0	3.0	2.3	2.0	2.0	3.5	2.5	2.0	2.0	3.5	2.5	+0.2	+0.2
14	3.0	3.0	3.5	3.2	3.0	3.0	3.5	3.2	3.0	3.0	3.5	3.2	0.0	0.0
15	4.5	3.0	4.5	4.0	4.5	3.0	4.5	4.0	4.5	2.5	4.5	3.8	0.0	-0.2
16	3.0	2.5	2.5	2.7	3.0	2.5	2.5	2.7	3.0	2.5	2.5	2.7	0.0	0.0
17	5.0	5.0	4.5	4.8	5.0	5.0	4.5	4.8	4.5	4.5	4.5	4.5	0.0	-0.3
18	2.5	2.0	3.0	2.5	2.0	2.0	3.0	2.3	2.0	2.0	3.0	2.3	-0.2	-0.2
19	3.0	4.5	3.0	3.5	3.0	4.5	3.0	3.5	3.5	3.0	4.0	3.5	0.0	0.0
20	3.0	3.0	4.5	3.5	3.0	3.0	4.5	3.5	2.5	2.5	4.5	3.2	0.0	-0.3
21	4.0	5.0	5.0	4.7	4.0	5.0	5.0	4.7	4.0	4.5	5.0	4.5	0.0	-0.2
22	1.0	0.5	2.0	1.2	2.0	1.0	2.0	1.7	2.0	0.5	2.0	1.5	+0.5	+0.3
23	3.0	2.0	2.5	2.5	3.0	2.0	2.5	2.5	3.0	1.5	2.5	2.3	0.0	-0.2
24	3.0	2.0	2.5	2.5	3.0	2.0	2.5	2.5	2.5	2.5	2.5	2.5	0.0	0.0
25	3.0	2.5	4.0	3.2	2.5	2.5	4.0	3.0	2.5	3.0	4.0	3.2	-0.2	0.0
26	2.0	2.0	1.5	1.8	2.0	2.0	1.5	1.8	2.0	2.0	1.5	1.8	0.0	0.0
27	2.5	3.0	3.5	3.0	2.5	3.0	3.5	3.0	2.5	3.0	3.5	3.0	0.0	0.0
28	2.0	3.0	3.5	2.8	4.0	4.0	4.5	4.2	4.0	4.0	4.5	4.2	+1.4	+1.4
29	2.5	1.5	3.0	2.3	4.0	3.0	2.5	3.2	4.0	3.0	2.5	3.2	+0.9	+0.9
30	3.0	4.0	4.0	3.7	4.0	3.0	4.5	3.8	4.0	3.0	4.5	3.8	+0.1	+0.1
31	3.5	3.0	3.5	3.3	4.5	3.5	4.5	4.2	4.5	3.5	4.5	4.2	+0.9	+0.9

Rating Scale: 1.0 to 7.0 (1.0 = very low, 2.0 = low, 3.0= moderately low, 4.0 = moderate, 5.0 = moderately high, 6.0 = high, 7.0 = very high

The proposed visual quality ratings are based on the changes from the existing conditions to the project's build conceptual ideas of what the views would look like with the proposed I-710 Corridor Project (based upon Caltrans' design standards). The change in overall visual character at project build out (including the standard Caltrans landscaping) is the difference between the "Existing Visual Quality" rating and the "Proposed Visual Quality" rating. For example, if the overall Existing Visual Quality rating is 6.0 and the Proposed Visual Quality rating is 5.0, then the difference from existing is -1.0. A negative number represents the potential for lowering the visual impact from the existing visual setting and indicates a need for mitigation. The greater the negative number, the more substantial the visual impact (e.g., a -1.0 rating would have more visual impact than a -0.4). A positive number represents a potential improvement in the visual setting with the implementation of the particular I-710 Corridor Project alternative and would not require any mitigation measures.

LEGEND

- Key View Locations (Total: 31 Key Views)
- Project Alignment
- Major Freeways/Highways
- Major Roads

NTS

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.1-OVERALL KEY VIEW MAP

FIGURE 8.1

I-710 Corridor Project
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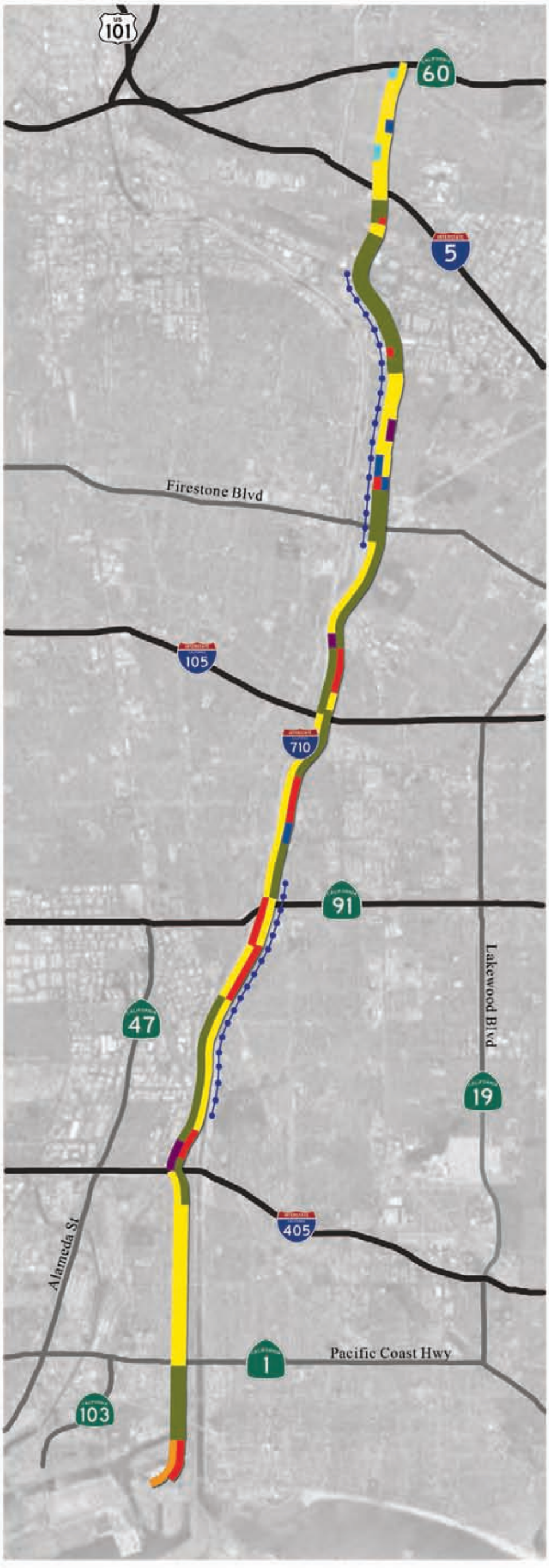
Overall Key View Map



LEGEND

- Port of Long Beach
- Recreation
- Residential
- Education
- Industrial
- Commercial
- Cemetery
- Utility Corridor

NTS

SOURCE: TATSUMI AND PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.2-LANDSCAPE UNITS

FIGURE 8.2

I-710 Corridor Project
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Landscape Units

Key View #1 (Figures 8.3 and 8.4)

ORIENTATION

As shown in Figure 8.3, Cesar Chavez Park is located at 401 Golden Avenue in Long Beach. The existing setting and visual simulation for Key View 1 are shown in Figure 8.4.

Latitude	Longitude	Heading
N 33° 46' 15.67"	W 118° 12' 9.61"	299° NW

EXISTING VISUAL QUALITY/CHARACTER

The location of Key View 1 takes place in Cesar Chavez Park. Its large clusters of Eucalyptus, Liquidambar, and other trees provide a filtered view of the I-710 Corridor and the existing visual quality of this view is moderate (4.2).

	Rating	Comments
Vividness (V)	4.0	The existing vividness is moderate - the tree masses are the main landscape components which create a memorable feature.
Intactness (I)	3.5	The existing intactness is moderately low - natural landscapes can be seen with minimal encroachment due to the light pole, park fences, and Shoreline Drive.
Unity (U)	5.0	The existing unity is moderately high - the tree clusters create a uniform visual pattern which dominates the scene.
Existing Visual Quality [VQ=(*V+I+U)/3]*	4.2	

PROPOSED PROJECT FEATURES

At this location, Alternative 5A would have all of its travel lanes on one uniform grade (Figure 8.4). However, ingress and egress to the I-710 mainline would necessitate the construction of a series of elevated ramps linking the collector distributor roads to I-710. For Alternatives 6A/B/C (Figure 8.4), I-710 at this location would have all GP lanes at the existing grade while the FC lanes begin to become elevated on the other side of the river. Additionally, a series of elevated ramps linking the collector distributor roads to I-710 similar to those in Alternative 5A would be present. The Shoemaker Bridge would be completely replaced and Cesar Chavez Park would be reconfigured by combining the NB and SB alignments of Shoreline Drive to maximize the park's usage. As part of this reconfiguration, the intersection of Shoreline Drive and Broadway/3rd Street would be shifted further south.

CHANGE TO VISUAL QUALITY/CHARACTER

Currently, Shoreline Drive consists of separated northbound and southbound lanes (one in each direction) routed through Cesar Chavez Park. Under all build alternatives, Shoreline Drive would be combined and reconstructed to two through lanes in each direction along the western edge of the park between Ocean Boulevard and the Shoemaker Bridge. The existing lanes would be removed and the available land restored and landscaped to become part of Cesar Chavez Park. This change would improve access to the park as well as provide for a larger contiguous recreation area.

VIEWER RESPONSE

Cesar Chavez Park and the community center are widely used, especially during off-school hours and on weekends. Sensitivity to the I-710 Corridor Project is likely to be low to moderate for all build alternatives. However, due to the visual obstruction of the Eucalyptus, Liquidambar, and other trees, users may see minimal views towards the I-710 Corridor Project through the tree foliage. Therefore, the overall viewer exposure to the I-710 Corridor Project would be low. And because there are no FC elements visible from this Key View location, the proposed visual quality applies to all build alternatives. The proposed visual quality of this view would be moderate (4.5).

Key View #1 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	4.5	The proposed vividness would be moderate - the tree clusters are reinforced by the elimination of the fence and Shoreline Drive in the foreground increasing the visual importance of the trees.
Intactness (I)	4.0	The existing intactness would be moderate - the scene is increased in value with the deletion of the visual elements in the foreground.
Unity (U)	5.0	The existing unity would be moderately high - rating would remain the same as existing due to the preservation of the tree pattern.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	4.5	

Key View #1 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	4.5	The proposed vividness would be moderate - the tree clusters are reinforced by the elimination of the fence and Shoreline Drive in the foreground increasing the visual importance of the trees.
Intactness (I)	4.0	The existing intactness would be moderate - the scene is increased in value with the deletion of the visual elements in the foreground.
Unity (U)	5.0	The existing unity would be moderately high - rating would remain the same as existing due to the preservation of the tree pattern.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	4.5	

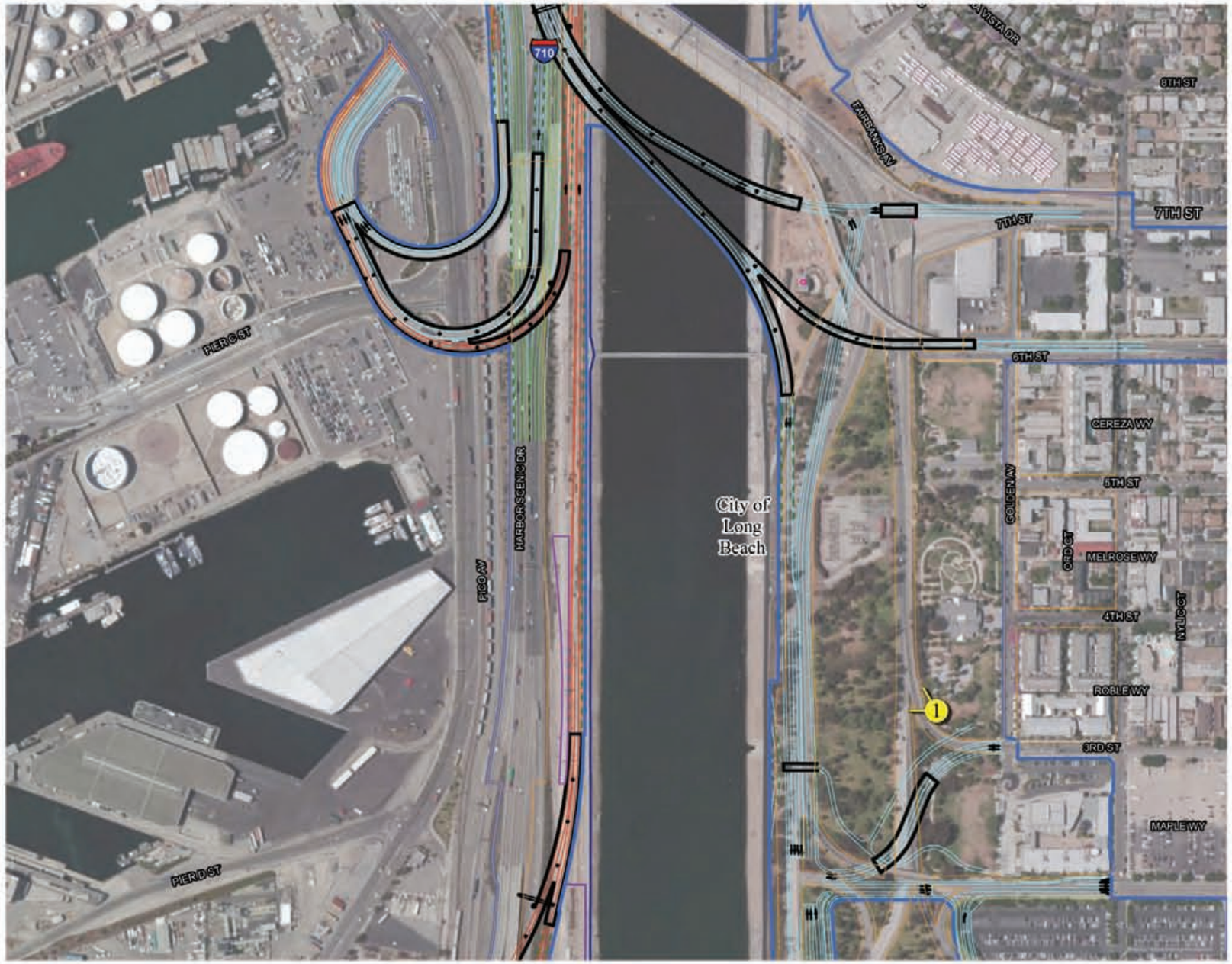
RESULTING VISUAL IMPACT

Under all build alternatives, the change in visual impacts in Key View 1 would be slightly improved (+0.3). The relocation of the existing northbound lanes of Shoreline Drive out of the foreground would result in a positive visual impact due to the greater vividness and intactness. The visual quality would remain moderate. The overall visual quality would be moderate. The level of visual mitigation required for Key View 1 would be "Low."

Difference from Existing Visual Quality (Alternative 5A)	+0.3
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.3

ENHANCED CONDITION/VIEWER RESPONSE

With the anticipated improvement in the visual quality at this Key View, no enhanced aesthetic treatments are being proposed for Key View 1.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 1 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.3 KEY VIEW #1 LOCATION

FIGURE 8.3

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Key View #1 Location

KEY VIEW #1

Cesar Chavez Park
401 Golden Avenue
Long Beach, CA 90802

GPS Location:
Latitude = 33°46'15.67"N
Longitude = 118°12'9.61"W
Heading = 299° NW

Cesar Chavez Park is located at 401 Golden Avenue in Long Beach. This Key View looks northwest toward the I-710 Corridor Project and has low viewer concern due to its distance from the I-710 and its obstruction by trees. The park users' attention will not be looking towards I-710.

Existing Condition

Visual Simulation: Proposed Base Condition

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.4-KEY VIEW 1 DESCRIPTION

FIGURE 8.4

I-710 Corridor Project
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Key View #1 Description

Key View #2 (Figures 8.5 and 8.6)

ORIENTATION

As shown in Figure 8.5, this Key View is located at the intersection of Gale Avenue and West Hill Street in a large residential area in the City of Long Beach. The existing setting and visual simulations for Key View 2 are shown in Figure 8.6.

Latitude	Longitude	Heading
N 33° 47' 49.59"	W 118° 12' 28.09"	90° E

EXISTING VISUAL QUALITY/CHARACTER

This Key View is located at the intersection of Gale Avenue and West Hill Street in a large residential area. Gale Avenue is solely residential while West Hill Street provides some educational and other public facilities as well as residential. The existing visual quality of this view is low (2.5).

	Rating	Comments
Vividness (V)	2.5	The existing vividness is low - there are no single significant visual elements which dominate the view.
Intactness (I)	2.0	The existing intactness is low - the natural landscape is preserved with minimal visual intrusion from man-made elements.
Unity (U)	3.0	The existing unity is moderately low - the view captures the urban residential pattern with landscape interwoven into the pattern.
Existing Visual Quality [VQ=*(V+I+U)/3]*	2.5	

PROPOSED PROJECT FEATURES

Under Alternative 5A, the I-710 Corridor Project would consist of 10 GP lanes at the existing grade and would not be seen from this view (Figure 8.5). Under Alternatives 6A/B/C (Figure 8.6), the four FC lanes would be at a different grade relative to the GP lanes. In this location the GP lanes would be at the same grade as the I-710 mainline while the FC lanes would be elevated between the mainline and the Los Angeles River. New soundwalls would be proposed at grade level, with additional soundwalls bordering the elevated FC lanes on the west side.

CHANGE TO VISUAL QUALITY/CHARACTER

With the widening of the I-710, the existing soundwalls would be increased in height and rebuilt at their existing position along the freeway, only closer to the community under all build alternatives. The existing visual character is of a residential area; however, this area would appear slightly more urbanized with the addition of the elevated FC in between the mainline and the Los Angeles River under Alternatives 6A/B/C.

VIEWER RESPONSE

West Hill Street is a major east-west street within this residential neighborhood. Local residents and pedestrians traveling along this street would be the main viewer group that would spend the longest time viewing the I-710 Corridor Project. Key View 2 is located approximately 250 feet away from the I-710

Corridor Project. Under all build alternatives, viewer response to the change in character would be high due to the moderate viewer exposure and high sensitivity related to the residential nature of the area.

Key View #2 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	2.0	The proposed vividness would be low - removal of landscaping along the existing soundwall would increase the memorability of the view.
Intactness (I)	0.5	The proposed intactness would be very low - the soundwall would appear to be closer to the viewer due to the widening of the freeway and increase the visual order.
Unity (U)	2.0	The existing unity is low - the view captures the urban residential pattern with landscape interwoven into the pattern.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	1.5	

Key View #2 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	2.0	The proposed vividness would be low - removal of natural landscapes plus the dominance of the freight corridor maintains the distinctive visual pattern of the view.
Intactness (I)	0.5	The proposed intactness would be very low - the soundwall would appear to be closer to the viewer due to the widening of the freeway and increase the visual order.
Unity (U)	2.0	The existing unity is low - the view captures the urban residential pattern with landscape interwoven into the pattern.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	1.5	

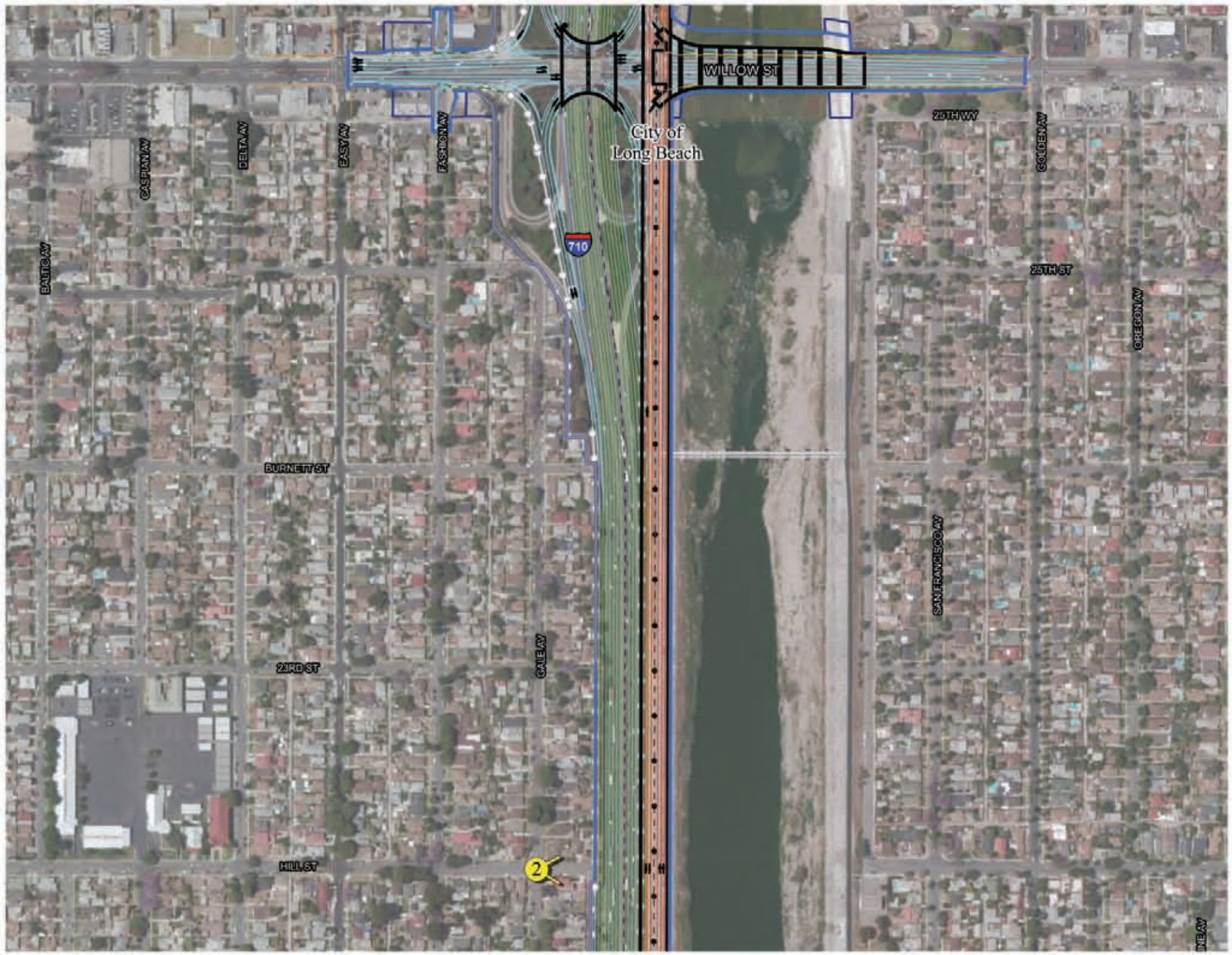
RESULTING VISUAL IMPACT

Under all build alternatives the change in adverse visual impacts to Key View 2 would be negative (-1.0). The overall visual quality of all alternatives would be very low (1.5). Alternatives 6A/B/C would be very low (1.5) due to the elevated structure under Alternatives 6A/B/C and the widening of the I-710 mainline at this location. The level of mitigation required for Key View 2 would be “High.”

Difference from Existing Visual Quality (Alternative 5A)	-1.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-1.0

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.6 illustrates one design example of aesthetic treatments for the elevated FC adding a new soundwall along the western edge. This possible concept illustrates an optional curvilinear shaped wall which blends into the background sky. A new soundwall constructed adjacent to the neighborhood street shows the possible treatment of textured blocks with added vine and shrub landscaping. All of these aesthetic elements provide an overall view with increased unity and vividness while maintaining current levels of intactness. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 2 Key View Location

0 200 400
FEET

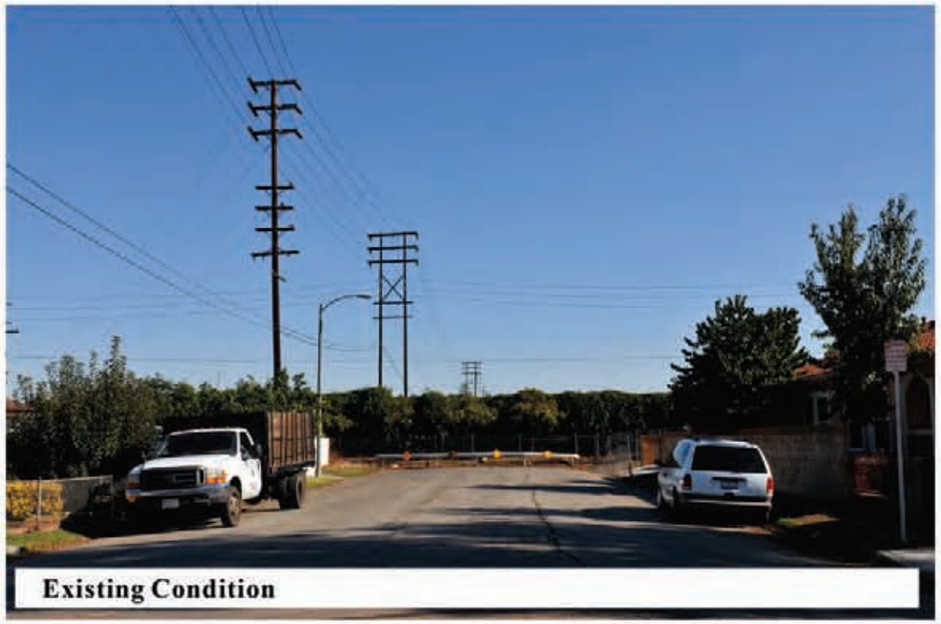
SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.5

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #2 Location

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.5 KEY VIEW #2 LOCATION



Existing Condition

KEY VIEW #2

Intersection of Gale Avenue and West Hill Street
Long Beach, CA 90810

GPS Location:
Latitude = 33°47'49.59"N
Longitude = 118°12'28.09"W
Heading = 90° E

This Key View is located in a large residential area. Neighborhood residents are expected to have a high concern about the I-710 Corridor Project and its effect on the view from their neighborhood and homes. In addition, residents may have a high level of concern about the views from the highway to their community. The Key View looks east towards the I-710 Corridor Project.

Note: The Visual Simulation showing proposed base condition for Alternative 5A includes only the cross hatched area called out as "5A." The Visual Simulation showing proposed base condition for Alternatives 6A/B/C includes the cross hatched areas called out as "5A" and "6A/B/C".

Study Area

Visual Simulation: Proposed Base Condition

Enhanced Condition

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads
- Alternatives 6A/B/C
- Alternative 5A

FIGURE 8.6

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #2 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.6-KEY VIEW 2 DESCRIPTION

Key View #3 (Figures 8.7 and 8.8)

ORIENTATION

As shown in Figure 8.7, this Key View is located on the Los Angeles River Trail near West Hill Street and DeForest Avenue in Long Beach adjacent to a large residential area on the east side of the Los Angeles River. The existing setting and visual simulations for Key View 3 are shown in Figure 8.8.

Latitude	Longitude	Heading
N 33° 47' 50.19"	W 118° 12' 16.74"	269° W

EXISTING VISUAL QUALITY/CHARACTER

Located on the opposite side of the Los Angeles River from Key View 2, the existing visual quality of this view is moderate (4.2).

	Rating	Comments
Vividness (V)	4.0	The existing vividness is moderate - the view includes a significant view of the Los Angeles River in the foreground and the overhead sky.
Intactness (I)	3.5	The existing intactness is moderately low - the utility lines stretching across the skyline encroaches on the natural scene.
Unity (U)	5.0	The existing unity is moderately high - the views of the Los Angeles River, trees, and rip rap along the Los Angeles River levee blend together to create a harmonious visual pattern.
Existing Visual Quality [VQ=*(V+I+U)/3]*	4.2	

PROPOSED PROJECT FEATURES

Under Alternative 5A, all new GP lanes would be at the same grade as the existing I-710 mainline and would not be seen from the Key View (Figure 8.8). Alternatives 6A/B/C (Figure 8.8) would feature GP lanes at the existing mainline grade while the FC would be elevated approximately 40 feet above the GP lanes between the mainline and the Los Angeles River. A soundwall would be constructed along the west side of the mainline with screen walls along both sides of the FC.

CHANGE TO VISUAL QUALITY/CHARACTER

Under Alternative 5A, there is no change in visual quality/character. Under Alternatives 6A/B/C, the visual simulation shows the elevated FC along the I-710 mainline. Implementation of the I-710 Corridor Project under Alternatives 6A/B/C would result in slightly lower visual quality in vividness ratings due to the obstruction of the clusters of trees in the background. As the distance from the viewers to the I-710 Corridor Project is within 650 feet, the sensitivity to the changes in this Key View will be high.

VIEWER RESPONSE

A number of residents, pedestrians and bicyclists pass this Key View. Bicyclists, surrounding neighborhood residents, and motorists are the ones most likely to spend the longest time in viewing the I-710 Corridor Project and are expected to have a high concern about Alternatives 6A/B/C of the I-710 Corridor Project and its effect on the view from their neighborhood and homes. The duration of the view is dependent on the location and the activity of the viewer. Additionally, some residences have added

second stories affording them higher views over the Los Angeles River levee. The residents with second stories located adjacent to the Los Angeles River may have a high level of concern about the views from Alternatives 6A/B/C of the I-710 Corridor Project into their homes and community.

Key View #3 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	4.0	The proposed vividness would be moderate - the view would include a significant view of the Los Angeles River in the foreground and the overhead sky.
Intactness (I)	3.5	The proposed intactness would be moderately low - the utility lines stretching across the skyline would encroach on the natural scene.
Unity (U)	5.0	The proposed unity would be moderately high - the views of the Los Angeles River, trees, and rip rap along the Los Angeles River levee would blend together to create a harmonious visual pattern.
Proposed Visual Quality [PVQ1=(*V+I+U)/3]*	4.2	

Key View #3 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	3.5	The proposed vividness would be moderately low - obstruction of the background trees by the soundwall would detract from the memorability of the trees.
Intactness (I)	3.5	The proposed intactness would be moderately low - the addition of the elevated freight corridor would be viewed from a distance. However because of the visibility of the freight corridor along the I-710 Corridor, it would make a negative impact on the overall order of this key view.
Unity (U)	5.0	The proposed unity would be moderately high - the views of the Los Angeles River, trees, and rip rap along the Los Angeles River levee would blend together to create a harmonious visual pattern.
Proposed Visual Quality [PVQ2=(*V+I+U)/3]*	4.0	

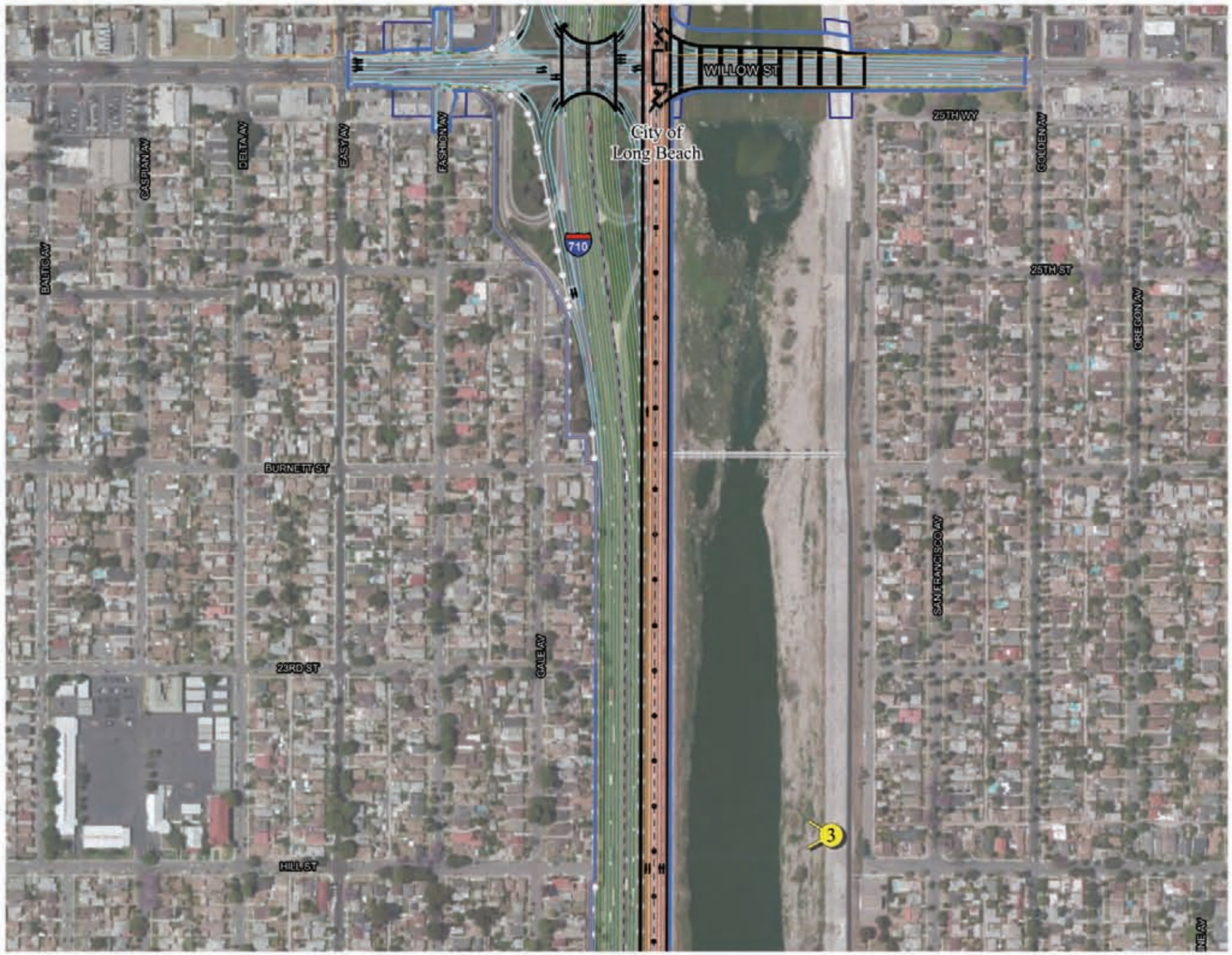
RESULTING VISUAL IMPACT

The change in adverse visual impacts for Alternative 5A is anticipated to be neutral or non-existent (0.0) and no mitigation measures would be required. Under Alternatives 6A/B/C, the change in adverse visual impacts would be negative (-0.2) due to the new elevated structure. The overall visual quality would be moderate. The level of visual mitigation required for Key View 3 under Alternatives 6A/B/C would be "Moderate."

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.2

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.8 illustrates one design example of aesthetic treatments for the elevated FC adding a new screen wall along the eastern edge. This illustrates how it is possible to create a filtered view of the freight movement on the elevated structure without completely masking it. This option would minimally increase the vividness of the scene by blending in the freight movement into the background sky. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 3 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.7 KEY VIEW #3 LOCATION

FIGURE 8.7

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

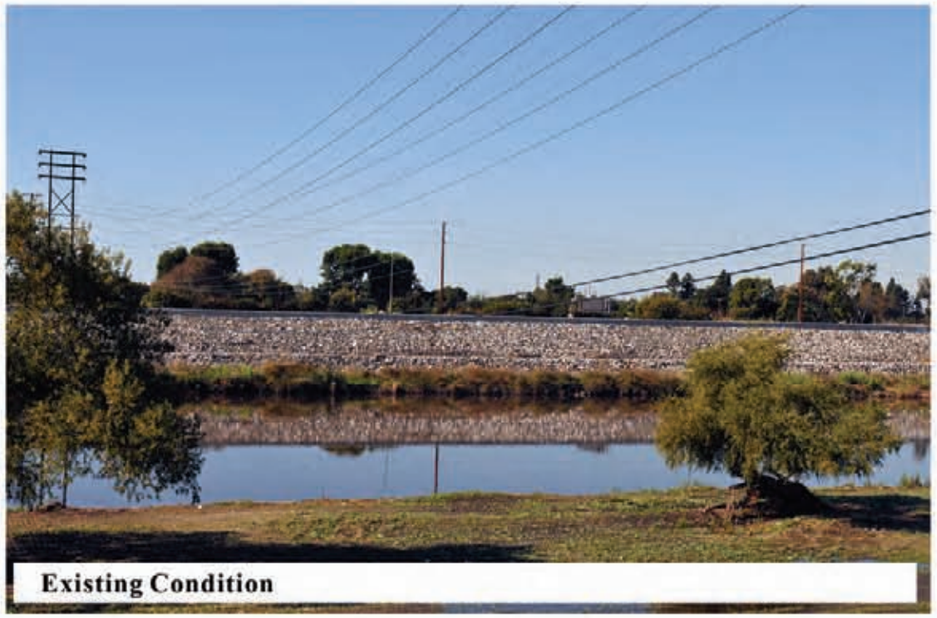
Key View #3 Location

KEY VIEW #3

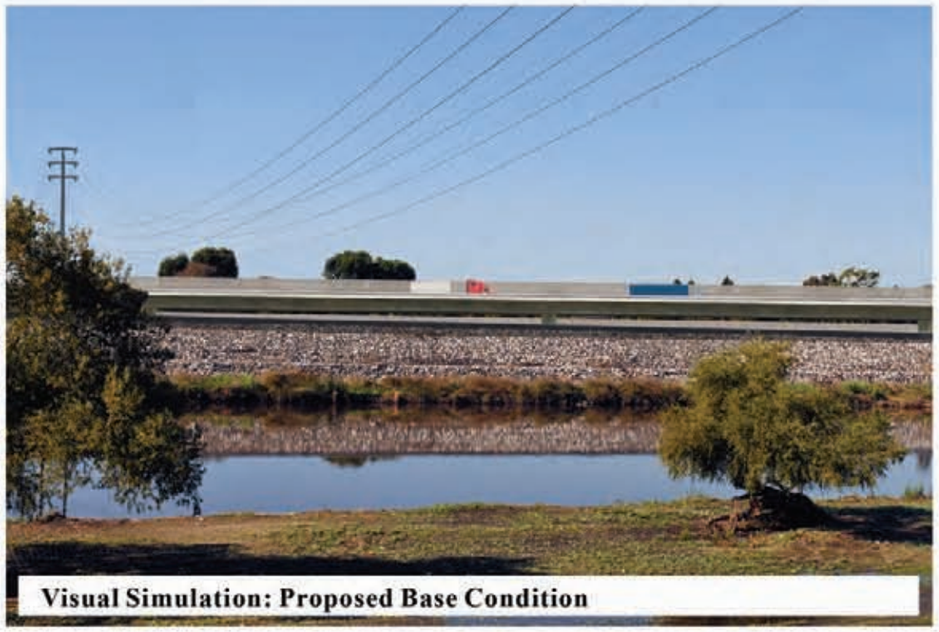
Bicycle Trail Near West Hill and De Forest Avenue
Long Beach, CA 909810

GPS Location:
Latitude = 33°47'50.19"N
Longitude = 118°12'16.74"W
Heading = 269° W

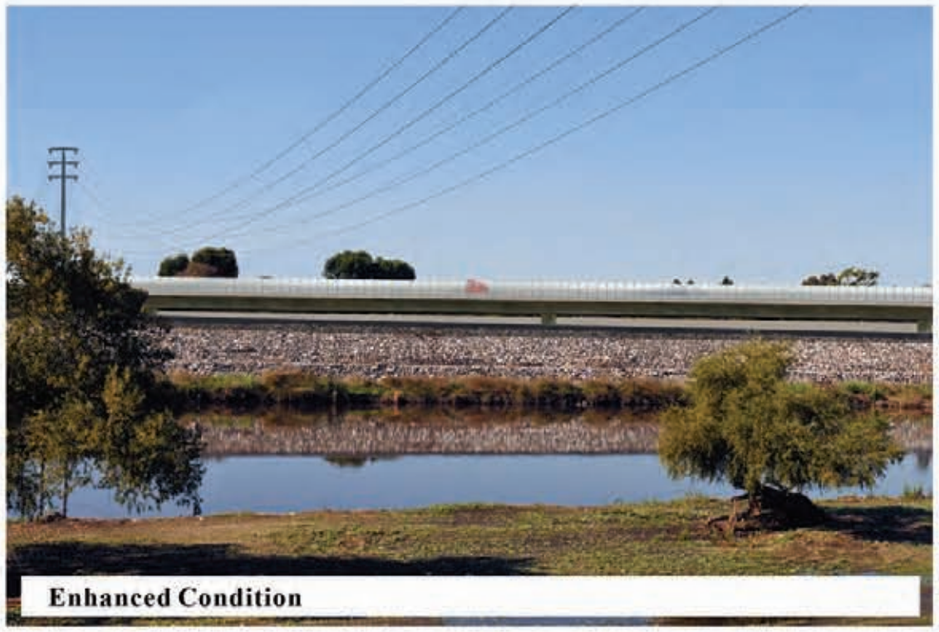
This Key View is located on a bicycle trail adjacent to a large residential area on the east side of the Los Angeles River near the intersection of West Hills and De Forest Avenue. The view looks west towards the I-710 Corridor Project. This Key View is approximately 650 feet from the I-710 Corridor Project.



Existing Condition



Visual Simulation: Proposed Base Condition



Enhanced Condition

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.8-KEY VIEW 3 DESCRIPTION

FIGURE 8.8

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #3 Description

Key View #4 (Figures 8.9 and 8.10)

ORIENTATION

As shown in Figure 8.9, this Key View is located on the Willow Street overcrossing, a major west-east corridor in Long Beach. The existing setting and visual simulations for Key View 4 are shown in Figure 8.10.

Latitude	Longitude	Heading
N 33° 48' 16.15"	W 118° 12' 27.94"	19° NE

EXISTING VISUAL QUALITY/CHARACTER

The existing view is given a moderately low (3.2) rating because viewers see vehicle traffic on a busy six-lane freeway with a large volume of trucks.

	Rating	Comments
Vividness (V)	3.5	The existing vividness is moderately low - tree groupings and low shrubs within the cloverleaf ramps located on the northwest and northeast quadrants contribute to an accented view.
Intactness (I)	2.0	The existing intactness is low - the presence of vehicles and the freeway itself creates conflict with the landscaping.
Unity (U)	4.0	The existing unity is moderate - I-710 provides the primary visual pattern to the view.
Existing Visual Quality [VQ=*(V+I+U)/3]*	3.2	

PROPOSED PROJECT FEATURES

Under all build alternatives, the existing four-quadrant cloverleaf configuration of Willow Street would be replaced by a single point urban interchange. The Willow Street overcrossing would carry two through lanes and two left turn lanes in the EB direction and three through lanes and two left turn lanes in the WB direction. From this Key View, Alternative 5A would consist of all GP lanes at a single grade with new soundwalls on the west side of the mainline (Figure 8.10). Under Alternatives 6A/B/C (Figure 8.10), the FC would be elevated approximately 40 feet above Willow Street and span the space between the existing mainline and the Los Angeles River. New soundwalls would be constructed on the west side of the elevated FC.

CHANGE TO VISUAL QUALITY/CHARACTER

Under all build alternatives, the existing freeway would be reconstructed to four GP lanes in each direction with a 28-foot wide median. The profile would be lowered by a maximum of six feet to minimize impacts along Willow Street. One auxiliary lane would extend SB between the I-405 connector and Willow Street off-ramp. In this location, under Alternatives 6A/B/C, the FC would be elevated and aligned between the NB freeway lanes and the Los Angeles River. The alignment would decline to freeway grade as it approaches I-405. The skyline would be blocked and may require removal of existing natural landscapes. The proposed visual quality would be reduced compared to the existing visual quality because of the additional man-made structures in the skyline and the removal of existing freeway landscaping.

VIEWER RESPONSE

The addition of the FC would be within the existing right-of-way and would be elevated high above the mainline grade and Willow Street overcrossing. As construction of the I-710 FC would retain the urban consistency of the corridor, viewer sensitivity to this change would likely be low to moderate, depending on the speed of the traffic flow and time of day.

Key View #4 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	3.0	The proposed vividness would be moderately low - the removal of the tree groupings on northeast quadrants would lead to a decreased memorability of the scene.
Intactness (I)	1.5	The proposed intactness would be very low - the increased traffic lanes on the freeway would contribute to increased visual encroachment of the view.
Unity (U)	4.0	The proposed unity would be moderate - the I-710 mainline serves as the primary visual pattern which would be reinforced by this alternative.
Proposed Visual Quality [PVQ1=(*V+I+U)/3]*	2.8	

Key View #4 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	3.0	The proposed vividness would be moderately low - the removal of the tree groupings on northeast quadrants would lead to a decreased memorability of the scene.
Intactness (I)	0.5	The proposed intactness would be very low - the large elevated FC including soundwalls would create a large visual encroachment.
Unity (U)	4.0	The proposed unity would be moderate - the I-710 mainline serves as the primary visual pattern which would be reinforced with the addition of the elevated FC.
Proposed Visual Quality [PVQ2=(*V+I+U)/3]*	2.5	

RESULTING VISUAL IMPACT

Viewers traveling on Willow Street would be expected to have a clear view of the elevated FC contributing to major visual encroachment and resulting in a negative change in adverse visual impacts (-0.4) under Alternative 5A and (-0.7) under Alternatives 6A/B/C. The overall visual quality would be low. Due to the normally fast travel speed and short viewing duration at this Key View, the highest level of visual mitigation required for Key View 4 would be ”Moderately High.”

Difference from Existing Visual Quality (Alternative 5A)	-0.4
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.7

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.10 illustrates an aesthetic treatment option of a curved soundwall constructed on top of the FC with landscaping added into the area in the middle ground. The effect of this is to blend or transition the soundwall into the background sky while the landscaping visually softens the close views of the structural columns. Overall this technique increases the intactness and vividness of the view by reinforcing the vertical elements of the structures with the vertical trees while decreasing the visual encroachment to the natural/landscaped environment. Viewer response to enhanced improvements to the view should be positive.

LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 4 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.9 KEY VIEW #4 LOCATION

FIGURE 8.9

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #4 Location

Existing Condition

KEY VIEW #4

West Willow Street Bridge
Long Beach, CA 90810

GPS Location:
Latitude = 33°48'16.15"N
Longitude = 118°12'27.94"W
Heading = 19° NE

Willow Street is a major west-east corridor. This Key View overlooks I-710's NB and SB lanes. Due to the duration of time spent on the freeway, daily commuters will have increased awareness of the view.

Note: The Visual Simulation showing proposed base condition for Alternative 5A includes only the cross hatched area called out as "5A." The Visual Simulation showing proposed base condition for Alternatives 6A/B/C includes the cross hatched areas called out as "5A" and "6A/B/C".

Study Area

Visual Simulation: Proposed Base Condition

Enhanced Condition

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads
- Alternatives 6A/B/C
- Alternative 5A

FIGURE 8.10

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #4 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.10-KEY VIEW 4 DESCRIPTION

Key View #5 (Figures 8.11 and 8.12)

ORIENTATION

As shown in Figure 8.11, this Key View is located at 3613 Gale Avenue in Long Beach in a large residential area north of Wardlow Road. The existing setting and visual simulations for Key View 5 are shown in Figure 8.12.

Latitude	Longitude	Heading
N 33° 49' 21.57"	W 118° 12' 27.71"	90° E

EXISTING VISUAL QUALITY/CHARACTER

This Key View is located at the end of the driveway of the residence located at 3613 Gale Avenue. The existing visual quality is moderately low (3.8).

	Rating	Comments
Vividness (V)	4.0	The existing vividness is moderate - both trees and shrubs in front of the soundwall and trees in the background combine and enhance the visual attractiveness of the view.
Intactness (I)	3.5	The existing intactness is moderately low - the landscape views are interrupted by elements including the fencing from residences, light pole, highway signage, and other man-made structures.
Unity (U)	4.0	The existing unity is moderate - the pattern created by the parallel lines of the street and soundwall reinforce an urban compatibility of the scene.
Existing Visual Quality [VQ=*(V+I+U)/3]*	3.8	

PROPOSED PROJECT FEATURES

At this Key View, all four build alternatives would have GP lanes at the same grade as the existing mainline under Alternative 5A (Figure 8.11). New soundwalls would be created along the west side of the freeway. Under Alternatives 6A/B/C (Figure 8.12), the FC lanes would also be at the same grade as the existing mainline. However, a new transition ramp from NB I-710 to SB I-405 would be elevated approximately 40 feet above grade and would be constructed with a soundwall.

CHANGE TO VISUAL QUALITY/CHARACTER

Under all build alternatives, there would be acquisition of right-of-way due to the widening of the freeway. Under Alternatives 6A/B/C, the visual simulation shows the transition ramp from NB I-710 to SB I-405. Implementation of the I-710 Corridor Project would result in lower visual quality and intactness ratings due to the removal of the grouped trees in the background. The average distance from the viewers to the I-710 Corridor Project is approximately 500 feet. Therefore, the sensitivity to the changes in the view is high.

VIEWER RESPONSE

Residents and motorists will be viewing and passing through this Key View. Residents may have a high level of concern about the views from I-710 into their community. The number of viewers may vary from a few up to two-digit numbers daily. A soundwall would provide a visual barrier between the residences and

the I-710. However, due to the proximity of the Key View to I-710, the overall sensitivity from the viewers would become high.

Key View #5 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	3.5	The proposed vividness would be moderately low - the replacement of both trees and shrubs with a new soundwall would decrease the memorability of the view.
Intactness (I)	3.0	The proposed intactness would be moderately low - the relatively close viewing distance of the new soundwall would decrease the visual freedom of the scene from man-made objects.
Unity (U)	4.0	The proposed unity would be moderate - the parallel lines of the street and soundwall would serve to reinforce the urban pattern of the view.
Proposed Visual Quality [PVQ1=(*V+I+U)/3]*	3.5	

Key View #5 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	3.5	The proposed vividness would be moderately low - the replacement of both trees and shrubs with a new soundwall would decrease the memorability of the view.
Intactness (I)	2.0	The proposed intactness would be low - the inclusion of the transition ramp with a soundwall on top plus the closer distance of the new soundwall would detract from the visual order of the scene.
Unity (U)	4.0	The proposed unity would be moderate - the parallel lines of the street, new soundwall plus the transition ramp would serve to reinforce the urban pattern of the view.
Proposed Visual Quality [PVQ2=(*V+I+U)/3]*	3.2	

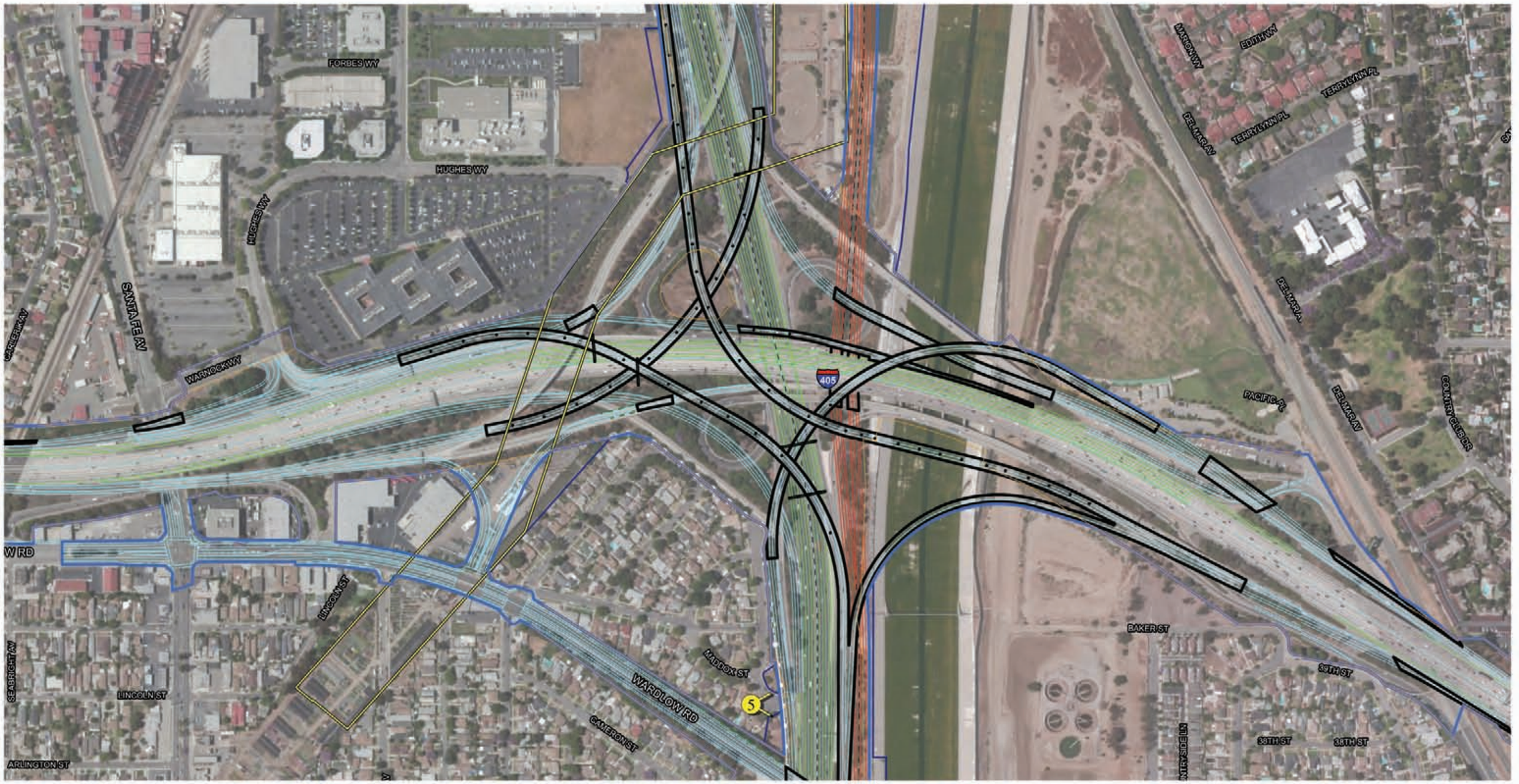
RESULTING VISUAL IMPACT

The change in adverse impacts would be negative for all build alternatives (-0.3 under Alternative 5A due to a closer relocation of the soundwall and the removal of the existing vegetation and -0.6 for Alternatives 6A/B/C due to the added elevated transition ramp). The overall visual quality would be moderately low. The level of visual mitigation required for Key View 5 would be “Moderately High.”

Difference from Existing Visual Quality (Alternative 5A)	-0.3
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.6

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.12 illustrates one design option of aesthetic treatments for a new soundwall adjacent to a residential street. The new soundwall is treated by varying concrete blocks in a manner which creates a series of horizontal lines. Furthermore, new landscape in front of the soundwall with vines growing on it provide additional screening of the new structure. This increases both vividness and intactness of the scene by filtering the view of the soundwall and by creating landscape as the dominant visual element. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 5 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.11 KEY VIEW #5 LOCATION

FIGURE 8.11

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #5 Location

Existing Condition

KEY VIEW #5

3613 Gale Avenue
Long Beach, CA 90810

GPS Location:
Latitude = 33°49'21.57"N
Longitude =118°12'27.71"W
Heading = 90° E

This Key View is located in a large residential area north of Wardlow Road. Residents are expected to have a high concern about the I-710 Corridor Project and its effect on the view from their neighborhood and homes. From this Key View, residents would experience a view of the elevated I-405 to I-710 connector.

Study Area

Visual Simulation: Proposed Base Condition

Enhanced Condition

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.12

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #5 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

Key View #6 (Figures 8.13 and 8.14)

ORIENTATION

As shown in Figure 8.13, this Key View is located at 3735 Easy Avenue in Long Beach in a residential area. The existing setting and visual simulations for Key View 6 are shown in Figure 8.14.

Latitude	Longitude	Heading
N 33° 49' 29.52"	W 118° 12' 31.17"	31° NE

EXISTING VISUAL QUALITY/CHARACTER

The existing view consists primarily of a mass of landscape including shrubs in the foreground and larger shrubs and trees in the background. This is the dominant visual element. Minor visual encroachments include the chain link fence in the foreground and a light fixture in the background. The existing visual quality is moderate (4.3).

	Rating	Comments
Vividness (V)	4.0	The existing vividness is moderate - land mass is memorable.
Intactness (I)	4.5	The existing intactness is moderate - minimal visual encroachments detracting from the landscape element.
Unity (U)	4.5	The existing unity is moderate - existing landscape creates a smooth horizontal flow, minimally interrupted by vertical tree elements, which does not lessen the visual flow.
Existing Visual Quality [VQ=*(V+I+U)/3]*	4.3	

PROPOSED PROJECT FEATURES

Alternative 5A (Figure 8.14) would feature all GP lanes at the same grade as the existing mainline. Alternatives 6A/B/C (Figure 8.14) in this Key View would introduce a soundwall and some views of the elevated SB I-405 to SB I-710 connector (at a height of approximately 40 feet above the levee). This would visually cut through the mass of the existing landscape and change the visual composition of the view significantly.

CHANGE TO VISUAL QUALITY/CHARACTER

Viewer sensitivity was initially thought to be high from this Key View. However, due to the topography (homes are lower than the freeways), existing vegetation, and the screening trees in the background, residents would experience minimal change to the visual quality/character as only the connector would be visible. Also, as the distance from the viewers to the I-710 Corridor Project is within 1000 feet of the I-710 and 500 to 600 feet of the I-710/I-405 connector, the viewing angle to a portion of the connector structure would be limited. Therefore, the sensitivity to the changes in the view would be minimal.

VIEWER RESPONSE

Residents and passing motorists would be the expected viewers at this Key View. Residents could be seeing the view multiple times per day as they leave and return to their homes. Assuming an average family size of four per household and 2 views per person per day, the number of daily views may vary from a few to over 176. The duration of the view would depend upon each viewer's activity. A new soundwall would separate the residential homes from I-710.

Key View #6 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	3.0	The proposed vividness would be moderately low - main element of the landscape would be minimized by the introduction of a large soundwall located close to the residential street. Neither soundwall nor landscape mass would dominate.
Intactness (I)	5.0	The proposed intactness would be moderately high - approximately equal distribution of the soundwall and landscape mass elements.
Unity (U)	5.0	The proposed unity would be moderately high - smooth horizontal flow or pattern of the soundwall, landscape mass and elevated connector.
Proposed Visual Quality [PVQ1=(*V+I+U)/3]*	4.3	

Key View #6 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	3.0	The proposed vividness would be moderately low - main element of the landscape would be minimized by the introduction of a large soundwall located close to the residential street. Neither soundwall nor landscape mass would dominate.
Intactness (I)	5.0	The proposed intactness would be moderately high - approximately equal distribution of the soundwall and landscape mass elements.
Unity (U)	5.0	The proposed unity would be moderately high - smooth horizontal flow or pattern of the soundwall, landscape mass and elevated connector.
Proposed Visual Quality [PVQ2=(*V+I+U)/3]*	4.3	

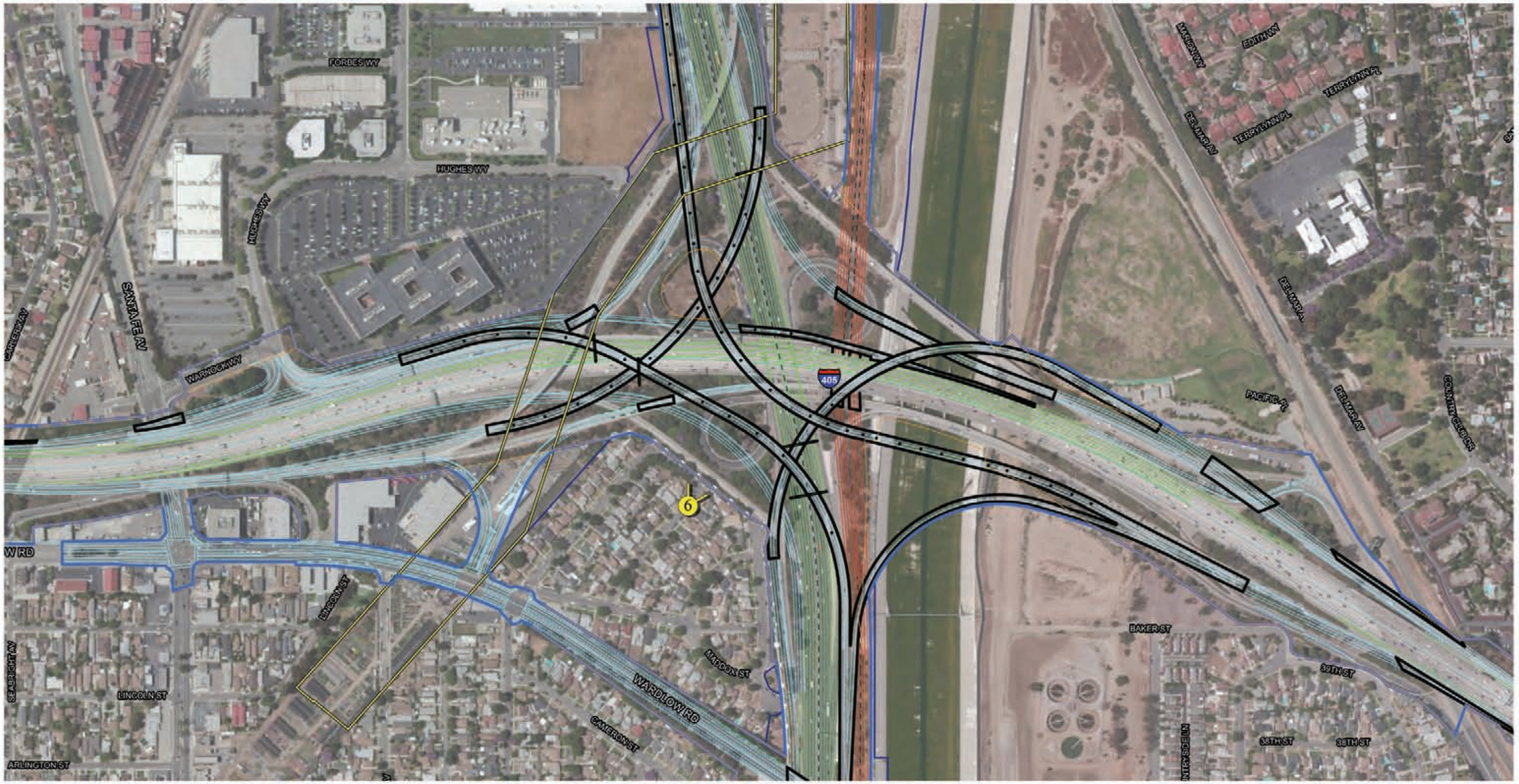
RESULTING VISUAL IMPACT

Under all build alternatives, the change in adverse visual impacts in Key View 6 would be neutral or non-existent (0.0), because while the vividness would be lower for all build alternatives due to removal of the large vegetation masses, the intactness and unity would improve slightly with the new soundwall and transition ramp adding integrity and visual pattern to the scene. The overall visual quality would remain moderate. No visual mitigation would be required.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.14 illustrates how a new soundwall can be treated. Additionally the planting area in the foreground has been treated with new landscape. This new plant material, plus the horizontal patterns on the soundwall combine to increase the memorability of the view. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 6 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.13 KEY VIEW #6 LOCATION

FIGURE 8.13

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #6 Location

KEY VIEW #6

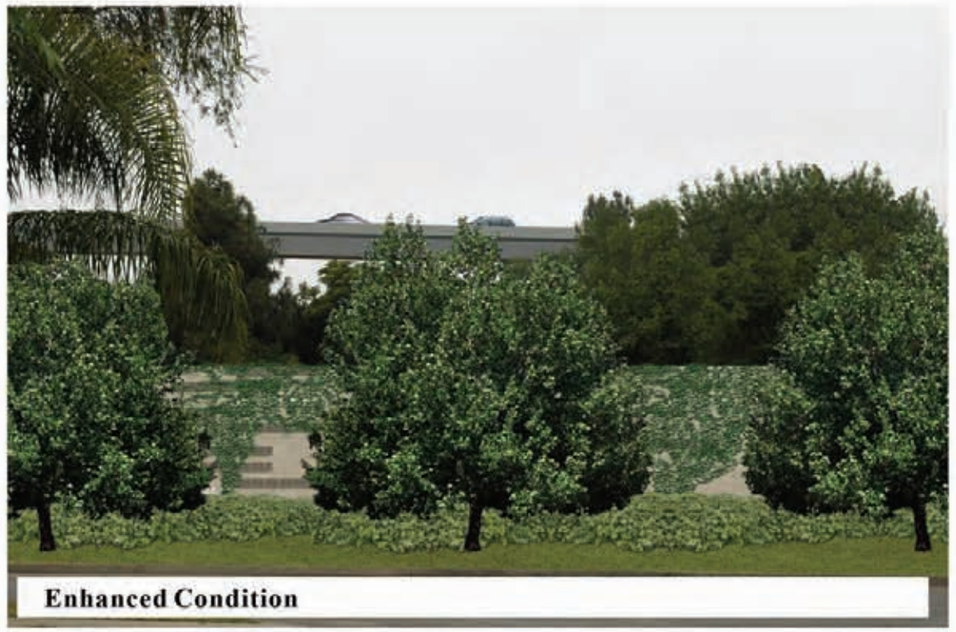
3753 Easy Avenue
Long Beach, CA 90810

GPS Location:
Latitude = 33°49'29.52"N
Longitude = 118°12'31.17"W
Heading = 31° NE

This Key View is located in a large residential area Southwest of I-405 and I-710 Corridor Project. Residents are expected to have a high concern about the I-710 Corridor Project and its effect on the view from their neighborhood and homes. From this Key View, residents would experience a partial view of the elevated SB I-405 to SB I-710 connector that would be screened by existing trees.

Existing Condition

Visual Simulation: Proposed Base Condition



Enhanced Condition

Study Area

LEGEND

- 6 — Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.14

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #6 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.14-KEY VIEW 6 DESCRIPTION

Key View #7 (Figures 8.15 and 8.16)

ORIENTATION

As shown in Figure 8.15, this Key View is located at 1500 Hughes Way (cross street: Via Oro) in a business area in the City of Long Beach. The existing setting and visual simulations for Key View 7 are shown in Figure 8.16.

Latitude	Longitude	Heading
N 33° 49' 39.90"	W 118° 12' 40.08"	107° SE

EXISTING VISUAL QUALITY/CHARACTER

The existing view from this Key View location is from the parking lot of an office building complex. Most of the viewers are from within the parking lot with others in offices with windows facing a portion of the parking lot and the I-710/I-405 interchange. The dominant visual element is the landscape mass blocking the view of the I-710/I-405 interchange. A large earthen berm is also found behind the landscape mass. Over the silhouette of the landscaping are a number of utility lines suspended across the view. The existing visual quality is given a rating of moderate (4.8).

	Rating	Comments
Vividness (V)	4.5	The existing vividness is moderate - large dominant landscape mass element in the foreground balanced by an almost unobstructed view of the sky.
Intactness (I)	5.0	The existing intactness is moderately high - relative horizontal order of the cars in the foreground, the landscape mass in the middle ground, the utility wires above the landscape, and the monotone nature of the sky.
Unity (U)	5.0	The existing unity is moderately high - major elements within the view are all horizontal flows, one above the other. This creates a strong sense of harmony in the visual patterns.
Existing Visual Quality [VQ=*(V+I+U)/3]*	4.8	

PROPOSED PROJECT FEATURES

Under all build alternatives (Figure 8.16), all new through lanes would be constructed at the same grade as the existing mainline. Additionally, new connector ramps would be constructed to provide transition from the I-710 and I-405.

CHANGE TO VISUAL QUALITY/CHARACTER

The anticipated view of the proposed project would significantly change due to the elimination of the existing landscape mass. The landscape mass would be disturbed by the construction activity and treated with erosion control seeding. Other major changes would include the addition of two new utility structures and the views of the fly-overs for the I-710/I-405 interchanges.

VIEWER RESPONSE

Numerous office workers and motorists would be expected to view and pass through this Key View. The number of viewers may vary from a few up to three-digit numbers daily. The duration of the view would

depend upon the viewer's activity. The distance of office workers from the I-710 Corridor Project would be over approximately 1,200 feet.

Key View #7 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	3.5	The proposed vividness would be moderately low - while the berm would remain, the main visual element (the landscape mass) would be eliminated.
Intactness (I)	3.0	The proposed intactness would be moderately low - new visual elements of the utility towers and elevated highway ramps would very visibly encroach into this view.
Unity (U)	4.0	The proposed unity would be moderate - landscape mass would be eliminated and utility towers and freeway ramps would disrupt the view. However, a small degree of coherent pattern would be preserved by the curving patterns of the ramps and drooping utility lines.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	3.5	

Key View #7 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	3.5	The proposed vividness would be moderately low - while the berm would remain, the main visual element (the landscape mass) would be eliminated.
Intactness (I)	3.0	The proposed intactness would be moderately low - new visual elements of the utility towers and elevated highway ramps would very visibly encroach into this view.
Unity (U)	4.0	The proposed unity would be moderate - landscape mass would be eliminated and utility towers and freeway ramps would disrupt the view. However, a small degree of coherent pattern would be preserved by the curving patterns of the ramps and drooping utility lines.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	3.5	

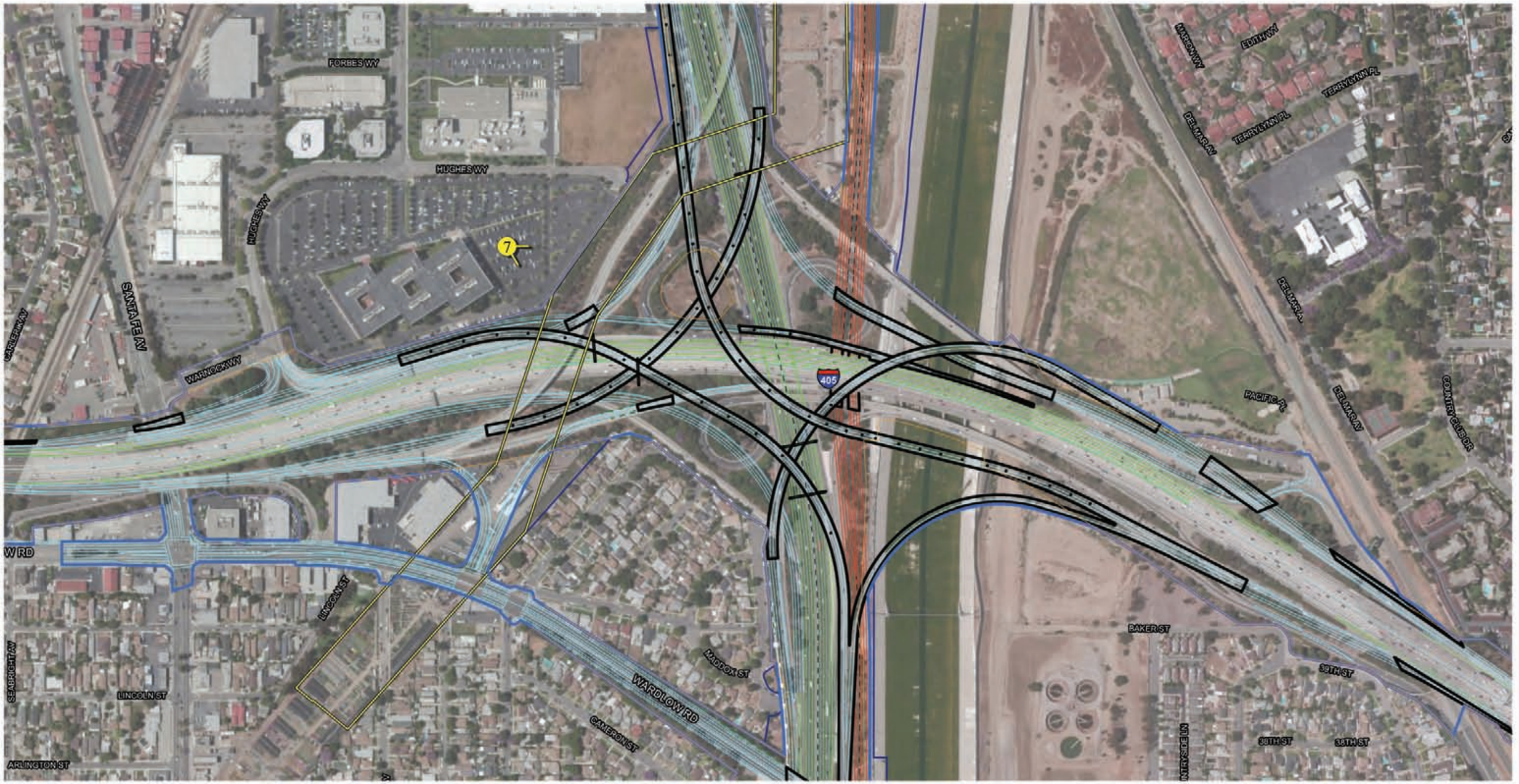
RESULTING VISUAL IMPACT

Under all build alternatives, the change in visual impacts would be negative (-1.3), because with the existing landscape removed for construction activity, the remaining berm, the connector ramps in the background and the overhead utility lines would be clearly seen. The overall visual quality of Key View 7 would be moderately low. The level of visual mitigation required would be "High."

Difference from Existing Visual Quality (Alternative 5A)	-1.3
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-1.3

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.16 illustrates one design example of aesthetic treatments for screening of the elevated ramps and utility towers with the addition of a landscaped berm. In this example of an optional concept, the primary aesthetic treatment is the landscaping of the berm. The combination of low growing shrubs with vertical growing trees work together to improve all three assessment criteria (vividness, intactness and unity) by reinforcing the vertical pattern set by the utility structures and providing a dominant visual element. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 7 Key View Location

0 200 400 FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.15 KEY VIEW #7 LOCATION

FIGURE 8.15

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #7 Location

Existing Condition

Visual Simulation: Proposed Base Condition

KEY VIEW #7

1500 Hughes Way
Long Beach, CA 90810

GPS Location:
Latitude = 33°49'39.90"N
Longitude = 118°12'40.08"W
Heading = 107° SE

This key view is located in a parking lot of a two-story office complex, Key View #7 looks southwest toward the interchange of I-710 and I-405. Viewers from this location will be primarily office workers parking their vehicles and going into or out of the office buildings. They are anticipated to have moderate sensitivity while viewers from within the buildings will have a slightly elevated sensitivity (moderately high). The view of the I-710 Corridor Project is approximately 1,200 feet in the distance. From this Key View, office workers would experience a view of the elevated I-405 to I-710 connectors.

Study Area

LEGEND

- 7 Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.16

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #7 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.16-KEY VIEW 7 DESCRIPTION

Key View #8 (Figures 8.17 and 8.18)

ORIENTATION

As shown in Figure 8.17, this Key View is located at 3768 Country Club Drive in Long Beach in a mixed residential/park/elementary school area. The existing setting and visual simulation for Key View 8 are shown in Figure 8.18.

Latitude	Longitude	Heading
N 33° 49' 35.41"	W 118° 11' 55.67"	264° SW

EXISTING VISUAL QUALITY/CHARACTER

The existing view from Key View 8 consists mainly of landscape masses in the background with a playground in the foreground. Utility transmission facilities can be seen in a filtered view between the landscape mass in the background. The existing visual quality is moderately high (5.0).

	Rating	Comments
Vividness (V)	5.0	The existing vividness is moderately high - dominant visual element of the landscape mass provides a memorable scene, children's playground provides a secondary visual focus.
Intactness (I)	6.0	The existing intactness is high - balance of visual proportion between the landscape mass and playground.
Unity (U)	4.0	The existing unity is moderate - introduction of the playground into the dominant landscape mass tends to moderately break up the unity of the view.
Existing Visual Quality [VQ=*(V+I+U)/3]*	5.0	

PROPOSED PROJECT FEATURES

Alternative 5A (Figure 8.18) would construct two new lanes in each direction at the same grade as the existing mainline. Under Alternatives 6A/B/C (Figure 8.18), the FC lanes would be elevated approximately 40 feet above the mainline and aligned along the eastern side of the mainline. For all build alternatives, the utility tower would be relocated

CHANGE TO VISUAL QUALITY/CHARACTER

The existing view from Key View 8 consists mainly of landscape masses in the background with a playground in the foreground. Utility transmission facilities can be seen in a filtered view between the landscape mass in the background. Due to the distance from the I-710 Corridor Project, viewer sensitivity would be low. Under all build alternatives, the intactness would improve slightly (from the relocation of the utility tower); however the vividness and unity would remain the same.

VIEWER RESPONSE

It would be expected for various residents and motorists to view and pass through this Key View. The number of viewers may vary from a few up to two-digit numbers daily. The duration of the view would depend upon each viewer's activity. Viewer response to the change in visual character would be low due to their distant exposure to the I-710 Corridor Project and because all the existing landscaping would remain.

Key View #8 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	5.0	The proposed vividness would be moderately high - no view of the project construction.
Intactness (I)	6.5	The proposed intactness would be high - installation of new power towers in the background; however, the new towers would be visually less intrusive than the existing ones.
Unity (U)	4.0	The proposed unity would be moderate - unchanged view with no view of the project construction.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	5.2	

Key View #8 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	5.0	The proposed vividness would be moderately high - no view of the project construction.
Intactness (I)	6.5	The proposed intactness would be high - installation of new power towers in the background; however, the new towers would be visually less intrusive than the existing ones.
Unity (U)	4.0	The proposed unity would be moderate - unchanged view with no view of the project construction.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	5.2	

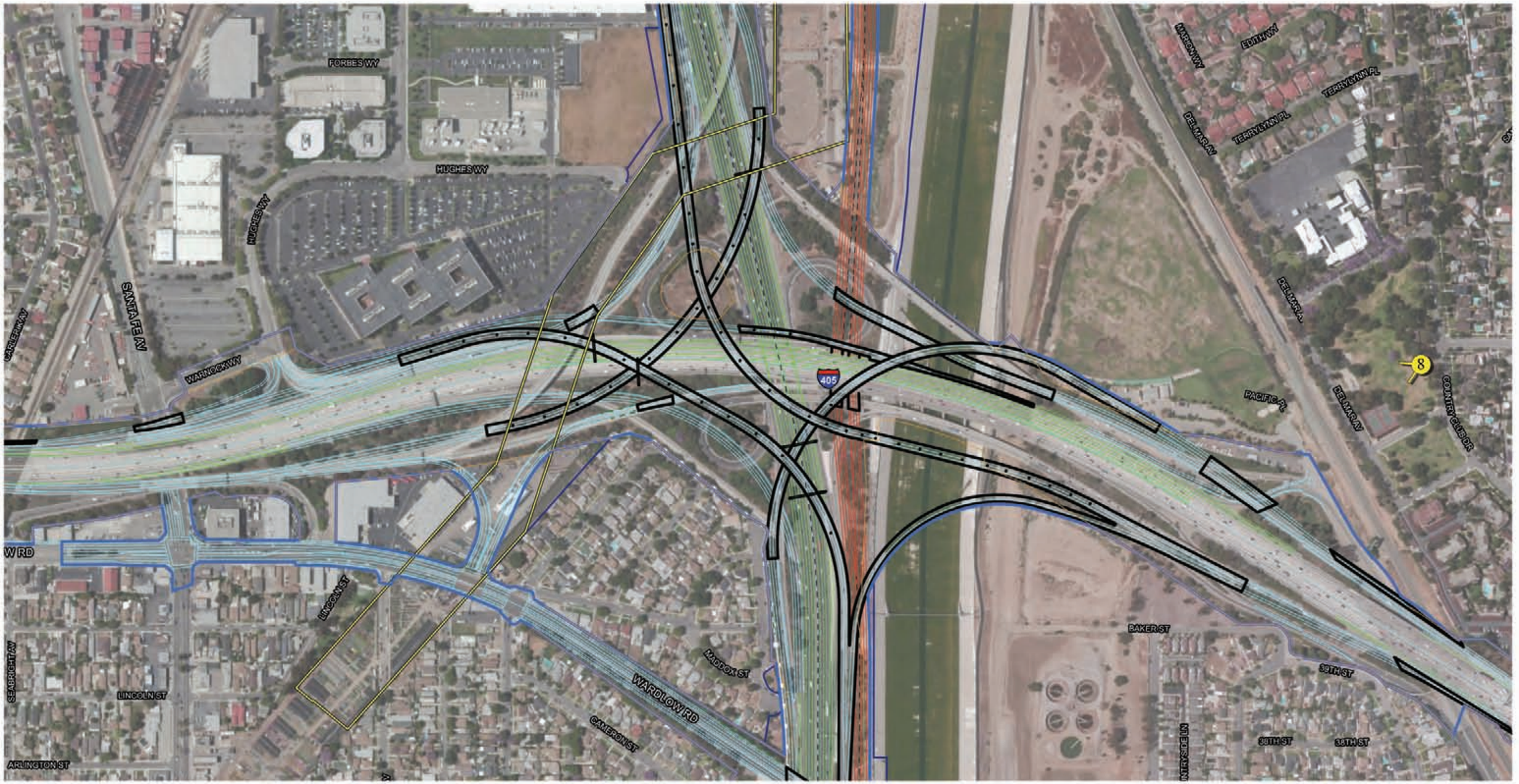
RESULTING VISUAL IMPACT

Under all build Alternatives, the change in visual impacts would be positive (+0.2) due to the distance to the I-710 Corridor Project and its limited views through the existing trees. The overall visual quality would be moderately high. The level of visual mitigation required for Key View 8 would be "Low."

Difference from Existing Visual Quality (Alternative 5A)	+0.2
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.2

ENHANCED CONDITION/VIEWER RESPONSE

With the anticipated very low adverse impact at this Key View, no aesthetic treatments are being proposed for Key View 8. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 8 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.17 KEY VIEW #8 LOCATION

FIGURE 8.17

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #8 Location

Existing Condition

Visual Simulation: Proposed Base Condition

KEY VIEW #8

Los Cerritos Park
3768 Country Club Drive
Long Beach, CA 90807

GPS Location:
Latitude = 33°49'35.41"N
Longitude = 118°11'55.67"W
Heading = 264° W by SW

This Key View is located within a residential neighborhood and adjacent to a community park on Country Club Drive. The Key View location is at the upper end of the park and looks west-southwest toward the intersection of the I-710 and I-405. Viewer sensitivity is expected to be high due to the recreational, educational and residential land uses. Large masses of existing landscape exist between this location and the I-710 Corridor Project. Distance from the Key View to the I-710 Corridor Project is more than 3,000 feet.

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.18-KEY VIEW 8 DESCRIPTION

FIGURE 8.18

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #8 Description

Key View #9 (Figures 8.19 and 8.20)

ORIENTATION

As shown in Figure 8.19, this Key View is located at 4161 North Country Club Drive in Long Beach in a residential area. The existing setting and visual simulations for Key View 9 are shown in Figure 8.20.

Latitude	Longitude	Heading
N 33° 49' 54.74"	W 118° 12' 2.21"	312° NW

EXISTING VISUAL QUALITY/CHARACTER

Key View 9 is taken from a residential area overlooking the Los Angeles River in the middle ground and industrial buildings in the background. This view is from an upper portion of the residential area with additional residential at a lower elevation in the foreground. The existing visual quality is moderately low (3.7).

	Rating	Comments
Vividness (V)	3.0	The existing vividness is moderately low - some memorable visual elements in the form of the residential units seen below.
Intactness (I)	4.0	The existing intactness is moderate - visual order created by the domination of the urban setting. Only element encroaching in an insignificant manner into the view is the linear element of the Los Angeles River.
Unity (U)	4.0	The existing unity is moderate - consistent pattern created by the residential units in the foreground and the industrial buildings in the background.
Existing Visual Quality [VQ=*(V+I+U)/3]*	3.7	

PROPOSED PROJECT FEATURES

Alternative 5A (Figure 8.20) would feature two new lanes in each direction at the same grade as the existing mainline. Under Alternatives 6A/B/C (Figure 8.20), the FC would be elevated approximately 40 feet above the east side of the mainline.

CHANGE TO VISUAL QUALITY/CHARACTER

The view from Key View 9 will be changed by the project construction of a new bridge for the METRO Blue Line. This new bridge is necessary to accommodate the alignment of the project.

The viewers' visual exposure and sensitivity to the I-710 Corridor Project would be minimal for all build alternatives due to the extreme distance between the viewer and the new construction. The I-710 Corridor Project would blend into the urban visual fabric of the view and would therefore not create any significant change in the quality/character of the scene.

VIEWER RESPONSE

The limited number of viewers from this location would consist primarily of the homeowners on the adjacent properties. Viewer sensitivity and exposure would likely be high because these areas serve as their place of residence. The duration of view would vary from low to very high, depending on the viewers'

time at their residences. The viewpoint is approximately ½ mile from the I-710 Corridor Project, making the viewers' exposure level low.

Key View #9 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	3.0	The proposed vividness would be moderately low - memorability of the view would remain unchanged.
Intactness (I)	4.0	The proposed intactness would be moderate - visual order would remain largely unchanged. The only introduced visual element would be the new Blue Line bridge, which would be very minor because of its distance.
Unity (U)	4.0	The proposed unity would be moderate - overall visual pattern would remain unchanged.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	3.7	

Key View #9 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	3.0	The proposed vividness would be moderately low - memorability of the view would remain unchanged.
Intactness (I)	4.0	The proposed intactness would be moderate - visual order would remain largely unchanged. The only introduced visual element would be the new Blue Line bridge, which would be very minor due to its distance.
Unity (U)	4.0	The proposed unity would be moderate - overall visual pattern would remain unchanged.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	3.7	

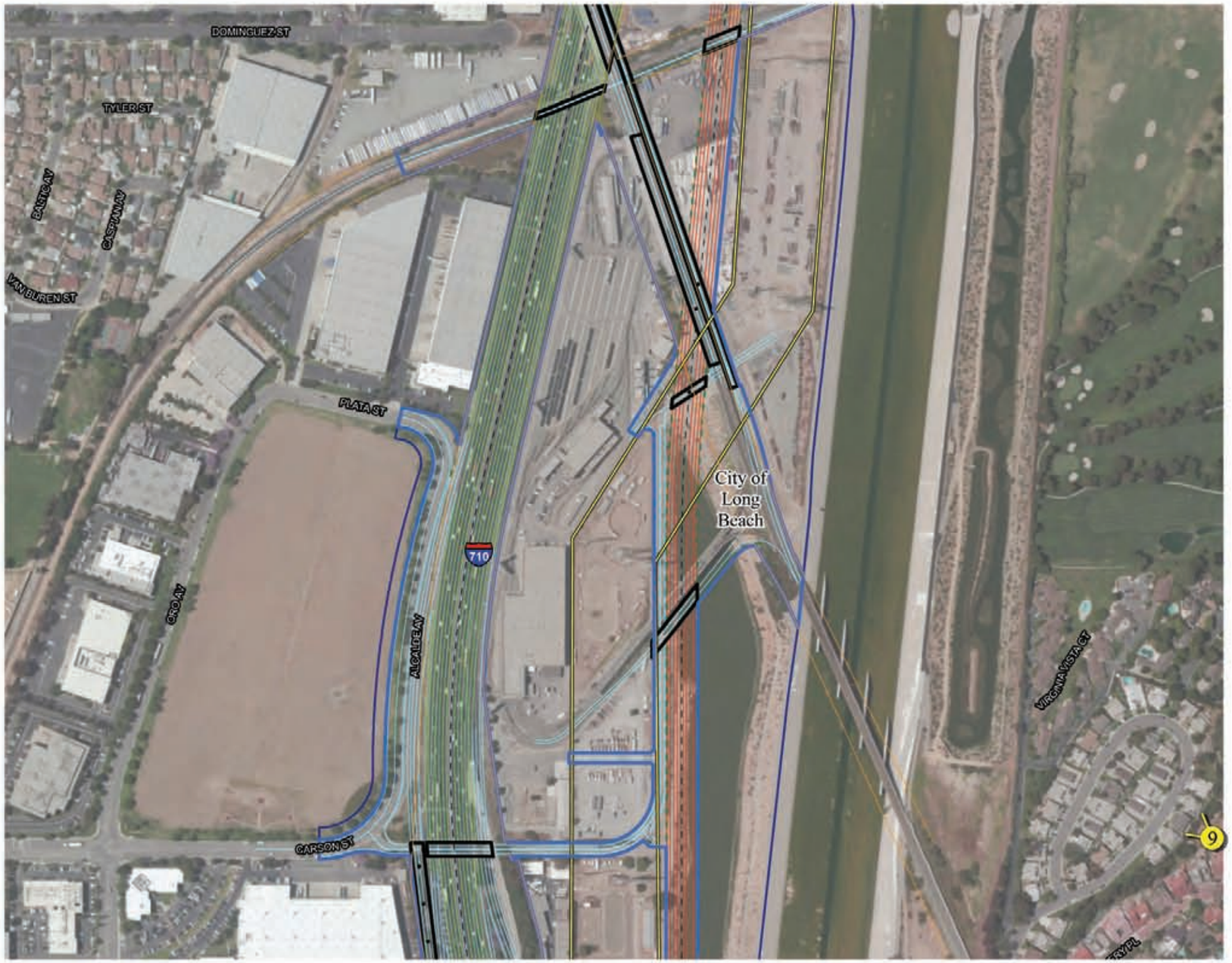
RESULTING VISUAL IMPACT

The change in adverse visual impacts to Key View 9 would be neutral or non-existent for all build alternatives because of its distance from the I-710 Corridor Project. The overall visual quality would remain moderately low. No visual mitigation would be required.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

ENHANCED CONDITION/VIEWER RESPONSE

With no anticipated adverse impacts at this Key View, no aesthetic treatments are being proposed for Key View 9. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 9 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.19 KEY VIEW #9 LOCATION

FIGURE 8.19

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #9 Location

Existing Condition

Visual Simulation: Proposed Base Condition

KEY VIEW #9

4161 N. Country Club Drive
Long Beach, CA 90807

GPS Location:
Latitude = 33°49'54.74"N
Longitude = 118°12'2.21"W
Heading = 312° NW

This Key View is located on an elevated portion of a residential neighborhood off of Country Club Drive. The specific location is near the back of residential properties within a maintenance alley. Viewer sensitivity is expected to be high due to the residential nature of the area. However this location will have limited viewers since it is located at the back of properties at the top of a slope which allows only limited pedestrian traffic and no vehicular traffic. The view is approximately ½ mile from the I-710 Corridor Project.

Study Area

LEGEND

- 9 Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.20

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #9 Description

Key View #10 (Figures 8.21 and 8.22)

ORIENTATION

As shown in Figure 8.21, this Key View is located at 47th Street and Pacific Avenue in Long Beach near the Virginia Country Club in a residential area. This Key View looks southwest toward I-710. The existing setting and visual simulation for Key View 10 are shown in Figure 8.22.

Latitude	Longitude	Heading
N 33° 50' 28.30"	W 118° 11' 58.20"	236° W by SW

EXISTING VISUAL QUALITY/CHARACTER

The existing view at this location is from a utility maintenance corridor. It is located next to a private golf course. Views from this location include tree masses on both sides as well as utility structures and a bridge structure in the middle. The existing visual quality of this view is low (2.7).

	Rating	Comments
Vividness (V)	2.5	The existing vividness is low - the lack of one major visual element minimizes the memorability of this view.
Intactness (I)	3.5	The existing intactness is moderately low - randomness of the visual elements and the introduction of the bridge and power structures in a view predominately made of natural bare earth and trees.
Unity (U)	2.0	The existing unity is low - trees, utility corridor, and man-made elements do not interact with any coherent pattern.
Existing Visual Quality [VQ=*(V+I+U)/3]*	2.7	

PROPOSED PROJECT FEATURES

Under all build alternatives, the I-710 Corridor Project would not be seen as the FC and mainline elements would be below grade in this area. The only portion of the new construction which would be seen is the construction of a new bridge for the METRO Rail Blue Line and the replacement of one utility structure.

CHANGE TO VISUAL QUALITY/CHARACTER

The proposed project would introduce the replacement of the single bridge found in the view. The location of the new bridge is slightly closer toward the viewer, though this difference is not noticeable. In addition, there is one utility structure that will be replaced with a different style. This new style repeats the style already found in the existing view.

There would be no visual impact under all build alternatives because it would not modify the existing visual setting. The vividness and intactness would remain the same as existing; however the unity would increase slightly (0.5) under all build alternatives. Viewer sensitivity and exposure to the slight change in unity would be minimal.

VIEWER RESPONSE

A very limited number of viewers would be expected to pass though this Key View. Among these viewer groups would likely be restricted to maintenance personnel. The viewing duration depends on the location and the activity of the viewers but is expected to be minimal. Therefore, under all build alternatives, the proposed visual quality of this view would be low (2.8).

Key View #10 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	2.5	The proposed vividness would be low - view would not notably change from existing.
Intactness (I)	3.5	The proposed intactness would be moderately low - with the exception of the new power tower, no other apparent changes.
Unity (U)	2.5	The proposed unity would be low - overall visual pattern would be slightly improved with the new power tower that complements the remaining utility structures. This would reinforce the vertical pattern.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	2.8	

Key View #10 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	2.5	The proposed vividness would be low - view would not notably change from existing.
Intactness (I)	3.5	The proposed intactness would be moderately low - with the exception of the new power tower, no other apparent changes.
Unity (U)	2.5	The proposed unity would be low - overall visual pattern would be slightly improved with the new power tower that complements the remaining utility structures. This would reinforce the vertical pattern.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	2.8	

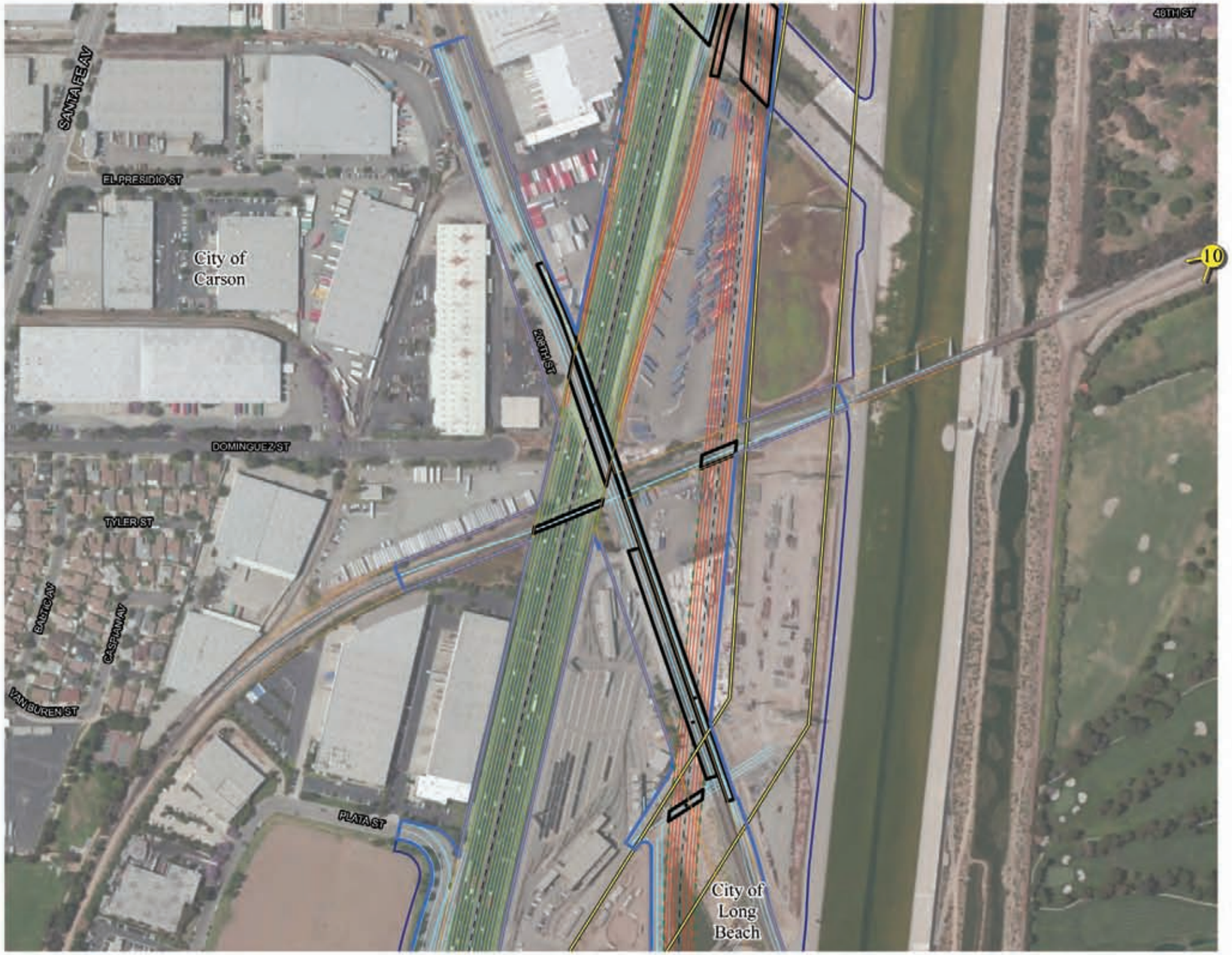
RESULTING VISUAL IMPACT

The change in visual impacts for all build alternatives in Key View 10 would be positive (+0.1) because of the lack of visibility of the I-710 Corridor Project and because the proposed changes to this Key View would be extremely minimal. The visual quality would remain low. The level of visual mitigation required would be “Low.”

Difference from Existing Visual Quality (Alternative 5A)	+0.1
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.1

ENHANCED CONDITION/VIEWER RESPONSE

With the anticipated improvement in the visual quality at this Key View, no aesthetic treatments are being proposed for Key View 10. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 10 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.21 KEY VIEW #10 LOCATION

FIGURE 8.21

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #10 Location

Existing Condition

Visual Simulation: Proposed Base Condition

KEY VIEW #10

47th Street and Pacific Avenue
Long Beach, CA 90805

GPS Location:
Latitude = 33°50'28.30"N
Longitude = 118°11'58.20"W
Heading = 236° W by SW

This Key View is located within an open field adjacent to a residential community. This community is composed of single-family units and mobile homes. Viewer sensitivity would be high due to the residential nature of the area. Views from this location are approximately 1,500 feet from the I-710 Corridor Project.

Study Area

LEGEND

- 10 Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.22

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #10 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.4-KEY VIEW 1 DESCRIPTION

Key View #11 (Figures 8.23 and 8.24)

ORIENTATION

As shown in Figure 8.23, this Key View is located at 4958 Oregon Avenue in Long Beach in a residential area. The existing setting and visual simulations for Key View 11 are shown in Figure 8.24.

Latitude	Longitude	Heading
N 33° 50' 45.38"	W 118° 12' 1.11"	254° W by SW

EXISTING VISUAL QUALITY/CHARACTER

Key View 11 is from an open field adjacent to a residential community. The open field can be seen in the foreground with the existing I-710 and levee of the Los Angeles River seen in the middle ground and utility structures in the middle and backgrounds. The existing visual quality of this view is moderate (4.2).

	Rating	Comments
Vividness (V)	4.0	The existing vividness is moderate - wide expanse of the open field visually fills the lower half of the view.
Intactness (I)	5.0	The existing intactness is moderately high - lower half of the view is the open field, middle of the view is filled by the river levee and I-710, and the upper portion of the view is the open sky. The utility towers play a minor part in the encroachment of the view.
Unity (U)	3.5	The existing unity is moderately low - major visual elements provide a strong visual order, but there is very little to provide a coherent visual pattern.
Existing Visual Quality [VQ=*(V+I+U)/3]*	4.2	

PROPOSED PROJECT FEATURES

Alternative 5A (Figure 8.24) would construct two new lanes in each direction at the same grade as the existing mainline. Alternatives 6A/B/C (Figure 8.24) would feature an elevated FC approximately 40 feet above the mainline. In this location, the FC would be positioned directly next to the GP lanes by means of columns and would be rising toward the north. Soundwalls would be erected on the FC along the western edge.

CHANGE TO VISUAL QUALITY/CHARACTER

The proposed view differs from the existing view in a very minor fashion. The most visible changes would be the addition of the elevated FC under Alternatives 6A/B/C, its soundwall, and the replacement of the utility structures found behind I-710. These structures are changed from one older style into two dual element structures.

Under Alternative 5A, there would be none to minimal visual change to the quality/character of the view. Under Alternatives 6A/B/C, the FC would be on the east side of I-710 mainline adjacent to the Los Angeles River. The proposed vividness would remain the same but the intactness would be reduced due to the clear view of the elevated FC. The proposed unity would increase slightly due to the elevated FC blocking the random "skyline" of the various buildings and trees. Sensitivity of viewers to this change would likely be low to moderate due to the far distance to the I-710 Corridor Project.

VIEWER RESPONSE

Numerous users would be expected to use this facility pending the improvement of this site into a recreation facility. The duration of views would depend on the ultimate use for this site. The Key View would be approximately 1,500 feet from I-710; therefore, viewers' exposure would be moderately low.

Key View #11 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	4.0	The proposed vividness would be moderate - the view would remain the same.
Intactness (I)	5.0	The proposed intactness would be moderately high - no change in view from the existing.
Unity (U)	4.0	The proposed unity would be moderate - no changes to improve or worsen the existing visual pattern.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	4.3	

Key View #11 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	4.0	The proposed vividness would be moderate - very little would be introduced to increase the vividness.
Intactness (I)	3.0	The proposed intactness would be moderately low - introduction of the elevated freight corridor would be a significant encroachment into the view.
Unity (U)	4.5	The proposed unity would be moderate - overall harmonious pattern would be slightly improved with the replacement of the utility structure.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	3.8	

RESULTING VISUAL IMPACT

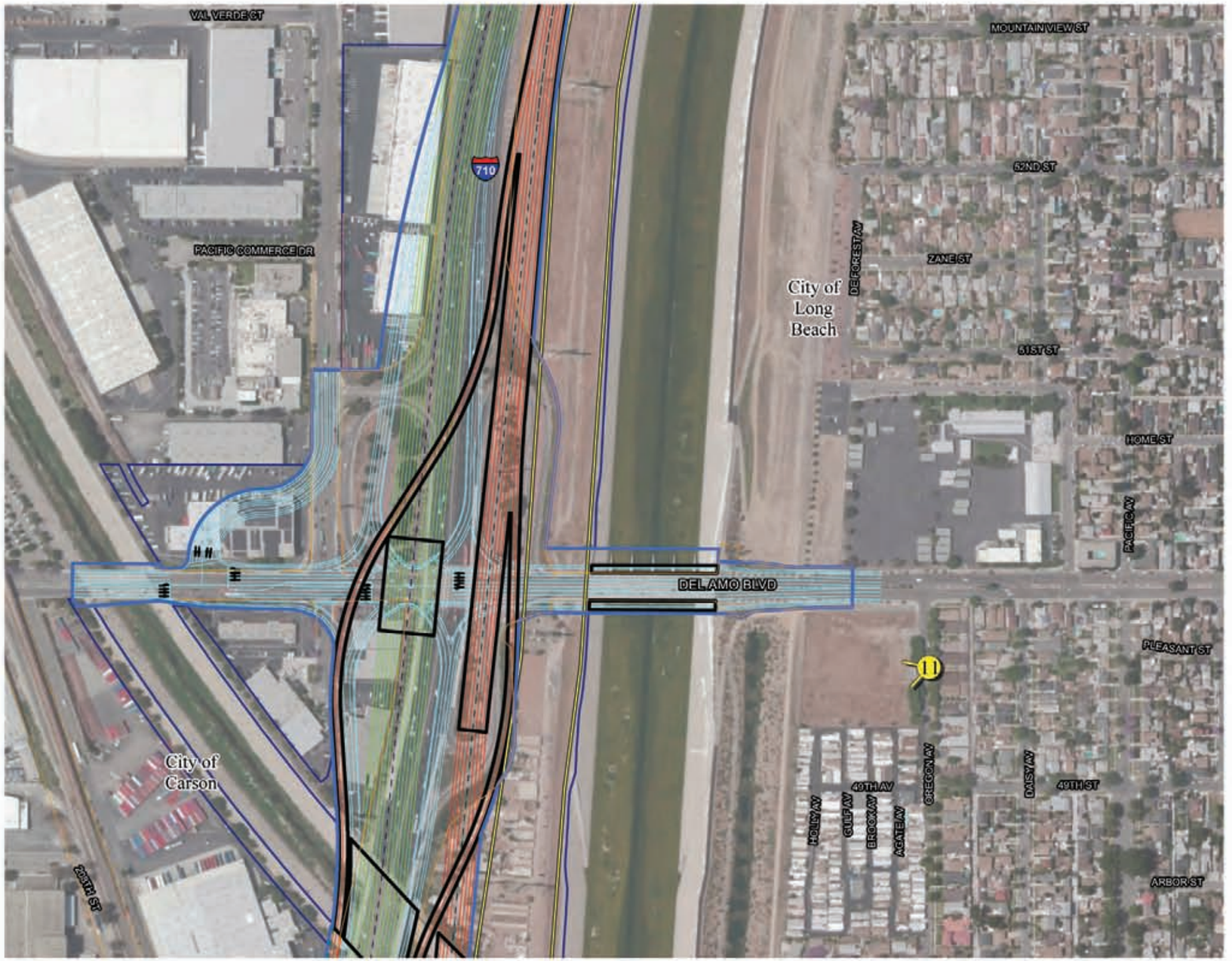
The change in visual impact at Key View 11 would be positive (+0.1) under Alternative 5A, however, for Alternatives 6A/B/C the change in adverse visual impact would be negative (-0.4) due to the clear view of the elevated FC from this open space. The visual quality would be moderate for Alternative 5A and moderately low for Alternatives 6A/B/C. The highest level of visual mitigation required for Key View 11 would be "Moderate."

Difference from Existing Visual Quality (Alternative 5A)	+0.1
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.4

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.24 illustrates one design example of aesthetic treatments for the elevated FC with the addition of a new screen wall. This possible concept illustrates an optional

curvilinear shaped wall which blends into the background sky. A new soundwall constructed adjacent to the Los Angeles River provides the overall view with increased levels of intactness. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 11 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.23

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #11 Location

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.23 KEY VIEW #11 LOCATION

KEY VIEW #11

4958 Oregon Avenue
Long Beach, CA 90805

GPS Location:
Latitude = 33°50'45.38"N
Longitude = 118°12'1.11"W
Heading = 254° W by SW

This Key View is located within an open field adjacent to a residential community. This community is composed of single-family units and mobile homes. Viewer sensitivity would be high due to the residential nature of the area. Views from this location are approximately 1,500 feet from the I-710 Corridor Project.

Existing Condition

Visual Simulation: Proposed Base Condition

Enhanced Condition

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.24

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #11 Description

Key View #12 (Figures 8.25 and 8.26)

ORIENTATION

As shown in Figure 8.25, this Key View is located at the knuckle of DeForest Avenue and West 52nd Street in Long Beach in a residential area. The existing setting and visual simulations for Key View 12 are shown in Figure 8.26.

Latitude	Longitude	Heading
N 33° 51' 0.03"	W 118° 12' 5.84"	278° W

EXISTING VISUAL QUALITY/CHARACTER

The existing visual quality is low (2.3) due to the lack of any significantly positive visual elements combined with the bare views of the levee and its slope and maintenance road. There is an almost complete lack of landscape in this view.

	Rating	Comments
Vividness (V)	2.0	The existing vividness is low - view features very little significant visual elements.
Intactness (I)	2.0	The existing intactness is low - the overall integrity of the view is compromised by the utility lines along the "skyline" and gravel road in the foreground.
Unity (U)	3.0	The existing unity is moderately low - the parallel lines of the utility lines and the form of the slope provide minimal visual coherence to the scene.
Existing Visual Quality [VQ=*(V+I+U)/3]*	2.3	

PROPOSED PROJECT FEATURES

Under Alternative 5A (Figure 8.26), all lanes would remain at the same grade as the existing mainline. Under Alternatives 6A/B/C (Figure 8.26), the FC would begin to elevate toward the north to a height of approximately 40 feet above the mainline and would be located between the mainline and the Los Angeles River. A minor view of the elevated portion of the I-710 FC can be seen from this Key View.

CHANGE TO VISUAL QUALITY/CHARACTER

Under Alternative 5A, the mainline would be widened to 10 GP lanes at the same grade as the existing mainline – vividness and intactness would remain low (2.0) and unity would remain moderately low (3.0). Under Alternatives 6A/B/C, the FC would be located on the east side of the I-710 mainline, adjacent to Los Angeles River. The proposed vividness would remain low (2.0), intactness would drop to very low (1.5), and unity would drop to low (2.5).

VIEWER RESPONSE

A limited number of viewers are expected per day. Since this Key View is located approximately 1,200 feet from the I-710 Corridor Project, the viewers will have a distant view. The duration of view would vary on the time of day and viewers' activities. The FC under Alternatives 6A/B/C would only be minimally seen in this view. Therefore, under all build alternatives, the proposed visual quality of this view would be low (2.0 to 2.3).

Key View #12 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	2.0	The proposed vividness would be low - due to the additional travel lanes being below the grade of the levee, this view would be unchanged.
Intactness (I)	2.0	The proposed intactness would be low - due to the additional travel lanes being below the grade of the levee, this view would be unchanged.
Unity (U)	3.0	The proposed unity would be moderately low - due to the additional travel lanes being below the grade of the levee, this view would be unchanged.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	2.3	

Key View #12 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	2.0	The proposed vividness would be low - the vividness of the view would be largely unchanged.
Intactness (I)	1.5	The proposed intactness would be very low - the addition of the elevated freight corridor along with utility lines over the "skyline" would lessen the integrity of the view.
Unity (U)	2.5	The proposed unity would be low - the horizontal patterns of the view would be lessened slightly by the introduction of the elevated freight corridor.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	2.0	

RESULTING VISUAL IMPACT

The change in adverse visual impacts under Alternative 5A would be neutral or non-existent (0.0) and therefore no mitigation would be required for this build alternative. However, the change in adverse visual impacts under Alternatives 6A/B/C would be lower (-0.3) due to the widening of the mainline and the minimally seen FC. The overall visual quality would remain low. The level of visual mitigation required under Alternatives 6A/B/C for Key View 11 would be "Moderate."

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.3

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.26 shows a visual treatment alternative which incorporates a visual screen adjacent to the Los Angeles River and regularly spaced curvilinear shapes. These enhancements help to increase the unity of the scene by "softening" the strong linear edge of the FC with the curvilinear shapes masking a significant part of the visual encroachment of the FC. Viewer response to enhanced improvements to the view should be positive.

LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 12 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC (2011)

FIGURE 8.25

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #12 Location

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.25 KEY VIEW #12 LOCATION

Existing Condition

KEY VIEW #12

Knuckle of De Forest Avenue and West 52nd Street
Long Beach, CA 90805

GPS Location:
Latitude = 33°51'0.03"N
Longitude = 118°12'5.84"W
Heading = 278° W

This Key View is located in the knuckle of De Forest Avenue and West 52nd Street in Long Beach. Neighborhood residents are expected to have a high concern about the I-710 Corridor Project and its effect on the view from their neighborhood and homes. This Key View is looking west to I-710 Corridor Project.

Study Area

Visual Simulation: Proposed Base Condition

Enhanced Condition

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.26

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #12 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.26-KEY VIEW 12 DESCRIPTION

Key View #13 (Figures 8.27 and 8.28)

ORIENTATION

As shown in Figure 8.27, this Key View is located at 5555 Long Beach Boulevard in Long Beach in a high density residential area. The existing setting and visual simulation for Key View 13 are shown in Figure 8.28.

Latitude	Longitude	Heading
N 33° 51' 28.63"	W 118° 11' 53.45"	320° NW

EXISTING VISUAL QUALITY/CHARACTER

Key View 13 consists of a number of visual elements including sparse landscape and the levee in the foreground, industrial buildings in the middle ground and utility structures in the background. This Key View has an overall visual quality of low (2.3).

	Rating	Comments
Vividness (V)	2.0	The existing vividness is low - lack of a visually dominant element.
Intactness (I)	2.0	The existing intactness is low - lack of visual order and the introduction of many man-made elements.
Unity (U)	3.0	The existing unity is moderately low - horizontal arrangement of the levee lines, the "skyline" of the industrial buildings, and the utility lines create a moderately low amount of visual pattern.
Existing Visual Quality [VQ=*(V+I+U)/3]*	2.3	

PROPOSED PROJECT FEATURES

Under all build Alternatives, the I-710 Corridor itself would not be seen. However, the new project construction would add a view of a new off-ramp to the middle ground of the scene. Additionally the utility structures in the background would be retrofitted with new style structures.

CHANGE TO VISUAL QUALITY/CHARACTER

Due to the topography of the I-710 Corridor Project and the viewer at this Key View location, the improvements of the actual I-710 Corridor Project will not be seen. However, the new off-ramp will be seen. The proposed vividness and intactness would remain mostly unchanged. The proposed unity would improve slightly from 3.0 to 3.5 with the increase harmony of the view, but still remain moderate. The Key View is located approximately 1,200 feet from I-710 Corridor Project.

VIEWER RESPONSE

The viewer group from this location would primarily be residents in the adjacent rental complex. The number of viewers would be expected to reach the high hundreds daily. Duration of view depends on the activity of viewers and would vary from minutes to hours. All build alternatives would have a low overall viewer response (2.5).

Key View #13 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	2.0	The proposed vividness would be low - the view would not be changed from the existing.
Intactness (I)	2.0	The proposed intactness would be low - visual encroachments would be mostly unchanged.
Unity (U)	3.5	The proposed unity would be moderately low - visual pattern would be slightly improved with the introduction of the new off-ramp. The ramp would cover much of the uneven "skyline" of industrial buildings and adds increased harmony to the view.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	2.5	

Key View #13 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	2.0	The proposed vividness would be low - the view would not be changed from the existing.
Intactness (I)	2.0	The proposed intactness would be low - visual encroachments would be mostly unchanged.
Unity (U)	3.5	The proposed unity would be moderately low - visual pattern would be slightly improved with the introduction of the new off-ramp. The ramp would cover much of the uneven "skyline" of industrial buildings and adds increased harmony to the view.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	2.5	

RESULTING VISUAL IMPACT

Under all build alternatives the change in visual impacts would be positive (+0.2) with the slightly increased visual unity from the addition of the ramp. The overall visual quality would be low. The level of visual mitigation required for Key View 13 would be “Low.”

Difference from Existing Visual Quality (Alternative 5A)	+0.2
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.2

ENHANCED CONDITION/VIEWER RESPONSE

With the anticipated improvement in the visual quality at this Key View, no aesthetic treatments are being proposed for Key View 13.

LEGEND

- Collector/Distributor and Ramp Geometries
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 13 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.27 KEY VIEW #13 LOCATION

FIGURE 8.27

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #13 Location

Existing Condition

Visual Simulation: Proposed Base Condition

KEY VIEW #13

5555 Long Beach Boulevard
Long Beach, CA 90805

GPS Location:
Latitude = 33°51'28.63"N
Longitude = 118°11'53.45"W
Heading = 320° NW

This Key View is located adjacent to an apartment residential complex, Key View #13 looks northwest toward the I-710 Corridor Project which is approximately 1,200 feet away. Viewers include the residence in the apartments plus recreation users of the trail running along the eastern Los Angeles River levee.

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.28

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #13 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.28-KEY VIEW 13 DESCRIPTION

Key View #14 (Figures 8.29 and 8.30)

ORIENTATION

As shown in Figure 8.29, this Key View is located at 6050 White Avenue in Long Beach north of East Gordon Street, in a major residential area. The existing setting and visual simulations for Key View 14 are shown in Figure 8.30.

Latitude	Longitude	Heading
N 33° 51' 54.03"	W 118° 11' 55.06"	101° E by SE

EXISTING VISUAL QUALITY/CHARACTER

This Key View is located in a residential community at roughly the same grade as the existing I-710 mainline. There is minor landscaping between the residential street and the existing soundwall. Utility lines and structures as well as lighting fixtures can also be seen. The overall visual quality is moderately low (3.2).

	Rating	Comments
Vividness (V)	3.0	The existing vividness is moderately low - the view features minimal landscape to create minimal visually distinctive elements in the scene.
Intactness (I)	3.0	The existing intactness is moderately low - the view contains a number of conflicting visual elements such as the landscape, street, fence along the soundwall, the soundwall itself, light poles, and utility lines.
Unity (U)	3.5	The existing unity is moderately low - all visual elements are evenly distributed within the view to create a minor visual pattern.
Existing Visual Quality [VQ=*(V+I+U)/3]*	3.2	

PROPOSED PROJECT FEATURES

In all build alternatives, construction of two new lanes in each direction at the same grade as the existing mainline and a soundwall would be added on the west side of I-710. Additionally a number of the existing utility lines seen immediately above the new soundwall would be removed.

CHANGE TO VISUAL QUALITY/CHARACTER

All build alternatives would result in minimal visual change in character. In spite of the local residents' proximity, the vividness, intactness and unity would remain unchanged.

VIEWER RESPONSE

The proximity of the residential viewers to the I-710 Corridor Project would normally project high sensitivity. However due to the limited visual constructed elements, the new soundwall and the removal of some of the utility lines, the overall viewer responses is projected to be neutral.

Key View #14 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	3.0	The proposed vividness would be moderately low - this view would remain unchanged with the exception of a new soundwall.
Intactness (I)	3.0	The proposed intactness would be moderately low - this view would remain unchanged.
Unity (U)	3.5	The proposed unity would be moderately low -this view would remain unchanged.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	3.2	

Key View #14 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	3.0	The proposed vividness would be moderately low - this view would remain unchanged with the exception of a new soundwall.
Intactness (I)	3.0	The proposed intactness would be moderately low -this view would remain unchanged with the exception of a new soundwall.
Unity (U)	3.5	The proposed unity would be moderately low - this view would remain unchanged.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	3.2	

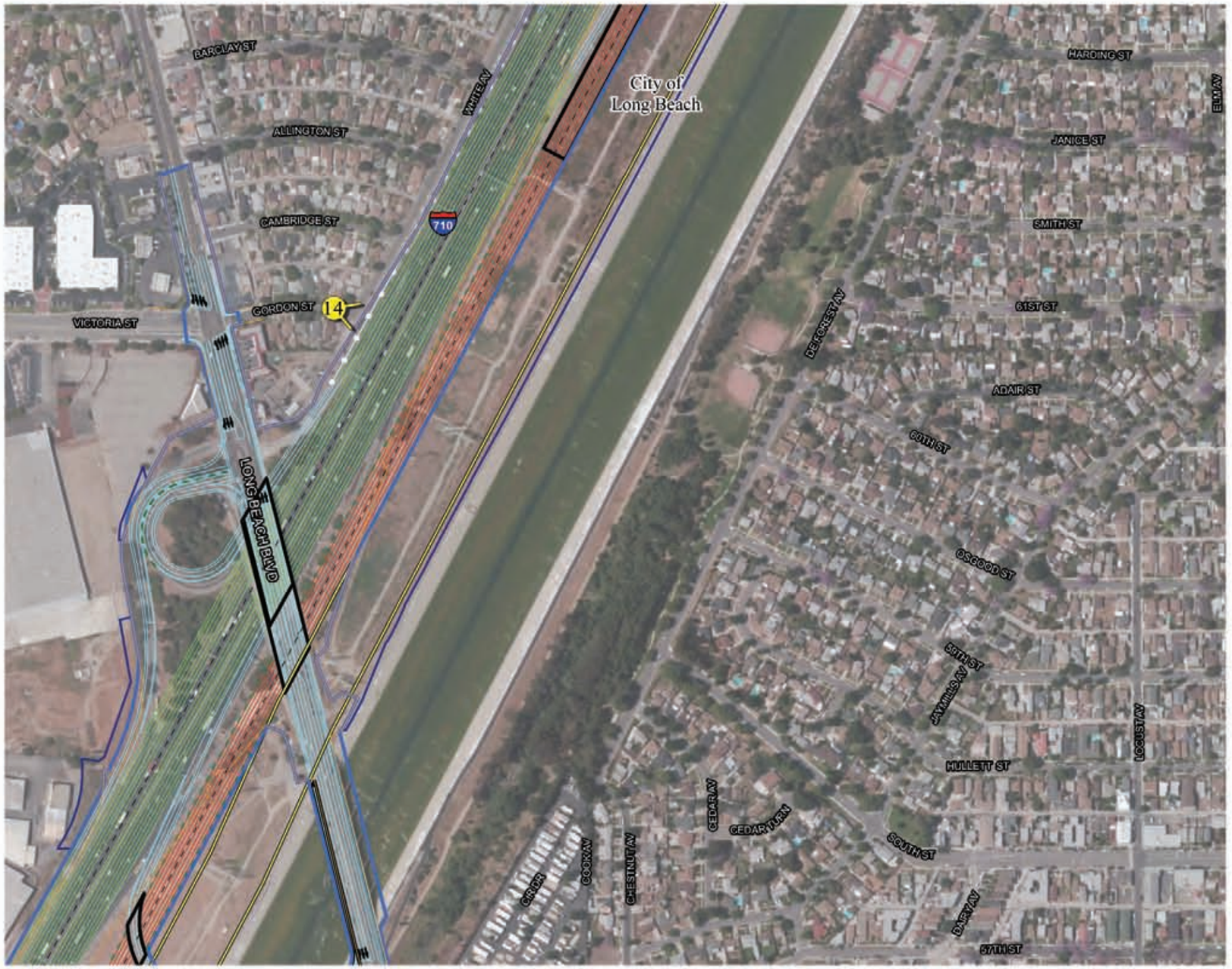
RESULTING VISUAL IMPACT

Under all build Alternatives the change in adverse visual impacts would be neutral or non-existent (0.0) because the major change in visual impact would be the replacement of an existing soundwall with a new soundwall. The overall visual quality would be moderately low. No visual mitigation would be required for Key View 14.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

ENHANCED CONDITION/VIEWER RESPONSE

The visual impact to this Key View is neutral or non-existent. However this visual simulation in Figure 8.30 illustrates how linear patterns on the soundwall, plus new landscaping in the foreground, can work to create a very pleasant visual environment.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 14 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.29 KEY VIEW #14 LOCATION

FIGURE 8.29

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #14 Location

KEY VIEW #14

6050 White Avenue
Long Beach, CA 90805

GPS Location:
Latitude = 33°51'54.03"N
Longitude = 118°11'55.06"W
Heading = 101° E by SE

This Key View is located on White Avenue, 150 feet north of East Gordon Street, in a major residential area. This Key View looks east toward I-710 Corridor Project.

Existing Condition

Visual Simulation: Proposed Base Condition

Enhanced Condition

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.30

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #14 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.30-KEY VIEW 14 DESCRIPTION

Key View #15 (Figures 8.31 and 8.32)

ORIENTATION

As shown in Figure 8.31, this Key View is from Coolidge Park, located at 6400 White Avenue in Long Beach. The existing setting and visual simulations for Key View 15 are shown in Figure 8.32.

Latitude	Longitude	Heading
N 33° 52' 21.89"	W 118° 11' 41.81"	58° NE

EXISTING VISUAL QUALITY/CHARACTER

This Key View is located at a recreation facility, and existing visual quality is moderate (4.0). Views of an existing soundwall, high fencing, lighting fixtures, utility lines and structures plus background trees are seen.

	Rating	Comments
Vividness (V)	4.5	The existing vividness is moderate - the turf featured in the baseball field and trees in the background contribute to the memorability of the scene.
Intactness (I)	3.0	The existing intactness is moderately low - the EB SR-91 on ramp to SB I-710, an existing soundwall, light poles, and fences in the foreground, with minimum visibility of utility lines in the background, increase the visual encroachment to the view.
Unity (U)	4.5	The existing unity is moderate - the colors of "skyline" plus the baseball field blend with one another to create a sense of visual coherency.
Existing Visual Quality [VQ=*(V+I+U)/3]*	4.0	

PROPOSED PROJECT FEATURES

Alternative 5A (Figure 8.32) would feature two new lanes in each direction at the same grade as the existing mainline. However, a new connector ramp which will be seen would be included in this alternative. This same connector ramp will be seen in Alternatives 6A/B/C (Figure 8.32) and the FC would be elevated approximately 40 feet above grade, parallel to I-710 between I-710 and the Los Angeles River. Soundwalls would be incorporated along the west side of the elevated FC.

CHANGE TO VISUAL QUALITY/CHARACTER

Under Alternative 5A, there would be no change in visual quality/character with the exception of the connector ramp. Under Alternatives 6A/B/C, the connector ramp and the FC would be located on the west side of I-710. The proposed intactness would be lessened due to the new FC. The proposed unity would remain the same.

VIEWER RESPONSE

The number of viewers could easily reach up into three-digit numbers during high park activity days including weekends and summer periods. The duration of the view would vary from less than a minute up to multiple hours, depending on the activity of viewers. The viewpoint would be approximately 300 feet from the I-710 Corridor Project. Viewers' responses to the change would be high. Viewers' exposure and sensitivity would be high.

Key View #15 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	4.5	The proposed vividness would be moderate - although the turf and open sky create significantly striking features, the new soundwall would detract from these elements.
Intactness (I)	3.0	The proposed intactness would be moderately low - this view would remain unchanged.
Unity (U)	4.5	The proposed unity would be moderate - the colors of skyline and baseball field would remain unchanged even with the introduction of the new soundwall.
Proposed Visual Quality [PVQ1=(*V+I+U)/3]*	4.0	

Key View #15 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	4.5	The proposed vividness would be moderate - although the impact of the turf and open sky would diminish slightly, the added views of the new structures and the new soundwall would create a higher of vividness.
Intactness (I)	2.5	The proposed intactness would be low - in this alternative, the existing ramp, light poles, and fences in the foreground, with minimum visibility of utility lines plus the visibility of the connector ramp and elevated freight corridor, would decrease the visual intactness of the view.
Unity (U)	4.5	The proposed unity would be moderate - all of the existing elements plus the new views of the structures would combine to create unity.
Proposed Visual Quality [PVQ2=(*V+I+U)/3]*	3.8	

RESULTING VISUAL IMPACT

The change in adverse visual impacts would be neutral or non-existent (0.0) under Alternative 5A and negative (-0.2) for Alternatives 6A/B/C due to the change in intactness from the elevated FC and associated soundwall. The overall visual quality for Alternative 5A would be moderate and for Alternatives 6A/B/C it would be moderately low. No mitigation would be required for Alternative 5A, however Alternatives 6A/B/C would require a "Moderate" level of visual mitigation.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.2

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.32 shows an example of minimal treatment to a new soundwall that can contribute to the enhanced quality of a view. In this instance, the visual encroachment of the new soundwall is minimized by the patterns and textures, thus increasing the intactness of the scene. Viewer response to enhanced improvements to the view should be positive.

LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 15 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.31 KEY VIEW #15 LOCATION

FIGURE 8.31

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #15 Location

KEY VIEW #15

Coolidge Park
6400 White Avenue
Long Beach, CA 90805

GPS Location:
Latitude = 33°52'21.89"N
Longitude = 118°11'41.81"W
Heading = 58° NE

Coolidge Park is located at 6400 White Avenue. This 6.1-acre park has amenities including a basketball court, softball field, playground, picnic area, and community center. This Key View is located alongside I-710 looking east. Park users and local residents are expected to have a high concern about the visual effect on the park and the surrounding neighborhood.

Note: The Visual Simulation showing proposed base condition for Alternative 5A includes only the cross hatched area called out as "5A." The Visual Simulation showing proposed base condition for Alternatives 6A/B/C includes the cross hatched areas called out as "5A" and "6A/B/C".

Existing Condition

Visual Simulation: Proposed Base Condition

Enhanced Condition

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads
- Alternatives 6A/B/C
- Alternative 5A

FIGURE 8.32

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #15 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.32-KEY VIEW 15 DESCRIPTION

Key View #16 (Figures 8.33 and 8.34)

ORIENTATION

As shown in Figure 8.33, this Key View is located at 494 East 68th Way in a residential area in the City of Long Beach. The existing setting and visual simulations for Key View 16 are shown in Figure 8.34.

Latitude	Longitude	Heading
N 33° 52' 42.91"	W 118° 11' 37.05"	89° E

EXISTING VISUAL QUALITY/CHARACTER

This existing Key View is located within a residential community and existing soundwalls and utility facilities can be seen in the background. All of these existing elements gives this Key View an existing visual quality which is low (2.7).

	Rating	Comments
Vividness (V)	3.0	The existing vividness is moderately low - the mixture of trees and shrubs weaved into the urban residential area with freeway structures in the background serve to create very little memorable scenes.
Intactness (I)	2.5	The existing intactness is low - the retaining walls along the street coupled with the visible utility lines in the background, light poles, and the transition ramp with a soundwall from SB I-710 to EB SR-91 break the visual integrity of the view.
Unity (U)	2.5	The existing unity is low - due to the numerous visual elements in the view in a jumbled and overlapping manner, very little coherency can be found.
Existing Visual Quality [VQ=*(V+I+U)/3]*	2.7	

PROPOSED PROJECT FEATURES

All build alternatives would feature the same new project features. The construction will require the installation of new soundwalls, the elimination of the background utility structures, and a new bridge structure.

CHANGE TO VISUAL QUALITY/CHARACTER

Under all build alternatives, the visual quality and character of this Key View would remain unchanged.

VIEWER RESPONSE

There would be numerous viewers, mostly residents who reside adjacent to I-710 Corridor Project in this Key View. Duration of their view would depend upon the activity of the viewers and it could vary from seconds to hours as this Key View is approximately 200 feet from the I-710 Corridor Project. Viewer response to a change in character would be high, however, the view would remain largely unchanged for all build alternatives.

Key View #16 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	3.0	The proposed vividness would be moderately low - the view would remain largely unchanged due to the replacement of the existing retaining/soundwall in the same location.
Intactness (I)	2.5	The proposed intactness would be low - the view would remain largely unchanged due to the replacement of the existing retaining/soundwall in the same location.
Unity (U)	2.5	The proposed unity would be low - the view would remain largely unchanged due to the replacement of the existing retaining/soundwall in the same location.
Proposed Visual Quality [PVQ1=(*V+I+U)/3]*	2.7	

Key View #16 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	3.0	The proposed vividness would be moderately low - the view would remain largely unchanged due to the replacement of the existing retaining/soundwall in the same location.
Intactness (I)	2.5	The proposed intactness would be low - the view would remain largely unchanged due to the replacement of the existing retaining/soundwall in the same location.
Unity (U)	2.5	The proposed unity would be low - the view would remain largely unchanged due to the replacement of the existing retaining/soundwall in the same location.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	2.7	

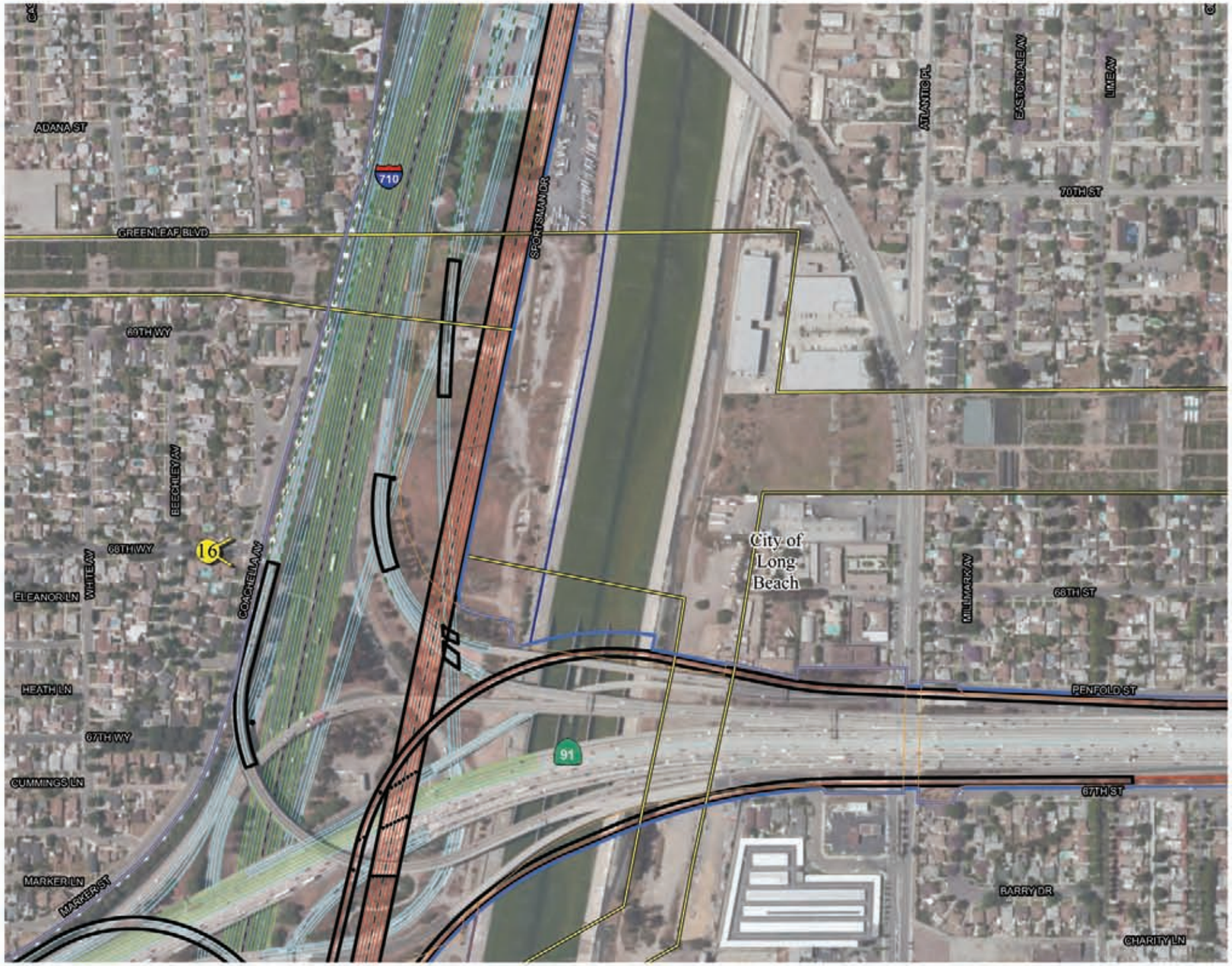
RESULTING VISUAL IMPACT

There would be a neutral or non-existent (0.0) change in adverse visual impacts under all build alternatives. This is due primarily to there being no new visual features, merely the replacement of existing features. The overall visual quality would be low. No visual mitigation would be required for Key View 16.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

ENHANCED CONDITION/VIEWER RESPONSE

While the analysis finds that very little visual impact occurs due to new construction, the visual simulation in Figure 8.34 illustrates one option that increases the visual value of the view from Key View 16. The added planting covers the retaining wall and soundwall which improves the vividness. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 16 Key View Location

0 200 400 FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.33 KEY VIEW #16 LOCATION

FIGURE 8.33

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #16 Location

KEY VIEW #16

494 East 68th Way
Long Beach, CA 90805

GPS Location:
Latitude = 33°52'42.91"N
Longitude = 118°11'37.05"W
Heading = 89° E

This Key View is located at 494 East 68th Way in a residential area in the City of Long Beach. Neighborhood residents are expected to have a high concern about the I-710 Corridor Project and its effect on the view from their neighborhood. This Key View looks east toward I-710 Corridor Project.

Existing Condition

Visual Simulation: Proposed Base Condition

Enhanced Condition

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.34

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #16 Description

Key View #17 (Figures 8.35 and 8.36)

ORIENTATION

As shown in Figure 8.35, this Key View is located within the Compton Par 3 Golf Course at 6400 East Compton Boulevard in Compton. The existing setting and visual simulations for Key View 17 are shown in Figure 8.36.

Latitude	Longitude	Heading
N 33° 53' 42.70"	W 118° 11' 6.94"	232° SW

EXISTING VISUAL QUALITY/CHARACTER

The existing visual quality of this Key View is moderate (4.8). The existing elements include a landscape-oriented scene with large turf areas and mature vegetation. The I-710 Corridor mainline can be seen slightly in the middle ground. But due to the Los Angeles River levees, a majority of the mainline cannot be seen with only the light fixtures and signage visible. Large expanses of open sky are also a major visual component of this scene.

	Rating	Comments
Vividness (V)	5.0	The existing vividness is moderately high - the combination of the green fields in the foreground with contrasting tree silhouettes and skyline combine to create a memorable scene.
Intactness (I)	5.0	The existing intactness is moderately high - the short fences in the foreground and utility lines, light poles, and fences in the middle ground, plus the existing I-710 being at grade behind the levee, create minimal encroachment into the view.
Unity (U)	4.5	The existing unity is moderate - the overall harmony of visual elements work together to create harmonious visual patterns.
Existing Visual Quality [VQ=*(V+I+U)/3]*	4.8	

PROPOSED PROJECT FEATURES

Alternative 5A (Figure 8.36) would feature two new lanes in each direction at the same grade as the existing mainline. Under Alternatives 6A/B/C (Figure 8.36), the FC would be elevated approximately 40 feet above grade and straddle the northbound I-710 GP lanes and the western levee of the Los Angeles River. A soundwall would be constructed along the west edge of the elevated FC.

CHANGE TO VISUAL QUALITY/CHARACTER

For Alternative 5A which only involves the widening of the I-710, no vertical structural changes would be created. The vividness would be lessened due to the removal of the trees alongside I-710 as a result of the widening. The overall unity of this Key View would remain moderate. Under Alternatives 6A/B/C, the widening of the freeway plus the elevated FC on the west side of I-710 would change the visual quality/character. The vividness would be lessened due to the removal of the trees alongside I-710 as a result of the FC and mainline widening. The FC would obstruct some of the view in the middle ground and "clean up" the visual mix found in this portion of the view. While a numerically insignificant change, this would contribute to a positive visual change to the view's proposed intactness**.** The overall unity of this Key View would remain as moderate.

VIEWER RESPONSE

It would be expected that numerous users use the recreation facility, especially over the weekends. Viewer sensitivity and exposure is anticipated to be moderate given the set activity of the users at this facility. The duration of the view would vary based on the golfing skill level of the viewer, however, a period of 2 to 3 hours would be average. The viewpoint is approximately 700 feet from I-710, making the viewer exposure level moderately high. Viewers' response to the change in character would be moderate. Sensitivity and exposure to the I-710 Corridor Project would be moderate.

Key View #17 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	5.0	The proposed vividness would be moderately high - this alternative would remain largely unchanged from the existing view.
Intactness (I)	5.0	The proposed intactness would be moderately high - this alternative would remain largely unchanged from the existing view.
Unity (U)	4.5	The proposed unity would be moderate - this alternative would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ1=(*V+I+U)/3]*	4.8	

Key View #17 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	4.5	The proposed vividness would be moderate - the additional of the elevated freight corridor would detract slightly from the overall distinctiveness of the view.
Intactness (I)	4.5	The proposed intactness would be moderate - the additional of the elevated freight corridor would detract slightly from the overall integrity of the view.
Unity (U)	4.5	The proposed unity would be moderate - overall harmony of visual elements would actually be strengthened by the clean lines of the elevated freight corridor.
Proposed Visual Quality [PVQ2=(*V+I+U)/3]*	4.5	

RESULTING VISUAL IMPACT

The change in adverse visual impacts at Key View 17 would be neutral or non-existent (0.0) under Alternative 5A because new lanes would not be seen due to the elevation of the levee between the view and the I-710 Corridor Project. Under Alternatives 6A/B/C, the change in adverse visual impacts would be negative (-0.3) due to the distant views of the elevated FC. The overall visual quality would remain moderate. No visual mitigation would be required under Alternative 5A. The level of visual mitigation required under Alternative 6A/B/C for Key View 11 would be "Moderate."

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.3

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.36 shows one alternative to treating the structures for aesthetic enhancements. In this example, the soundwall on top of the FC is colored and textured in a manner that allows it to blend into the background sky. This preserves the existing visual unity while increasing the intactness by providing an overall integrity to the scene. Viewer response to enhanced improvements to the view should be positive.

LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 17 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.35

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #17 Location

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.35 KEY VIEW #17 LOCATION

KEY VIEW #17

Compton Par 3 Golf Course
6400 E Compton Boulevard
Compton, CA 90723

GPS Location:
Latitude = 33°53'42.70"N
Longitude = 118°11'6.94"W
Heading = 232° SW

This Key View is located within the Compton Par 3 Golf Course, and has a southwest orientation to the I-710 Corridor Project. Golf course users are expected to have a prolonged view of the I-710 Corridor Project.

Existing Condition

Visual Simulation: Proposed Base Condition

Enhanced Condition

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.36

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #17 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.36-KEY VIEW 17 DESCRIPTION

Key View #18 (Figures 8.37 and 8.38)

ORIENTATION

As shown in Figure 8.37, this Key View is located on SB I-710 at approximately 2,300 feet north of the I-105 junction in Lynwood. The existing setting and visual simulations for Key View 18 are shown in Figure 8.38.

Latitude	Longitude	Heading
N 33° 55' 18.40"	W 118° 10' 42.15"	190° S

EXISTING VISUAL QUALITY/CHARACTER

The primary viewer from this Key View location will be drivers on SB I-710. The existing visual quality of the Key View is low (2.5) due to the overall lack of striking visual features and the juxtaposition of the other visual elements.

	Rating	Comments
Vividness (V)	2.5	The existing vividness is low - the shrubs and trees located along I-710 and trees in the background create minimal existing vividness.
Intactness (I)	2.0	The existing intactness is low - visual encroachments by freeway traffic signage, utility lines located in the foreground and background, light poles, and the I-710/I-105 interchange itself contribute to low visual harmony.
Unity (U)	3.0	The existing unity is moderately low - this view is mainly of I-710, a constant visual feature in this view and results in a significant visual harmony.
Existing Visual Quality [VQ=*(V+I+U)/3]*	2.5	

PROPOSED PROJECT FEATURES

Alternative 5A (Figure 8.38) features the addition of two new lanes in each direction at the same grade as the existing mainline at the far west side of the mainline. Alternatives 6A/B/C (Figure 8.38) remain in the same configuration as Alternative 5A at this location but add the elevated FC on the west side of the northbound mainline.

CHANGE TO VISUAL QUALITY/CHARACTER

Under Alternative 5A, I-710 would be widened to 10 GP lanes. As a result, the I-710 Corridor Project would appear to be wider with less landscaping area along the SB edge, lessening the vividness. Intactness would remain low and unity would remain moderately low. Alternatives 6A/B/C would add the elevated FC beyond the edge of the northbound GP lanes. This new structure will be slightly visible to drivers on the SB I-710.

VIEWER RESPONSE

A very high number of viewers driving on this portion of I-710 mainline would be expected. Viewer sensitivity and exposure would likely be moderate, depending on the speed of traffic along this portion of the mainline. The duration of this view would vary from low to high; again depending on the speed of traffic. With the viewpoint immediately in front of the viewers, the viewer exposure level would be high.

Viewer response to the change in character would be moderately high. Sensitivity and exposure to the I-710 Corridor Project would be moderately high. Because there are limited views of the FC elements, the proposed visual quality of this view for all build alternatives would be low (2.3).

Key View #18 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	2.0	The proposed vividness would be low - the addition of the travel lanes along the edge of the freeway would reduce the amount of shrubs and trees located along I-710 and trees in the background, slightly minimizing the vividness of the scene.
Intactness (I)	2.0	The existing intactness would be low - this alternative would remain largely unchanged from the existing view.
Unity (U)	3.0	The existing unity would be moderately low - this alternative would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	2.3	

Key View #18 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	2.0	The proposed vividness would be low - these alternatives would result in the removal of shrubs and trees located along northbound side of the I-710, thereby eliminating the distinctive landscape massing on that side.
Intactness (I)	2.0	The proposed intactness would be low - these alternatives would remain largely unchanged from the existing view.
Unity (U)	3.0	The proposed unity would be moderately low - these alternatives would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	2.3	

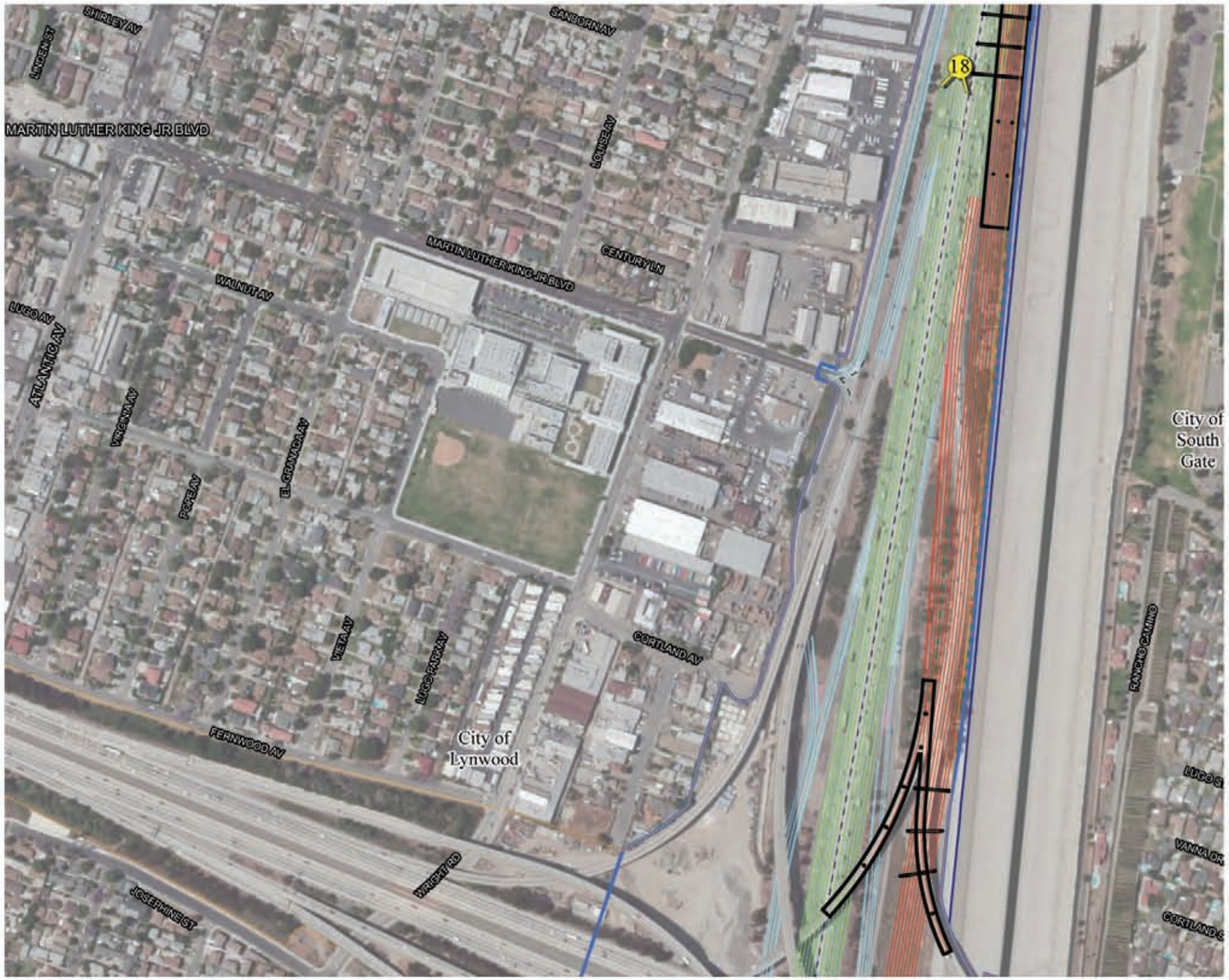
RESULTING VISUAL IMPACT

The change in adverse visual impacts for all build alternatives is slightly negative (-0.2) due to the limited views of the new elevated FC. The overall visual quality would remain low. The level of visual mitigation required for Key View 18 would be “Moderate.”

Difference from Existing Visual Quality (Alternative 5A)	-0.2
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.2

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.38 illustrates the option of adding landscape to the edge of the travel lanes and providing more visual buffer from the areas adjacent to the I-710 Corridor Project. This provides additional visual natural elements to the view and increases the memorability. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 18 Key View Location

N

0 300 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.37 KEY VIEW #18 LOCATION

FIGURE 8.37

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #18 Location

KEY VIEW #18

I-710 Southbound at I-105 Northbound/Southbound Junction
Lynwood, CA 90262

GPS Location:
Latitude = 33°55'18.40"N
Longitude = 118°10'42.15"W
Heading = 190° S

I-105 runs west to east with one of its terminus near the Los Angeles International Airport in Los Angeles and the other terminus in Norwalk. This Key View is located on SB I-710 at approximately 2,300 feet north of the I-105 junction. The I-105 junction in Lynwood serves as an important junction for travelers commuting within Los Angeles County, especially during the peak hours from 7 a.m. to 6 p.m. Daily commuters will have increased awareness of the views from the I-710 Corridor Project due to the amount of time they are traveling on I-710 while commuting each day. This Key View looks south toward I-710.

Note: The Visual Simulation showing proposed base condition for Alternative 5A includes only the cross hatched area called out as "5A." The Visual Simulation showing proposed base condition for Alternatives 6A/B/C includes the cross hatched areas called out as "5A" and "6A/B/C".

Existing Condition

Visual Simulation: Proposed Base Condition

Enhanced Condition

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads
- Alternatives 6A/B/C
- Alternative 5A

FIGURE 8.38

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #18 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.38-KEY VIEW 18 DESCRIPTION

Key View #19 (Figures 8.39 and 8.40)

ORIENTATION

As shown in Figure 8.39, this Key View is located in front of the apartment complex at 10965 Wright Road in Lynwood in a residential area. The existing setting and visual simulations for Key View 19 are shown in Figure 8.40.

Latitude	Longitude	Heading
N 33° 55' 44.55"	W 118° 10' 46.54"	52° NE

EXISTING VISUAL QUALITY/CHARACTER

The existing view features a juxtaposed mixture of landscape shrubs and trees. The existing overpass bridge is seen through a filtered view through the landscape. An existing chain link fence is also found in the foreground. The existing visual quality is moderately low (3.5).

	Rating	Comments
Vividness (V)	3.0	The existing vividness is moderately low - the major visual element is the landscape mass; however, the mass hosts many different visual components of varying sizes, patterns, textures, heights, and shapes. There are no major visual elements to serve as a focal point.
Intactness (I)	4.5	The existing intactness is moderate - lack of any man-made elements encroaching into this view.
Unity (U)	3.0	The existing unity is moderately low - weakness of any inter-compatibility of the plant materials of varying shapes, sizes, and textures.
Existing Visual Quality [VQ=*(V+I+U)/3]*	3.5	

PROPOSED PROJECT FEATURES

Alternative 5A (Figure 8.40) would include the addition of two new lanes in each direction at the same grade as the existing mainline. This configuration would necessitate the construction of a new soundwall along Wright Road within the residential land uses. A new elevated on-ramp would also be featured in this Alternative. In Alternatives 6A/B/C, the same elements found in Alternative 5A would be found. In addition, the elevated FC will also be a feature of this Alternative in the background. This corridor will be seen behind the soundwall and the new on-ramp.

CHANGE TO VISUAL QUALITY/CHARACTER

The existing view would remain primarily the same with Alternative 5A; however, the proposed construction of Alternatives 6A/B/C will add the on ramp into the middle ground of the view as well as a view of the elevated FC in the background. There would be filtered as well as unfiltered views of these structures through the existing landscape. Vividness and unity would be increased slightly while intactness would decrease for Alternatives 6A/B/C.

VIEWER RESPONSE

There would be numerous viewers, mostly residents adjacent to I-710. Duration of view depends upon the activities of viewers and it may vary from seconds to hours. The Key View is approximately 150 feet from the I-710 Corridor Project. Viewer response to the change in character would be high due to this view's residential nature and viewer distance. Viewers' sensitivity and exposure to the I-710 Corridor Project would be high. The proposed visual quality of this view would be moderately low (3.5).

Key View #19 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	3.0	The proposed vividness would be moderately low - the view would not be changed from the existing.
Intactness (I)	4.5	The proposed intactness would be moderate - visual encroachments would be mostly unchanged.
Unity (U)	3.0	The proposed unity would be moderately low - elements in this view would remain mostly the same.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	3.5	

Key View #19 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	3.5	The proposed vividness would be moderately low - memorability of the view would be slightly increased with the introduction of the ramp, which would add a single strong visual focal point.
Intactness (I)	3.0	The proposed intactness would be moderately low - view would suffer from the visual encroachment of the ramp structures into the natural landscape.
Unity (U)	4.0	The proposed unity would be moderate - overall visual pattern would be strengthened as the new structures add a single horizontal element in to the view.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	3.5	

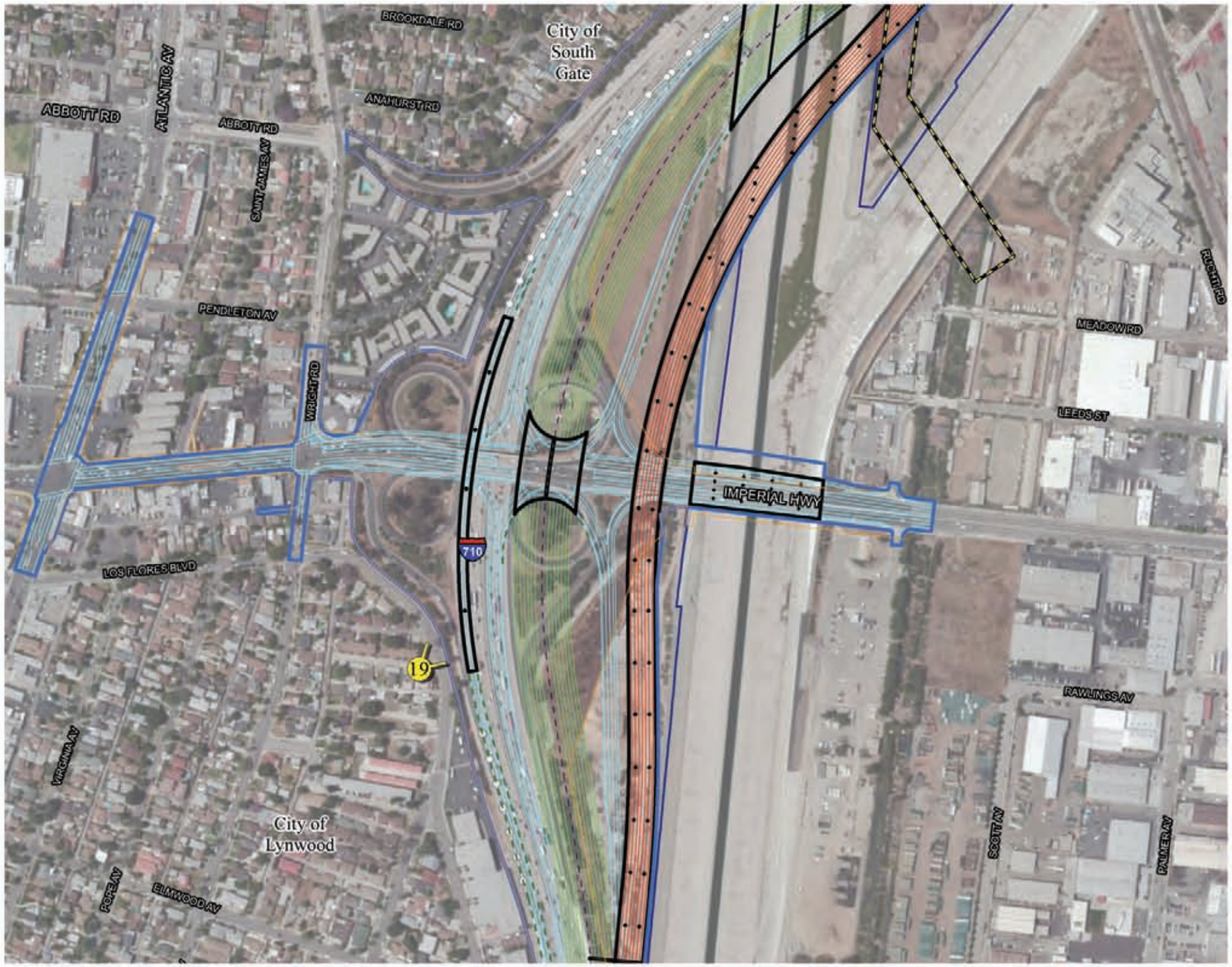
RESULTING VISUAL IMPACT

Under all build alternatives, the change in adverse visual impacts in Key View 19 would be neutral or non-existent (0.0) due to the removal of some visual elements and the addition of others. The overall visual quality would remain moderately low. No visual mitigation would be required for Key View 11.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.40 shows one design example of aesthetic treatments for the new soundwall and the elevated FC in the background. The new soundwall is constructed of concrete blocks of varying textures and color. These blocks are arranged to create horizontal patterns along the wall. To complement this, new landscaping is added to increase the intactness of the overall view. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometries
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 19 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.39 KEY VIEW #19 LOCATION

FIGURE 8.39

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #19 Location

KEY VIEW #19

10965 Wright Road
Lynwood, CA 90262

GPS Location:
Latitude = 33°55'44.55"N
Longitude = 118°10'46.54"W
Heading = 52° NE

This Key View is located in a residential neighborhood on Wright Road. This area is a mixture of single-family and apartment units. Looking northeast from the Key View, the I-710 Corridor Project will be close (within 100 feet) to the viewer. Viewer sensitivity is expected to be high.

Note: The Visual Simulation showing proposed base condition for Alternative 5A includes only the cross hatched area called out as "5A." The Visual Simulation showing proposed base condition for Alternatives 6A/B/C includes the cross hatched areas called out as "5A" and "6A/B/C".

Existing Condition

Visual Simulation: Proposed Base Condition

Enhanced Condition

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads
- Alternatives 6A/B/C
- Alternative 5A

FIGURE 8.40

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #19 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.40-KEY VIEW 19 DESCRIPTION

Key View #20 (Figures 8.41 and 8.42)

ORIENTATION

As shown in Figure 8.41, this Key View is located along the Los Angeles River Trail adjacent to East Imperial Highway in South Gate. The existing setting and visual simulations for Key View 20 are shown in Figure 8.42.

Latitude	Longitude	Heading
N 33° 55' 50.96"	W 118° 10' 31.34"	312° W by NW

EXISTING VISUAL QUALITY/CHARACTER

The existing visual quality of this Key View is moderately low (3.5) due to the limited memorable visual features and the dominance of the Los Angeles River in the foreground.

	Rating	Comments
Vividness (V)	3.0	The existing vividness is moderately low - the clusters of trees in the background form a distinctive visual element.
Intactness (I)	3.0	The existing intactness is moderately low - the visual encroachment by the Los Angeles River trail with signs and fences in the background lend to relatively minor integrity.
Unity (U)	4.5	The existing unity is moderate - the trees and Los Angeles River create a visual pattern of horizontal flows.
Existing Visual Quality [VQ=*(V+I+U)/3]*	3.5	

PROPOSED PROJECT FEATURES

Under Alternative 5A, the I-710 Corridor Project would be widened to 10 GP lanes and would include two new lanes in each direction at the same grade as the existing mainline. This configuration would necessitate the construction of soundwalls along the western side near the residential land uses. Alternatives 6A/B/C (Figure 8.42) would add an elevated FC between I-710 mainline and the Los Angeles River. New soundwalls would be added along the western edge of the FC.

CHANGE TO VISUAL QUALITY/CHARACTER

Under Alternative 5A, I-710 would be widened to 10 GP lanes. However, these new lanes would be added at the same grade as the existing lanes and would not be visible from this Key View location resulting in no visual changes. Under Alternatives 6A/B/C, the elevated FC with its new soundwalls will serve as a major new visual element and significantly alter the visual character.

VIEWER RESPONSE

There would be a limited number of viewers using the bike trail adjacent to Los Angeles River. Duration of their view depends upon the activities of viewers and it may vary from seconds to hours. This Key View is approximately 700 feet from the I-710 Corridor Project. Viewer response to the change in character would be very high due to the recreational nature of this Key View. Viewer sensitivity and exposure to the I-710 Corridor Project would be high. The proposed visual quality of this view would be moderately low (3.5).

Key View #20 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	3.0	The proposed vividness would be moderately low - this alternative would remain largely unchanged from the existing view.
Intactness (I)	3.0	The proposed intactness would be moderately low - this alternative would remain largely unchanged from the existing view.
Unity (U)	4.5	The proposed unity would be moderate - this alternative would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ1=(*V+I+U)/3]*	3.5	

Key View #20 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	2.5	The proposed vividness would be low - the addition of the elevated freight corridor and its soundwall blocks the views of the clusters of trees in the background.
Intactness (I)	2.5	The proposed intactness would be low - the encroachment is further degraded by the added view of the elevated freight corridor and its soundwall.
Unity (U)	4.5	The proposed unity would be moderate - these alternatives would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ2=(*V+I+U)/3]*	3.2	

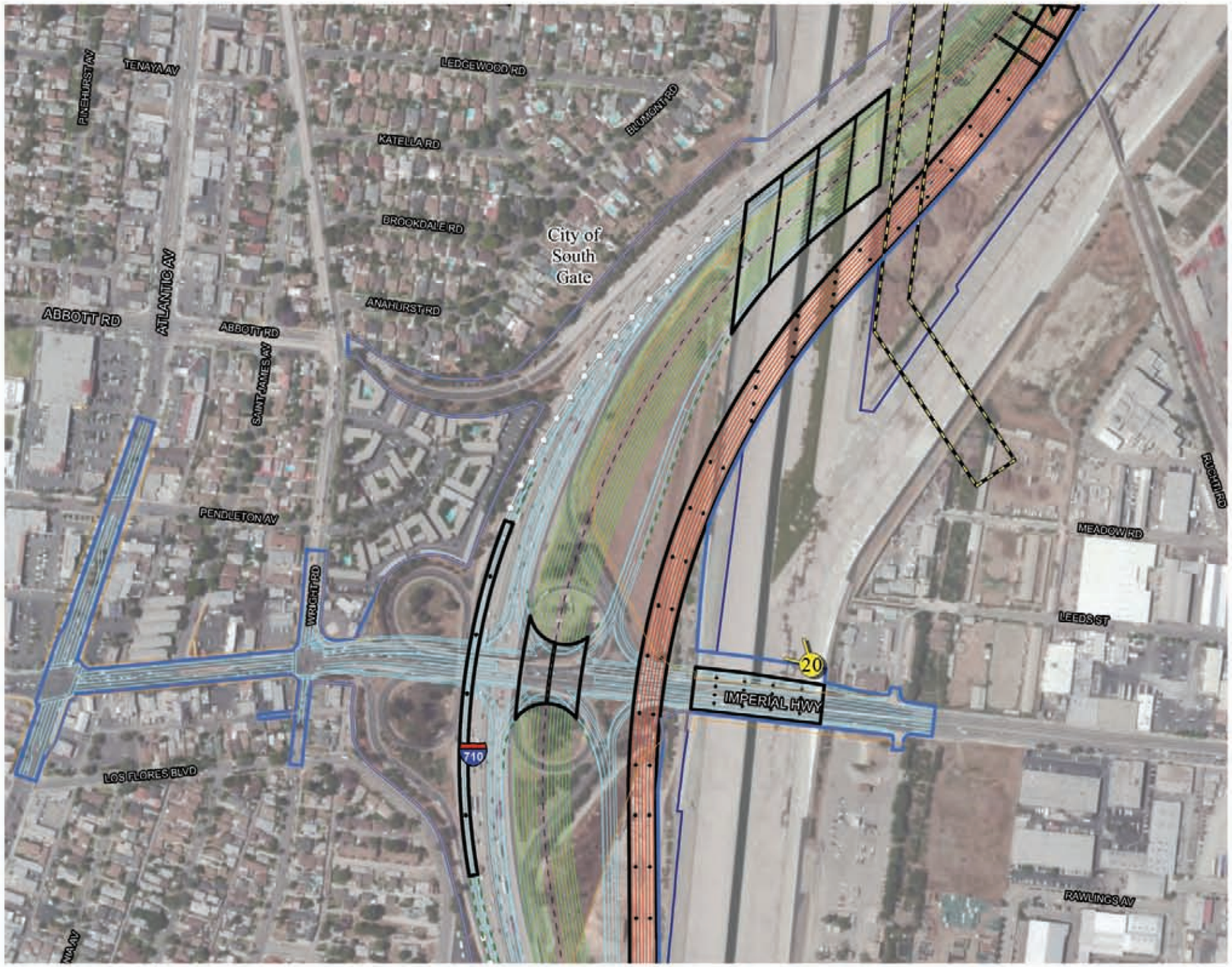
RESULTING VISUAL IMPACT

Under Alternative 5A, the change in adverse visual impacts in Key View 20 would be neutral or non-existent (0.0) and would not require any visual mitigation. Under Alternatives 6A/B/C, the change in adverse visual impacts would be negative (-0.3) due mainly to the elevated FC and its associated soundwall. The overall visual quality would remain moderately low. The level of visual mitigation required under Alternatives 6A/B/C would be “Moderate.”

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.3

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.42 is just one example of visual treatments for the new elevated FC. New screening on the FC helps to filter views of the freight movement while the overall color of the FC helps to blend into the background sky. These both contribute to improved vividness and intactness. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 20 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.41

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #20 Location

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.41 KEY VIEW #20 LOCATION

KEY VIEW #20

Los Angeles River Trail on East Imperial Highway
South Gate, CA 90280

GPS Location:
Latitude = 33°55'50.96"N
Longitude = 118°10'31.34"W
Heading = 312° W by NW

This Key View is located on the Los Angeles River Trail in South Gate, east of I-710 looking west. The freight corridor proposed in Alternatives 6A and 6B would be clearly visible from this Key View. With close proximity to future recreational facilities adjacent to the Key View, motorists and other users may have a high level of concern about the views to the I-710 Corridor Project from the facilities.

Existing Condition

Visual Simulation: Proposed Base Condition

Enhanced Condition

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.42

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #20 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.42-KEY VIEW 20 DESCRIPTION

Key View #21 (Figures 8.43 and 8.44)

ORIENTATION

As shown in Figure 8.43, this Key View is located in Circle Park on Garfield Avenue in South Gate. The existing setting and visual simulations for Key View 21 are shown in Figure 8.44.

Latitude	Longitude	Heading
N 33° 56' 18.98"	W 118° 10' 4.91	287° W by NW

EXISTING VISUAL QUALITY/CHARACTER

Key View 21 is located within an existing park facility. The major visual elements include a hard play surface in the foreground, lawn and the river levee in the middle ground, and a minor "skyline" of distant trees with utility structures and an elevated water tower in the background. The existing visual quality of this Key View is moderate (4.7).

	Rating	Comments
Vividness (V)	4.0	The existing vividness is moderate - the single visual element of the lawn in the middle of the view provides a minor distinctive feature. The open sky filling the upper portion of the view also provides a memorable component.
Intactness (I)	5.0	The existing intactness is moderately high - minimal encroachment of the man-made elements into the nature-oriented view.
Unity (U)	5.0	The existing unity is moderately high - overall visual pattern is harmonious with the layering effect of the gray playing surface in the foreground, mass of green lawn in the middle ground, and the open sky in the upper portion. The visual mass of the river levee and background trees introduce a horizontal element into the view which bisects and reinforces the complementary scene dividing the angled pattern of the lower half of the view with the horizontal pattern of the upper half.
Existing Visual Quality [VQ=*(V+I+U)/3]*	4.7	

PROPOSED PROJECT FEATURES

The proposed view introduces very little to the existing scene. A new soundwall and another structural element would not be seen through the landscape on the right side of the view.

Under Alternative 5A, the I-710 would be widened to 10 GP lanes. Alternative 5A (Figure 8.42) would include two new lanes on each side at the same grade as the existing mainline. Alternatives 6A/B/C (Figure 8.42) would include the addition of the elevated FC and its soundwall along the western edge.

CHANGE TO VISUAL QUALITY/CHARACTER

Under Alternative 5A, the I-710 would be widened to 10 GP lanes at its current grade. This would result in no visual change for this configuration. Alternatives 6A/B/C would change the visual character slightly due to the distant view of the new elevated FC and its soundwall. Overall, the quality and character of the view would not change.

VIEWER RESPONSE

There would be numerous viewers from this park site. The duration of their view would depend upon the activities of the viewers and it could vary from minutes to hours. This Key View is approximately 1,100 feet from the I-710 Corridor Project. Viewer response to the change in character would be very high due to the recreational nature of this Key View. Viewer sensitivity and exposure to the I-710 Corridor Project would be high. Alternative 5A would result in an overall unchanged visual quality from the existing (4.7). Because only limited FC elements can be seen from this Key View, the proposed visual quality of Alternatives 6A/B/C would be only slightly lower (4.5).

Key View #21 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	4.0	The proposed vividness would be moderate - the memorability of the view would not be changed from the existing.
Intactness (I)	5.0	The proposed intactness would be moderately high - visual encroachments would be mostly unchanged.
Unity (U)	5.0	The proposed unity would be moderately high - overall coherence of the visual pattern would be unchanged.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	4.7	

Key View #21 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	4.0	The proposed vividness would be moderate - memorability of the view would be unchanged.
Intactness (I)	4.5	The proposed intactness would be moderate - integrity of the view would be slightly interrupted by the addition of filtered views of the project's FC soundwall to the right side of the view.
Unity (U)	5.0	The proposed unity would be moderately high - overall coherence of the visual pattern would be unchanged.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	4.5	

RESULTING VISUAL IMPACT

Under Alternative 5A, the change in adverse visual impacts in Key View 21 would be neutral or non-existent (0.0) due to the distance of this recreational facility to I-710. The change in adverse visual impacts under Alternatives 6A/B/C would be negative due to the addition of the elevated FC and its soundwall. The overall visual quality would remain moderate. No visual mitigation would be required under Alternative 5A. The level of visual mitigation required under Alternative 6A/B/C would be "Moderate."

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.2

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.44 illustrates the inclusion of a visual screening wall on top of the FC in the background. While its effects are minor, it helps to increase the intactness of the scene. Viewer response to enhanced improvements to the view should be positive.

LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 21 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.43 KEY VIEW #21 LOCATION

FIGURE 8.43

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #21 Location

KEY VIEW #21

Circle Park
10099 Garfield Avenue
South Gate, CA 90280

GPS Location:
Latitude = 33°56'18.98"N
Longitude = 118°10'4.91"W
Heading = 287° W by NW

Circle Park in the City of South Gate is the location of Key View #21. This site is adjacent to single-family residential units and the major route of Garfield Avenue. The view is northwest oriented and approximately 1,100 feet from the I-710 Corridor Project and includes some views of the Los Angeles River levee in the foreground. With Alternatives 6A/B/C, viewers would experience a minor glimpse of the soundwall when looking toward the water tower.

Existing Condition

Visual Simulation: Proposed Base Condition

Enhanced Condition

Study Area

LEGEND

- 21 Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.44

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #21 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.44-KEY VIEW 21 DESCRIPTION

Key View #22 (Figures 8.45 and 8.46)

ORIENTATION

As shown in Figure 8.45, this Key View is located at 10001 West Frontage Road in South Gate at the Thunderbird Villa Mobile Home Park. The existing setting and visual simulations for Key View 22 are shown in Figure 8.46.

Latitude	Longitude	Heading
N 33° 56' 32.54"	W 118° 10' 18.48"	95° E by SE

EXISTING VISUAL QUALITY/CHARACTER

This Key View is located in a mobile home park at roughly the same grade as the existing I-710 mainline. There is little or no landscaping between the residents of the mobile home park and the freeway. The overall visual quality is very low (1.2).

	Rating	Comments
Vividness (V)	1.0	The existing vividness is very low - the trees and shrubs offer very little memorability of the scene.
Intactness (I)	0.5	The existing intactness is very low - presence of utility lines, street signs, fences, the road, and the I-710 mainline take away from the visual order of the scene.
Unity (U)	2.0	The existing unity is low - the visual mixture of the various man-made and landscape elements combine to offer little coherency to the scene.
Existing Visual Quality [VQ=*(V+I+U)/3]*	1.2	

PROPOSED PROJECT FEATURES

Alternative 5A (Figure 8.30) would construct two new lanes in each direction at the same grade as the existing mainline and a soundwall would be added on the west side of I-710. Under Alternatives 6A/B/C (Figure 8.30), the FC would be elevated approximately 40 feet above the mainline and positioned directly over the northbound lanes along the east side of the mainline by dual columns on both sides. A soundwall would be added on the west side of the FC facing the mobile home park. The area of space available for landscaping at ground level will be reduced due to the widening.

CHANGE TO VISUAL QUALITY/CHARACTER

A new soundwall would be placed closer to the mobile homes under Alternative 5A. There would be moderate visual change in the character for the mobile home park viewers as the soundwall is being placed close to their homes. While not shown in the simulations, there would be a new tunnel located west of Frontage Road for the residents' secondary entrance/exit to the community. Under Alternatives 6A/B/C, the FC would be located on the east side of the I-710 mainline approximately 40 feet over the NB lanes of the mainline. Due to the anticipated improved appearance of the new soundwall, FC structure, and the new replacement planting, the vividness, intactness and unity would be increased.

VIEWER RESPONSE

Assuming that there is an average family unit size of two residing in each mobile home, there would be about 478 residents viewing the I-710 Corridor Project daily. The duration of their view depends on the activity of viewers and sensitivity would be moderate. The distance between the Key View location and the new construction is estimated to be approximately 100 feet. The overall level of viewer exposure would be very high.

Key View #22 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	2.0	The proposed vividness would be low - trees and shrubs would be removed, but the new soundwall would look better.
Intactness (I)	1.0	The proposed intactness would be very low - presence of Frontage Road, soundwall, and I-710 mainline.
Unity (U)	2.0	The proposed unity would be low - view would be primarily the entrance of the mobile home park facing I-710.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	1.7	

Key View #22 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	2.0	The proposed vividness would be low - view of the soundwall and elevated freight corridor.
Intactness (I)	0.5	The proposed intactness would be very low - presence of the road and the proximity of the soundwall, I-710 mainline, and elevated FC to the housing units.
Unity (U)	2.0	The proposed unity would be low - the view is primarily of the new soundwall and FC.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	1.5	

RESULTING VISUAL IMPACT

The change in adverse visual quality would be positive under Alternative 5A (+0.5) and Alternatives 6A/B/C (+0.3) because of the “cleaning up” effect the new soundwalls would have in minimizing the various visual encroachments of the existing view and increasing the view’s vividness. The overall visual quality would remain very low under all build alternatives even with the new construction slightly improving the vividness of the view (and improved intactness for Alternative 5A). The highest level of visual mitigation required would be “Low.”

Difference from Existing Visual Quality (Alternative 5A)	+0.5
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.3

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.46 features aesthetic treatments which are applied in this conceptual alternative. This particular example shows horizontal textures across the face of the soundwall at the top of the FC. It also adds color and textures to the retaining walls and the soundwall on top of the retaining wall adjacent to the street. Lastly, new landscaping, including low groundcover in the foreground, vines growing up the retaining/soundwall, and the vertical trees, all contribute to lessen the overall encroachment by the new structures and improving the intactness rating. Viewer response to enhanced improvements to the view should be positive.

LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 22 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.45

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #22 Location

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.45 KEY VIEW #22 LOCATION

Existing Condition

KEY VIEW #22

Thunderbird Villa Mobile Home Park
10001 West Frontage Road
South Gate, CA 90280

GPS Location:
Latitude = 33°56'32.54"N
Longitude = 118°10'18.48"W
Heading = 95° E by SE

This Key View is located at 10001 West Frontage Road in South Gate, Thunderbird Villa Mobile Home Park was built in 1966. It is a small community consisting of 239 mobile homes. This Key View looks east and is considered important due to the direct adjacency of this community to I-710 Corridor Project. The residents within the community are expected to have a high level of concern about the I-710 Corridor Project.

Note: The Visual Simulation showing proposed base condition for Alternative 5A includes only the cross hatched area called out as "5A." The Visual Simulation showing proposed base condition for Alternatives 6A/B/C includes the cross hatched areas called out as "5A" and "6A/B/C".

Enhanced Condition

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads
- Alternatives 6A/6B/6C
- Alternative 5A

FIGURE 8.46

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #22 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.46-KEY VIEW 22 DESCRIPTION

Key View #23 (Figures 8.47 and 8.48)

ORIENTATION

As shown in Figure 8.47, this Key View is located at Bell Gardens Elementary at 5620 Quinn Street in Bell Gardens. The existing setting and visual simulations for Key View 23 are shown in Figure 8.48.

Latitude	Longitude	Heading
N 33° 57' 34.58"	W 118° 10' 5.55"	276° W

EXISTING VISUAL QUALITY/CHARACTER

This Key View is located adjacent to an educational institution within a residential community with an existing visual quality of low (2.5).

	Rating	Comments
Vividness (V)	3.0	The existing vividness is moderately low - due to the minimal landscaping along the street, this view lacks any visually striking features to rate very high.
Intactness (I)	2.0	The existing intactness is low - all constructed features such as the existing soundwall, light poles, utility lines, school fences, and the street itself visually extent into the green environment and illustrates a lack of visual order.
Unity (U)	2.5	The existing unity is low - the streets, the school, utility lines and the existing soundwall create very little visual pattern.
Existing Visual Quality [VQ=*(V+I+U)/3]*	2.5	

PROPOSED PROJECT FEATURES

Alternative 5A (Figure 8.48) would feature two new lanes in each direction at the same grade as the existing mainline with the addition of a new soundwall. Under Alternatives 6A/B/C (Figure 8.48), the FC would be elevated approximately 40 feet above grade parallel to I-710 between I-710 and the Los Angeles River. Soundwalls would be incorporated along the east side of both the mainline and the FC.

CHANGE TO VISUAL QUALITY/CHARACTER

Under Alternative 5A, there would be no change in visual quality/character with the exception of a new soundwall and the removal of existing trees in the background. Under Alternatives 6A/B/C, the same visual changes would occur plus the addition of the elevated FC would be located over the I-710. The proposed intactness would be lessened due to the new FC. The proposed vividness and unity would remain the same.

VIEWER RESPONSE

The number of viewers could reach up to 2,570 during school days. The duration of the view would vary from less than a minute up to hours, depending on the activity of viewers. The viewpoint would be approximately 300 feet from the I-710 Corridor Project. Viewers' response to the change would be high. Viewers' exposure and sensitivity would be high.

Key View #23 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	3.0	The proposed vividness would be moderately low - this alternative would remain largely unchanged from the existing view.
Intactness (I)	2.0	The proposed intactness would be low - this alternative would remain largely unchanged from the existing view.
Unity (U)	2.5	The proposed unity would be low - this alternative would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	2.5	

Key View #23 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	3.0	The proposed vividness would be moderately low - these alternatives would remain largely unchanged from the existing view.
Intactness (I)	1.5	The proposed intactness would be very low - the addition of the elevated freight corridor in addition to the new soundwalls and other existing visual features would combine to limit the visual order of the scene.
Unity (U)	2.5	The proposed unity would be low - these alternatives would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	2.3	

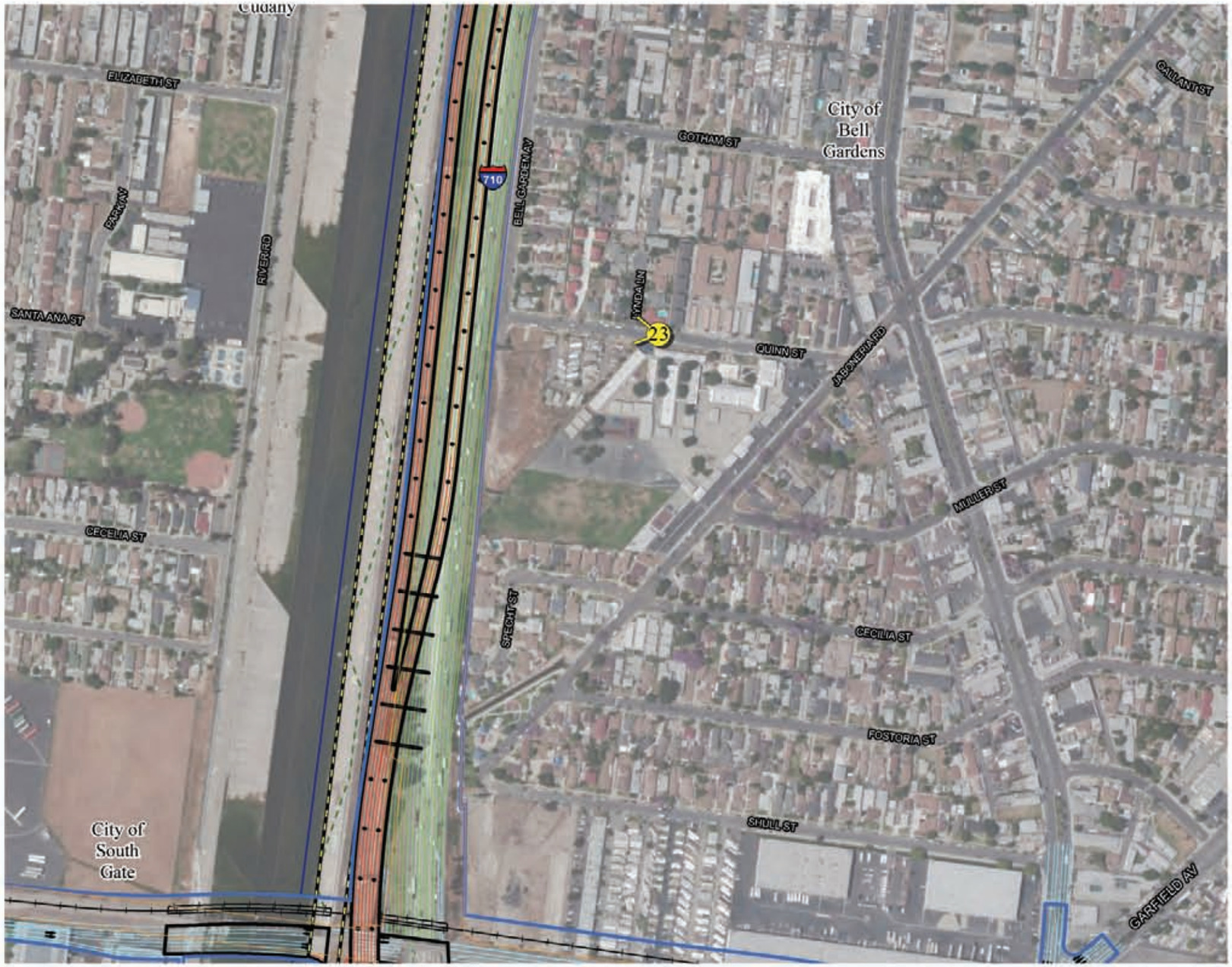
RESULTING VISUAL IMPACT

The change in adverse visual impacts in Key View 23 would be neutral on non-existent (0.0) in Alternative 5A because the at-grade widening would be largely unseen from this Key View. However, under Alternatives 6A/B/C, the change in adverse visual impacts would be negative (-0.2), due to the addition of the elevated FC. The overall visual quality would remain low. No visual mitigation would be required under Alternative 5A. The level of visual mitigation required under Alternative 6A/B/C would be "Moderate."

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.2

ENHANCED CONDITION/VIEWER RESPONSE

The intactness in the aesthetic enhancements provided in the visual simulation in Figure 8.48 is improved by adding a curved soundwall on top of the FC and landscaping in front of the soundwall. These elements work together to create a more memorable view while minimizing encroachment by new construction. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 23 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.47

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #23 Location

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.47 KEY VIEW #23 LOCATION

KEY VIEW #23

Bell Gardens Elementary School
5620 Quinn Street
Bell Gardens, CA 90201

GPS Location:
Latitude = 33°57'34.58"N
Longitude = 118°10'5.55"W
Heading = 276° W

Bell Gardens Elementary School is located in the Montebello Unified School District. Bell Gardens Elementary School provides services to approximately 1,177 students (pre-kindergarten through fourth grade) and currently employs 108 campus faculty and staff. Therefore, over 2,570 users will pass through this west facing Key View on school days.

Note: The Visual Simulation showing proposed base condition for Alternative 5A includes only the cross hatched area called out as "5A." The Visual Simulation showing proposed base condition for Alternatives 6A/B/C includes the cross hatched areas called out as "5A" and "6A/B/C".

Existing Condition

Visual Simulation: Proposed Base Condition

Enhanced Condition

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads
- Alternatives 6A/B/C
- Alternative 5A

FIGURE 8.48

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #23 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

Key View #24 (Figures 8.49 and 8.50)

ORIENTATION

As shown in Figure 8.49, this Key View is located at 5522 Lanto Street in Bell Gardens in a residential area. The existing setting and visual simulations for Key View 24 are shown in Figure 8.50.

Latitude	Longitude	Heading
N 33° 58' 40.01"	W 118° 10' 0.09"	277° W

EXISTING VISUAL QUALITY/CHARACTER

The scene captured in this Key View is of a residential community, its street and neighborhood trees. An existing soundwall and utility lines and structure can also be seen. The existing visual quality of this Key View is low (2.5).

	Rating	Comments
Vividness (V)	3.0	The existing vividness is moderately low - the natural elements such as neighborhood trees and other landscaping provide limited distinctive visual features.
Intactness (I)	2.0	The existing intactness is low - the street and soundwall visually and physically separate I-710 from the neighborhood. Street signs, electrical tower and electrical power lines in the background all combine to create little visual integrity.
Unity (U)	2.5	The existing unity is low - the mixture of numerous elements such as houses, trees, large utility structures, existing soundwalls and electrical power lines overhead limit any harmonious patterns in the scene.
Existing Visual Quality [VQ=*(V+I+U)/3]*	2.5	

PROPOSED PROJECT FEATURES

Alternative 5A (Figure 8.50) would construct two new lanes in each direction at the same grade as the existing mainline and would replace the existing soundwall. Under Alternatives 6A/B/C (Figure 8.50), the FC would be elevated approximately 40 feet above grade with soundwalls incorporated along the east side. Additionally, the existing smaller electrical power lines would be placed underground and the elevated FC would be aligned between the mainline and the Los Angeles River.

CHANGE TO VISUAL QUALITY/CHARACTER

Under Alternative 5A, the electrical tower would continue to impact the visual quality/character of this view. Under Alternatives 6A/B/C, the FC would be located on the west side of I-710. The existing visual character is residential; however, with implementation of Alternatives 6A/B/C, this Key View would appear to be slightly more urban. While the unity wouldn't change due to the underground placement of the smaller electrical power lines and the removal of the smaller electrical pole contributing to a neutral visual impact, the vividness would lessen and the intactness would increase because the FC would obstruct some of the view in the foreground. The overall unity of this Key View would remain moderately low.

VIEWER RESPONSE

There are numerous viewers, mostly residents who reside adjacent to I-710 Corridor Project in this Key View. Duration of view depends upon the activities of viewers and it may vary from seconds to hours. The Key View is approximately 200 feet from the I-710 Corridor Project. Viewer response to the change in character would be high due to its residential nature. Viewer sensitivity and exposure to the I-710 Corridor Project would be high.

Key View #24 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	3.0	The existing vividness would be moderately low - this alternative would remain largely unchanged from the existing view.
Intactness (I)	2.0	The existing intactness would be low - this alternative would remain largely unchanged from the existing view.
Unity (U)	2.5	The existing unity would be low - this alternative would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	2.5	

Key View #24 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	2.5	The proposed vividness would be lessened to low - the addition of the elevated freight corridor would detract from any memorable elements in the scene.
Intactness (I)	2.5	The proposed intactness would be increased slightly, but remain low - the elevated freight corridor would obstruct some of the view; however, the relocation of the utility structure further away from the viewer would contribute to a positive change in the intactness.
Unity (U)	2.5	The proposed unity would remain low - the removal of the smaller utility structure and its associated lines does not improve the unity enough to counter the addition of the FC in this alternative.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	2.5	

RESULTING VISUAL IMPACT

There would be a neutral or non-existent (0.0) change in adverse visual impacts under Alternative 5A because the at-grade widening would be largely unseen from this Key View. Under Alternatives 6/B/C, the improved view from the elimination of a smaller electrical power pole and the relocation of the large electrical tower would be negated by the added structure of the FC and its soundwall and would therefore also result in a neutral or non-existent (0.0) change in visual impact of the view. The overall visual quality would remain low due to the balancing of the visual qualities from the addition of the elevated FC, removal of the power pole, and relocation of the power lines and tower. No visual mitigation would be required for Key View 24.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.50 illustrates one design example of aesthetic treatments for the new soundwall with landscaping, including trees, and the elevated FC with the addition of a new curving soundwall. This curvilinear shaped wall blends into the background sky and allows the new landscape and textured soundwall to become the more memorable visual feature of the Key View. Viewer response to enhanced improvements to the view should be positive.

LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 24 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.49 KEY VIEW #24 LOCATION

FIGURE 8.49

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #24 Location

Existing Condition

KEY VIEW #24

5522 Lanto Street
Bell Gardens, CA 90201

GPS Location:
Latitude = 33°58'40.01"N
Longitude = 118°10'0.09"W
Heading = 277° W

This Key View faces directly west to I-710 and the existing electrical power lines and towers. Assuming that the utilities would be closer to but remaining on the same side of the Los Angeles River, the visual impact to this residential community would remain the same.

Note: The Visual Simulation showing proposed base condition for Alternative 5A includes only the cross hatched area called out as "5A." The Visual Simulation showing proposed base condition for Alternatives 6A/B/C includes the cross hatched areas called out as "5A" and "6A/B/C".

Study Area

Visual Simulation: Proposed Base Condition

Enhanced Condition

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads
- Alternatives 6A/B/C
- Alternative 5A

FIGURE 8.50

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #24 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.50-KEY VIEW 24 DESCRIPTION

Key View #25 (Figures 8.51 and 8.52)

ORIENTATION

As shown in Figure 8.51, this Key View is located within Maywood Riverfront Park at 5000 Slauson Avenue in Maywood. The existing setting and visual simulations for Key View 25 are shown in Figure 8.52.

Latitude	Longitude	Heading
N 33° 59' 9.01"	W 118° 10' 19.31"	112° E by SE

EXISTING VISUAL QUALITY/CHARACTER

This Key View is located within a recreation park site within a residential community. Large expanses of the Los Angeles River can be seen in the foreground with industrial buildings and utility lines/structures in the middle and backgrounds. The existing visual quality is moderately low (3.2).

	Rating	Comments
Vividness (V)	3.0	The vividness is moderately low - the lack of landscaping along the I-710 mainline and the Los Angeles River limits the memorability of this view.
Intactness (I)	2.5	The intactness is low - the fence and pole located in between the park entrance and the Los Angeles River, the Los Angeles River itself, the middle ground and background filled with varying industrial uses and power lines all contribute to a scene filled with visual encroachments.
Unity (U)	4.0	The unity is moderate - the I-710 and the Los Angeles River are the two major components of the view that work together to create a sense of coherency.
Existing Visual Quality [VQ=*(V+I+U)/3]*	3.2	

PROPOSED PROJECT FEATURES

Alternative 5A (Figure 8.52) would feature two new lanes in each direction at the same grade as the existing mainline. Under Alternatives 6A/B/C (Figure 8.52), the FC would be elevated approximately 40 feet above grade descending as it travels NB between the mainline and the Los Angeles River.

CHANGE TO VISUAL QUALITY/CHARACTER

For Alternative 5A which only involves the widening of the I-710, no structural vertical changes would be created. The vividness would be lessened due to the removal of the trees alongside I-710 as a result of the widening. Intactness would remain low and the overall unity of this Key View would remain moderate. Under Alternatives 6A/B/C, the widening of the freeway plus the elevated FC on the west side of I-710 would change the visual quality/character. The vividness would be lessened due to the removal of the trees alongside I-710 as a result of the mainline widening and addition of the FC. The FC would obstruct some views of the industrial buildings in the middle ground plus the underground relocation of the smaller electrical power lines and elimination of the smaller electrical towers. This would contribute to a positive visual impact to the view's proposed intactness**.** The overall unity of this Key View would remain as moderately low.

VIEWER RESPONSE

There is expected to be numerous users using the park and community center, especially during off-school hours and on weekends. Viewer sensitivity and exposure is anticipated to be moderate, depending on the activity of users in the facilities. The duration of view would vary from low to high; again depending on the activities of viewers. The viewpoint is approximately 900 feet from I-710, making the viewer exposure level moderately high. Viewers' response to the change in character would be moderate. Sensitivity and exposure to the I-710 Corridor Project would be moderate.

Key View #25 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	2.5	The proposed vividness would be low - the view would remain unchanged.
Intactness (I)	2.5	The proposed intactness would be low - this alternative would remain largely unchanged from the existing view.
Unity (U)	4.0	The proposed unity would be moderate - this alternative's unity would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ1=(*V+I+U)/3]*	3.0	

Key View #25 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	2.5	The proposed vividness would be low - these alternatives would remain largely unchanged from the existing view.
Intactness (I)	3.0	The proposed intactness would be moderately low - the elimination of the smaller electrical power lines and small utility structures in addition to a minor negative impact of the elevated freight corridor would improve the visual unity with fewer visual encroachments.
Unity (U)	4.0	The proposed unity would be moderate - while the visual pattern created by the utility poles would be removed, it would be replaced by the addition of the FC.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	3.2	

RESULTING VISUAL IMPACT

The change in adverse visual impacts at Key View 25 would be negative (-0.2) under Alternative 5A and neutral or non-existent (0.0) under Alternatives 6A/B/C. While the elimination of the smaller electrical towers and smaller electrical power lines would contribute to a positive change, the added vertical structures of the FC would counterbalance and the overall visual quality would remain moderate. The overall visual quality would remain moderately low. The level of visual mitigation required under Alternative 5A would be "Moderate." No visual mitigation would be required under Alternatives 6A/B/C.

Difference from Existing Visual Quality (Alternative 5A)	-0.2
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.52 illustrates one design example of aesthetic treatments for the new elevated FC with the addition of a new screen wall. This new screen wall helps to filter the views of the freight movement and increases the vividness or memorability of the Key View. Viewer response to enhanced improvements to the view should be positive.

LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 25 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.51

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #25 Location

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.51 KEY VIEW #25 LOCATION

Existing Condition

KEY VIEW #25

Maywood Riverfront Park
5000 Slauson Avenue
Maywood, CA 90270

GPS Location:
Latitude = 33°59'9.01"N
Longitude = 118°10'19.31"W
Heading = 112° E by SE

Maywood Riverfront Park is one of the two local parks in Maywood. The park is located next to the Los Angeles River. Its facilities include handball courts, basketball courts, and a soccer field. Park users and local residents are expected to have a high concern about the I-710 Corridor Project and its visual effect on the park and the surrounding neighborhood and homes. This Key View looks southeast to the I-710 Corridor Project.

Study Area

Visual Simulation: Proposed Base Condition

Enhanced View

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.52

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #25 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.52-KEY VIEW 25 DESCRIPTION

Key View #26 (Figures 8.53 and 8.54)

ORIENTATION

As shown in Figure 8.53, this Key View is located at the intersection of East Washington Boulevard and Atlantic Avenue in City of Commerce in front of the Starbucks in a commercial business area. The existing setting and visual simulations for Key View 26 are shown in Figure 8.54.

Latitude	Longitude	Heading
N 34° 0' 10.71"	W 118° 10' 2.12"	282° W by NW

EXISTING VISUAL QUALITY/CHARACTER

Key View 26 illustrates the view from the major intersection within a business/commercial sector of the City of Commerce. The view contains a number of features including traffic signals, utility poles, various buildings, the streets and minimal trees. The existing visual quality of the Key View is very low (1.8).

	Rating	Comments
Vividness (V)	2.0	The existing vividness is low - the large number of visual elements within this scene are all without hierarchy and therefore does not present any distinctive features.
Intactness (I)	2.0	The existing intactness is low - the large amount of visual man-made elements dominate the view and results in low visual integrity.
Unity (U)	1.5	The existing unity is very low - the lack of visual harmony between the lights, trees, utilities and the streets themselves severely limit the coherence of the view.
Existing Visual Quality [VQ=*(V+I+U)/3]*	1.8	

PROPOSED PROJECT FEATURES

All build alternatives would feature two new lanes in each direction at the same grade as the existing mainline. A new bridge spanning Washington Boulevard would also be added.

CHANGE TO VISUAL QUALITY/CHARACTER

Under all build alternatives, I-710 would be widened to 10 GP lanes. As a result, the I-710 Corridor Project would appear to be insignificantly closer to the Key View causing very little change to the vividness, intactness, and unity. The overall visual quality would remain very low.

VIEWER RESPONSE

There is expected to be a large number of viewers passing through this Key View location. It is a major business/commercial intersection in the City of Commerce. Viewer sensitivity and exposure is likely to be moderate, depending on the traffic conditions. The duration of view would vary from low to high; again depending on traffic conditions and the timing of the traffic signals. The viewpoint is approximately 1,700 feet from the I-710 Corridor Project, making the viewer exposure level low. Viewer response to the change in character would be low. Sensitivity and exposure to the I-710 Corridor Project would also be low. The proposed visual quality of this view would remain very low (1.8).

Key View #26 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	2.0	The proposed vividness would be low - this alternative would remain largely unchanged from the existing view.
Intactness (I)	2.0	The proposed intactness would be low - this alternative would remain largely unchanged from the existing view.
Unity (U)	1.5	The proposed unity would be very low -this alternative would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ1=(*V+I+U)/3]*	1.8	

Key View #26 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	2.0	The proposed vividness would be low - these alternatives would remain largely unchanged from the existing view.
Intactness (I)	2.0	The proposed intactness would be low - these alternatives would remain largely unchanged from the existing view.
Unity (U)	1.5	The proposed unity would be very low - these alternatives would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ2=(*V+I+U)/3]*	1.8	

RESULTING VISUAL IMPACT

The change in adverse visual impacts for all build alternatives would be neutral or non-existent (0.0) since there would be no elevated FC in this portion of the I-710 and because of the distance between the viewer and the I-710 Project Corridor. The overall visual quality would remain very low. No visual mitigation would be required.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

ENHANCED CONDITION/VIEWER RESPONSE

With no anticipated adverse impacts at this Key View, no aesthetic treatments are being proposed for Key View 26.

LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 26 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.53

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #26 Location

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.53 KEY VIEW #26 LOCATION

Existing Condition

KEY VIEW #26

Intersection of East Washington Boulevard and Atlantic Boulevard
5201 East Washington Boulevard
Commerce, CA 90040

GPS Location:
Latitude = 34° 0'10.71"N
Longitude = 118°10'2.12"W
Heading = 282° W by NW

This Key View is located at the intersection of Atlantic Boulevard and Washington Boulevard. The view looks in a northwest direction with the I-710 Corridor Project approximately 1,700 feet away. Viewers from this location will be large in number ranging from vehicle drivers to customers at the adjacent businesses. Viewer duration will vary greatly due to activity and traffic conditions. Viewer sensitivity is expected to be moderate.

Study Area

Visual Simulation: Proposed Base Condition

Enhanced View

LEGEND

- 26 Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.54

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #26 Description

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.54-KEY VIEW 26 DESCRIPTION

Key View #27 (Figures 8.55 and 8.56)

ORIENTATION

As shown in Figure 8.55, this Key View is located at the intersection of Nobel Street and Ransom Street in City of Commerce in a residential area. The existing setting and visual simulations for Key View 27 are shown in Figure 8.56.

Latitude	Longitude	Heading
N 34° 0' 17.23"	W 118° 10' 13.21"	293° W

EXISTING VISUAL QUALITY/CHARACTER

Key View 27 is located at an intersection of two residential streets. The existing view features residential units, the streets, an existing soundwall, utility lines/poles and trees in the foreground and background. The existing visual quality is moderately low (3.0).

	Rating	Comments
Vividness (V)	2.5	The existing vividness is low - the few but large street trees provide a limited distinctiveness to the view.
Intactness (I)	3.0	The existing intactness is moderately low - the large amount of visual man-made elements dominate the view and results in low visual integrity.
Unity (U)	3.5	The existing unity is moderately low - the arrangement of visual groupings of plants, residential structures, utility lines, the streets and the existing soundwall combine to create a medium level of visual patterns.
Existing Visual Quality [VQ=(*V+I+U)/3]*	3.0	

PROPOSED PROJECT FEATURES

All build alternatives for this Key View would feature the same visual elements. The existing soundwall would be replaced with a new soundwall and the trees in the background would be eliminated.

CHANGE TO VISUAL QUALITY/CHARACTER

Under all build alternatives, I-710 would be widened to 10 GP lanes. Due to this construction, a new soundwall would be required; however it would not cause any changes in the visual quality/characteristics of the scene. While the removal of the trees in the background is necessary for the construction within the I-710/Washington Blvd. interchange area, the loss of the trees does little to change any of the visual ratings. Vividness would remain low and intactness and unity would remain moderately low.

As discussed earlier in the Alternatives Description section, for this Key View, Alternatives 6A/B/C have three design options that are under consideration which will be fully analyzed in the EIR/EIS so that they can be considered in the future selection of a Preferred Alternative for the project. Design Option 1 provides access to Washington Blvd. using three ramp intersections at Washington Blvd., Design Option 2 provides access to Washington Blvd. using two ramp intersections at Washington Blvd., and Design Option 3 removes access to Washington Blvd. at its current location (the ramps at the I-710/Washington Blvd. interchange would be removed and there would be a new SB off-ramp and NB on-ramp at Oak St. and Indiana St.

Design Option 2 was selected to be illustrated as it represents the worst case scenario from an aesthetics standpoint.

VIEWER RESPONSE

Numerous viewers reside adjacent to I-710. Duration of views would depend upon the activities of viewers and it could vary from seconds to hours. The Key View is approximately 400 feet from the I-710 Corridor Project. Viewer response to a change in character would be high due to this view's residential nature. Viewers' sensitivity and exposure to the I-710 Corridor Project would be high. Because there are no FC elements, the proposed visual quality applies to all build alternatives. The proposed visual quality of this view would remain largely unchanged at moderately low (3.0).

Key View #27 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	2.5	The proposed vividness would be low - this alternative would remain largely unchanged from the existing view (replacing existing soundwall with a new one).
Intactness (I)	3.0	The proposed intactness would be moderately low - this alternative would remain largely unchanged from the existing view.
Unity (U)	3.5	The proposed unity would be moderately low - this alternative would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	3.0	

Key View #27 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	2.5	The proposed vividness would be low - these alternatives would remain largely unchanged from the existing view.
Intactness (I)	3.0	The proposed intactness would be moderately low - these alternatives would remain largely unchanged from the existing view (replacing existing soundwall with a new one).
Unity (U)	3.5	The proposed unity would be moderately low - these alternatives would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	3.0	

RESULTING VISUAL IMPACT

Under all build alternatives, the change in adverse visual impacts in Key View 27 would be neutral or non-existent (0.0). The overall visual quality would remain moderately low (neutral or non-existent change at 0.0) because the view would remain visually unchanged with the exception of the new soundwall in the same location as the existing soundwall. No visual mitigation would be required.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

ENHANCED CONDITION/VIEWER RESPONSE

There are very few visual impacts from this Key View. However, the visual simulation in Figure 8.56 illustrates one conceptual example of aesthetic treatments for the new soundwall with the addition of landscaping with trees. These elements effectively mask a majority of the soundwall and improve the overall visual quality of the scene by increasing the intactness of the view. Viewer response to enhanced improvements to the view should be positive.

LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 27 Key View Location

N

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.55

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #27 Location

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.55 KEY VIEW #27 LOCATION

Existing Condition

KEY VIEW #27

4913 Nobel Street
Commerce, CA 90040

GPS Location:
Latitude = 34° 0'17.23"N
Longitude = 118°10'13.21"W
Heading = 293° W

This Key View is located on Nobel Street within a residential neighborhood. Located approximately 400 feet from the nearest I-710 Corridor Project construction, the view looks west. Viewer sensitivity is anticipated to be high.

Study Area

Visual Simulation: Proposed Base Condition

Enhanced Condition

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.56

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #27 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.56-KEY VIEW 27 DESCRIPTION

Key View #28 (Figures 8.57 and 8.58)

ORIENTATION

As shown in Figure 8.57, this Key View is located at 2343 Connor Avenue (near Washington Boulevard) in City of Commerce in a residential area. The existing setting and visual simulations for Key View 28 are shown in Figure 8.58.

Latitude	Longitude	Heading
N 34° 0' 20.97"	W 118° 10' 26.99"	133° SE

EXISTING VISUAL QUALITY/CHARACTER

The location contains close up views of the southbound on-ramp/off-ramp at Washington Blvd. to the I-710 mainline. Features include a low retaining wall, fencing, traffic guard railing, and a commercial building in the background with some trees. The existing visual quality is low (2.8).

	Rating	Comments
Vividness (V)	2.0	The existing vividness is low - the few visual elements of any dominance provide limited distinctiveness to the view.
Intactness (I)	3.0	The existing intactness is moderately low - the various visual masses created by the building, the freeway ramps and the open sky combine to give semi-limited integrity to the view.
Unity (U)	3.5	The existing unity is moderately low - the arrangement of visual groupings of the building structure, the freeway ramps, and the open sky combine to create a low level of visual patterns.
Existing Visual Quality [VQ=*(V+I+U)/3]*	2.8	

PROPOSED PROJECT FEATURES

All build alternatives would include two new lanes in each direction at the same grade as the existing mainline. This would include any new or reconstructed on-ramps and off-ramps. New soundwalls would be constructed on top of traffic barriers at the edge of the ramps. The existing commercial building would be removed as would the trees in the background.

CHANGE TO VISUAL QUALITY/CHARACTER

Under all build alternatives, the new on-ramp/off-ramp at Washington Blvd. would be constructed including the new soundwall. As a result, the Key View would increase in intactness. The vividness would be affected positively as the existing building and foreground landscape area and guard rail would be removed and replaced by a single visual element of the soundwall. The unity would increase to moderate.

As discussed earlier in the Alternatives Description section and for Key View 27, for this Key View, Alternatives 6A/B/C, have three design options that are under consideration which will be fully analyzed at a later time so that they can be considered in the future selection of a Preferred Alternative for the project. Design Option 1 provides access to Washington Blvd. using three ramp intersections at Washington Blvd., Design Option 2 provides access to Washington Blvd. using two ramp intersections at Washington Blvd., and Design Option 3 removes access to Washington Blvd. at its current location (the ramps at the I-710/Washington Blvd. interchange would be removed and there would be a new SB off-ramp and NB on-ramp at Oak St. and Indiana St.

Design Option 2 was selected to be illustrated as it represents the worst case scenario from an aesthetics standpoint.

VIEWER RESPONSE

Numerous viewers reside adjacent to I-710. Duration of views would depend upon the activities of viewers and it could vary from seconds to hours. The Key View is only 25 feet from the nearest element of construction. Viewer response to the change in character would be high due to this view's residential nature. Viewers' sensitivity and exposure to the I-710 Corridor Project would be high. Because there are no FC elements, the proposed visual quality applies to all build alternatives. The proposed visual quality of this view would be moderate (4.2).

Key View #28 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	4.0	The proposed vividness would be moderate - this alternative would minimize the randomness of the view with the new freeway components simplifying the elements within the view into a memorable focal point.
Intactness (I)	4.0	The proposed intactness would be moderate - this alternative would minimize the visual encroachment of the various elements to others and result in a sense of visual order.
Unity (U)	4.5	The proposed unity would be moderate - this alternative would improve the unity of the view by allowing the new structures to visually combine to create a horizontal flow of visual lines.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	4.2	

Key View #28 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	4.0	The proposed vividness would be moderate - these alternatives would minimize the randomness of the view with the new freeway components simplifying the elements within the view into a memorable focal point.
Intactness (I)	4.0	The proposed intactness would be moderate - these alternatives would minimize the visual encroachment of the various elements to others and result in a sense of visual order.
Unity (U)	4.5	The proposed unity would be moderate - these alternatives would improve the unity of the view by allowing the new structures to visually combine to create a horizontal flow for visual lines.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	4.2	

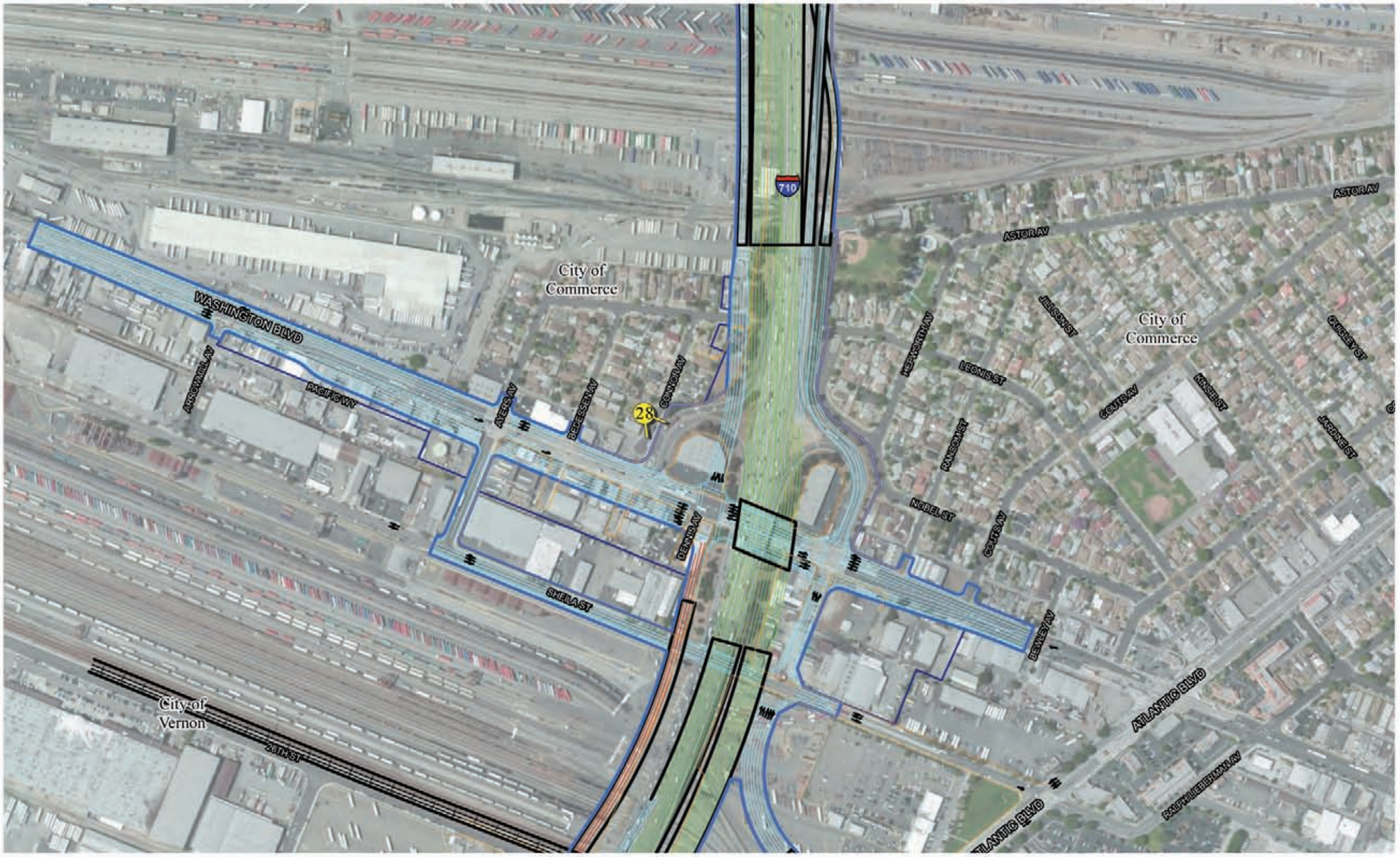
RESULTING VISUAL IMPACT

Under all build alternatives, the change in visual impacts to Key View 28 would be positive (+1.4) due to the replacement of the on-ramp/off-ramp. The addition of the new on-ramp/off-ramp blocks the views of the existing buildings and highway structures adding to the clean or simple lines to the overall view. The overall visual quality would improve from low to moderate. The highest level of visual mitigation required would be "Low."

Difference from Existing Visual Quality (Alternative 5A)	+1.4
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+1.4

ENHANCED CONDITION/VIEWER RESPONSE

The construction of the new ramps for the I-710 Corridor Project adds to the overall visual quality of the Key View by minimizing the visual congestion created by the various highway elements and background buildings. The visual simulation in Figure 8.58 shows how one possible manner of aesthetic treatment can actually improve all three visual assessment criteria (vividness, intactness and unity) by creating dominant visual elements, minimizing the visual chaos and screening visual encroachment. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 28 Key View Location

0 200 400 FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.57

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #28 Location

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.57 KEY VIEW #28 LOCATION

KEY VIEW #28

2343 Conner Avenue
Commerce, CA 90040

GPS Location:
Latitude = 34° 0'20.97"N
Longitude = 118°10'26.99"W
Heading = 133° SE

This Key View is located adjacent to the new on/off ramp for the I-710 Corridor Project. The surrounding area is residential with a mixture of commercial uses. Due to the close proximity and residential nature of the area, viewer sensitivity is expected to be high.

Existing Condition

Visual Simulation: Proposed Base Condition

Enhanced Condition

Study Area

LEGEND

- 28 Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.58

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #28 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.58-KEY VIEW 28 DESCRIPTION

Key View #29 (Figures 8.59 and 8.60)

ORIENTATION

As shown in Figure 8.59, this Key View is located at the intersection of Dunham Street and South McBride Avenue in City of Commerce in a residential area. The existing setting and visual simulations for Key View 29 are shown in Figure 8.60.

Latitude	Longitude	Heading
N 34° 0' 46.48"	W 118° 10' 15.05"	270° W

EXISTING VISUAL QUALITY/CHARACTER

The existing visual quality of this Key View is low (2.3). The visual elements include residential trees, overhead utility lines and poles plus retaining walls, soundwalls, fencing and minimal landscaping in front of the retaining/soundwalls bordering I-710.

	Rating	Comments
Vividness (V)	2.5	The existing vividness is low - the view consists of trees within the neighborhood which form the greatest amount of memorable focus.
Intactness (I)	1.5	The existing intactness is very low - the obstruction of the skyline by numerous utility lines and an existing retaining wall/soundwall detracts from the visual integrity of the scene.
Unity (U)	3.0	The existing unity is moderately low - the primary elements such as the street, trees, and existing retaining wall/soundwall work together to create a limited sense of visual pattern.
Existing Visual Quality [VQ=*(V+I+U)/3]*	2.3	

PROPOSED PROJECT FEATURES

All build alternatives would include two new lanes in each direction at the same grade as the existing mainline. This configuration would necessitate the relocation and replacement of the existing retaining/soundwall along the eastern side near the residential land uses. This replacement of the retaining/sound wall to a location closer to the viewer would eliminate the landscape area. Additionally, the relocated utility pole would be replaced with a new style pole. Alternatives 6A/B/C would remain in the same configuration as Alternative 5A at this location with a new retaining/soundwall along the east side.

CHANGE TO VISUAL QUALITY/CHARACTER

Under all build alternatives, I-710 would be widened to 10 GP lanes. As a result, I-710 would appear to be closer to the Key View and the trees on the slope would be removed, lessening the unity. The vividness and intactness would be affected positively as the new soundwall/retaining wall combination strengthens the visual order of the view and becomes a memorable feature.

VIEWER RESPONSE

Numerous viewers reside adjacent to I-710. Duration of views would depend upon the activities of viewers and it could vary from seconds to hours. The Key View is approximately 400 feet from the I-710 Corridor Project. Viewer response to the change in character would be high due to this view's residential nature. Viewers' sensitivity and exposure to the I-710 Corridor Project would be high. Because there are

no FC elements, the proposed visual quality applies to all build alternatives. The proposed visual quality of this view would be moderately low (3.2).

Key View #29 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	4.0	The proposed vividness would be moderate - the addition of a new soundwall on top of a new retaining wall creates a dominant visual feature that is memorable.
Intactness (I)	3.0	The proposed intactness would be moderately low - the I-710 widening would result in a new soundwall/retaining wall combination located closer to the viewer. This would strengthen the visual order of the scene.
Unity (U)	2.5	The proposed unity would be low - this alternative would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ1=(*V+I+U)/3]*	3.2	

Key View #29 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	4.0	The proposed vividness would be moderate - the addition of a new soundwall on top of a new retaining wall creates a dominant visual feature that is memorable.
Intactness (I)	3.0	The proposed intactness would be moderately low - the I-710 widening would result in a new soundwall/retaining wall combination located closer to the viewer. This would strengthen the visual order of the scene.
Unity (U)	2.5	The proposed unity would be low - these alternatives would remain largely unchanged from the existing view.
Proposed Visual Quality [PVQ2=(*V+I+U)/3]*	3.2	

RESULTING VISUAL IMPACT

Under all build alternatives, the change in adverse visual impacts in Key View 29 would be positive (+0.9) with the widening of the mainline. While the viewer sensitivity at this Key View would be high due to the residential nature of Key View 29, the cleaner appearance of the new soundwall would improve the overall visual quality from low to moderately low. The highest level of visual mitigation required would be "Low."

Difference from Existing Visual Quality (Alternative 5A)	+0.9
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.9

ENHANCED CONDITION/VIEWER RESPONSE

The visual simulation in Figure 8.58 illustrates one design option of aesthetic treatments for the new retaining wall with soundwall on top with the addition of horizontal textures on the walls, plus a neutral

color and vines growing on the walls. The use of vines would be necessary due to the very limited space available for landscaping that would exclude the placement of trees and shrubs. This technique serves to filter the views of the walls and increase the intactness for the viewer. Viewer response to enhanced improvements to the view should be positive.

LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 29 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.59 KEY VIEW #29 LOCATION

FIGURE 8.59

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

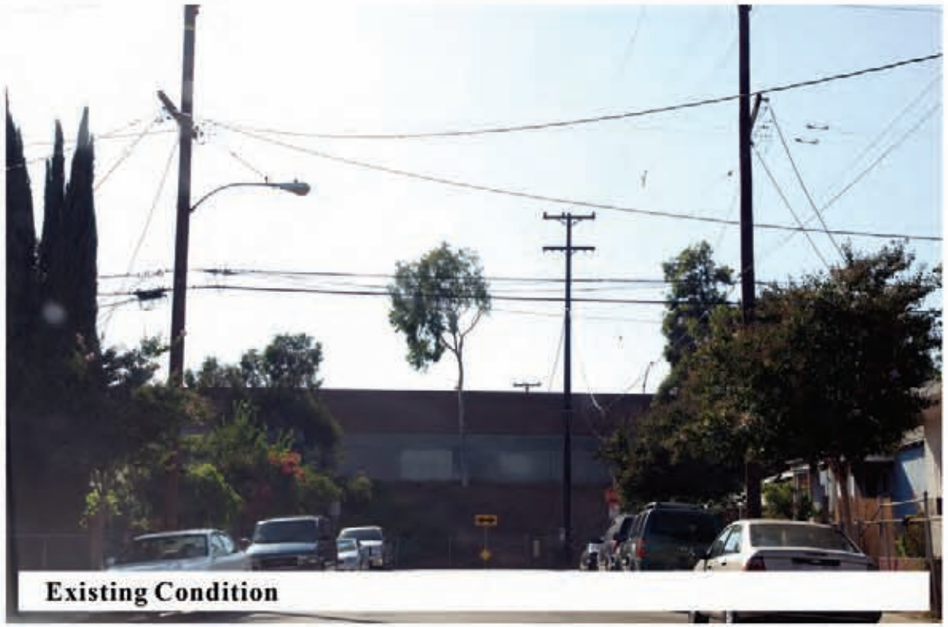
Key View #29 Location

KEY VIEW #29

Intersection of Dunham Street and South McBride Avenue
Commerce, CA 90040

GPS Location:
Latitude = 34° 0'46.48"N
Longitude =118°10'15.05"W
Heading = 270° W

The view from the intersection of Dunham Street and South McBride Avenue has a high visibility of both I-710 and I-5. Dunham Street has a direct view of I-710 and McBride Avenue has a direct view of NB I-5. Residents in this area are expected to have a high concern of the proposed changes for the I-710 Corridor Project and a high sensitivity to any changes in the visual environment. This Key View looks west to the I-710 Corridor Project.



Existing Condition

Visual Simulation: Proposed Base Condition

Enhanced Condition

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.60

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #29 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.60-KEY VIEW 29 DESCRIPTION

Key View #30 (Figures 8.61 and 8.62)

ORIENTATION

As shown in Figure 8.61, this Key View is located at 4489 East Lovett Street (near South Eastern Avenue) in City of Commerce in a residential area. The existing setting and visual simulation for Key View 30 are shown in Figure 8.62.

Latitude	Longitude	Heading
N 34° 0' 49.51"	W 118° 10' 27.27"	90° E

EXISTING VISUAL QUALITY/CHARACTER

The view from Key View 30 is located within a residential neighborhood. Seen in this view is a row of houses of varying height along with some minor landscaping and minor utility lines in the upper half of the view. The existing visual quality is moderately low (3.7).

	Rating	Comments
Vividness (V)	3.0	The existing vividness is moderately low - few memorable elements to create any striking or distinctive features.
Intactness (I)	4.0	The existing intactness is moderate - similar texture (right angles and diagonal lines of the houses) and the nature of the materials (man-made). There are few man-made elements encroaching on natural elements and vice versa.
Unity (U)	4.0	The existing unity is moderate - juxtaposed lines (various horizontal and vertical lines interrupted by angled lines).
Existing Visual Quality [VQ=*(V+I+U)/3]*	3.7	

PROPOSED PROJECT FEATURES

All build alternatives would include two new lanes in each direction at the same grade as the existing mainline. This configuration would necessitate the relocation and replacement and heightening of the existing soundwalls along the western side near the residential units.

CHANGE TO VISUAL QUALITY/CHARACTER

Under all build alternatives, the proposed view adds a major element in the form of a new soundwall behind the existing houses along the street. This effectively blocks out the views of any background trees from the existing view. As a result, I-710 would appear to be closer to the Key View, lessening the intactness. The vividness and unity would be affected positively as the soundwall would become a dominant visual element.

VIEWER RESPONSE

Numerous viewers reside adjacent to I-710. Duration of views would depend upon the activities of viewers and it could vary from seconds to hours. This Key View is approximately 300 feet from the nearest new visual element of the I-710 Corridor Project. Viewer response to the change in character would be high due to this view's residential nature. Viewers' sensitivity and exposure to the I-710 Corridor Project would be high. Because there are no FC elements, the proposed visual quality applies to all build alternatives. The proposed visual quality of this view would be moderately low (3.8).

Key View #30 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	4.0	The proposed vividness would be moderate - memorability of the view would increase slightly with the introduction of the large visual mass of the soundwall which would become the largest monotone color & texture within the view.
Intactness (I)	3.0	The proposed intactness would be moderately low - view would remain free of competing visual elements that encroach upon each other due to the lack of natural elements; however, the visual integrity of the view would be disrupted to a small degree by the introduction of the large mass of the soundwall.
Unity (U)	4.5	The proposed unity would be moderate - visual patterns would be strengthened by the addition of the horizontal element of the soundwall, which would complement the horizontal pattern of the street and overhead power lines.
Proposed Visual Quality [PVQ1=*(V+I+U)/3]*	3.8	

Key View #30 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	4.0	The proposed vividness would be moderate - memorability of the view would increase slightly with the introduction of the large visual mass of the soundwall which would become the largest monotone color & texture within the view.
Intactness (I)	3.0	The proposed intactness would be moderately low - view would remain free of competing visual elements that encroach upon each other due to the lack of natural elements; however, the visual integrity of the view would be disrupted to a small degree by the introduction of the large mass of the soundwall.
Unity (U)	4.5	The proposed unity would be moderate - visual patterns would be strengthened by the addition of the horizontal element of the soundwall, which would complement the horizontal pattern of the street and overhead power lines.
Proposed Visual Quality [PVQ2=*(V+I+U)/3]*	3.8	

RESULTING VISUAL IMPACT

Under all build alternatives, the change in visual impacts to Key View 30 would be positive (+0.1) due to the widening of the mainline. The overall visual quality would remain moderately low. The level of visual mitigation required would be “Low.”

Difference from Existing Visual Quality (Alternative 5A)	+0.1
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.1

ENHANCED CONDITION/VIEWER RESPONSE

With the anticipated improvement in the visual quality at this Key View, no aesthetic treatments are being proposed for Key View 30.

LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 30 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

FIGURE 8.61

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #30 Location

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.61 KEY VIEW #30 LOCATION

Existing Condition

KEY VIEW #30

4489 East Lovett Street
Commerce, CA 90040

GPS Location:
Latitude = 34° 0'49.51"N
Longitude =118°10'27.27"W
Heading = 90° E

This Key View is located within a residential community and about 300 feet away from the I-710 Corridor Project. The visual orientation is easterly. Viewer sensitivity is anticipated to be high with viewer duration extending to numerous hours due to the residential nature of the area.

Study Area

Visual Simulation: Proposed Base Condition

Enhanced Condition

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.62

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #30 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.62-KEY VIEW 30 DESCRIPTION

Key View #31 (Figures 8.63 and 8.64)

ORIENTATION

As shown in Figure 8.63, this Key View is located at 848 South Sydney Drive in East Los Angeles in a major residential area. The existing setting and visual simulations for Key View 31 are shown in Figure 8.64.

Latitude	Longitude	Heading
N 34° 1' 26.67"	W 118° 10' 22.87"	168° E by SE

EXISTING VISUAL QUALITY/CHARACTER

Key View 31 is located in an area between residential homes and the existing I-710 Corridor. The view consists of the neighborhood street, sidewalks, fencing, slope landscaping, the existing I-710 Corridor and lighting/utility poles. The existing visual quality of this Key View is moderately low (3.3).

Key View #31 - Existing Visual Quality

	Rating	Comments
Vividness (V)	3.5	The existing vividness is moderately low - the clusters of trees and other landscaping along Sydney Drive and I-710 create a memorable landscape feature to the view.
Intactness (I)	3.0	The existing intactness is moderately low - the encroachment by the tunnel underneath the overpass, street signs, light poles, as well as I-710 and street itself lessens the visual order of the view.
Unity (U)	3.5	The existing unity is moderately low - there are minor visual patterns established by the groupings of landscape, the I-710 and Sydney Drive.
Existing Visual Quality [VQ=*(V+I+U)/3]*	3.3	

PROPOSED PROJECT FEATURES

Under all build alternatives, I-710 would be widened to 10 GP lanes. This would also include two new lanes in each direction at the same grade as the existing mainline. This configuration would necessitate the construction of new retaining walls and soundwalls along the western edge of the I-710 near the residential land uses. This construction would move these elements closer to the viewer and eliminate a large portion of the existing landscape. Additionally a new freeway bridge would be constructed and fencing replaced. Utility lines spanning the I-710 would also be eliminated.

CHANGE TO VISUAL QUALITY/CHARACTER

Under all build alternatives, I-710 would be widened to 10 GP lanes. As a result, the I-710 Corridor Project would appear to be closer to the Key View, increasing the intactness, vividness and unity. The vividness and unity would be affected positively as the removal of trees on the slope and the addition of the new soundwalls would create a better defined visual mass.

VIEWER RESPONSE

There are numerous viewers who reside adjacent to I-710 Corridor Project. Duration of their view depends upon the activities of viewers and it may vary from seconds to hours. This Key View is approximately 200 feet from nearest new visual element of the I-710 Corridor Project. Viewer response to the change in character would be very high due to the residential nature of this Key View. Viewer sensitivity and exposure to the I-710 Corridor Project would be high. Because there are no FC elements, the proposed visual quality applies to all build alternatives. The proposed visual quality of this view would be moderate (4.2).

Key View #31 - Proposed Visual Quality for Alternative 5A

	Rating	Comments
Vividness (V)	4.5	The proposed vividness would be moderate - the construction of the new soundwalls, freeway bridge and the removal of most of the landscaped areas would combine to create an increased distinctiveness to the view.
Intactness (I)	3.5	The proposed intactness would be moderately low - existing visual encroachments would be lessened by the elimination of most of the existing landscape and the introduction of the new I-710 structures.
Unity (U)	4.5	The proposed unity would be moderate - all of the major visual elements in the view would work together to create long, diagonal lines through the scene.
Proposed Visual Quality [PVQ1=(*V+I+U)/3]*	4.2	

Key View #31 - Proposed Visual Quality for Alternatives 6A/B/C

	Rating	Comments
Vividness (V)	4.5	The proposed vividness would be moderate - the construction of the new soundwalls, freeway bridge and the "cleaning" of the landscaped areas would combine to create an increased distinctiveness to the view.
Intactness (I)	3.5	The proposed intactness would be moderately low - existing visual encroachments would be lessened by the elimination of the existing landscape and the introduction of the new I-710 structures.
Unity (U)	4.5	The proposed unity would be moderate - all of the major visual elements in the view would work together to create long, diagonal lines through the scene.
Proposed Visual Quality [PVQ2=(*V+I+U)/3]*	4.2	

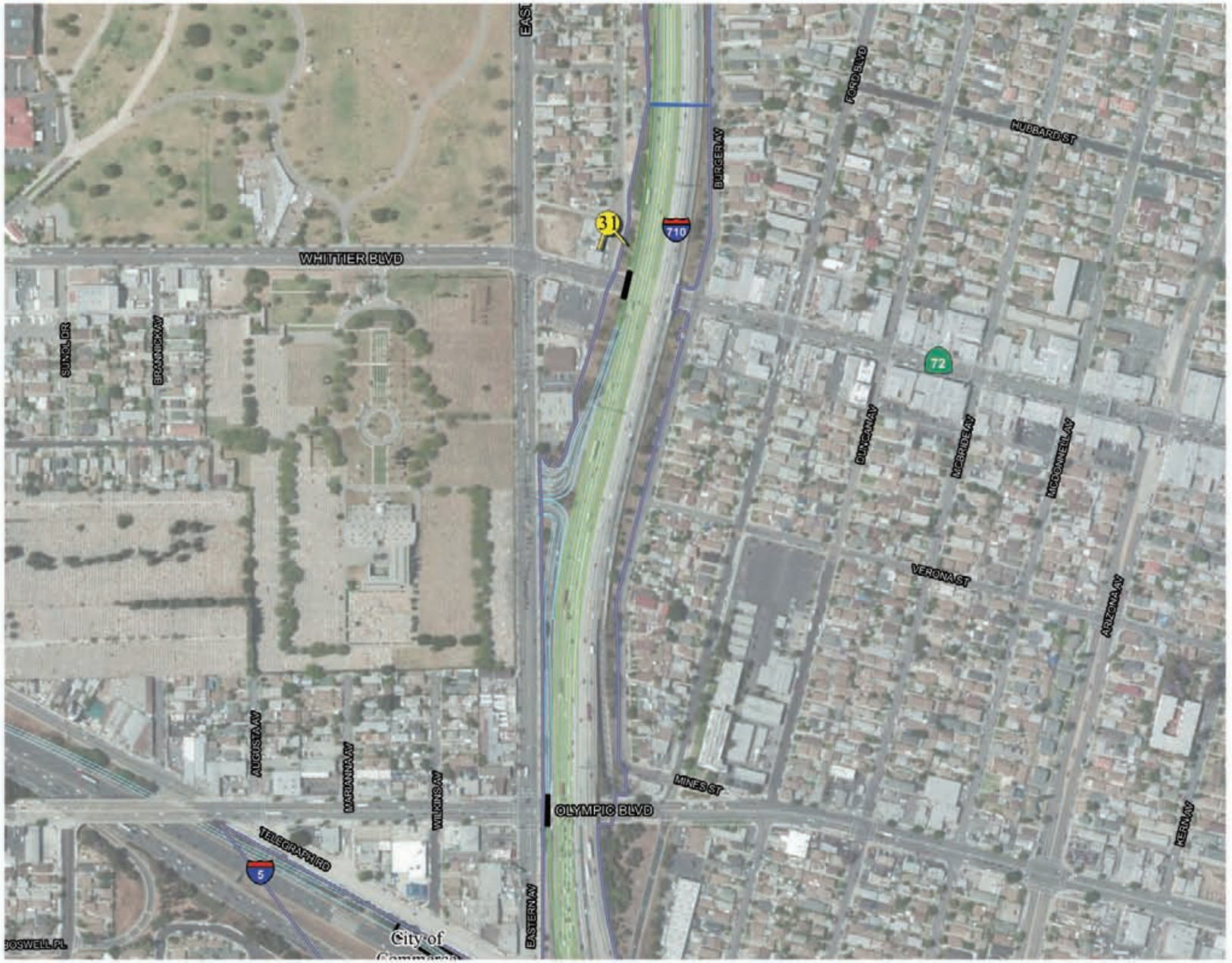
RESULTING VISUAL IMPACT

Under all build alternatives, the change in visual impacts to Key View 31 would be positive (+0.9). The overall visual quality would improve from moderately low to moderate. The level of visual mitigation required would be "Low."

Difference from Existing Visual Quality (Alternative 5A)	+0.9
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.9

ENHANCED CONDITION/VIEWER RESPONSE

With the anticipated improvement in the visual quality at this Key View, no aesthetic treatments are being proposed for Key View 31. However, this visual simulation in Figure 8.64 illustrates how some treatment to the soundwall and the addition of landscaping can dramatically improvement overall visual quality from the surrounding neighborhood by adding memorable landscape elements and increasing the vividness. Viewer response to enhanced improvements to the view should be positive.



LEGEND

- Collector/Distributor and Ramp Geometrics
- Freight Corridor Geometrics
- Mainline Geometrics
- Proposed Bridges and Elevated Structures
- Existing Caltrans and Local Right of Way
- Proposed Right of Way
- TCE
- Future SCE Transmission Corridor
- DWP ROW
- Proposed Retaining Walls
- Potential Sound Barriers
- Potential Oil Field Impacts
- 31 Key View Location

0 200 400
FEET

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.63 KEY VIEW #31 LOCATION

FIGURE 8.63

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #31 Location

KEY VIEW #31

848 South Sydney Drive
East Los Angeles, CA 90022

GPS Location:
Latitude = 34° 1'26.67"N
Longitude = 118°10'22.87"W
Heading = 168° E by SE

This Key View is located in a major residential area in East Los Angeles, on South Sydney Drive. It is near the major intersection of Eastern Avenue and Whittier Boulevard. Surroundings include two cemeteries: Home of Peace Memorial Park and Calvary Cemetery and Mausoleum. A major residential community is found in the northeast quadrant, and a fire station is located in the southeast quadrant of the intersection. This Key View looks southeast toward I-710.

Existing Condition

Visual Simulation: Proposed Base Condition

Enhanced Condition

Study Area

LEGEND

- Key View Locations
- Project Alignment
- Major Freeways/Highways
- Major Roads

FIGURE 8.64

I-710 Corridor Project
07-LA-710-PM 4.9/24.9 EA 249900

Key View #31 Description

SOURCE: TATSUMI & PARTNERS, INC. (2011)

P:\2006511.01-I-710 VIA\RENDERINGS\KEY VIEW BOOKLET\FIGURE 8.64-KEY VIEW 31 DESCRIPTION

C. Summary of Project Impacts

The following is a summary of the individual impacts of each Key View as well as the overall visual impacts resulting from the I-710 Corridor Project.

In terms of severity of impacts, short term impacts are those which can be mitigated immediately upon completion of construction activities. Long term impacts are those impacts that take longer to achieve full mitigation or are a permanent part of the project. Short term impacts would include the construction activity (i.e., construction equipment and materials, temporary roadside barriers, construction signage, and removal of existing mature plantings). Long term impacts for this project would include the amount of time it would take for the new plantings to achieve full growth or the addition of permanent aesthetic treatments to structures. New plantings can reasonably be expected to reach mature growth within a one to three year period (depending on the species and initial planting size). Some tree species could take decades to reach mature growth.

Key View #1:

Under all build alternatives, the change in visual impacts of the I-710 Corridor Project from this Key View location would be positive. There would be changes made within this view, but these changes (the NB lanes of Shoreline Drive would be consolidated to a location outside of the park viewing area) will actually improve the visual quality from the park site. The overall visual quality would remain moderate.

Difference from Existing Visual Quality (Alternative 5A)	+0.3
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.3

Key View #2:

The widening would move the soundwall closer to the viewers under Alternatives 5A and 6A/B/C. The elevated FC would add a minor amount of visual intrusion below the height of the soundwall in Alternatives 6A/B/C. These improvements would create a level of adverse visual impact that would be negative. The overall visual quality from this Key View would be less than the existing visual quality due primarily to the elevated structure under Alternatives 6A/B/C and the widening of the I-710 mainline under all build alternatives.

Difference from Existing Visual Quality (Alternative 5A)	-1.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-1.0

Key View #3

The change in adverse visual impacts would be neutral or non-existent (0.0) for Alternative 5A and negative (-0.2) for Alternatives 6A/B/C. The overall visual quality for Alternative 5A is anticipated to be neutral or non-existent (0.0) due to the grade of the facility being below the existing river levee. Alternatives 6A/B/C would exhibit the elevated FC which would lower the overall visual quality from the opposite side of the river and bike trail.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.2

Key View #4:

Under Alternative 5A, all improvements would be at grade level and the resulting change in adverse visual impacts would be negative (-0.4). However, viewers traveling on Willow Street would be expected to have a clear view of the elevated FC resulting in a negative change impact (-0.7) under Alternatives 6A/B/C. Due to the viewers' viewing duration being relatively short due to driving at the posted highway speeds at this Key View, the overall visual quality would be low.

Difference from Existing Visual Quality (Alternative 5A)	-0.4
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.7

Key View #5:

This Key View would be anticipated to have a visual impact under all build alternatives due to the closer relocation of the soundwall in Alternatives 5A and 6A/B/C. The change in adverse visual impact would be negative for all build alternatives (-0.3 for Alternative 5A and -0.6 for Alternatives 6A/B/C) with the added the view of the elevated connector ramp above the height of the soundwall. While still rated moderately low, the overall visual quality would be lower in rating than the existing visual quality due to the new, below grade structure under all of the build alternatives.

Difference from Existing Visual Quality (Alternative 5A)	-0.3
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.6

Key View #6:

Under all of the build alternatives, the change in adverse impact to the visual setting in Key View 6 would be neutral or non-existent (0.0) because the I-710 Corridor Project would have low visibility to this Key View. The overall visual quality would remain moderate.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

Key View #7:

Under all of the build alternatives, the view from Key View 7 would have a negative change (-1.3) in visual impact due to the resulting de-vegetation required by the construction of the I-710 Corridor Project maintain the visual "flow". The elimination of this vegetation would allow views of elevated connector ramps. Additionally, the relocated utility structures would be visible from this location. The overall visual impact would drop to from moderate to moderately low.

Difference from Existing Visual Quality (Alternative 5A)	-1.3
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-1.3

Key View #8:

Under all of the build alternatives, the change in visual impacts from this park site would be positive (+0.2) due to the distance of the I-710 Corridor Project and its limited views through the existing trees. The only element seen from this location would be the change in utility structures in the background. The overall visual quality would remain moderately high.

Difference from Existing Visual Quality (Alternative 5A)	+0.2
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.2

Key View #9:

Due to the low level of visibility of the I-710 Corridor Project from this location, the change in adverse impacts to the visual setting of Key View 9 would be neutral or non-existent (0.0) under all build alternatives. The only minor visual change would be the construction of a new bridge from the METRO Blue Line. The overall visual quality would remain moderate.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

Key View #10:

The proposed changes to this Key View would be minimal. This Key View would be anticipated to have a positive change in visual impact (+0.1) under all build alternatives due to the lack of visibility of the I-710 Corridor Project. The overall visual quality would remain low.

Difference from Existing Visual Quality (Alternative 5A)	+0.1
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.1

Key View #11:

The change in visual impact would be positive (+0.1) under Alternative 5A as the widening work would be at-grade. The change in adverse visual impacts to this location under Alternatives 6A/B/C would be negative (-0.4) due to the distant view of the elevated FC from this open space. The overall visual quality would remain moderate for Alternative 5A, but would drop to moderately low for Alternatives 6A/B/C.

Difference from Existing Visual Quality (Alternative 5A)	+0.1
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.4

Key View #12:

Under Alternative 5A in this Key View, the change in adverse visual impacts would be neutral or non-existent (0.0) as the overall widening of the mainline to accommodate five lanes in each direction cannot be seen from this Key View. The minimally seen FC of Alternatives 6A/B/C and the distance from the viewer to the I-710 Corridor Project would result in a negative impact (-0.3) as some utility structures would be changed in the background. The overall visual quality would remain low.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.3

Key View #13:

Under all of the build alternatives the change in adverse visual impact would be positive as the only visible elements from the I-710 Corridor Project would be a new off-ramp and the utility structure changes in the middle ground view. Even though the overall visual quality would be slightly increased from 2.3 to 2.5 (+0.2), the overall visual quality would remain low.

Difference from Existing Visual Quality (Alternative 5A)	+0.2
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.2

Key View #14:

Under all of the build alternatives, the overall visual impact would be neutral or non-existent (0.0) with the only visual impact being the relocation of the soundwall slightly closer to the viewer. This relocation does not affect the overall view of this location. The overall visual quality would remain moderately low.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

Key View #15:

For Alternative 5A, park users would experience a neutral or non-existent (0.0) change in adverse visual impacts at Key View 15 The views of the elevated FC in Alternatives 6A/B/C would contribute to the negative (-0.2) change in visual quality. The overall visual quality would remain moderate for Alternative 5A and drop to moderately low for Alternatives 6A/B/C.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.2

Key View #16:

Under all of the build alternatives, there would be a neutral or non-existent (0.0) change in adverse visual impacts due primarily to there not being any new visual features, but merely the replacement of existing features. The overall visual quality would remain low.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

Key View #17:

The distant views of the elevated FC in Alternatives 6A/B/C would give this Key View a negative (-0.3) change visual impact. Alternative 5A would have a neutral or non-existent (0.0) change in adverse visual impacts as the river levee blocks visible features of the I-710. The overall visual quality of this Key View would remain moderate.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.3

Key View #18:

The change in adverse visual impacts for all of the build alternatives is negative (-0.2) due to the limited views of the new elevated FC or addition of travel lanes. The overall visual quality would remain low.

Difference from Existing Visual Quality (Alternative 5A)	-0.2
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.2

Key View #19:

Under all of the build alternatives, the addition of the soundwall and the views of the elevated connector ramp, plus the removal of some visual elements like the fencing, would combine to give Key View 19 a neutral or non-existent (0.0) change in adverse visual impacts. The overall visual quality would remain moderately low.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

Key View #20:

Under Alternative 5A, the visual impacts to Key View 20 would be neutral or non-existent (+0.0) due to it being constructed at the same grade as the existing mainline. Alternatives 6A/B/C would result in a negative (-0.3) change in adverse visual impact because the elevated FC and its soundwall would be seen. The overall visual quality would remain moderately low.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.3

Key View #21:

In Alternative 5A, the change in adverse visual impacts to Key View 21 would be neutral or non-existent (0.0). In Alternatives 6A/B/C, the change in adverse visual impacted would be negative

(-0.2) due to the addition of the elevated FC and its soundwall. The overall visual quality would remain moderate.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.2

Key View #22:

Under Alternative 5A, the overall visual impact would positive (+0.5) with the new construction being located closer to the viewer than the existing mainline and in Alternatives 6A/B/C, the level of visual impact would also be positive (+0.3) The overall visual quality would remain very low.

Difference from Existing Visual Quality (Alternative 5A)	+0.5
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.3

Key View #23:

This residential neighborhood would experience a neutral or non-existent adverse visual impact under Alternative 5A. This would be because there would be very little visual change. Alternatives 6A/B/C would create a negative change in adverse visual impact due to the distant view of the elevated FC. The overall visual quality would remain low.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	-0.2

Key View #24:

There would be a neutral or non-existent (0.0) change in adverse visual impacts under all alternatives. The view in Alternative 5A would remain largely unchanged. Under Alternatives 6A/B/C, there would be an offset of visual elements including the added structure of the FC balanced by the elimination of the utility tower in the background resulting in a neutral or non-existent change in visual impact. The overall visual quality would remain low due to the balancing of the visual qualities from the added FC, removed power pole, and relocated power tower and lines.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

Key View #25:

The change in adverse visual impacts at Key View 25 would be anticipated to be negative under Alternative 5A (-0.2). Under Alternatives 6A/B/C, the overall visual impact would be considered to be neutral or non-existent (+0.0) with the balancing of visual elements including the elimination of the smaller electrical towers and smaller electrical power lines relative to the added vertical structures of the FC. The overall visual quality would remain moderately low.

Difference from Existing Visual Quality (Alternative 5A)	-0.2
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

Key View #26:

The change in adverse visual impacts for all of the build alternatives would be neutral or non-existent (0.0) due to the lack of the new elevated FC and the distance between the viewer and the I-710 Project Corridor. The overall visual quality would remain very low.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

Key View #27:

Under all of the build alternatives, the change in adverse visual impacts to Key View 27 would be neutral or non-existent (0.0) due to the replacement of the existing soundwall. The most visible feature of new construction would be the new soundwall at the same location as the existing one. The overall visual quality of Key View 27 would remain moderately low.

Difference from Existing Visual Quality (Alternative 5A)	0.0
Difference from Existing Visual Quality (Alternatives 6A/B/C)	0.0

Key View #28:

Under all of the build alternatives, the change in visual impacts to Key View 28 would be positive (+1.4) with the screening of the building and highway-related features of the existing on-ramp. The screening of these structures adds to the overall "simplification" of the view resulting in an improvement of the overall visual quality from low to moderate.

Difference from Existing Visual Quality (Alternative 5A)	+1.4
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+1.4

Key View #29:

Under all of the build alternatives, the change in visual impacts to Key View #29 would be positive (+0.9) as the new construction would require the addition of a new soundwall and retaining wall located closer to the viewer than the existing soundwalls and slope. Despite the soundwall/retaining wall combination, the overall visual integrity would be maintained and even slightly improved from low to moderately low.

Difference from Existing Visual Quality (Alternative 5A)	+0.9
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.9

Key View #30:

Under all of the build alternatives, the change in visual impacts to Key View 30 would be almost positive (+0.1) due to the widening of the mainline. The overall visual quality would remain moderately low.

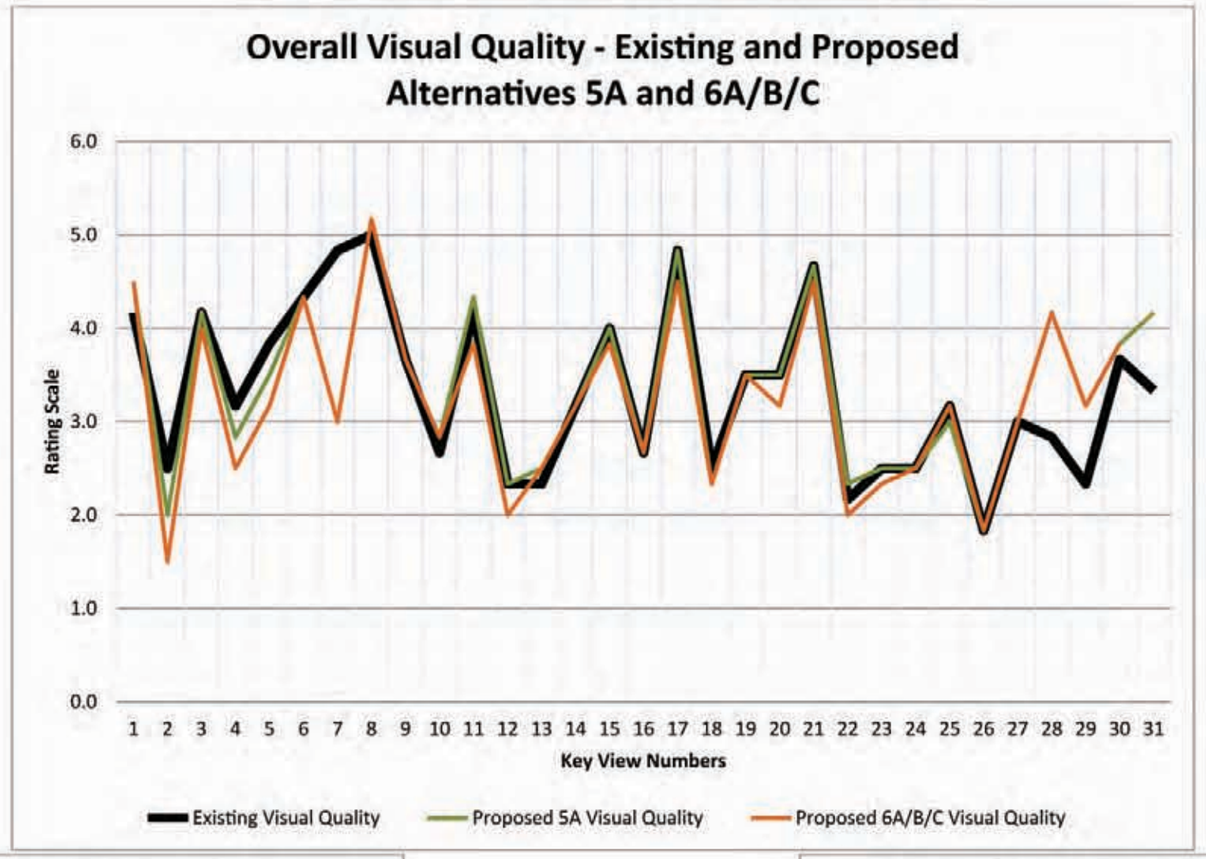
Difference from Existing Visual Quality (Alternative 5A)	+0.1
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.1

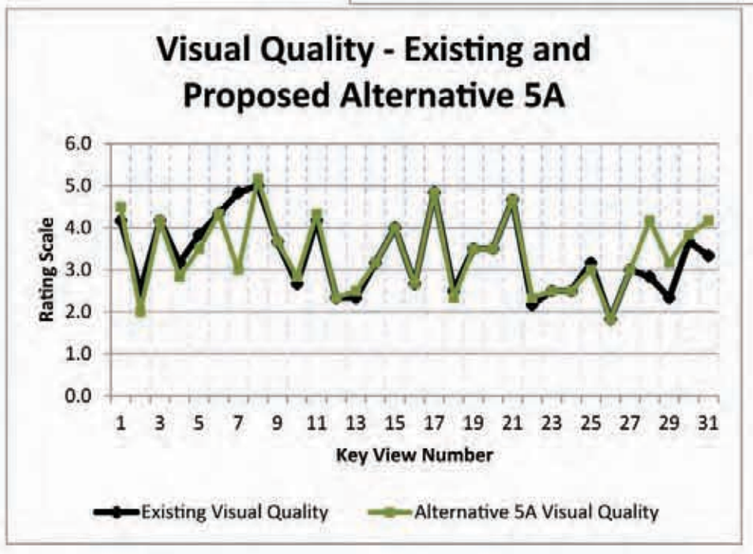
Key View #31:

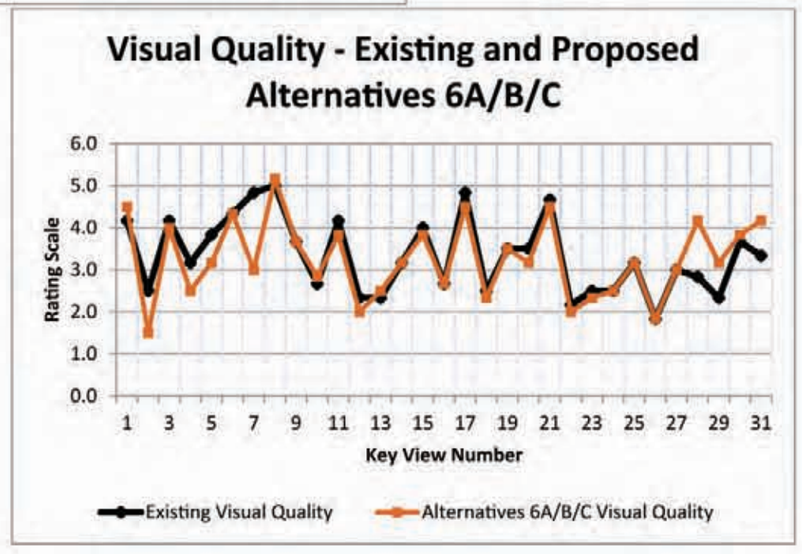
Under all of the build alternatives, the addition of new travel lanes would bring the I-710 Corridor Project closer to the viewer. The new elements would include new soundwalls, retaining walls, fencing and a new bridge, which would actually simplify and unify the view, lessening the visual impacts and creating a positive (+0.9) change in visual impacts. The overall visual quality would improve from moderately low to moderate.

Difference from Existing Visual Quality (Alternative 5A)	+0.9
Difference from Existing Visual Quality (Alternatives 6A/B/C)	+0.9

Table 8.2: Overall Visual Impacts For Alternatives 5A and 6A/B/C







IX. LIGHT, GLARE, SHADE AND SHADOW

Freeway Lighting

Existing land uses found along the I-710 Corridor Project will experience an elevated level of night lighting due to the widening of the mainline where traffic light fixtures will be relocated closer to all land uses. Additionally, traffic light fixtures installed onto the elevated FC under Alternatives 6A/B/C would add increased night lighting to some neighborhoods. The effects of this new light can be lessened to some degree by utilizing light control appliances on the light fixtures.

There would be an increase in night lighting for two existing golf courses within the study area. However, golfing activity is mainly restricted to daylight hours and with the distance from the viewer (minimum of 0.20 miles) the I-710 Corridor Project would have minimal impact to these golf courses from the increased lighting. There may also be increased night lighting along portions of the I-710 Corridor Project where it is relatively close to the Los Angeles River. However, due to the nature of activities related to the trail, no impact is anticipated.

Glare

Glare from the GP lanes and the elevated portions of the FC are expected to be minimized by the construction of soundwalls and screen walls and by distance of the viewer from the freeway lights and headlights from the various vehicles. Since soundwalls would be installed whenever the I-710 Corridor Project is adjacent to residential areas, these walls would block the vehicle headlight glare. For views from the opposing side of the Los Angeles River, screen walls would be constructed. However, the distance from the views (minimum of 0.15 miles) across the Los Angeles River to the I-710 Corridor Project is anticipated to minimize any glare.

Shade and Shadows

During hours where the sun is low to the horizon and especially during the winter solar declination seasons (September through March), the elevated FC would create some shade and/or shadows along the project study area. The acute angle of the sun relative to the ground plain creates “longer” shadows during these times. The shade/shadows created by the project would impact on the neighborhoods west of the I-710 Corridor Project from Pacific Coast Highway to the SR-91 Freeway as well as the residents in the Thunderbird Villa Mobile Home Park in South Gate closest to the west side of the mainline.

Using solar declination calculations, the following length of shadow is derived for the mobile home park:

Assumptions:

Overall height at the top of soundwall above the elevated FC: 60 feet
Location of Key View #14: 33o56’32/62”N; 118o10’18.05”W
Date of Calculation: December 22, 2010 (Worst Case)
Time of Calculation: 07:00 AM
Results: 138.4 feet maximum shadow length

Impact:

The first row of homes immediately adjacent to Frontage Road can expect morning shadows between September and March. Late December would result in the longest shadows. The shadows will shorten considerably during the summer months.

X. VISUAL AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Caltrans and the FHWA mandate that a qualitative/aesthetic approach should be taken to mitigate for visual quality loss in the I-710 Corridor Project study area. This approach fulfills the letter and the spirit of FHWA requirements as it addresses the estimated impacts to the visual quality that will occur in the I-710 Corridor Project viewshed if the I-710 Corridor Project were to be implemented. It also includes mitigation measures for the I-710 Corridor Project.

The following are descriptions of the levels of mitigation and their durations to achieve the required mitigation.

No Mitigation – No adverse change to the existing visual resource or improved visual change to the existing visual resource. Does not require mitigation.

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

Moderate Mitigation – Moderate adverse change to the visual resource with moderate viewer response. Impact can be mitigated within five years using conventional practices.

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

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

Table 10.1: Level of Visual Mitigation Required

	Alternative 5A					Alternatives 6A/B/C				
Key View #	No	Low	Moderate	Moderately High	High	No	Low	Moderate	Moderately High	High
1	X					X				
2					X					X
3	X						X			
4			X						X	
5			X						X	
6	X					X				
7					X					X
8	X					X				
9	X					X				
10	X					X				
11	X							X		
12	X							X		
13	X					X				
14	X					X				

	Alternative 5A					Alternatives 6A/B/C				
Key View #	No	Low	Moderate	Moderately High	High	No	Low	Moderate	Moderately High	High
15	X						X			
16	X					X				
17	X							X		
18		X					X			
19	X					X				
20	X							X		
21	X						X			
22	X					X				
23	X						X			
24	X					X				
25		X				X				
26	X					X				
27	X					X				
28	X					X				
29	X					X				
30	X					X				
31	X					X				
Totals:	25	2	2	0	2	18	5	4	2	2

Visual mitigation for adverse project impacts addressed in the Key View assessments and summarized in Table 10.1 would consist of following the design recommendations in cooperation with the Caltrans District Landscape Architect and community input. The recommendations are described below by project features.

A. Soundwalls and Screen Walls

Soundwalls protect surrounding neighborhoods from the freeway noise and reduces noise levels in neighborhoods adjacent to a freeway and others farther away. Screen walls (constructed for the FC) shield direct views of trucks using the elevated FC, but are not intended for sound abatement. The design of soundwalls and screen walls will follow the standards from the Highway Design Manual Standards and will take into consideration gathered community input. Aesthetic enhancement for the soundwalls and screen walls could be incorporated into the final design of the I-710 Corridor Project. Possible enhancements may include, but would not be limited to, using graphic patterns or vines and shrubs on or in front of the walls, and landscaping that could mitigate the appearance of the walls.

B. Landscape and Hardscape Concepts

Besides soundwalls and screen walls treatments, it is the desire of the I-710 Corridor communities to participate in the development of the landscape and aesthetics improvement plans. Planting trees and shrubs of native species along the I-710 Corridor Project could enhance the planting character. In most cases, native plants grow better than introduced species, since these plants are less prone to disease and require less water and fertilizer than introduced species. Plants should be resistant to damage from smog and other urban pollutants. Using a selection of deciduous plants (including trees, shrubs and herbaceous perennials) would add visual character and help to distinguish seasonal changes in the landscape. Deciduous trees bloom in spring and green leaves turn to red, orange and other colors in fall before going bare in

the winter. Motorists on I-710 and viewers from surrounding areas may observe the difference in visual characteristics as seasons change.

The following design concepts could be included in the project design, but are not limited to the following:

1. Conventional Treatments with Los Angeles River Theme:

   Landscaping could be used on easements and also a portion of excess parcel and interchanges. Concrete soundwalls and screen walls mitigated with vines, trees, or bushes could be placed adjacent to sensitive areas. Artwork with symbols could be located along the arterials to highlight unique communities. The theme could consist of Caltrans approved bridges with design enhancements (including consideration of community input). The Los Angeles River could remain a continuous theme element.

2. Eco/High Technology Concept:

   This eco-friendly design theme could include green bridges and soundwalls for selected areas, artwork made from recycled materials to portray goods movement and migration, a combination of vines and solar panels on top of concrete block walls, and water retention/green roof on selected location of the corridor. Similar to the Los Angeles River theme, artwork could be located along the corridor to emphasize the distinctiveness of each community. Further investigation and additional funding would be required for this concept.

3. Contemporary Art Concept:

   This theme is filled with dramatic lighting and walls in a modern style. The elements could include a combination of transparent and concrete walls with vines on selected areas, a deck park over the freeway close to the Los Angeles River, and artistic vertical elements representing the industrial character. Landscaping could be used for portions of excess parcels and interchanges. Similar to the themes above, artwork could be located along the corridor to emphasize the distinctiveness of each community.

4. Possible combination of the above concepts and other concepts proposed by the communities.

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